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Indian Micro-lepidoptera  
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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

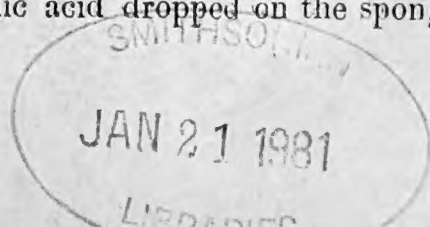
BY E. MEYRICK, B.A., F.R.S., F.Z.S.

### I.

In this and successive papers I propose to endeavour to work out the Indian *Micro-Lepidoptera* (including under this head those of Burma and Ceylon), a task of great interest and probably also of great magnitude. For material I shall be wholly dependent on others, since there is no likelihood of my being able to visit the region personally at present, and I have already received much kind help and promise of more. I venture, however, to appeal to all collectors to assist in this matter: very little is known at present, and even the commonest species will be welcomed, to ascertain geographical range and variation. Full information as to localities, elevation, dates, and larval habits is also desired. If collectors will number the species sent in rotation, proceeding to higher numbers for successive consignments, and retaining specimens with corresponding numbers, I will send them the identifications according to these numbers. All types of species described will eventually be deposited in the collection of the British Museum; but I hope also to be able to send duplicates of many species to Mr. E. E. Green, Government Entomologist of Ceylon, and Mr. L. C. H. Young, Entomological Curator at the Bombay Museum, to form reference collections which can be consulted on the spot.

It is very desirable that specimens should be in good condition; poor specimens may be identified if the species is already known, but could not be described. In particular, care should be taken to prevent their becoming mouldy, which, I am aware, is difficult in the tropics; but mould will not attack insects in boxes if a small piece of sponge is pinned in one corner (so as not to come in contact with the box itself) and some carbolic acid dropped on the sponge; the vapour

[1]



will not only keep off mould, but insect pests of all descriptions. Mould on the head of small insects makes the structure unrecognisable, and, in general, cannot be removed.

It is impossible to insist too strongly on the necessity for proper packing; it is very disappointing to all concerned when valuable specimens are destroyed in transit, whilst with due care this need never happen. I recommend that the following instructions should be strictly carried out. The insect-box should be small and light, no strength being required, and the cork should be good; the specimens placed as close together as possible, all pins firmly fixed, and if naphthaline or other preservative is included, it should be wrapped in muslin, and this very firmly pinned. A piece of loose cotton wool may be pinned in one corner to catch stray abdomens if detached. The insect-box should then be packed in a larger box of sufficient size to allow of at least one inch of packing all round, and at top and bottom; this packing should be either cotton wool or tightly crumpled paper, the latter material being unsurpassed for cheapness and efficiency. The outer case must be strong enough to resist moderate pressure, but any light wooden box will serve, or a biscuit-tin does very well. The address should not be entrusted to a tied label, as these are frequently dragged off in transit, but gummed on the outer case. Insects thus packed were sent me by Captain (now Lt.-Col.) Manders from the Shan States, travelling hundreds of miles by pack-mule over mountain ranges and unbridged torrents before making the voyage to England, and suffered absolutely no damage. All consignments should be addressed to me at Thornhanger, Marlborough, Wilts.

All specimens must be pinned, not sent in papers; if possible, they should be set, as they do not relax so well as larger insects, and this applies especially to the more minute species which can hardly be set except when fresh. Fine pins of only moderate length should be used; for average Micros it suffices if there is about half-an-inch of pin below the insect, and enough above to grasp with the forceps.

As the basis of the following descriptions I have assumed the classification, terminology, systematic characters, &c., given in my "Handbook of British Lepidoptera." As the work proceeds, I will give such dichotomous tabulations of the genera and species from time to time as may seem necessary. Meanwhile, I shall be glad to explain to correspondents any difficulties that they find in identification of species.







For the material of the present paper I am indebted to Mr. E. E. Green, Government Entomologist of Ceylon; Mr. J. Pole, of Maskeliya, Ceylon; Lt.-Col. N. Manders, R.A.M.C.; and Mr. H. Maxwell-Lefroy, Government Entomologist of India. The name of the collector is recorded in the case of each species.

## PTEROPHORIDÆ.

*Oxyptilus zanchistes* n. sp.

♂ ♀. 16 mm. Head and thorax ochreous-whitish, irrorated with fuscous. Palpi white, second and terminal joints with oblique dark fuscous bars. Antennæ white, lined with blackish. Abdomen whitish-ochreous, mixed with fuscous. Segments 1—3 with wedge-shaped dark fuscous dorsal marks, 4—6 wholly dark fuscous on dorsum. Forewing with segments extremely narrow, apex of second segment forming a very long slender sickle-shaped projection; fuscous, finely irrorated with whitish-ochreous; a cloudy dark fuscous discal dot at  $\frac{1}{3}$ ; an ochreous-whitish costal spot on middle of first segment; cilia, whitish-ochreous, dark fuscous spots in costal cilia before and beyond pale spot, two others posteriorly, and one at apex, lower cilia of first segment and upper of second with scattered dark fuscous scales, dorsal cilia with grey pre-tornal patch, and four slight scale-projections of two or three dark fuscous scales each, first mixed with whitish scales. Hindwings dark fuscous, third segment ochreous-whitish posteriorly, irrorated with dark fuscous; cilia of first two segments fuscous with slight purplish tinge, of third segment whitish-ochreous, on upper margin irregularly strewn with black scales and with a loose tuft of black scales at  $\frac{2}{3}$ , on dorsum with a rather broad patch of black scales at  $\frac{2}{3}$  and a small tuft at apex.

Two specimens, Fort Stedman, Burma (Manders). Differs from other described species by the especially long and slender apical projection of the second segment of forewings.

*Oxyptilus causodes* n. sp.

♂ ♀. 20—22 mm. Head, thorax, and abdomen dark reddish-fuscous, face without tuft. Palpi long, slender. Forewings with segments narrow; dark reddish-fuscous, slightly sprinkled with whitish-grey, especially on first segment; an ochreous-whitish costal dot or small spot at middle of first segment, and a slender ochreous-whitish bar near its apex; cilia fuscous, with numerous scattered blackish scales, forming a bar at lower angle of tip of first segment, rounded dark fuscous black-edged spots at tip of second and tornus, and two undefined projections on its dorsum. Hindwings with segments linear; dark fuscous; cilia fuscous, on third segment mixed with black scales at base on both margins, with a large triangular black scale-tooth on lower margin at  $\frac{3}{4}$ , and a small one beneath apex.

Nine specimens, Peradeniya, Ceylon, in August and October (Green). Larva feeds in fleshy fruits of *Dillenia retusa*, in August; when about to pupate, it leaves the fruit and attaches itself to any neighbouring support (Green).

*Alucita* L.

I follow Lord Walsingham's most recently expressed views in adopting the name *Alucita* for the genus standing in my Handbook as *Pterophorus* and the name *Pterophorus* for the genus there called *Alucita*.

*Alucita sesamitis* n. sp.

♂. 21 mm. Head, palpi, antennæ, thorax, and abdomen ochreous-whitish. Legs white, anterior and middle pair with a blackish line. Forewings with segments moderately narrow; ochreous-whitish; a fuscous discal dot at  $\frac{1}{2}$ ; a small fuscous spot at base of upper margin of second segment; first segment with a blackish dot on costa beyond its middle, and another on its lower margin before apex; second segment with a blackish dot in middle of its lower margin, another beyond this, and a third at apex; cilia whitish, towards tornus tinged with greyish-ochreous towards tips. Hindwings grey, third segment becoming ochreous-whitish towards base; cilia whitish-grey, on dorsum of third segment becoming whitish towards base.

One specimen, Koni, Burma, in September (Manders).

## ORNEODIDÆ.

*Orneodes thapsina* n. sp.

♂. 21 mm. Head whitish-ochreous, crown ochreous-yellow. Palpi and antennæ ochreous-whitish. Thorax ochreous-orange, partially sprinkled with fuscous. Abdomen ochreous-orange, segmental margins white. Legs whitish, anterior femora and tibiæ dark fuscous above. Forewings orange-ochreous, towards base partially suffused with fuscous, posterior  $\frac{2}{3}$  crossed by four irregular whitish lines, partially obscurely edged with a fuscous tinge; tips of segments pale or whitish, with a minute dark fuscous terminal dot; cilia alternately whitish-ochreous and whitish. Hindwings whitish; segments 1-5 with six, segment 6 with three ochreous bars irregularly edged with dark fuscous irroration; cilia as in forewings.

Two specimens, Maskeliya, Ceylon, in February (Pole). Only comparable in general colouring with the Australian *O. xanthodes*, from which, however, it is quite distinct.

*Orneodes ischalea* n. sp.

♂. 13 mm. Head white, back of crown mixed with fuscous. Palpi white, externally fuscous-tinged. Antennæ whitish. Thorax whitish, mixed with fuscous. Abdomen whitish, irrorated with fuscous, with a clear white trapezoidal dorsal patch before middle, and a spot beyond middle. Legs white, anterior femora and tibiæ infuscated above. Forewings and hindwings whitish-ochreous, crossed by six white irregular lines edged with fuscous irroration, sixth terminal; base of forewing mixed with dark fuscous, costa spotted alternately with white and dark fuscous; cilia alternately whitish-ochreous and whitish.

One specimen, Pundalu-oya, Ceylon, in February (Green).

*Eucosmida* = EPIBLEMIDÆ.*Platyepplus* Wals.

Antennæ in ♂ simple or shortly fasciculate-ciliated. Palpi porrected or sub-ascending. Thorax with posterior crest. Posterior tibiæ broadly dilated with

Platycephalus merged with Enosma (B.J. XVIII. 137) and both names sink under  
Aegyploce (B.J. XIX. 592)





long dense rough scales, forming a brush on inner side in ♂ with one or more expansible hair pencils above. Forewings in ♂ without costal fold, termen straight or slightly rounded, with dorsal scale-projection at  $\frac{1}{3}$ , 7 and 8 separate. Hindwings with 3 and 4 connate, 5 approximated to 4, 6 and 7 approximated towards base, in ♂ sometimes with subdorsal groove.

Closely allied to *Eucosma*, from which it differs essentially by the brush-like posterior tibiæ. This character is not mentioned at all by Lord Walsingham, but his genus was based on the single species *aprobola* Meyr., which shows the structure clearly. I have also an undescribed Australian species, and now add eight from Ceylon, so that the genus will doubtless prove very extensive.

*Platypeplus hedraea* n. sp.

♂. 14—15 mm. Head ochreous-fuscous, purplish-tinged. Palpi dark fuscous. Antennæ fuscous. Thorax ferruginous-brown, suffused with purplish. Abdomen grey, apex whitish. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen straight, little oblique, rounded beneath; deep ferruginous, posteriorly brown-reddish on veins and suffused with blackish grey between them; an obtuse-triangular white costal patch, extending along costa from before  $\frac{1}{3}$  to  $\frac{3}{4}$ , and reaching  $\frac{1}{3}$  across wing, on costa strigulated with black, beneath which is a slight grey or ochreous suffusion; ocellus containing three or four longitudinal blackish bars, its posterior margin leaden; a fine blackish line from costa before apex to termen below middle; extreme apex orange; cilia ferruginous, partly barred with dark grey. Hindwings somewhat distorted and roughened with scales on dorsal  $\frac{2}{3}$  of posterior half; grey thinly scaled towards base, darker towards tornus; cilia whitish grey, with darker subbasal line.

Two specimens, Kandy, Ceylon, in August and September (Green). Easily known by the white costal patch.

*Platypeplus harmonica* n. sp.

♂. 18 mm. Head and palpi blackish grey, marked with white. Antennæ dark grey. Thorax dark grey mixed with white. Abdomen dark fuscous, anal tuft whitish. Posterior tibiæ with long hair pencil from base above, basal joint of posterior tarsi with fringe of dense projecting scales above. Forewings elongate-triangular, costa posteriorly moderately arched, apex obtuse, termen somewhat rounded, little oblique; deep brown-red; basal half mixed with olive-green and blackish and suffusedly strigulated with white, with small scattered tufts of raised white scales, limited by an olive-green line; terminal half with pairs of white costal strigulae; a small orange discal spot at  $\frac{2}{3}$ , preceded by a blackish suffusion; a pale purplish transverse shade beyond this, and a double pale ochreous subterminal stria, mixed with white broken beneath apex; between these some small grey spots, mixed with blue-whitish; cilia brown-reddish, barred with grey and white, towards tornus ochreous-yellow, and with a small orange spot at apex. Hindwings with subdorsal groove; dark fuscous, lighter towards base; cilia whitish with grey basal line.

One specimen, Peradeniya, in August (Green).

*Platypeplus erotias* n. sp.

♂ ♀. 13—16 mm. Head, palpi, and thorax ferruginous-brown, mixed with blackish. Antennæ brown. Abdomen fuscous. Forewings rather short-triangular, costa gently arched, apex obtuse, termen nearly straight, little oblique, rounded beneath; brown, more or less suffused with light rosy-crimson especially on margins, strigulated with dark fuscous, and strewn with spots of raised leaden scales, some of which are sometimes tipped with white; a small irregular whitish-ochreous spot in disc at  $\frac{2}{3}$ ; cilia dark grey, basal half barred with rosy-crimson. Hindwings dark fuscous, lighter towards base; cilia grey, with darker subbasal line; in ♂ beneath with shallow subdorsal groove, and scales somewhat raised towards tornus, dorsal cilia thickened and curled towards tornus.

Five specimens, Maskeliya, Yatiyantota, and Peradeniya, Ceylon, in February, March, July, September, and November (Green, Pole).

*Platypeplus phyllochloa* n. sp.

♂. 15—17 mm. Head, palpi, and thorax dull green. Antennæ grey. Abdomen dark grey, with long lateral hair pencils on each side from near base. Brush of posterior tibiae black on inner side. Forewings rather elongate, posteriorly dilated, costa gently arched, apex obtuse, termen nearly straight, hardly oblique, rounded beneath; rather light green; costa strigulated with black and whitish; basal third more or less strigulated with blackish; central fascia deeper green, more or less mixed with black, narrowest on costa, anterior edge undefined, posterior well marked, somewhat irregular, partially edged with white; a dark fuscous blotch, angular and edged with white above, roundish beneath, before middle of termen, between this and central fascia a short curved transverse dark fuscous mark; suffused white strigæ above this, connecting with costal strigulae; tornal space more or less sprinkled with blackish and whitish; cilia dark grey, with two or three whitish ochreous bars beneath apex, towards tornus whitish. Hindwings with subdorsal groove and hair pencil; dark fuscous; cilia grey, with darker subbasal shade.

Three specimens, Peradeniya, Kandy, and Haragam, Ceylon, in July and August (Green).

*Platypeplus creserias* n. sp.

♂. 17 mm. Head and thorax fuscous, mixed with whitish ochreous. Palpi ochreous white, dark fuscous, above except towards apex. Antennæ pale fuscous. Abdomen fuscous, anal tuft ochreous-whitish. Forewings elongate-triangular, costa rather strongly arched, apex obtuse, termen straight, little oblique, rounded beneath; fuscous, densely and suffusedly strigulated throughout with whitish-ochreous, with some scattered dark olive-green scales; costa dark fuscous, with pairs of ochreous-whitish strigulae terminated by short leaden streaks, beneath costa some reddish-ochreous suffusion; basal patch indicated on dorsal  $\frac{2}{3}$  by dark fuscous intermixture, outer edge bent in middle; a small brown spot on middle of costa; a triangular darker fuscous prætornal spot, sprinkled with ochreous-whitish; a triangular pinkish fuscous apical patch, streaked with dark olive-green; cilia grey, mixed with ferruginous

The first part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1) as  $t \rightarrow \infty$ . It is shown that the solutions of the system (1) are bounded and tend to zero as  $t \rightarrow \infty$ .

In the second part of the paper, the asymptotic behavior of the solutions of the system (1) is studied as  $t \rightarrow 0$ . It is shown that the solutions of the system (1) are bounded and tend to zero as  $t \rightarrow 0$ .

The third part of the paper is devoted to the study of the asymptotic behavior of the solutions of the system (1) as  $t \rightarrow \infty$ . It is shown that the solutions of the system (1) are bounded and tend to zero as  $t \rightarrow \infty$ .

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and dark fuscous, above tornus with a patch of ochreous-whitish suffusion. Hindwings rather dark fuscous; cilia whitish-fuscous, with darker subbasal line.

One specimen, Haragam, Ceylon, in July (Green).

*Platypeplus threnodes* n. sp.

♂. 28 mm. Head, palpi, and thorax dark ashy-fuscous, palpi with ochreous spots beneath apex of second and on terminal joint. Antennæ grey. Abdomen rather dark fuscous, apex of anal tuft whitish. Forewings elongate, posteriorly rather dilated, costa moderately arched, apex rounded, termen almost straight, little oblique, rounded beneath; blackish-fuscous, closely and suffusedly strigulated with shining purplish-lead, less so towards costa; a small roundish blackish spot in disc at  $\frac{2}{5}$ , and another above tornus; cilia purplish-lead. Hindwings rather dark fuscous; cilia light grey, with darker subbasal line.

One specimen, Kandy, Ceylon, in July (Green).

*Platypeplus hemiopta* n. sp.

♂. 28 mm. Head, palpi, antennæ, and thorax light-brown. Abdomen fuscous, anal tuft whitish. Forewings elongate, posteriorly dilated, costa moderately arched, apex rounded, termen slightly rounded, little oblique; ferruginous-brown, suffusedly strigulated with purplish-lead, costal half pale yellow-ochreous strigulated with prismatic whitish-ochreous, costa strigulated with dark fuscous, and on anterior half suffused with ferruginous-brown; some scattered black strigulae on dorsal half, and an irregular black transverse mark above tornus; a dark fuscous suffusion towards termen beneath apex, concave beneath; cilia brown mixed with lead, with a pale ochreous apical patch. Hindwings rather dark fuscous, with a small flap of white scales beneath costal area before middle; cilia light grey, with darker subbasal line.

One specimen, Peradeniya, Ceylon, in September (Green).

*Platypeplus rhynchias* n. sp.

♂ ♀. 24-29 mm. Head, antennæ, and thorax brown, face dark fuscous. Palpi brown mixed with dark fuscous. Abdomen whitish-fuscous mixed with dark fuscous. Forewings elongate-triangular, costa slightly arched, apex rounded, termen nearly straight, little oblique rounded beneath; ferruginous-brown, strigulated and more or less suffused with purplish-fuscous, except towards base; costa strigulated with dark fuscous; a small irregular triangular blackish spot above tornus; an irregular pale ochreous terminal fascia strigulated with darker, indented by a downwards-oblique acute projection of ground colour nearly or quite touching termen below middle, which is edged by two blackish strigæ, upper curved along margin of terminal fascia to apex, lower running towards costa at  $\frac{4}{5}$ , terminal fascia suffused upwards beneath this cilia; reddish-fuscous irrorated with whitish-ochreous, with two dark fuscous lines.

Hindwings rather dark-grey; cilia pale grey, with darker subbasal line.

Four specimens, Kandy and Yatiyantota, Ceylon, in March and November (Green).

*Notocelia helota* n. sp.

♂. 15 mm., ♀ 20-26 mm. Head, palpi, and thorax dark fuscous, sometimes mixed with brownish. Antennæ dark fuscous. Abdomen grey. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen nearly straight, rather oblique, rounded beneath; bent up and shortly oppressed to 2 near origin of latter; dark bronzy-fuscous, obscurely strigulated with leaden-grey; and ochreous-whitish discal dot at  $\frac{3}{4}$ ; cilia bronzy-fuscous, with darker subbasal shade. Hindwings fuscous; cilia light fuscous, with darker subbasal shade.

Four specimens, Maskeliya and Badulla, Ceylon, in July and November (Green, Pole).

*Lipoptycha ochropa* n. sp.

♂. 8-9 mm. Head, antennæ, and thorax pale fuscous, face whitish-ochreous. Palpi ochreous-whitish. Abdomen fuscous. Forewings moderately elongate, posteriorly slightly dilated, costa gently arched, apex obtuse, termen slightly sinuate beneath apex, rather obliquely rounded, light fuscous, obscurely striated with dark fuscous, striæ rectangularly bent in middle, alternate dark striæ, purplish-leadon on costal half; costa strigulated with whitish; towards middle of dorsum four of the alternating striæ of ground colour becoming more whitish very obscurely indicate a dorsal blotch; four black dots before lower portion of termen; cilia whitish: fuscous, with dark fuscous subbasal line becoming sharper and blackish round apex. Hindwings rather dark fuscous; cilia whitish, with dark fuscous subbasal line.

Three specimens taken by myself at Kandy, Ceylon, in December.

*Eucelis* Hb.

I agree with Lord Walsingham that this name should be adopted for the genus standing in my Handbook as *Epinotia*.

*Eucelis critica* n. sp.

♂. 12-14 mm. Head and thorax grey, slightly ochreous-tinged, shoulders mixed with dark fuscous. Abdomen grey. Forewings elongate, costa gently arched, apex obtuse, termen slightly sinuate, little oblique, rounded beneath; olive-fuscous, posteriorly whitish-tinged, with scattered blackish-fuscous, strigulae; costa strigulated throughout with blackish-fuscous, posteriorly with whitish interspaces; angulated outer edge of basal patch indicated by dark fuscous suffusion; central fascia suffused, dark fuscous, narrow on costa, broad and ill-defined in disc, obsolete towards dorsum; veins posteriorly lined with dark fuscous, and a longitudinal patch of dark fuscous suffusion between central fascia and termen above middle; a silvery-metallic transverse mark before middle of termen, preceded by four elongate black dots; apex blackish, edged beneath by a curved whitish strigula: cilia pale fuscous, more or less irrorated with whitish, towards apex suffusedly mixed with dark fuscous. Hindwings with 3 and 4 stalked; fuscous; cilia whitish-grey, with grey subbasal shade, dorsum with fringe of long blackish hairs.

Two specimens, Surat, Bombay, in October (Maxwell-Lefroy). Larva feeds in spun-up shoots of *Cajanus indicus* (Maxwell-Lefroy).

# THE HISTORY OF THE

## REPUBLIC OF THE UNITED STATES

OF AMERICA

FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME

BY

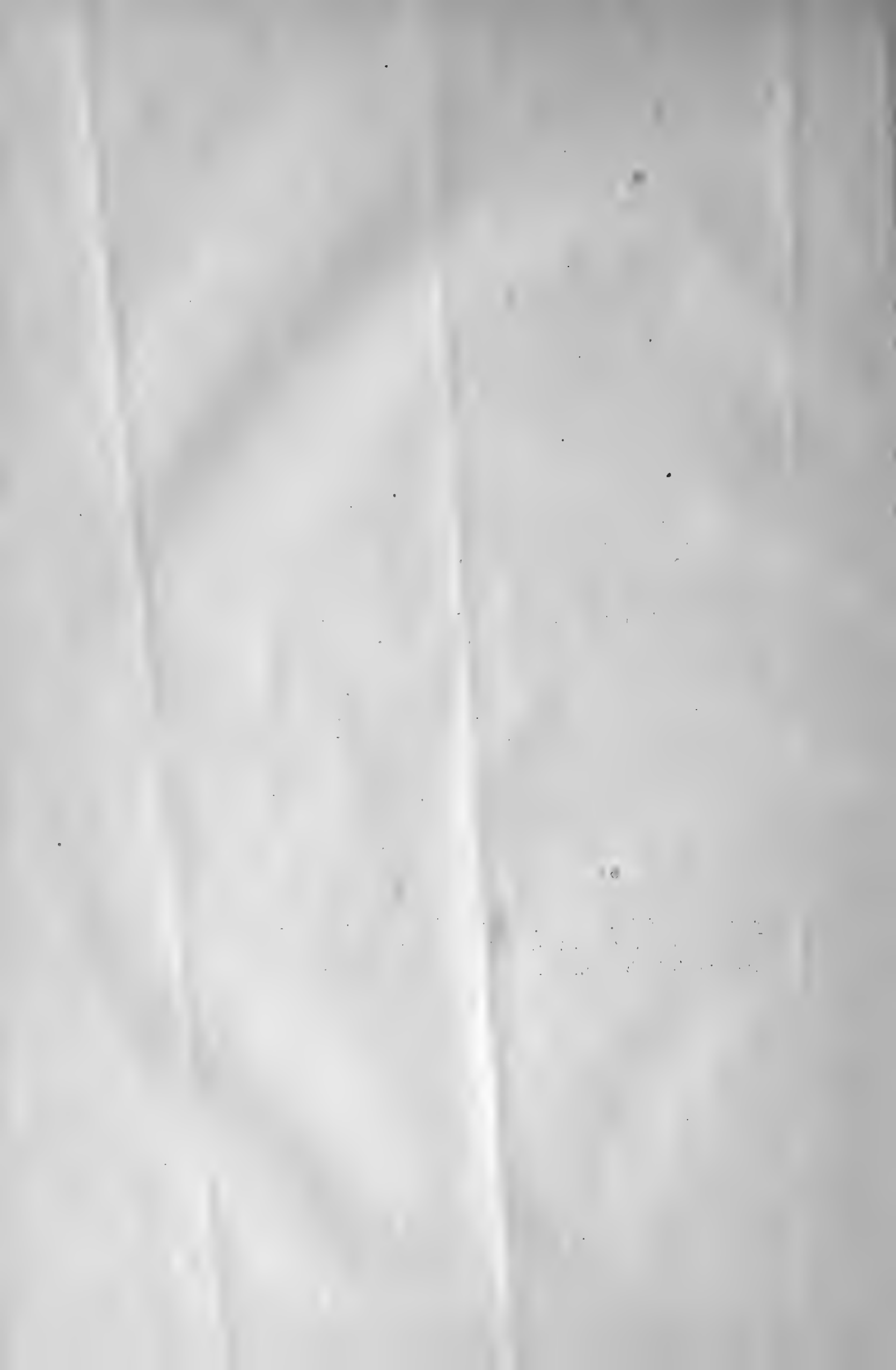
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1877

THE HISTORY OF THE

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## TORTRICIDÆ.

*Eboda* Walk.

Antennæ in ♂ moderately ciliated. Palpi moderate, porrected or ascending. Thorax without crest. Forewings without costal fold; 3 and 4 stalked, 7 to termen. Hindwings with 3 and 4 connate, 5 absent, 6 and 7 stalked.

Apparently related to *Oxygrapha*, but easily distinguished by the different neuration.

*Eboda smaragdinana* Walk.

(*Eboda smaragdinana* Walk. Cat. Suppl. 1805.)

♂ ♀. 14-18 mm. Head and thorax green. Palpi white, spotted with olive-green. Abdomen dark-grey. Forewings suboblong, costa abruptly arched and roughened with scales near base, broadly prominent and with a patch of rough projecting scales beyond middle, apex rounded-obtuse, termen slightly rounded, vertical; deep emerald-green; a round spot in middle of disc, a transverse spot from dorsum beyond middle nearly reaching it and sometimes a subcostal dot beyond middle mixed with ochreous and blackish raised scales, and edged with whitish; a narrow dark grey terminal fascia continued round apex, anteriorly marked with blackish and edged with white, terminating just above tornus; a blackish white-edged tornal dot; cilia grey, base spotted with pale ochreous. Hindwings dark fuscous; cilia fuscous, tips whitish.

Seven specimens, Kandy and Haragam, Ceylon, in March, August, and September (Green). Walker's type is from New Guinea; his description is unrecognisable.

*Oxygrapha* Hb.

I think it best to follow Lord Walsingham in adopting this name for the genus standing as *Acalla* in my Handbook.

*Oxygrapha sagmatias* n. sp.

♂. 17-20 mm. Head and thorax fuscous. Abdomen pale fuscous or whitish-fuscous. Forewings moderately elongate, costa strongly and evenly arched throughout, apex obtuse, termen faintly sinuate, little oblique, rounded beneath; fuscous, obscurely strigulated with darker, more or less mixed or sprinkled with ferruginous-brown, some very small scattered scale-tufts; a curved ochreous-yellow ferruginous-mixed fascia-like blotch running from dorsum near base obliquely outwards to middle of disc, thence bent towards tornus and terminating at  $\frac{2}{3}$ , but this blotch is sometimes (var. 2) wholly obsolete; a very small white spot before apex; cilia dark fuscous, base and a median line paler. Hindwings pale fuscous or whitish-fuscous, suffused with darker posteriorly; cilia whitish-fuscous, with dark fuscous subbasal line.

Five specimens, Maskeliya and Horton Plains, Ceylon, in February and March (Pole, Green).

*Epagoge siderantha* n. sp.

♂ ♀. 12-14 mm. Head and palpi pale brownish-ochreous or brownish, palpi in ♂ 3, in ♀ almost 4. Thorax brown, with large posterior crest tipped with dark fuscous. Abdomen whitish-fuscous, suffused with grey posteriorly,

especially in ♀, anal tuft of ♂ whitish. Forewings elongate-triangular, costa moderately and evenly arched, apex obtuse, termen sinuate beneath apex, little oblique, rounded beneath; ferruginous-brown; numerous scattered small shining bluish-leadene-metallic spots, and a transverse series immediately before termen; in ♂ a triangular pale yellow costal spot before middle, and a smaller one beyond middle; in ♀ a triangular costal spot of orange suffusion beyond middle, and a large semi-circular deep orange dorsal blotch extending from  $\frac{1}{3}$  almost to tornus, marked on dorsum with a pale yellow irregular outwardly oblique sometimes interrupted mark before middle, and a small pale yellow triangular spot beyond middle; cilia pale ochreous-yellow, at tornus dark grey. Hindwings yellow-whitish, in ♂ with apex and some posterior and terminal strigulae dark grey, in ♀ posteriorly rather widely suffused with dark grey, more strongly towards termen; cilia ochreous-whitish, towards lower half of termen greyish, in ♀ with dark grey sub-basal shade.

Three specimens, Maskeliya, Ceylon, in February and March (Pole).

*Cacæcia epicyrta*, n. sp.

♂ 18.21 mm. ♀ 23 mm. Head and thorax reddish-fusces, sometimes mixed with ferruginous. Palpi ferruginous. Abdomen fuscous, anal tuft brownish-ochreous. Forewings moderate, posteriorly dilated, costa in ♂ moderately arched anteriorly and sinuate before apex, in ♀ more strongly arched and sinuate, apex obtuse, prominent and in ♀ considerably produced, termen sinuate, beneath apex, not oblique but rather prominently bowed; 7 and 8 nearly approximated towards base; costal fold of ♂ reaching from base to  $\frac{2}{5}$  of costa, almost  $\frac{1}{3}$  of wing in breadth, enclosing a pale ochreous-yellowish tuft; ferruginous-ochreous, in ♀ strigulated with brown; costal fold of ♂ suffused with dark fuscous; an oblique triangular deep red-brown blotch from dorsum near base; central fascia darker, in ♂ suffused with the purplish-fuscous and make above middle with deep red-brown, running from  $\frac{2}{5}$  of costa to before tornus, narrowed on costa, edges irregular and ill-defined; a dark red-brown elongate costal spot, reaching from middle to  $\frac{5}{8}$ ; in ♂ a red-brown sub-apical spot, and an oblique ferruginous-brown mark from beneath costal spot, nearly reaching termen above tornus; cilia ferruginous, at apex dark fuscous, towards tornus pale ochreous-yellowish. Hindwings pale ochreous-yellowish, becoming deeper towards apex, dorsal half grey; cilia pale yellowish, round apex grey on outer half; in ♀ on costa with a thickened patch of dense grey scales from beyond middle to near apex.

Seven specimens, Maskeliya, Puttalam, and Newera Eliya, Ceylon, from July to September (Green). Bred from larvæ feeding in fruit of plum in May (Green); but very probably the larva is a general feeder. This species is very similar to the European *C. podana*; it may be distinguished structurally by the approximation of veins 7 and 8 of forewings towards base (in *podana* these diverge from base), the much broader costal fold of ♂, the prominent termen of forewings, and in ♀ the thickened patch of scales in costal cilia of hindwings; and also by the grey colour of the hindwings being confined to dorsal half, whereas in *podana* it extends towards costa anteriorly.







## PHALONIADÆ.

*Tribonica*, n. g.

Antennæ in ♂ biciliated with very long fine cilia. Palpi long, porrected. Thorax smooth; posterior tibiæ clothed with long hairs above. Forewings without costal fold in ♂, surface with tufts of raised scales; 2 from very near angle of cell, 3 and 4 stalked from angle, 7 to termen, 8 and 9 long-stalked. Hindwings with 2, 3, 5 approximated at base, 4 absent, 6 to apex, 7 absent; lower margin of cell with basal pecten of hairs.

Closely allied and superficially very similar to *Heterocrossa*, but immediately distinguished by the stalking of veins 3 and 4, 8 and 9 of forewings.

*Tribonica eremitis*, n. sp.

♂ ♀. 17-24 mm. Head white, crown in ♀ sprinkled with fuscous. Palpi in ♂ 3, in ♀ 4, white, externally suffused with pale ochreous and densely irrorated with blackish-fuscous. Thorax whitish, shoulders infuscated, in ♀ more or less irrorated with fuscous. Abdomen shining whitish. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen straight, oblique, rounded beneath; whitish, in ♂ slightly, in ♀ more strongly strewn with fuscous, grey, and blackish scales; a small brownish-tinged basal patch, edged by a nearly straight ridge of raised scales mixed with dark fuscous anteriorly from  $\frac{1}{5}$  of costa to  $\frac{1}{5}$  of dorsum; two white tufts above and below middle at  $\frac{1}{3}$ , edged anteriorly with dark fuscous; a transverse ridge of white scales in disc at  $\frac{2}{3}$ , anteriorly dark fuscous, and preceded by a patch of more or less dark suffusion; and ill-defined fuscous subterminal shade, more distinct in ♀; cilia fuscous whitish, basal half faintly darker-barred. Hindwings and cilia ochreous-grey-whitish.

Seven specimens, Maskeliya, Ceylon, in March (Pole).

*Trymalitis*, n. g.

Antennæ in ♂ simple. Palpi moderate, subascending. Thorax smooth. Anterior femora in ♂ with expansible hair pencil from base; middle and posterior tibiæ clothed with long fine hair above. Forewings without costal fold in ♂; 2 from posterior fourth of cell, 3 and 5 approximated at base, 4 absent, 7 to apex, 8 and 9 stalked, 10 closely approximated to 8. Hindwings with 2 remote from angle, 3 and 4 short-stalked from angle, 5 slightly approximated to 4, 6 and 7 long-stalked; lower margin of cell without basal pecten of hairs.

Probably belonging to the group of *Commophila*, but very distinct by the neururation of forewings.

*Trymalitis margarias*, n. sp.

♂. 17-20 mm. Head whitish mixed with ferruginous. Palpi white, second joint dark fuscous above. Thorax white, spotted with grey. Abdomen yellowish-grey. Forewings elongate, posteriorly dilated, costa slightly arched, apex round pointed, termen sinuate beneath apex, rounded, oblique; whitish with rows of undefined fuscous strigulæ or roundish spots between veins, becoming obsolete towards middle of disc; costa and dorsum shortly strigulated with dark fuscous; a dark fuscous discal dot above middle; a rather

broad fuscous fascia at  $\frac{3}{4}$  parallel to termen, marked with darker; an orange apical spot, enclosing a white crescentic mark; a praeterterminal series of dark fuscous strigulae in fuscous spots; cilia white, with an orange basal spot at apex, and three or four faint fuscous bars on outer half round apex. Hindwings grey, paler or whitish towards base, veins streaked with ochreous-fuscous, apex white; cilia white, sometimes with a grey basal spot at apex.

Two specimens, Kandy and Puttalam, Ceylon, in October and November (Green).

#### GELECHIADÆ.

*Sitotroga cerealella*. Ol.

Newera Eliya, Ceylon, in March and June (Green). This now cosmopolitan insect (stated by Mr. Green to be destructive to rice) will probably be found generally distributed, though liable to be overlooked; the larva feeds on grain of all kinds, and may do great damage in granaries.

*Chaliniastis metrodelta*, n. sp.

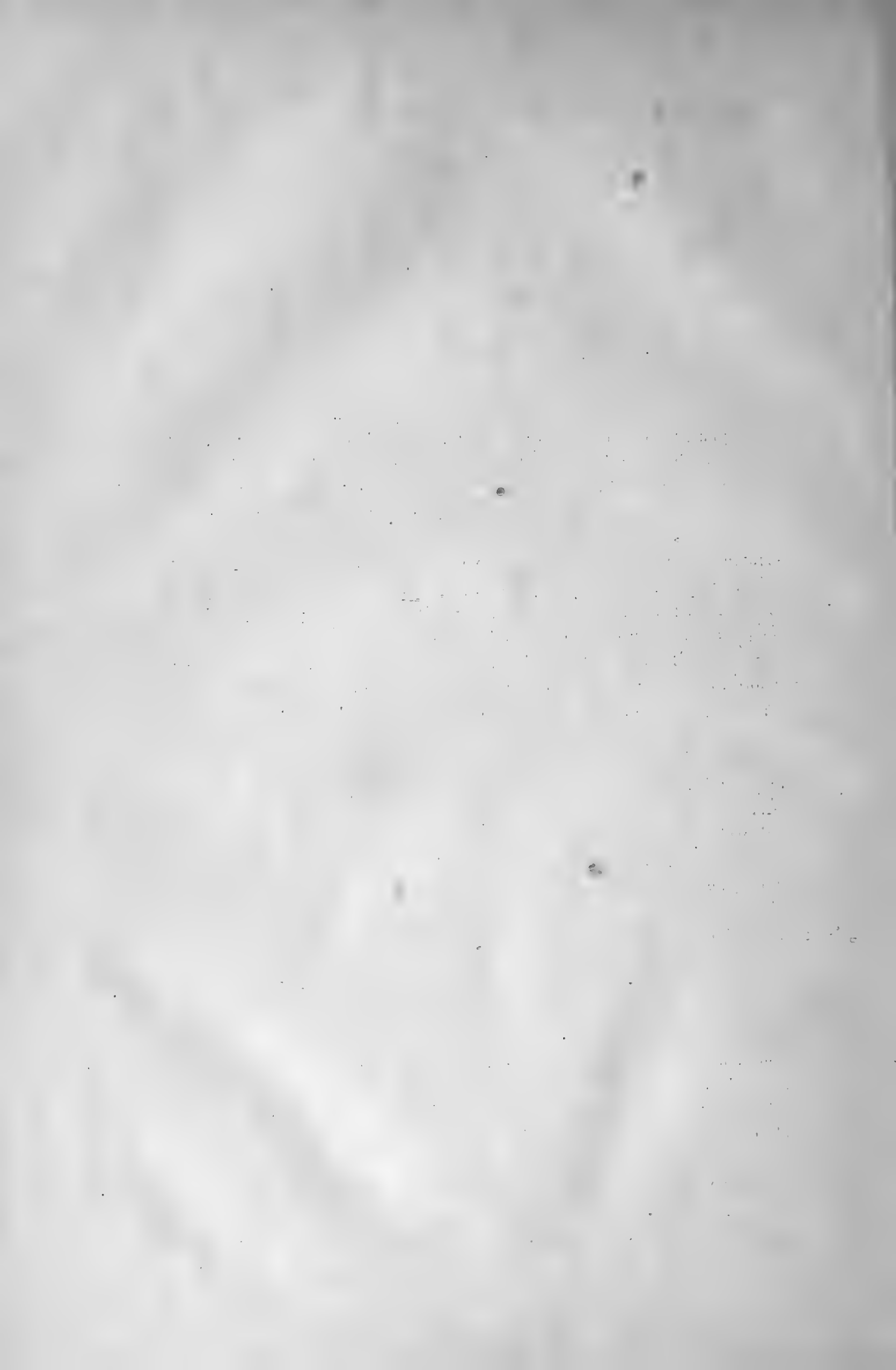
♂. 15 mm. Head fuscous, sides ochreous-yellow. Palpi pale ochreous-yellow, second joint with lower  $\frac{2}{3}$  and almost apical ring fuscous externally, terminal joint as long as second, with base and anterior edge, except towards base dark fuscous. Antennæ dark grey. Thorax purplish-fuscous. Abdomen fuscous, darker posteriorly, apex ochreous-yellow. Posterior tibiæ shortly rough-scaled above. Forewings elongate, narrowed anteriorly, posteriorly rather dilated, costa gently arched, apex obtuse, termen nearly straight, somewhat oblique, rounded beneath; fuscous, slightly purplish-tinged; costal edge ochreous orange, somewhat suffused into ground colour; straight parallel transverse whitish-ochreous lines at  $\frac{2}{5}$  and beyond  $\frac{4}{5}$ , first followed by a triangular dorsal ochreous-brown patch, reaching  $\frac{3}{4}$  across wing, edged with dark fuscous posteriorly, second rather broadly edged with dark fuscous posteriorly; second discal stigma dark fuscous, edged with whitish-ochreous; a dark fuscous line round termen and apex, interrupted by ochreous-yellow dots; cilia ochreous-yellow, beneath tornus dark fuscous. Hindwings somewhat over 1, fuscous, slightly brassy-tinged; cilia  $\frac{1}{2}$ , whitish-fuscous, with two fuscous shades.

One specimen, Maskeliya, Ceylon, in March (Pole).

*Thiotricha orthiastis*, n. sp.

♂. 13 mm. Head shining, bronzy-fuscous, with pale reflections. Palpi light bronzy-grey, base whitish. Antennal ciliations 3. Thorax and abdomen bronzy-fuscous. Forewings elongate, very narrow, costa gently arched, apex pointed, termen extremely obliquely rounded; 9 out of 6; dark fuscous; a broad ochreous-white streak occupying costal half from base, from middle onwards gradually attenuated and leaving costal edge, not quite reaching apex; a fine white strigula between this and apical fifth of costa; a black apical mark; cilia grey, round apex ochreous-white with two dark fuscous lines. Hindwings almost 1, cilia  $2\frac{1}{2}$ : grey, darker posteriorly; cilia grey.





One specimen, Rawalpindi, Punjab (Manders).

*Epitheatis studiosa*, n. sp.

♂ ♀. 9-10 mm. Head, palpi, antennæ, thorax, and abdomen ochreous-whitish, tinged with pale fuscous. Forewings elongate, lanceolate; pale whitish-ochreous, brownish-tinged, towards apex with scales somewhat roughened; an obscure streak of fuscous suffusion from disc beyond middle to apex; cilia whitish-ochreous. Hindwings with apex somewhat produced termen sinuate, 5 basally obsolescent; pale whitish-ochreous; cilia pale whitish-ochreous.

Four specimens, Peradeniya, Ceylon, in December (Green). Larva destructive to dried plants in herbarium (Green). The larval habit is singular, but in this specialised form must be quite recent; it will doubtless be found to feed naturally under other circumstances.

*Gelechia gossypiella*. Saund.

Surat, Bombay (Maxwell-Lefroy). This species, described by Saunders as a *Depressaria*, is a true *Gelechia*, nearly allied to the European *G. malvella*, which feeds on an allied plant in the same way. It is stated to be very destructive to cotton.

*Gnorimoschema heliopa*. Low.

Peradeniya, Ceylon (Green); Cambay, Bombay (Maxwell-Lefroy). This species is Australian, and belongs to a group of nearly allied species native to that region, but its food plant has not been noticed there; it might prove to be an indigenous *Solanum*. In India and Ceylon it is a serious pest of the tobacco plant (*Nicotiana*); "the larva bores into the stem, and ultimately causes death; its presence may be known by a swelling of the green stem; it usually affects quite small plants in nurseries, but sometimes older plants; the point of infection is often on underside of midrib of leaf" (Green). It does not appear to be known in America, the home of the tobacco plant; I showed specimens to Mr. Busck, the principal authority on North American *Tineina*, and he was unacquainted with it; but a similar (probably the same) insect is reported to be destructive in Java. The moth is a small mottled yellow-brown species, resembling an ordinary *Gelechia* of the *obsoletella* group.

*Tipha*. Walk.

Antennæ over 1, in ♂ simple, basal joint sometimes with short apical prominence, Labial palpi in ♂ variably modified, second joint often much enlarged with projecting scales, terminal joint often more or less aborted; in ♀ long, recurved, second joint with oppressed scales, slightly rough beneath towards apex, terminal joint as long as second, slender, acute. Posterior tibiae and tarsi sometimes clothed with projecting scales above. Forewings with 3 absent, 2 and 4 approximated or stalked or coincident, 7 and 8 stalked or coincident, 7 to costa or apex on termen, 9 sometimes out of 7. Hindwings 1, elongate-trapezoidal, in ♂ apex obtuse, termen sinuate or rounded, in ♀ apex round-pointed, termen sinuate, cilia 1; in ♂ 3 absent, 2 and 4 connate or stalked, 5 absent, 6 and 7 connate or stalked, or coincident cell sometimes

*Tingitina*  
apparently



open, in ♀ 2 remote, 3 and 4 connate or stalked, 5 near, parallel, 6 and 7 connate or stalked.

This genus shows considerable variation of structure, especially in veins 7—9 of forewings, and in the often greatly modified palpi and other secondary sexual characters of the ♂; but I have no doubt that the different forms are properly included in the same genus, which remains easily definable. From *Timyra* it is readily distinguished by the absence of vein 3 in forewings, the presence of vein 5 in hindwings of ♀, and the want of the large median tuft of posterior tibiae. The curious modification of the palpi of ♂ occurs in varying degree in some species of *Timyra*, *Crocantbes*, and other allied genera, and is certainly only a specific character. *Cacogamia*, Snell, would seem from the descriptions to be a synonym of this genus.

*Tipha monetella*. Feld.

(*Anarsia monetella*. Feld., Reis. Nov. pl. CXXXIX, 19.)

Maskeliya, Ceylon, in February (Pole).

*Tipha pharetrata*, n. sp.

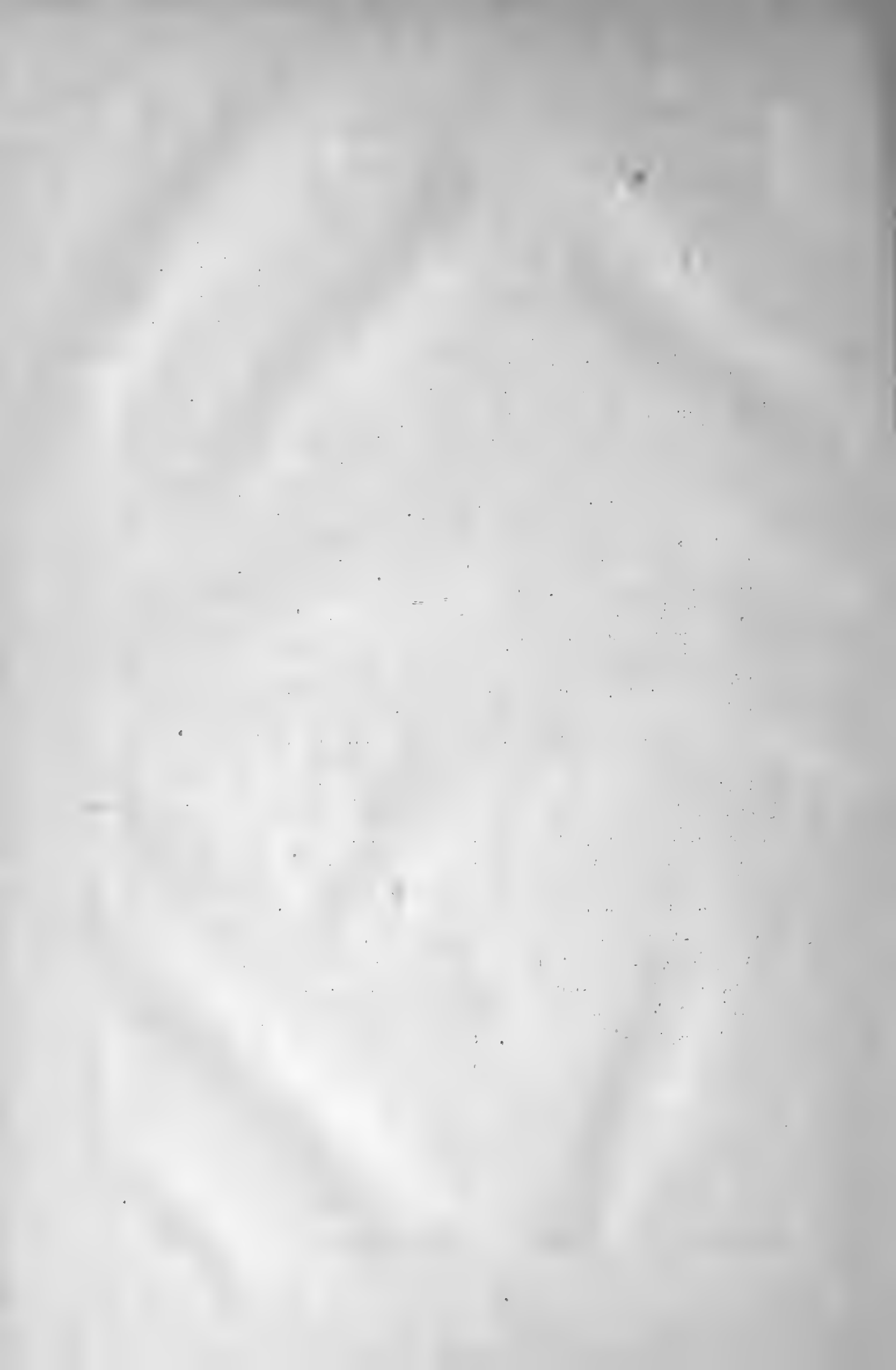
♂ ♀. 20-21 mm. Head light ochreous-orange, crown in ♀ suffused with purple-fuscous. Palpi in ♂ obliquely ascending, clothed with dense long projecting scales beneath so as to be spoon-shaped, obtuse, terminal joint minute, concealed; dark shining steel-grey, towards base light ochreous-orange, in ♀ wholly light ochreous-orange. Antennae ochreous-yellow, more or less suffused with grey towards tip. Thorax ochreous-orange, patagia purplish-fuscous. Abdomen whitish-yellowish, mixed with grey, especially in ♀. Legs ochreous-yellowish, anterior tibiae in ♂ with recurved flap of dense yellowish gray scales beneath; posterior tibiae orange, with shining bronze marks above near base and beyond middle, slightly rough and with black spots above on origin of spurs. Forewings elongate, narrow, costa gently arched, apex rounded, termen extremely obliquely rounded; 2, 4, 5 approximated, 7 to costa, 8 absent, 9 separate; orange, lighter and more ochreous-tinged towards costa; markings shining silvery-bronze; a spot on base of costa; a line along submedian fold from rather near base to beyond middle of wing; a longitudinal discal line from beyond  $\frac{1}{3}$  to  $\frac{3}{5}$ , dilated at extremities, and a longitudinal spot above its posterior extremity; six streaks on veins starting from beyond  $\frac{3}{5}$ , and running to posterior part of costa and termen: cilia ochreous. Hindwings in ♂ with 2, 4, 5 approximated, 6 and 7 connate, in ♀ 3 and 4 short-stalked; in ♂ light yellowish-fuscous, in ♀ grey; cilia pale brownish-ochreous, in ♀ pale yellowish round apex and upper part of termen; in ♂ with large expandible subdorsal pecten of pale yellowish hairs.

Two specimens, Kandy and Paradeniya, Ceylon (Green).

*Tipha spectralis*, n. sp.

♂. 21 mm. Head shining golden. Palpi clothed with dense long projecting scales beneath so as to be spoon-shaped, obtuse, terminal joint concealed; shining metallic grey, above and beneath suffused with ochreous-yellow. Antennae dark fuscous, with obscure median band of pale ochreous suffusion,





Thorax ochreous-orange, sides and posterior extremity shining metallic grey. Abdomen ochreous-yellowish. Legs yellowish, anterior tibiae dark grey above, with flap of recurved pale ochreous-yellowish hairs beneath, posterior tibiae and basal joint of tarsi clothed with long hairs above. Forewings elongate, narrow, costa gently arched, apex rounded, termen extremely obliquely rounded; 2 and 4 connate, 5 parallel, 7 and 8 stalked, 7 to termen; light shining bronzy-fuscous; costa suffused with ochreous-yellow, except a basal spot; dorsum suffused with ochreous-yellow anteriorly, connected with costal suffusion near base, and by a bar at  $\frac{1}{5}$ ; an indistinct ochreous-yellowish transverse mark below middle of disc: cilia pale shining bronzy, on costa and towards tornus yellowish-suffused. Hindwings with termen rather abruptly sinuate, 2, 4, 5 approximated, 6 to apex, 7 absent; light grey, yellowish-tinged, towards costa suffused with yellow-ochreous; a deep longitudinal median groove throughout, beneath which towards base is a dense expansible pecten of long yellowish hairs; cilia pale ochreous.

One specimen, Maskeliya, Ceylon (Pole).

*Tipha pyrophanes*, n. sp.

♀. 20 mm. Head and thorax shining purplish-bronzy fuscous. Palpi ochreous-yellow. Antennae fuscous. Abdomen grey. Legs yellowish, anterior femora and tibiae metallic grey, posterior tibiae smooth, deep yellow, apex dark grey. Forewings elongate, narrow, costa gently arched, apex rounded, termen extremely obliquely rounded; 2 and 4 approximated, 5 parallel, 7 and 8 stalked, 7 to termen; deep orange; markings shining purplish-lead-en-grey; a very small basal patch; a small spot in disc at  $\frac{1}{5}$ ; a very large patch occupying entire apical  $\frac{2}{3}$  except towards margins anteriorly, enclosing an irregularly triangular patch of ground colour in disc about  $\frac{3}{5}$ ; cilia shining grey. Hindwings with 6 and 7 stalked; grey; cilia light grey, towards base suffused with whitish-ochreous.

One specimen, Pundalu-oya, Ceylon, in February (Green).

*Tipha phalaritis*, n. sp.

♀. 18 mm. Head and thorax bluish-bronzy-fuscous. (Palpi broken.) Antennae rather dark fuscous, with whitish median band. Abdomen dark grey. Legs orange, femora and anterior tibiae grey, apex of middle and posterior tibiae dark grey, posterior tibiae with a tuft of grey hairs above on origin of median spurs, tarsi whitish. Forewings elongate, narrow, costa gently arched, apex rounded, termen very obliquely rounded; 2 and 4 approximated, 5 parallel, 7 and 8 stalked, 7 to termen; deep reddish-orange; markings purplish-fuscous; a very small basal patch; a discal dot at  $\frac{1}{5}$ ; a reniform blotch in disc slightly before middle; a terminal blotch occupying posterior fourth of wing: cilia pale shining fuscous, with brassy-purplish reflections. Hindwings with 6 and 7 stalked; rather dark fuscous; cilia fuscous, paler towards tips.

One specimen, Kandy, Ceylon, in September (Green).

*Tipha brochias*, n. sp.

♂. 20 mm. Head shining bronze, sides yellowish. Palpi with second joint loosely haired, terminal joint minute; ochreous-yellow, towards base

sprinkled with dark fuscous. Antennæ pale ochreous, towards base and apex becoming dark fuscous. Thorax dark bronzy-fuscous, tips of palagia tinged with brassy-ochreous. Abdomen dark fuscous, apex ochreous-yellow. Legs ochreous-yellow, anterior femora and tibiæ dark fuscous above, apex of middle femora and tibiæ dark fuscous, posterior tibiæ beyond median spurs, and basal joint of posterior tarsi dark fuscous, scales slightly raised on origin of spurs. Forewings elongate, narrow, costa gently arched, apex rounded, termen very obliquely rounded; 2 and 4 approximated, 5 parallel, 7 and 8 stalked, 7 to termen; orange, paler towards costa; markings bronzy-fuscous, darker-edged, suffused with shining purplish-lead; an elongate costal blotch at base, extended in disc to connect with an elongate loop-shaped discal blotch reaching to  $\frac{2}{5}$ ; a streak along dorsum from near base to beyond middle; a terminal patch occupying apical third, its anterior edge convex: cilia bronzy-fuscous. Hindwings with 2, 4, 5 approximated, 6 and 7 connate; a slight discal groove and ridge of scales towards base; dark fuscous; an irregular ochreous-yellow patch in disc towards base; cilia fuscous.

One specimen, Maskeliya, Ceylon (Pole).

*Timyra*. Walk.

Antennæ over 1, in ♂ simple, basal joint elongate, in ♂ sometimes densely tufted. Labial palpi long, recurved, second joint in ♂ sometimes clothed with long loose rough hairs, or with fine expansible hairs inwardly, in ♀ with appressed scales, rough beneath, terminal joint in ♂ sometimes very short, thickened with scales, rough anteriorly, in ♀ nearly or quite as long as second, slender, acute, loosely scaled. Anterior tibiæ with brush of scales beneath, posterior tibiæ with large dense median tuft of long hair scales above in both sexes, posterior tarsi thickened with rough scales or with fringe of long hairs above. Forewings with 2 remote from angle, 7 and 8 stalked, 7 to termen or apex. Hindwings over 1, trapezoidal, apex obtuse, termen not sinuate, cilia  $\frac{2}{3}$ , in ♂ usually with deep groove beneath cell, containing long hair-pencil; in ♂ 3 absent, 2 and 4 approximated or stalked, in ♀ 2 remote, 3 and 4 separate or stalked; 5 absent, 6 and 7 stalked.

Obviously allied to *Crochantes*, which is, however, immediately distinguished by the absence of veins 2 and 9 of forewings; the large scale tuft of posterior tibiæ in both sexes is a quite peculiar character.

*Decuaria*, Walk., is a synonym.

*Timyra machlas*, n. sp.

♂ ♀. 20-22 mm. Head bronzy-fuscous, sides ochreous-whitish, in ♂ with scales of crown directed forwards above antennæ. Palpi ochreous-whitish mixed with dark fuscous, in ♂ with basal joint dilated, second joint much enlarged, very long and thickened with dense scales, above with fringe of long projecting hairs and on inner side with long expansible whitish hair-pencil, terminal joint  $\frac{1}{4}$  of second, thickened with dense dark fuscous scales, in ♀ second joint with appressed scales, terminal joint as long as second, both with anterior edge blackish. Antennæ whitish-ochreous, in ♀ ringed, in ♂ suffused







with fuscous, basal joint in ♂ with large whitish-ochreous tuft of scales in front, hollowed and dark fuscous on inner side. Thorax fuscous, collar fuscous, whitish. Abdomen pale ochreous. Legs ochreous-yellow, anterior pair dark fuscous, except part of tarsi, middle tibiae whitish banded with dark fuscous posterior tibiae and tarsi with long fine projecting hairs above, spotted and streaked with dark fuscous, median tuft of tibiae ochreous-yellow, mixed with dark fuscous. Forewings elongate, rather narrow, costa gently arched, apex in ♂ obtuse, in ♀ round-pointed, termen straight, rather oblique, rounded beneath; 7 to apex; light brown, mixed with darker; basal area mixed with orange, and with orange median and plical streaks to middle; in ♂ a sub-basal tuft of erect scales; beyond middle a broad orange slightly oblique transverse fascia; posterior area with white lines on veins, and along costa and termen: cilia pale ochreous, base orange-tinged, with two dark fuscous shades. Hindwings in ♂ whitish-ochreous, posteriorly suffused with fuscous; in ♀ fuscous; cilia as in forewings.

Two specimens, Kandy, Ceylon, in September and October (Green).

*Timyra mendicella*. Walk.

(*Decuaria mendicella*, Walk. Cat. Tin. 797.)

Palpi with appressed scales, very long, slender, alike in both sexes. Antennae in ♂ with large tuft of scales from basal joint in front, hollowed on inner side. Posterior tibiae and tarsi with loose rough projecting scales above, median tuft of tibiae very large, scales yellowish, tipped with black or suffused with dark fuscous. Forewings with vein 7 to termen. Hindwings as in *T. sphenias*.

Two specimens, Pundalu-oya, Ceylon, in March (Green).

*Timyra metallanthes*, n. sp.

♂. 19 mm. Head pale ochreous, crown fuscous-tinged. Palpi whitish-ochreous, second joint fringed with projecting hairs above, terminal joint as long as second, slender. Antennae whitish-ochreous, ringed with fuscous beneath, basal joint with large tuft in front, on inner side hollowed and mixed with dark fuscous. Thorax light shining brownish-ochreous. Abdomen pale ochreous. Legs whitish-ochreous, anterior tibiae dark fuscous, fringed with hairs beneath, middle tibiae suffused with dark fuscous, with expansible hairs towards apex above, posterior tibiae and first three joints of tarsi with projecting hairs above, median tuft of tibiae very large, mixed with shining metallic grey and black scales. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen straight, rather oblique, rounded beneath; 7 to termen; fuscous, irrorated with whitish-ochreous except on basal and terminal areas; an indistinct cloudy whitish-ochreous fascia at  $\frac{1}{4}$ ; an orange fascia before  $\frac{3}{4}$ , dilated on costa; cilia whitish-fuscous, with darker sub-basal shade, base pale orange-ochreous. Hindwings fuscous, paler and thinly scaled towards base, hair-pencil ochreous-yellowish; cilia whitish-ochreous, more yellowish towards base.

One specimen, Maskeliya, Ceylon (Pole).

*Timyra sphenias*, n. sp.

♂ ♀. 25-28 mm. Head and thorax fuscous, crown yellowish-mixed, in ♂ with hairs raised round a quadrate pale ochreous-yellowish area above antennæ. Palpi fuscous, somewhat mixed with ochreous yellowish, in ♂ with second joint clothed with loose rough hairs, terminal joint half second, much thickened with loose scales, in ♀ second joint thickened with loose scales, terminal joint nearly as long as second, tolerably slender. Antennæ ochreous-yellowish, beneath infuscated, basal joint in ♂ with large tuft of fuscous scales in front. Abdomen ochreous-yellow. Legs purplish-fuscous partially mixed or suffused with ochreous-yellowish, posterior tibiæ clothed with rough projecting hairs beneath on basal half, posterior tarsi clothed with rough projecting hairs above, more strongly in ♂. Forewings elongate, narrow, posteriorly somewhat dilated, costa slightly arched, apex obtuse, termen straight, rather oblique, rounded beneath; 7 to termen; purplish-fuscous, irregularly irrorated with dark fuscous, sometimes posteriorly sprinkled with whitish-ochreous; a transverse elongate-triangular ochreous-yellow blotch beyond middle, apex downwards, more or less nearly touching both margins: cilia fuscous, becoming ochreous-yellow towards base, with a darker fuscous subbasal line. Hindwings pale ochreous-yellowish; termen in ♀ narrowly suffused irregularly with fuscous, in ♂ only at apex and towards tornus; cilia pale ochreous-yellowish.

Three specimens, Maskeliya, Peradeniya, and Pundalu-oya, Ceylon, in March and August (Green).

*Macrolona platyconta* n. sp.

♂. 16-20 mm. Head and thorax ochreous-white. Palpi whitish irrorated with fuscous and dark fuscous, second joint roughened towards apex above and beneath, terminal joint slightly shorter than second. Antennæ very stout, flatly compressed, ochreous-whitish, tip dark fuscous. Abdomen ochreous-whitish. Forewings elongate, rather narrow, costa gently arched, apex round pointed, termen sinuate, oblique, rounded beneath; 7 to termen, 9 separate; ochreous-whitish, towards costa and dorsum tinged and sprinkled with fuscous, costa posteriorly more or less suffused with fuscous; some scattered blackish or dark fuscous scales on submedian fold; irregular groups of black and dark fuscous somewhat raised scales representing stigmata, plical before first discal: cilia pale whitish-ochreous, outer half irrorated with fuscous. Hindwings with 3 and 4 connate or short-stalked, 6 and 7 long-stalked; light fuscous; cilia pale whitish-ochreous, outer half irrorated with fuscous round apex.

Two specimens, Maskeliya, Ceylon, in January (Pole).

*Pharangitis* n. g.

Antennæ  $\frac{1}{2}$ , in ♂ thick, simple, basal joint moderate, without pecten. Labial palpi long, curved, ascending, second joint thickened with scales, roughly projecting towards apex beneath, terminal joint as long as second, slender, acute. Forewings with 3 absent, 2, 4, 5 separate, 8 and 9 out of 7, 7 to

Timya crucella, Feld  
|| Timya sphenias, Meyr.

} B.T. XVII. 145

Pharangitis spatias, nyp, Wyt. Gen. An. fasc 184, p. 219, t. 4 f. 93.

Deutoplasia cremnaspis, nyp, Wyt. Gen. An. fasc 184, p. 220, t. 4 f. 92 (1926)



termen. Hindwings 1, elongate, apex round-pointed, termen faintly sinuate cilia 1; 3 and 4 remote, 5 parallel, 6 and 7 long-stalked.

Apparently allied to *Macrotona*.

*Pharangitis spathias* n. sp.

♂. 15 mm. Head and thorax white, patagia brownish-ochreous. Palpi ochreous-yellowish, apex of second joint white, terminal joint white towards base. Antennæ white, becoming whitish-ochreous towards apex. Abdomen ochreous-yellowish. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, produced, termen concave, oblique, rounded beneath; rather deep brownish-ochreous; a clear white costal streak from base to  $\frac{5}{6}$  attenuated posteriorly; dorsum slenderly white towards base: cilia brownish-ochreous, blackish-grey at apex and on a median shade disappearing towards tornus, beyond this whitish-yellow on termen. Hindwings whitish-ochreous, slightly infuscated towards apex; cilia whitish-ochreous.

One specimen, Maskeliya, Ceylon, in March (Pole).

*Antiochtha* n. g.

Antennæ almost 1, in ♂ simple, basal joint moderate, without pecten. Labial palpi long, recurved, second joint thickened with rough scales beneath, terminal joint longer than second, slender, acute. Posterior tarsi with basal joint thickened with rough scales above. Forewings with 2 and 3 stalked, 5 absent, 8 and 9 out of 7, 7 to termen. Hindwings 1, trapezoidal, apex obtuse, termen not sinuate, cilia 1; 3 and 4 connate, 5 absent, cell open, 6 and 7 stalked.

Allied to *Onebala*.

*Antiochtha balbidota* n. sp.

♂. 17-18 mm. Head pale greyish-ochreous. Palpi whitish, second joint irrorated with dark fuscous except towards apex, terminal joint with extreme base and upper  $\frac{2}{3}$  of anterior edge dark fuscous. Antennæ pale ochreous. Thorax pale ochreous, mixed with whitish and dark fuscous. Abdomen whitish-ochreous. Forewings elongate, rather narrow, costa anteriorly gently arched, posteriorly nearly straight, apex obtuse, termen straight, oblique, rounded beneath; light fuscous with some scattered dark fuscous scales, median area suffusedly mixed with whitish; a short blackish bar from base of costa; a narrow irregular blackish fascia from  $\frac{1}{4}$  of costa to before middle of dorsum, more or less obsolete on dorsum, edged posteriorly with whitish suffusion; a round blackish dot, edged with whitish suffusion, in disc beyond middle; an ill-defined cloudy whitish transverse line from  $\frac{3}{4}$  of costa to before tornus, somewhat angulated outwards in middle; edge of termen and tornus suffused with dark fuscous: cilia rather dark fuscous sprinkled with pale points, at base and beneath tornus pale greyish-ochreous. Hindwings light fuscous, darker on termen; cilia pale whitish-ochreous, with two fuscous shades.

Two specimens, Maskeliya, Ceylon (Pole).

*Onebala cremnaspis* n. sp.

♂. 21-22 mm. Head and thorax bronzy-fuscous. Palpi ochreous-whitish, second joint externally suffused with rather dark fuscous except towards apex,

terminal joint longer than second. Antennæ whitish-ochreous, indistinctly ringed with fuscous. Abdomen pale-bronzy-ochreous. Legs ochreous-whitish, anterior and middle tibiæ and tarsi blotched with dark fuscous, posterior tibiæ dark-fuscous. Forewings elongate, narrow, costa gently arched, apex round pointed, termen concave, rather oblique, rounded beneath; 2 from angle, 4 and 5 stalked, 7 to apex; bronzy-fuscous; extreme costal edge whitish-ochreous except towards base; markings blackish fuscous, finely edged with whitish-ochreous; an irregular triangular dorsal blotch before middle, reaching  $\frac{4}{5}$  across wing, confluent on dorsum with a triangular posterior dorsal patch of dark fuscous suffusion, whose apex reaches costa at  $\frac{3}{4}$ , its posterior edge limited by nearly straight fine whitish-ochreous line; a small spot on costa before middle, and a small oblique oval spot in disc beyond middle: cilia light fuscous-ochreous, with broad rather dark grey sub-basal shade, beneath tornus wholly dark grey. Hindwings pale ochreous, apex and termen narrowly suffused with fuscous; cilia pale fuscous, at base and towards tornus becoming whitish-ochreous.

Two specimens, Maskeliya, Ceylon, in February (Pole). The colouring of the posterior legs is a curious feature, being the reverse of what almost invariably obtains.

*Torodora xerastis* n. sp.

♂ ♀. 15-16 mm. Head, palpi, and thorax ochreous-bronzy. Forewings elongate, narrow, costa slightly arched, apex obtuse, termen slightly rounded oblique: 7 to apex, 9 separate; brownish-ochreous, ferruginous-tinged sometimes suffused with rather dark fuscous on dorsal half anteriorly and on veins posteriorly; stigmata ferruginous-ochreous with some dark fuscous scales, partially edged with whitish, plical elongate, dash-like, rather before first discal; a terminal series of fuscous or dark fuscous dots: cilia brownish ochreous sprinkled with whitish. Hindwings pellucid, grey-whitish, posteriorly and on veins suffused with greyish-ochreous: cilia whitish-ochreous.

Two specimens, Mooltan, Punjab, in August (Manders).

*Torodora episticta* n. sp.

♀. 18 mm. Head, palpi, antennæ, thorax, and abdomen whitish-ochreous; second joint of palpi fuscous except towards apex. Forewings elongate, costa gently arched, apex obtuse, termen sinuate, somewhat oblique, rounded beneath; 7 to termen, 9 separate; whitish-ochreous, with a few scattered grey and blackish scales; a black dot on base of costa, and one beneath costa near base; a dark grey dorsal dot near base; stigmata rather large, blackish, plical rather beyond first discal; an almost marginal series of undefined blackish dots beneath posterior half of costa and round termen: cilia whitish-ochreous. Hindwings with 6 and 7 approximated at base; ochreous-whitish; cilia whitish-ochreous.

One specimen, Maskeliya, Ceylon (Pole).

*Torodora epomia* n. sp.

♂. 23 mm. Head, thorax, and abdomen bronzy-ochreous. Palpi ochreous-whitish, second joint externally suffused with ochreous and dark fuscous except towards apex. Antennæ pale ochreous mixed with fuscous. Fore-

Brachmia xeraxis

Apetisris

Brachmia episticta, Hy. W. G. & M. Fox. 194, p. 251, t. 5 f. 102 (1926)

Leithocera epomia.

Brachyacma, Her. 1886 = Paraspirotes, H.

Brachyacma palpigeris, Wm 1891 = P. violacea, Her.

wings elongate, posteriorly somewhat dilated, costa gently arched, apex round-pointed, termen sinuate, oblique, rounded beneath; 7 to termen, 9 separate; bronzy-ochreous, suffused with pale brownish except towards anterior  $\frac{2}{3}$  of costa; a spot of dark purple-fuscous suffusion on base of costa; stigmata dark fuscous, discal small, indistinct, plical and an additional dot beneath second discal large, plical directly beneath first discal: cilia light ochreous. Hindwings grey, lighter towards base; cilia pale ochreous, with grey sub-basal shade.

One specimen, Maskeliya, Ceylon, in August (Green).

*Brachmia* (= *Torodora*) *spilotella* Walk.

(*Cryptolechia spilotella* Walk. Tin. 746; *C. tripustulata* Wals., Lep. Ceyl. iii, 520, pl. 209, 8).

Peradeniya, Ceylon, in April and November (Green).

*Paraspistes* n. g.

Antennæ  $\frac{4}{5}$ , in ♂ simple, basal joints elongate, without pecten. Palpi moderately long, curved, ascending, second joint thickened with appressed scales expanded above towards apex, terminal joint shorter than second, acute. Posterior tibiæ clothed with long fine hairs above. Forewings with 2 widely remote, 3 and 4 connate from angle, 5 from near 4, 6 out of 7 near base, 7 and 8 stalked, 7 to costa, 9 approximated to 7. Hindwings under 1, trapezoidal, apex produced, termen bisinuate, cilia 2; 2 remote, 3 and 4 short-stalked, 5 parallel, 6 and 7 stalked.

Allied to *Nothris*, and very similar in most characters, but the palpi are quite different.

*Paraspistes ioloncha* n. sp.

♂ ♀. 12-15 mm. Head and thorax pale ochreous. Palpi ochreous-whitish, second joint suffused with fuscous except at apex. Forewings elongate, narrow, widest near base, costa hardly arched, apex round-pointed, termen extremely obliquely rounded; pale ochreous, dorsal half-suffused with light brown; a ferruginous-brown streak along costa from before middle to near apex, cut by a fine pale oblique strigula at  $\frac{4}{5}$ , beyond this mixed with blackish; stigmata blackish, sometimes indistinct, plical very obliquely before first discal, which is in middle of wing; three undefined dots of blackish scales before termen; cilia pale ochreous. Hindwings grey, darker posteriorly; cilia grey.

Four specimens, Peradeniya, Ceylon, in July (Green). Larva feeds in pods of *Crotalaria* sp. (Green).

*Hypelictis* n. g.

Antennæ  $\frac{4}{5}$ , in ♂ shortly ciliated, basal joint moderate, without pecten. Labial palpi long, recurved, second joint thickened with dense scales, somewhat rough beneath and with fringe of rough projecting scales above, terminal joint shorter than second, densely scaled, somewhat rough anteriorly and with fringe of rough projecting scales posteriorly. Forewings with 2 and 3 stalked, 4 and 5 rather approximated, 7 to costa, 8 absent. Hindwings  $1\frac{1}{2}$ , trapezoidal, apex obtuse, termen not sinuate, cilia  $\frac{1}{2}$ ; 3 and 4 connate, 5 parallel, 6 and 7 stalked.

Allied to *Ypsolophus* and *Anorthosia*.

*Hypelictis acrochlora* n. sp.

♂. 18 mm. Head, palpi, antennæ, and thorax dark purplish-bronzy-fuscous. Abdomen fuscous. Forewings elongate, rather narrow, costa anteriorly moderately arched, posteriorly nearly straight, apex rounded, termen somewhat obliquely rounded, apex somewhat distorted and bent over so as to be concave beneath; dark shining purplish-bronzy-fuscous; a hardly paler obtusely angulated transverse line from  $\frac{1}{5}$  of costa to tornus; apical distorted portion pale shining ochreous: cilia shining bronzy-fuscous, basal half-mixed with pale ochreous and ferruginous. Hindwings fuscous, paler towards base, subdorsal hairs pale whitish-ochreous; cilia whitish-ochreous, partially suffused with pale fuscous, round apex with darker fuscous.

One specimen, Maskeliya, Ceylon, in February (Pole).

*Ypsolophus deltaspi* n. sp.

♂. 21 mm. Head and thorax fuscous. Palpi with second joint dark fuscous, tip grey-whitish, tuft long, rather triangular, terminal joint much longer than second, ochreous-whitish sprinkled with dark fuscous, with subapical dark fuscous band. Antennæ greyish-ochreous ringed with dark fuscous. Abdomen rather dark fuscous. Forewings elongate, rather narrow, slightly dilated posteriorly, costa gently arched, somewhat sinuate in middle, apex round-pointed, termen concave, little oblique, rounded beneath; greyish-ochreous, strigulated with ferruginous-brown; a small blackish spot on base of costa and a dot beneath costa near base; costal edge anteriorly pale rosy, strigulated with blackish; a triangular blackish spot on costa before middle, reaching  $\frac{1}{3}$  across wing; a transverse streak of ferruginous-brown suffusion from dorsum before  $\frac{1}{4}$ , reaching more than half across wing; discal stigmata small, ferruginous-brown, near together; an undefined fascia of ferruginous-brown suffusion about  $\frac{3}{4}$ , terminating on costa in a darker spot mixed with blackish: cilia pale ferruginous, with an indistinct grey line. Hindwings rather dark fuscous; cilia fuscous.

One specimen, Kandy, Ceylon, in September (Green).

## XYLORYCTIDÆ.

*Amphoritis* n. g.

Antennæ  $\frac{3}{5}$ , in ♂ minutely ciliated, basal joint thickened with scales above, without pecten. Labial palpi long, recurved, second joint thickened with rough scales beneath, terminal joint as long as second, acute. Anterior tibiæ and tarsi very short, posterior tibiæ loosely haired. Forewings with costal scale-projections before and beyond middle; 2 from  $\frac{4}{5}$  of cell, 3 from angle, 7 to costa, 8 absent. Hindwings 1, oblong-ovate, termen not sinuate, cilia  $\frac{2}{3}$ ; 3 and 4 connate or stalked, 5 parallel, 6 and 7 stalked.

Allied to *Xylorycta*. Type *A. camelodes*.

*Amphoritis camelodes* n. sp.

♀. 20 mm. Head fuscous-whitish. Palpi whitish, terminal joint sprinkled with fuscous except at apex, with a blackish subapical ring. Thorax fuscous-whitish mixed with pale brown. Abdomen pale greyish-ochreous. Forewings elongate, moderate, costa moderately arched, apex rounded-obtuse, termen





Aria obtusella, Weu, Car. XXIX 831 (1864) = mycteros, m

rounded, vertical; fuscous-whitish, suffusedly irrorated with pale, fuscous, and posteriorly with light ferruginous; costal scale-projections tipped with light ferruginous-brown; stigmata minute, dark fuscous, plical slightly beyond first discal, second discal edged beneath by a small whitish scale-tuft; a much interrupted subterminal line of dark fuscous irroration beneath middle of costa near and parallel to costa and termen to before tornus; a terminal series of dark fuscous dots; cilia light brown, with a dark grey antemedian shade round apex and termen to below middle, beneath this whitish sprinkled with dark grey on basal half. Hindwings pale brassy fuscous, paler anteriorly; cilia fuscous-whitish, with light fuscous subbasal shade.

One specimen, Kandy, Ceylon, in October (Green).

*Amphoritis nycterodes* n. sp.

♂ 13 mm. Head, thorax, and abdomen dark fuscous. Palpi whitish, mixed with dark grey, towards base ochreous-tinged, terminal joint with blackish sub-apical ring. Forewings sub-oblong, moderate, costa gently arched, more strongly towards base, apex rounded-obtuse, termen rounded, slightly oblique; dark fuscous, slightly ferruginous tinged; stigmata small, blackish-fuscous, plical rather beyond first discal, second discal margined beneath by a dot of somewhat raised whitish scales; an indistinct blackish-fuscous angulated sub-terminal line, rather near and parallel to posterior part of costa and termen; cilia grey mixed with darker, tips whitish-grey. Hindwings rather dark coppery-fuscous; cilia fuscous.

One specimen, Haragam, Ceylon, in July (Green).

*Xylorycta* Meyr.

I propose to widen the definition of the genus *Xylorycta*, so far as to unite with it the genera *Lichenaula*, *Telecrates*, *Clerarcha*, *Plectophila*, and *Chalarotona*. These were all published by me at the same time, and I select the name of *Xylorycta* for the resulting group because I made that typical of the family and therefore gave it precedence. The structural characters are thus extended in the following particulars: Antennal ciliations of ♂ variable ( $\frac{1}{2}$ —3); 7 of forewings to apex or termen; 6 and 7 of hindwings approximated, connate, or stalked.

*Xylorycta paracyrta* n. sp.

♂ 23 mm. Head, thorax and abdomen whitish-ochreous. Palpi white, second joint light fuscous except towards apex. Antennal ciliations 2. Forewings elongate, moderate, costa rather strongly arched, apex evenly rounded, termen strongly rounded so as to be prominent beneath apex; 2 from  $\frac{5}{8}$  to apex; whitish-ochreous; a small round cloudy fuscous spot in disc beyond middle; a faint curved transverse shade of fuscous suffusion at  $\frac{1}{5}$ , parallel to posterior part of costa and termen; cilia whitish-ochreous, on costa and round apex suffused with ferruginous brown, tips dark grey round apex. Hindwings and cilia pale whitish-ochreous; 3 and 4 stalked, 6 and 7 stalked.

One specimen, Haputale, Ceylon, in February (Green).

*Myriophlema*  
(B.J. XVII. 415)

*Agrilus unicolor* L.

*O. ...*

*Oditis**Xylorycta psilotis* n. sp.

♂ 16-17 mm. Head, thorax and abdomen ochreous-whitish, head loosely haired. Palpi white, lower  $\frac{2}{3}$  of second joint fuscous. Antennæ strongly biciliated (3). Forewings elongate, moderate, costa moderately arched, apex rounded obtuse, termen rounded, hardly oblique; 2 from  $\frac{2}{3}$ , 7 to termen; pale whitish-ochreous, thinly scaled; discal stigmata indicated by two or three blackish scales, first sometimes absent; an almost, marginal series of dark grey or blackish dots along termen, sometimes little marked; cilia ochreous-whitish. Hindwings and cilia ochreous-whitish; 3 and 4 stalked, 6 and 7 stalked.

Four specimens, Peradeniya and Yatiyantota, Ceylon, in March, September, and November (Green).

*Nephantis* n. g.

Head with appressed scales, sidetufts small, slightly raised. Antennæ  $\frac{3}{4}$ , in ♂ filiform, simple, basal joint elongate, without pecten. Labial palpi very long, recurved, second joint clothed beneath and on inner side with long, rough expanded hairs, terminal joint as long as second, slender, acute. Anterior tibiae and tarsi short, posterior tibiae clothed with long hairs above. Forewings with 2 from  $\frac{2}{3}$  of cell, 3, 4, 5 approximated, 7 and 8 stalked, 7 to about apex. Hindwings, 1, elongate-ovate, cilia  $\frac{1}{2}$ ; 3 and 4 stalked, 5 parallel, 6 and 7 short-stalked.

Allied to *Xylorycta*, but distinguished by the rough hairs of palpi. The apex of forewings is so rounded that the termination of vein 7 might be described as indefinite.

*Nephantis serinopa* n. sp.

♂ ♀. 20-28. mm. Head and thorax light greyish-ochreous, Palpi ochreous-whitish, hairs internally marked with fuscous. Abdomen pale ochreous. Forewings elongate, costa gently arched, apex rounded, termen obliquely rounded; pale greyish-ochreous, with some fine scattered blackish scales; extreme costal edge whitish; first discal stigma raised, dark fuscous, plical and second discal indistinct, indicated by two or three dark fuscous scales, plical obliquely before first discal; in ♂ a bare whitish-ochreous patch towards dorsum near base; cilia whitish, towards base mixed with pale fuscous. Hindwings whitish ochreous tinged with fuscous; cilia, whitish, towards base fuscous-tinged.

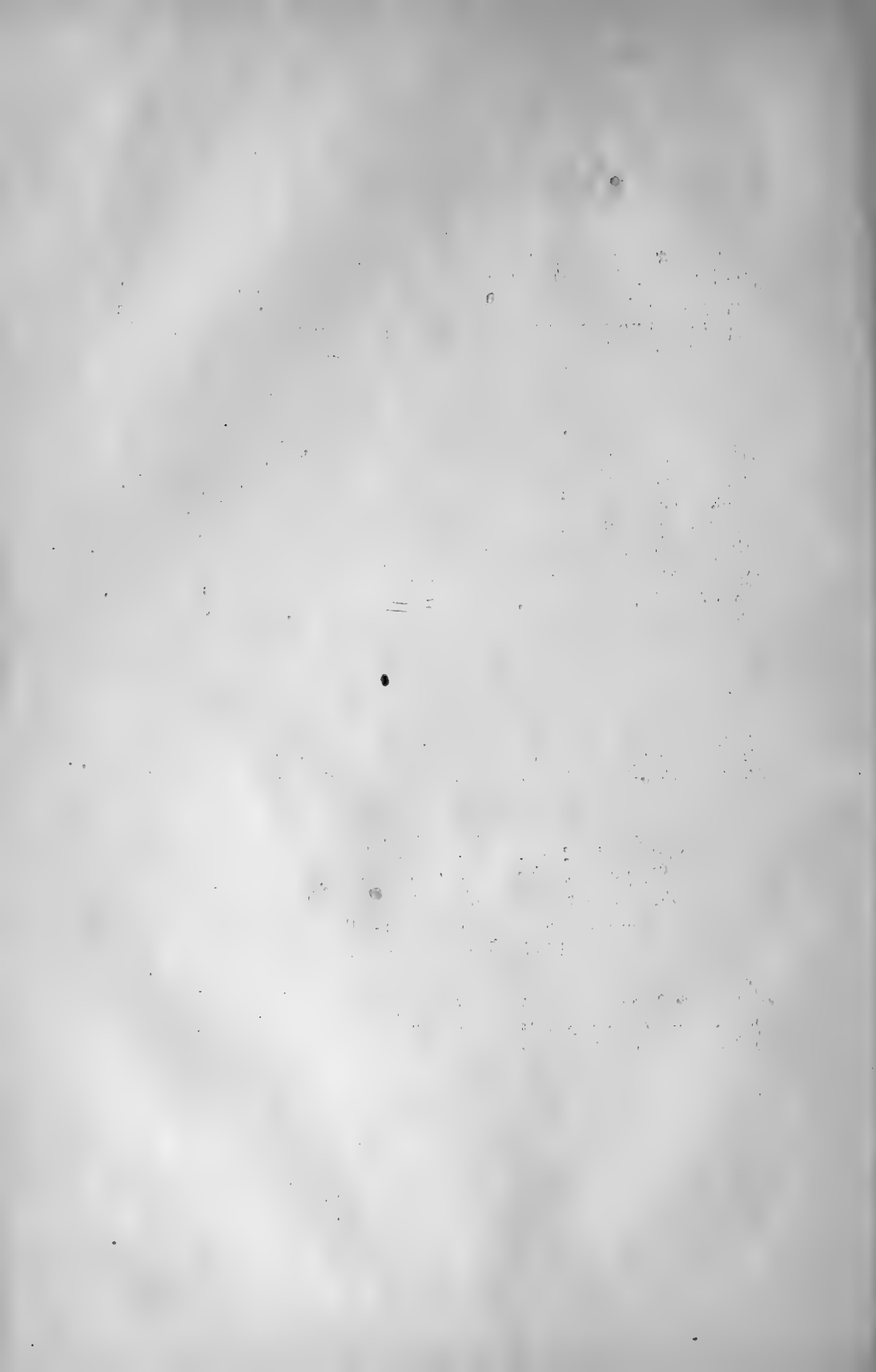
Five specimens, Batticaloa, Ceylon, in April (Green). Larva conceals itself beneath galleries of web and excreta on undersurface of leaves of cocoanut palm; in bad attacks the palm fronds are completely skeletonized; a serious pest (Green).

## CECOPHORIDÆ.

*Eulechria autogramma* n. sp.

♂. 17 mm. Head ochreous-yellow. Palpi moderate, ochreous-yellow, second joint blackish except towards apex. Antennæ grey, ciliations  $1\frac{1}{2}$ . Thorax dark purplish-fuscous, posterior extremity ochreous-yellowish. Forewings elongate, costa moderately arched, apex obtuse, termen obliquely





rounded; ochreous-yellow, with some scattered dark fuscous scales; markings dark purplish-fuscous; a basal fascia, widest on costa; stigmata moderate, plical slightly beyond first discal; a suffused elongate spot on costa towards middle; a triangular spot on dorsum towards middle, its apex almost confluent with plical stigma; a thick suffused curved subterminal line from  $\frac{5}{6}$  of costa to tornus; cilia ochreous-yellow, dark fuscous on costal extremity of subterminal line. Hindwings grey, veins dark fuscous; cilia pale ochreous, with two fuscous shades disappearing towards apex.

One specimen, Maskeliya, Ceylon (Pole).

*Macrosaces* n. g.

Antennæ 1, in ♂ thick, serrulate, simple, basal joint moderate, without pecten. Labial palpi long, recurved, second joint thickened with loosely appressed scales, terminal joint as long as or shorter than second, slender, acute. Posterior tibiae rough-haired above. Forewings with 2 from angle, 3 absent, 7 to costa, 8 absent, 11 from middle of cell. Hindwings 1, ovate-lanceolate, cilia  $1\frac{1}{4}$ ; 3 and 4 connate.

A development of the *Phaeosaces* group. Type *M. thermopa*.

*Macrosaces thermopa* n. sp.

♂. 18 mm. Head ochreous. Palpi long, whitish-ochreous, second joint suffusedly mixed with dark fuscous except at apex, terminal joint as long as second, sprinkled with dark fuscous. Antennæ fuscous. Thorax ochreous sprinkled with dark fuscous. Abdomen whitish-grey, apex whitish-ochreous. Forewings elongate, narrow, costa, gently arched, apex round-pointed, termen extremely obliquely rounded; rather deep ochreous, with scattered dark fuscous scales, on dorsal half and costal edge irrorated with dark fuscous; a small dark fuscous spot on base of costa; an irregular dark fuscous blotch in disc at  $\frac{1}{3}$ , representing anterior stigmata; second discal stigma dark fuscous, and a similar dot below it, but obscured by dorsal irroration; a suffused dark fuscous apical blotch; cilia yellow-ochreous, paler towards tips, with a faint fuscous shade, above apical blotch grey. Hindwings pale grey; cilia whitish-ochreous.

One specimen, Maskeliya, Ceylon, in February (Pole).

*Psaltica* n. g.

Antennæ 1, in ♂ thick, serrulate, single, basal joint moderate, without pecten, Labial palpi long, recurved, second joint thickened with appressed scales, terminal joint as long as second, acute. Posterior tibiae rough-haired above. Forewings with 2 from angle, 3 absent, 7 and 8 stalked, 7 to termen, 11 from middle. Hindwings 1, elongate-ovate, cilia 1; 3 and 4 connate.

Allied to *Macrosaces*.

*Psaltica monochorda* n. sp.

♂. 14 mm. Head glossy whitish-fuscous. Palpi whitish-fuscous, second joint sprinkled with dark fuscous. Antennæ pale fuscous. Thorax light glossy fuscous. Abdomen pale whitish-ochreous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen extremely obliquely

rounded; glossy whitish-ochreous, tinged with brownish, with silvery reflections; basal half suffused with brown, limited by a fascia of dark fuscous suffusion, its posterior edge sharply defined and edged with white, running from middle of costa to beyond middle of dorsum, slightly concave; a dark fuscous discal dot at  $\frac{2}{3}$ ; a series of dark fuscous dots round posterior part of costa and termen: cilia whitish-ochreous, towards base brownish-tinged and sprinkled with fuscous. Hindwings pale grey; cilia whitish-ochreous, tinged with grey.

One specimen, Maskeliya, Ceylon (Pole).

*Phaosaces* Meyr.

I propose to extend the structural characters of this genus so as to include forms in which vein 7 of forewings runs to the termen, and also those in which the second joint of palpi is clothed with rough projecting hairs towards apex above. In view of this extension *Homosaces* will cease to exist, being merged in *Phaosaces*.

*Phaosaces chrysocoma* n. sp.

♂. 16 mm. Head orange-yellow. Palpi light orange, sprinkled with dark fuscous, terminal joint  $\frac{2}{3}$  of second, anterior edge dark fuscous. Antennæ fuscous. Thorax and abdomen dark purplish-fuscous. Legs yellow, anterior and middle pair banded with dark fuscous. Forewings elongate, costa gently arched, apex obtuse, termen oblique, slightly rounded; 7 to apex; dark shining purplish-bronzy-fuscous; extreme costal edge yellow except at base and apex: cilia rather dark fuscous, tips ochreous-whitish on termen. Hindwings and cilia dark bronzy-fuscous.

One specimen, Pundalu-oya, Ceylon, in February (Green). Much like *P. anthocoma*, but differing by the apical termination of vein 7, and yellow costal edge of forewings.

*Phaosaces orthotoma* n. sp.

♀. 19 mm. Head whitish-fuscous. Palpi very long, second joint fuscous sprinkled with whitish, above with rough projecting whitish hairs, apex whitish, terminal joint whitish, anterior edge mixed with fuscous. Thorax light fuscous. Abdomen pale greyish-ochreous. Forewings sub-oblong, costa moderately arched, apex obtuse, termen oblique, slightly rounded; 2 from before angle, 7 to apex; pale fuscous; costal edge narrowly whitish-ochreous; discal stigmata dark fuscous, partially whitish-edged, second large, connected with apex of a triangular præternal blotch of dark fuscous suffusion, its anterior edge vertical and margined with ochreous-whitish; a terminal series of irregular dark fuscous dots continued round apex: cilia ochreous-whitish, brownish-tinged on basal half, with antemedian series of faint fuscous spots. Hindwings light fuscous, darker posteriorly; cilia pale whitish-fuscous.

One specimen, Peradeniya, Ceylon, in November (Green).

*Phaosaces aganopsis* n. sp.

♀. 19 mm. Head light ochreous, brownish-tinged. Palpi very long, second joint dark fuscous sprinkled with whitish-ochreous, above with rough project-



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ing whitish hairs, extreme apex whitish, terminal joint ochreous-whitish, anterior edge mixed with fuscous. Thorax light brown. Abdomen grey, apex whitish-ochreous. Forewings elongate, costa moderately arched, apex obtuse, termen oblique, lightly rounded; 2 widely remote from angle, 7 to termen; rather light brown, slightly ferruginous-tinged, with a few scattered dark fuscous scales; stigmata dark fuscous, plical somewhat beyond first discal: cilia light ochreous, on basal half brownish-tinged. Hindwings pale fuscous, tinged with whitish-ochreous anteriorly, darker towards apex; cilia pale ochreous.

One specimen, Maskeliya, Ceylon, in August (Green).

#### COPROMORPHIDÆ.

When originally describing the genus *Copromorpha*, I suggested that it would probably be necessary to regard it as the type of a new family, and I now think it advisable to give effect to the suggestion. The characters of the family are at present those of the genus; the basal pectination of hairs on the lower margin of cell of hindwings is a peculiar character amongst the *Tineina*, possibly indicating some relationship to the *Tortricina*; otherwise the family has probably most affinity to the *Xyloryctida*, though differing in the separation of veins 7 and 8 of forewings, the parallel veins 6 and 7 of hindwings, and the thickened palpi.

*Copromorpha pleurophanes* n. sp.

♂ ♀. 15-20 mm. Head and thorax ochreous-whitish, thorax sometimes sprinkled with fuscous. Tongue present, very short. Palpi dark fuscous, apex of second joint white, terminal joint ochreous-white with dark fuscous median ring. Antennæ ochreous-whitish, irregularly spotted above with dark fuscous, in ♂ deeply and broadly dentate. Abdomen whitish ochreous. Forewings elongate, posteriorly dilated, costa posteriorly strongly arched, apex rounded-obtuse, termen rather obliquely rounded; cell very narrow; scales on veins roughened, on margins of cell tufted, between veins appearing ribbed owing to their bases being transparent; ochreous-whitish, thinly strewn with small fuscous spots (in Assam example towards dorsum more ochreous and mottled with fuscous); costa irregularly spotted with dark fuscous; several irregular dark fuscous spots on margins of cell, its posterior end more or less suffused with dark fuscous; two or three posterior series of irregular dark fuscous marks on veins: cilia whitish-ochreous. Hindwings ochreous-grey-whitish, with prismatic reflections; cilia pale whitish-ochreous.

Three specimens, Maskeliya, Ceylon, in March (Pole); Margherita, Assam. The difference in antennal structure from the typical species appears only specific.

#### ELACHISTIDÆ.

See p. 601

*Cuphodes dicastis* n. sp.

♂. 10 mm. Head, palpi, antennæ, thorax, abdomen, and legs ochreous-white; antennæ simple; anterior tibiae with a dark fuscous line; posterior legs with a conspicuous small black spot on origin of median spur beneath, and with several cloudy dark fuscous dots above on origin of spurs and apex of tarsal joints. Forewings narrow, gradually long-pointed from near base; ochreous-

*Pachyzancla*  
*dicastis*.

*Cup. lep.*  
*Heliodora*.

whitish ; cilia ochreous-whitish. Hindwings and cilia ochreous-whitish.

One specimen, taken near Kandy, Ceylon, by myself in December.

*Pyroderces selenopis* n. sp.

♀. 16 mm. Head and thorax light shining golden-ochreous, face whitish tinged. Palpi whitish-ochreous. Antennæ whitish, lined above and towards base ringed with dark fuscous, towards apex with three dark fuscous bands. Abdomen whitish-ochreous, three basal segments dark brown dorsally. Forewings elongate-lanceolate, long-pointed ; brownish-ochreous ; a fine incurved transverse whitish line at  $\frac{3}{5}$ , above middle emitting a short whitish dash anteriorly, towards costa doubled and enclosing a fine blackish strigula, towards dorsum thickened and becoming silvery-metallic, followed by a subdorsal black dot ; wing beyond this suffused with pale ochreous-yellow, most strongly in disc ; two indistinct whitish costal strigulae separated by a blackish dot beyond  $\frac{3}{4}$  : cilia pale brownish-ochreous. Hindwings fuscous, with a transparent patch towards base ; cilia light fuscous, becoming pale yellowish on costa towards apex.

One specimen, Pundalu-oya, Ceylon, in February (Green).

*Pyroderces magica* n. sp.

♂. 9-12 mm. Head shining metallic bronzy-grey. Palpi yellow, anterior edge of terminal joint dark fuscous. Antennæ dark fuscous, with broad white subapical band, basal joint yellow in front. Thorax deep shining coppery-bronze. Abdomen bronzy-grey. Forewings elongate-lanceolate, long-pointed ; deep shining brassy-bronze, basal fourth and apical  $\frac{2}{5}$  bright deep coppery-purple ; fine transverse bluish-white lines at  $\frac{2}{5}$  and beyond middle, second interrupted in disc ; cilia dark fuscous, base suffused with coppery-purple. Hindwings dark grey, lighter towards base ; cilia purplish-grey.

Three specimens, Maskeliya, Ceylon, in February (Pole).

*Pyroderces spodochtha* n. sp.

♂ ♀. 9-10 mm. Head and thorax ochreous, suffusedly mixed with ferruginous. Palpi whitish-ochreous, suffused with deeper ochreous, terminal joint with dark fuscous subapical ring. Antennæ ochreous-whitish, ringed with dark fuscous or blackish, towards apex with three blackish bands with whitish interspaces. Abdomen pale ochreous. Forewings elongate-lanceolate, long-pointed ; reddish-ochreous or ferruginous, partially irrorated with fuscous ; markings whitish-ochreous, densely irrorated with blackish or dark fuscous, more or less raised in disc ; a somewhat oblique fascia about  $\frac{1}{4}$  ; an upcurved streak from dorsum beyond middle obliquely outwards to  $\frac{2}{3}$  of costa, continued along costa to near apex ; a terminal streak from tornus to apex, usually interrupted in middle : cilia grey, round apex becoming light ochreous, at apex ferruginous, with short dark grey line before tips beneath apex. Hindwings linear, grey, darker posteriorly ; cilia light grey, ochreous-tinged.

Sixteen specimens, Kandy, Ceylon, in December and February (Green). Bred freely from larvæ feeding in resinous masses of a lac Coccid, *Tachardia albizziae* (Green).

1911

1912

1913

1914

1915

1916

1917

1918

1919

1920



*Pyroderces scæosema* n. sp.

♂. 9 mm. Head ochreous-white, crown dark bronze. Palpi ochreous-white, dark fuscous towards base, terminal joint dark fuscous except on basal fourth. Antennæ ochreous-white. Thorax dark bronzy-fuscous. Abdomen grey, anal tuft ochreous-whitish. Forewings elongate-lanceolate; dark fuscous, slightly purplish-tinged; a white vertical fascia at  $\frac{1}{4}$ , narrowed towards costa; a rounded-triangular white spot on costa beyond middle, and another on tornus; cilia rather dark fuscous, lighter and greyer towards tornus. Hindwings grey, on undersurface pale yellow-ochreous on basal half; cilia grey.

One specimen, Peradeniya, Ceylon, in December (Green).

*Oedematopoda cypris* n. sp.

♀. 12 mm. Head shining dark bronzy-fuscous, collar vermilion-red. Palpi light ochreous-reddish, anterior edge and terminal joint internally dark fuscous. Antennæ dark purplish-fuscous, fringed with long scales above from base to near apex. Thorax vermilion-red, mesothorax posteriorly slenderly edged with blackish, metathorax light ochreous-reddish. Abdomen purple-blackish, posterior edge of second segment white. Legs purple-blackish, bristles whitish-ochreous, spurs with two or three præapical bristles. Forewings elongate-lanceolate, costa faintly sinuate, vermilion-red; a small purple-black spot in middle of base; a dark fuscous-purple apical patch, occupying nearly  $\frac{1}{3}$  of wing; cilia dark bronzy-fuscous. Hindwings dark fuscous, basal  $\frac{2}{5}$  light ochreous-yellowish, division suffused; cilia rather dark fuscous, paler and suffused with pale yellowish towards dorsum.

One specimen, Kandy, Ceylon, in December (Green). Bred from colony of lac Coccid, *Tachardia albizziae*, on *Theobroma cacao* (Green).

## PLUTELLIDÆ.

*Pronomeuta* n. g.

Head loosely haired; ocelli present; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ moderately ciliated, basal joint moderate, without pecten. Labial palpi moderate, curved, ascending, with appressed scales, terminal joint shorter than second, tolerably pointed. Maxillary palpi obsolete. Posterior tibiæ smooth-scaled. Forewings with 2 from near angle, 4 absent, 7 to apex, 8, 9, 10 from near 7, 11 widely remote, from before middle, secondary cell and parting-vein well defined. Hindwings 1, elongate-ovate, cilia  $\frac{1}{2}$ ; 3 and 4 connate, 5 parallel, 6 and 7 rather approximated, 8 free.

Allied to *Yponomeuta*, apparently somewhat earlier in the line of development.

*Pronomeuta sarcopis* n. sp.

♂ ♀. 15-18 mm. Head, palpi, antennæ, and thorax whitish-ochreous, suffused with pale fuscous. Abdomen light fuscous-reddish. Forewings elongate, costa moderately arched, apex obtuse, termen nearly straight, rather oblique, rounded beneath; light fuscous or fuscous-ochreous, irregularly strewn with small dark fuscous dots; discal stigmata rather large, dark fuscous; cilia pale brownish-ochreous, tips paler. Hindwings dull fuscous-reddish; cilia fuscous, tips whitish.

Two specimens, Heneratgoda, Ceylon, in November (Green).



*Archimaga* n. g.

Head with loosely appressed hairs; ocelli present; tongue short. Antennæ  $\frac{3}{2}$ , in ♂ stout, simple, basal joint short, without pecten. Labial palpi moderate, curved, ascending, second joint thickened with rough scales beneath, terminal joint shorter than second, acute. Maxillary palpi obsolete. Posterior tibiae with loosely appressed scales. Forewings with 2 from  $\frac{2}{6}$  of cell, 3 from towards angle, 8 and 9 out of 7, 7 to costa, 10 from near 7, 11 remote, from beyond middle, secondary cell absent. Hindwings 1, trapezoidal-ovate, cilia  $\frac{2}{6}$ ; 3 and 4 connate, 5 parallel, 6 and 7 stalked, 8 free.

Allied to *Hilarographa*, of which it may be a development.

*Archimaga pyractis* n. sp.

♂. 16—17 mm. Head brownish-ochreous, sides of crown fuscous, collar edged with ferruginous. Palpi white, basal joint ochreous, second joint ochreous or fuscous above. Antennæ ochreous. Thorax white. Abdomen whitish-ochreous. Forewings elongate, somewhat dilated posteriorly, costa gently arched, faintly sinuate, apex round-pointed, termen deeply and abruptly concave, oblique, rounded-prominent beneath; white, towards dorsum and termen greyish-tinged; dorsum irregularly spotted with dark fuscous suffusion, extending about  $\frac{1}{3}$  across wing, largest spot præterminal; six reddish-orange oblique wedge-shaped strigulae from posterior half of costa, marked with rather dark fuscous on costa, first two larger and more oblique, becoming whitish-ochreous downwards, sixth abruptly angulated and running to apex; produced apical area otherwise tinged with leaden-grey, and marked beneath with a longitudinal ochreous-yellow blackish-edged bar; terminal area tinged with whitish-ochreous; a black præterminal dot in middle, and two towards tornus; cilia whitish-ochreous, basally brown at apex and yellow beneath it (imperfect). Hindwings whitish ochreous, tinged with grey towards tornus, with a præterminal series of faint grey spots, apex yellower; cilia whitish-ochreous.

Two specimens, Maskeliya, Ceylon, in February and March (Pole).

*Irianassa* n. g.

Head with appressed scales; ocelli present; tongue short. Antennæ  $\frac{1}{2}$ , in ♂ simple, basal joint short, without pecten. Labial palpi moderate, curved, ascending, second joint with appressed scales, slightly rough beneath, terminal joint short, thick, obtuse. Maxillary palpi obsolete. Posterior tibiae smooth-scaled. Forewings with 2 from middle of cell, 3 from  $\frac{1}{3}$ , 4 from angle, 7 to termen, 8 to costa, 9 and 10 from near 8, 11 remote, from middle of cell, secondary cell well-defined. Hindwings 1, ovate, cilia  $\frac{1}{3}$ ; 3 and 4 connate, 5 somewhat approximated, 6 and 7 rather approximated towards base, 8 free.

Allied to *Hilarographa*.

*Irianassa sapphiropa* n. sp.

♂. 17 mm. Head dark fuscous, with a bright deep blue bar above middle of face, collar and sides of crown pale metallic blue. Palpi fuscous, towards base whitish-fuscous. Antennæ dark fuscous. Thorax greenish-bronze. Abdomen dark fuscous. Forewings elongate, posteriorly considerably dilated,





costa posteriorly moderately arched, apex obtuse, termen sinuate beneath apex, hardly oblique, rounded beneath; dark bronzy-fuscout; basal area within a line from  $\frac{1}{3}$  of costa to  $\frac{3}{4}$  of dorsum suffused with golden-green with strong purple and blue reflections; four curved outwardly oblique pale metallic-blue transverse strigulae from near middle of dorsum; two pale metallic-blue oblique streaks from costa before middle, white on costa, second much longer, and two others less oblique from costa beyond middle; a pale metallic-blue oblique streak from beneath costa beyond these, almost or quite meeting a short bluish-silvery downward streak from apex; two short streaks from costa before apex, first pale metallic-blue, second bluish-silvery; two vertical purplish-leadestreaks before and beyond tornus, reaching to above middle, partially split or branched; cilia brilliant purple-coppery round apex purplish-grey with blackish basal line, with white spots on costal extremities of last two streaks. Hindwings dark fuscous, with a paler thinly scaled longitudinal discal patch; cilia whitish, with dark fuscous basal line, towards apex with a patch of fuscous suffusion.

One specimen, Kandy, Ceylon, in September (Green). Both in structure and type of markings this insect appears to approach the genus *Laspeyresia* in the *Epiblemidæ*, and possibly indicates the origin of that family.

*Hilarographa caminodes* n. sp. .

♂ ♀. 12-17 mm. Head, palpi, and antennae varying from ochreous to fuscous. Thorax deep reddish-orange, with three dark purplish-fuscous usually broad stripes. Abdomen dark fuscous. Forewings elongate-triangular, costa slightly arched, apex rounded, termen sinuate beneath apex, rounded, little oblique; deep reddish-orange; basal area with three longitudinal dark bluish-leadest-fuscous streaks; costal edge dark fuscous; five oblique pale blue-metallic streaks from costa between  $\frac{1}{3}$  and apex, edged with dark fuscous, more or less white towards costa, last two united at apex to form a loop; dorsal  $\frac{2}{3}$  between  $\frac{1}{3}$  and termen irregularly striated with dark purplish-leadest-fuscous; sometimes costal and discal areas much suffused with dark purplish-leadest-fuscous; a short leaden bar on termen below middle, preceded by a blackish dot; a wedge-shaped bluish-leadest-metallic dash on subapical sinuation, whitish on termen; cilia fuscous, mixed with dark fuscous, and at apex and on a subapical spot suffused with ochreous-whitish, with a dark fuscous basal line becoming purplish-metallic on middle of termen. Hindwings dark fuscous, darker terminally; cilia pale fuscous, with dark fuscous basal line.

Ten specimens, Pundalu-oya, Gammaduwa, and Rangella, Ceylon, in February, March, June, and August (Green).

Larva tunnels into fleshy rhizomes of cardamom plant causing partial abortion of flowering racemes and is a serious pest (Green).

*Saptha smaragdilis* n. sp.

♂ ♀. 16-17 mm. Head brilliant metallic dark greenish-bronze, sides behind eyes ochreous-yellowish. Palpi shining golden, terminal joint dark fuscous. Antennae purple-blackish, with a white patch above at  $\frac{2}{3}$  from base. Thorax metallic green, more or less coppery on back. Abdomen dark fuscous. Fore-

wings elongate-triangular, costa posteriorly moderately arched, apex obtuse termen straight, rather oblique, rounded beneath; blackish; basal area metallic golden-green, sometimes with coppery reflections, its edge straight, running from  $\frac{1}{3}$  of costa to  $\frac{2}{5}$  of dorsum; traces of an interrupted line of ground colour within this, near and parallel to outer edge; beyond this a fascia of ground colour, bisected by a greenish-silvery line, and followed by a white fascia, of which the posterior edge is suffused and connected with an upcurved crescentic patch of white suffusion above middle, and expanded near dorsum; posterior area evenly sprinkled with silvery-whitish scales; a silvery-metallic terminal streak, becoming pale-blue on upper half; cilia shining bluish-grey, basal third blackish. Hindwings dark fuscous, lighter towards base; cilia pale fuscous, on upper half of termen whitish, with dark fuscous basal line.

Fourteen specimens, Kandy, Ceylon, in August and September (Green).

*Tortricomorpha grammarcha* n. sp.

♂. 23-24 mm. Head whitish-ochreous, hairs of crown mixed with fuscous at base, frontal hairs brushed upwards between antennæ. Palpi whitish-ochreous, second joint externally yellow-ochreous, in front fuscous-tinged laterally slightly excurved, terminal joint half second, fuscous. Antennæ fuscous. Thorax brown. Abdomen fuscous, tip whitish-ochreous. Forewings elongate, posteriorly considerably dilated, costa gently arched, faintly sinuate, apex rounded-obtuse, termen rounded, hardly oblique; brown; extreme costal edge yellowish from  $\frac{1}{4}$  to middle; base of dorsum suffused with dark fuscous; a short yellow mark on middle of costa from which an obscurely indicated yellowish line proceeds to dorsum beyond middle; an obscure dark fuscous discal spot at  $\frac{3}{5}$ ; a small triangular yellow spot on costa before apex, from which a very faintly indicated yellowish line proceeds to termen below middle; a terminal series of cloudy dark fuscous dots; extreme terminal edge whitish-ochreous; cilia fuscous. Hindwings dark fuscous, lighter towards base; cilia fuscous.

Two specimens, Kandy and Peradeniya, Ceylon, in September (Green).

*Tortricomorpha diptherina* n. sp.

♂ ♀. 22-23 mm. Head whitish-ochreous, crown brownish-tinged, in ♂ with long frontal hairs brushed backwards between antennæ. Palpi whitish-ochreous, in ♂ laterally excurved, terminal joint in ♂ very short, in ♀ half second. Antennæ pale ochreous. Thorax whitish-ochreous mixed with brownish-ochreous or fuscous. Abdomen pale greyish-ochreous mixed with fuscous, in ♂ with median lateral whitish-ochreous tufts brushed upwards to meet above. Forewings elongate, posteriorly considerably dilated, costa gently arched, apex rounded-obtuse, termen rounded, hardly oblique; rather dark fuscous, more or less strewn with brownish-ochreous scales; markings brownish ochreous, obscurely edged with pale yellow-ochreous; a basal patch, sometimes little marked, its edge running from beyond  $\frac{1}{4}$  of costa to before middle of dorsum, bisinuate; semioval spots on costa before and beyond middle; an irregular discal patch extending from middle to  $\frac{5}{6}$ , in ♀ obscured by general







ochreous suffusion; a triangular apical spot; some irregular suffused markings towards tornus; a dark fuscous terminal line: cilia whitish-ochreous, brownish-tinged except round apex, faintly barred with fuscous. Hindwings fuscous-suffused with dark fuscous towards termen: cilia whitish-ochreous, with fuscous basal line.

Two specimens, Peradeniya, Ceylon, in January and February (Green).

*Tortricomorpha ergasia* n. sp.

♀. 20 mm. Head and thorax light ochreous-brown, thorax faintly spotted with a fuscous tinge. Palpi whitish-ochreous, brownish-tinged, terminal joint half second. Antennæ pale brownish-ochreous. Abdomen fuscous. Forewings elongate, posteriorly considerably dilated, costa gently arched, apex rounded-obtuse, termen rounded, hardly oblique; ochreous-brown; base of dorsum suffused with fuscous; a nearly straight somewhat irregular thick fuscous line from beyond  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of dorsum; a spot of fuscous suffusion on middle of costa; a curved series of elongate fuscous spots between veins from  $\frac{3}{4}$  of costa to tornus: cilia ochreous-brown, tips whitish-ochreous. Hindwings dark fuscous, lighter towards base; cilia whitish-ochreous, with two faint fuscous lines.

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(T.S.)

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One specimen, Peradeniya, Ceylon, in February (Green).

*Anticrates* n. g.

Head with appressed scales; ocelli present; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ moderately ciliated, basal joint moderate, without pecten. Labial palpi moderately long, subascending, with appressed scales, terminal joint shorter than second, pointed. Maxillary palpi rudimentary. Posterior tibiae loosely scaled above. Forewings with 16 furcate, 2 from angle, 7 to termen, 11 from before middle of cell. Hindwings 1, elongate-ovate, cilia  $\frac{1}{2}$ ; 3 and 4 short-stalked, 8 connected with 7 beyond cell.

Not obviously allied to any genus known to me.

*Anticrates chrysantha* n. sp.

♂. 16 mm. Head and palpi deep yellow. Antennæ dark fuscous, basal joint yellow. Thorax dark purplish-fuscous. Abdomen dark fuscous, anal tuft pale ochreous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen nearly straight, oblique, rounded beneath; dark purplish-fuscous; markings clear yellow; a very broad fascia about  $\frac{1}{3}$ , unevenly narrowed towards costa; a triangular præternal spot, reaching half across wing, and a small costal spot opposite to it: cilia dark purplish-fuscous, round apex pale yellowish on outer half. Hindwings thinly clothed with hairscales, dark fuscous, slightly purplish-tinged; a patch towards base obscurely suffused with whitish yellowish; cilia purplish-fuscous with darker suffused subbasal line.

One specimen, Maskeliya, Ceylon (Pole).

*Stachyotis* n. g.

Head with loosely appressed scales; ocelli present; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ pubescent, basal joint short, with dense pecten of scales. Labial palpi moderately long, subascending, thickened with rough scales anteriorly, terminal joint as long as second, pointed. Maxillary palpi short,

porrected, scaled. Posterior tibiæ clothed with long hairs above. Forewings with 2, 3, 4 approximated from angle, 5 absent, 7 to termen, 8 and 9 short-stalked, 11 widely remote, from before middle of cell. Hindwings 1, elongate-ovate, cilia  $\frac{2}{3}$ ; 3 and 4 connate, 5, 6, 7 parallel, 8 free.

Perhaps related to the New Zealand genus *Orthenches*.

*Stachyotis epichrysa* n. sp.

♂. 19 mm. Head white, face sprinkled with grey. Palpi white, second joint greyish-tinged and irrorated with blackish, terminal joint with subbasals, median, and apical rings of blackish irroration. Antennæ grey ringed with whitish. Thorax whitish tinged and sprinkled with fuscous. Abdomen whitish-ochreous. Forewings elongate, rather narrow, posteriorly somewhat dilated, costa gently arched, apex round-pointed, termen concave, oblique; white, partially tinged and irregularly irrorated with fuscous, with scattered blackish strigulae; anterior  $\frac{2}{3}$  of costa regularly strigulated with blackish; three irregular brassy-golden fasciae edged with pale fuscous, first subbasal, obsolete on costa, second somewhat before middle, third at  $\frac{2}{3}$ , narrow and more or less interrupted; a small fuscous spot on costa at  $\frac{1}{2}$ : cilia ochreous-orange, externally with three rows of dark purple-fuscous points. Hindwings pale grey: cilia grey-whitish.

One specimen, Maskeliya, Ceylon, in December (Pole).

#### TINEIDÆ.

*Opostega zelopa* n. sp.

♀. 5 mm. Head and thorax white. Antennæ light grey, eyecap white. Forewings lanceolate; white; a broad dark fuscous anterior fascia, on costa extending from  $\frac{1}{4}$  to middle, much dilated downwards and on dorsum extending from near base to near tornus, a fine dark fuscous irregular line from  $\frac{2}{3}$  of costa to termen beneath apex, area beyond this fuscous; a minute black apical dot: cilia light greyish-ochreous. Hindwings light grey; cilia whitish grey-ochreous.

One specimen, Pundalu-oya, Ceylon, in May (Green).

*Gracilaria perisphena* n. sp.

♂ ♀. 7—8 mm. Head bronzy-ochreous, face white. Palpi white. Antennæ grey. Thorax bronzy-ochreous. Abdomen grey, anal tuft whitish-ochreous. Legs fuscous banded with white, middle tibiæ not thickened. Forewings narrow lanceolate; bronzy-ochreous, sometimes much mixed with dark fuscous; four costal and three dorsal oblique white wedge-shaped streaks, more or less edged with dark fuscous, first costal from before middle, fourth almost vertical, first dorsal from near base, second somewhat beyond first costal, third tornal; a black apical spot: cilia pale grey, at apex with a white hook edged above with a black line and beneath with an ochreous bar. Hindwings and cilia light grey.

Two specimens, Maskeliya, Ceylon, in April (Pole). *Digatalewa. Nilgiri*

*Erobrytophora staterias* n. sp.

♂. 5—6 mm. Head, antennæ, and thorax shining white. Forewings lanceolate; shining white; three oblique slightly converging dark fuscous lines from costa beyond middle, directed towards tornal spot but not reaching it,

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26



space between two anterior pale whitish-ochreous ; a round dull golden-metallic raised tornal spot, edged laterally with blackish, and anteriorly faintly ringed with pale yellowish ; cilia ochreous-whitish, with three fine fuscous lines, innermost dark fuscous. Hindwings and cilia whitish.

Three specimens, Peradeniya, Ceylon, in July (Green). Larva mines large blister-like patches (several larvæ in one blister) in leaves of *Plumbago capensis*, separating the cuticle from the undersurface of the leaf (Green).

*Tonza citrorrhoea* n. sp.

♂. 16 mm. Head white, loosely rough-haired on crown but not tufted, face pale yellow. Palpi, antennæ, thorax, and abdomen pale whitish-yellow. Forewings elongate, narrow, terminally dilated, costa slightly sinuate, apex round-pointed, termen concave, rather oblique, tornus prominent, round-pointed ; white, with series of pale fuscous transverse strigulæ between veins ; costal half except towards termen, and veins on terminal area suffused with pale brassy-yellow ; margins of cell, and tornal veins dotted with dark fuscous ; minute blackish dots at apex and tornus : cilia whitish, becoming pale yellowish posteriorly, with a dark brownish postmedian line. Hindwings whitish, towards apex yellowish-tinged and with a few grey strigulæ ; cilia white.

Two specimens, Hantane, Ceylon, in March (Green). This is very closely allied to the other known species, but shows slight structural as well as superficial differences. The neurulation is misinterpreted in my description of the generic characters when dealing with the Australian *T. purella*, and should be as follows :—Forewings with 2 and 3 stalked from angle and approximated throughout, 4 absent, 5 connate or short-stalked with 2, 6 from middle of transverse vein, 7 and 8 approximated at base or connate, 7 to termen, 9 absent, 10 absent, 11 from beyond middle of cell. Hindwings with 2 widely remote from angle, 3 and 4 short-stalked from angle, 5 from middle of transverse vein, 6 from angle of cell to beneath apex, 7 absent, 8 closely approximated to cell and base of 6, then diverging.

*Struthisca* n. g.

Head loosely scaled ; ocelli absent ; tongue absent. Antennæ  $\frac{1}{2}$ , in ♂ bipectinated or plumose to apex, basal joint short, thick. Labial palpi rather or very short, slender, loosely scaled, pointed. Maxillary palpi obsolete. Posterior tibiae smooth-scaled. Forewings with 1b furcate, 9 and 8 stalked or approximated, 10 to apex or costa, 9 absent, 11 widely remote, from middle of cell, secondary cell and parting-veins defined. Hindwings  $\frac{4}{5}$ , elongate-ovate, cilia  $\frac{1}{2}$  ; 5 absent, 6 and 7 short-stalked or approximated, 8 free.

Type *S. siderarcha*. This genus is a development of *Melasma*, and shows analogous variability of structure, but is easily separable by the absence of a vein in both forewings and hindwings.

*Struthisca holoscia* n. sp.

♂. 13—15 mm. Head, palpi, antennæ, thorax and abdomen grey ; palpi very short ; antennal pectinations extremely long,  $\frac{2}{3}$  of length of antennæ. Forewings moderately elongate, costa moderately arched, apex round-pointed, termen very

oblique, slightly rounded; 7 and 8 stalked; grey, obscurely mottled with rather dark fuscous: cilia grey, mixed with rather dark fuscous. Hindwings and cilia grey.

Three specimens, Maskeliya, Ceylon, in February (Pole).

*Struthisca mesocentra* n. sp.

♂ ♀. 13-18 mm. Head ochreous. Palpi very short dark fuscous. Antennæ in ♂ fuscous, pectinations 4 in ♀ pale ochreous. Thorax and abdomen pale greyish-ochreous. Forewings elongate, costa gently arched, apex round-pointed, termen very obliquely rounded; pale greyish-ochreous, costal edge yellowish-tinged; a round blackish spot towards dorsum before  $\frac{1}{4}$ , and one in disc slightly before middle; a blackish bar from middle of dorsum, reaching nearly half across wing, sometimes incomplete; a fuscous fascia from costa before apex narrowed downwards and not reaching tornus; a series of black dots along posterior half of costa and termen: cilia whitish-ochreous. Hindwings light fuscous; cilia whitish-ochreous.

Three specimens, Kandy, Ceylon, in March (Green).

*Struthisca thraxitis* n. sp.

♂ 15 mm., ♀ 25 mm. Head pale ochreous-yellowish. Palpi short, pale ochreous, mixed with dark fuscous except towards apex. Antennæ pale ochreous, in ♀ mixed with fuscous, pectinations in ♂ 3. Thorax fuscous, patagia in ♂ whitish-ochreous. Abdomen pale ochreous, suffused with fuscous on sides and posteriorly, anal tuft pale ochreous. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen slightly rounded, rather strongly oblique; in ♂ whitish-ochreous sprinkled with dark fuscous, in ♀ whitish-fuscous coarsely strigulated with dark fuscous; base of costa dark fuscous; a straight dark fuscous fascia from beneath costa before middle to middle of dorsum; a roundish spot of dark fuscous suffusion in disk beyond  $\frac{2}{3}$ ; in ♂ two or three dark fuscous strigulae towards apex: cilia in ♂ whitish-ochreous, in ♀ whitish-fuscous. Hindwings and cilia light fuscous.

Two specimens, Maskeliya, Ceylon, in March (Pole).

*Struthisca siderarcha* n. sp.

♂. 15-17 mm., ♀ 22 mm. Head fuscous, crown mixed with pale ochreous. Palpi moderate, pale ochreous mixed with dark fuscous. Antennæ pale ochreous, in ♀ mixed with fuscous, pectinations in ♂ 6, fuscous. Thorax purplish-bronzy-fuscous. Abdomen fuscous. Forewings moderately broad, more elongate in ♀, costa moderately arched, apex rounded, termen obliquely rounded; in ♂ purplish-bronzy-fuscous, in ♀ metallic bluish-lead-fuscous, in both sexes coarsely strigulated with dark fuscous; a moderate dark fuscous fascia from  $\frac{2}{3}$  of costa to middle of dorsum; a dark fuscous bar from costa at  $\frac{2}{3}$ , reaching half across wing: cilia purplish-fuscous. Hindwings bronzy-fuscous, darker posteriorly: cilia purplish-fuscous.

Four specimens, Maskeliya, Ceylon, in February (Pole).

*Melasina* Bois.

Characters extended as follows: Forewings sometimes with 8 and 9 stalked, or 9 and 10 stalked, or 9 and 10 out of 8, or all veins separate. These differences







are probably usually available for specific discrimination, but are not always constant even specifically, and the species exhibiting them, which agree well together in other structural characters and superficially, must properly be included in the same genus.

*Melasina tetraspila* n. sp.

♂. 23—26 mm. Head light ochreous-yellowish, Palpi short, fuscous. Antennæ pale ochreous mixed with fuscous, pectinations 3. Thorax ochreous-whitish, shoulders suffused with fuscous. Abdomen pale greyish-ochreous. Forewings elongate, posteriorly dilated, costa moderately arched, apex rounded, termen obliquely rounded; 9 and 10 out of 8; ochreous-whitish, thinly strewn with fuscous strigulae; costal edge suffused with ochreous; a moderate fuscous spot on base of costa and two on costa at  $\frac{1}{2}$  and  $\frac{2}{3}$ , reaching half across wing, enclosing pale dots on costa; a fuscous spot on middle of dorsum, reaching  $\frac{1}{3}$  across wing: cilia ochreous-whitish, on costa spotted with fuscous. Hindwings pale greyish-ochreous; cilia ochreous-whitish, basal half more ochreous.

Two specimens, Peradeniya and Kōplanda, Ceylon, in June and October (Green).

*Melasina autadelpha* n. sp.

♂. 22—25 mm. Head light ochreous-yellow, face fuscous. Palpi very short, fuscous. Antennæ pale ochreous, pectinations  $1\frac{1}{2}$ . Thorax pale fuscous, anteriorly suffused with darker. Abdomen light fuscous. Forewings moderately elongate, rather dilated posteriorly, costa moderately arched, apex rounded, termen obliquely rounded; 9 and 10 out of 8; pale fuscous, indistinctly mottled with darker; cilia whitish-fuscous. Hindwings pale fuscous; cilia pale greyish-ochreous.

Three specimens, Kōni, Burma (Manders). Very similar superficially to *M. ochrocoma*, but structurally distinct.

*Melasina platyzona* n. sp.

♀. 18—21 mm. Head whitish-ochreous, sides with a few dark fuscous hairs. Palpi moderate, whitish-ochreous, second joint irrorated with dark fuscous. Antennæ pale ochreous. Thorax pale yellow-ochreous, more or less mixed with fuscous and sometimes with dark fuscous. Abdomen pale ochreous or whitish-ochreous. Forewings moderately elongate, costa moderately arched, apex rounded-obtuse, termen obliquely rounded; 8 and 9 stalked; ochreous-white, with a very few scattered dark fuscous scales; three brownish fasciæ irrorated or suffused with dark fuscous; first broad, basal, outer edge somewhat oblique; second broad, from middle of costa to before tornus; third narrow, terminal, irregular and more or less interrupted: cilia ochreous-white, with a few dark fuscous scales. Hindwings light brassy-grey; cilia ochreous-whitish, with traces of a fuscous shade.

Four specimens, Peradeniya and Galboda, Ceylon, in August and December (Green).

*Melasina energa* n. sp.

♂. 20-23 mm. Head pale ochreous, somewhat mixed with dark fuscous. Palpi moderately long, dark fuscous, terminal joint pale ochreous. Antennæ

pale ochreous, pectinations in ♂ 5. Thorax pale ochreous mixed with fuscous and dark fuscous. Abdomen pale fuscous, anal tuft pale ochreous. Forewings moderately elongate, costa moderately arched, apex rounded-obtuse, termen obliquely rounded; 9 and 10 usually stalked; whitish-ochreous irrorated with fuscous, and strewn with coarse irregular dark fuscous strigulae, sometimes little marked; dark fuscous suffusion appearing to form a basal patch, a fascia from  $\frac{1}{3}$  of costa to near dorsum beyond middle, an oblique streak from costa beyond middle reaching half across wing and terminating in a darker discal spot, and a subterminal line, but these are all very ill-defined and sometimes little marked: cilia whitish-ochreous with two fuscous shades, outer half barred with fuscous. Hindwings pale fuscous, sprinkled with darker; cilia whitish-ochreous with two fuscous shades, sometimes very faint.

Ten specimens, Peradeniya, Tangalla, and Yatiyantota, Ceylon, in March, April, and June (Green).

*Ereunetis melanastra* Meyr. (rec by 1906)

Twenty-three specimens, Udagama and Peradeniya, Ceylon, in February, March, and November (Green). Bred in plenty from decaying bark of dead *Hevea braziliensis* (Para rubber) in February (Green); perhaps, however, like other feeders on dead wood, it may not be particular as to the kind of tree. Originally described from Fiji, and I have it from Funafuti.

*Epactris* n. g.

Head rough-haired; ocelli present; tongue absent. Antennae somewhat over 1, in ♂ thick, filiform, simple. Labial palpi moderately long, subascending, with appressed scales or somewhat roughened beneath, terminal joint shorter than second, somewhat pointed. Maxillary-palpi several jointed, folded. Posterior tibiae clothed with long hairs. Forewings with 2 from before angle, 7 to costa, 11 from before middle, secondary cell indicated. Hindwings under 1, ovate-lanceolate, cilia  $1\frac{1}{4}$ ; 2 remote, 3 and 4 approximated from angle, 6 absent.

Allied to *Tinea*, but distinguished by the long antennae and absence of vein 6 of hindwings.

*Epactris melanchata* n. sp.

♂. 12-13 mm. Head blackish-fuscous. Palpi rather dark fuscous. Antennae whitish-ochreous, basal joint blackish-fuscous. Thorax blackish-bronze, apex of patagia and posterior extremity pale ochreous-yellow. Abdomen pale ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; pale ochreous-yellow; markings rather dark fuscous; a thick streak along basal  $\frac{2}{3}$  of costa, dilated near base, posteriorly confluent with an irregular antemedian discal spot; a dorsal mark near base, and a short streak along dorsum before middle; a spot on middle of costa; an irregular elongate spot beneath middle of disc; an irregular subquadrate blotch from costa about  $\frac{2}{3}$ , enclosing a costal spot of ground colour, and reaching  $\frac{2}{3}$  across wing, its lower angles connected with median discal spot and terminal streak respectively; a narrow streak along termen: cilia whitish-ochreous. Hindwings pale grey; cilia whitish-grey-ochreous.

Decadarchis dissimulans, Key, Extr. No. I 364 (1915)  
= melanostoma, Key, B.J. XVI 617 (1905) (rec Key: 1906)



Two specimens, Maskeliya, Ceylon, in February and March (Pole).

*Chrysoryctis synæma* n. sp.

*Chrysoryctis synæma*

♂. 12-19 mm. Head ochreous-yellow. Palpi dark fuscous. Antennæ pale fuscous, darker-ringed. Thorax dark purplish-fuscous. Abdomen bronzy-fuscous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; shining ochreous-yellow; a rather narrow dark purplish-fuscous basal fascia; costal edge slenderly suffused with dark fuscous to near middle; a more or less undefined fuscous terminal fascia, anterior edge irregular, running from  $\frac{4}{5}$  of costa to tornus: cilia pale yellowish irrorated with fuscous and dark fuscous. Hindwings bronzy-fuscous, sometimes posteriorly dark fuscous; cilia pale fuscous.

Two specimens, Maskeliya and Yatiyantota, Ceylon, in March (Pole, Green). Very closely allied to some of the Australian species of the genus, yet apparently distinct; it differs from all by the rather narrow dark basal fascia, the Australian species having either a broad fascia or else only the extreme base dark.

*Monopis dicycla* n. sp.

♂. 11 mm. Head whitish-ochreous. Palpi dark fuscous, tip whitish-ochreous. Antennæ dark fuscous, paler towards apex, basal joint whitish-ochreous. Thorax whitish-ochreous, patagia dark fuscous. Abdomen grey. Forewings lanceolate; 7 and 8 stalked; fuscous mixed with dark fuscous; discal impression paler and thinly scaled, surmounted by a pale ochreous-yellowish mark; two connected light ochreous-yellow semicircular dorsal spots, extending from near base almost to tornus, not reaching half across wing; with a small dark fuscous spot lying between them beneath discal impression: cilia ochreous-yellow sprinkled with dark fuscous. Hindwings grey; cilia pale grey.

One specimen, Maskeliya, Ceylon, in February (Pole). Allied to *ferruginella*, Hb.

*Monopis tripetala* n. sp.

♀. 17 mm. Head white, side tufts dark fuscous with pale ochreous tips. Palpi fuscous, terminal joint pale ochreous. Antennæ pale ochreous. Thorax dark bronzy-fuscous. Abdomen light ochreous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen oblique, slightly rounded; 6, 7, 8 separate; dark purple-fuscous; three semioval ochreous-whitish blotches, first largest, extending on dorsum from near base to middle, and reaching  $\frac{3}{4}$  across wing, second extending on costa from before middle to  $\frac{3}{4}$  and reaching nearly half across wing, third extending on dorsum from  $\frac{2}{3}$  to tornus and reaching  $\frac{1}{3}$  across wing: cilia dark fuscous, beneath tornus ochreous-whitish. Hindwings whitish-ochreous suffused with pale bronzy-fuscous; cilia whitish-ochreous.

One specimen, Peradeniya, Ceylon, in December (Green). Allied to the Australian *M. meliorella*.

*Tinea brachychlora* n. sp.

♀. 15 mm. Head ochreous-fuscous mixed with blackish. Palpi rather dark fuscous. Antennæ pale ochreous-yellowish, basally mixed with dark fuscous.

Thorax pale yellow, anterior third dark bronzy-fuscous. (Abdomen broken.) Forewings rather broadly lanceolate; dark bronzy-fuscous; markings pale ochreous-yellow; a patch occupying basal  $\frac{1}{3}$ , its edge acutely angulated near costa, beneath this slightly concave; rest of costa marked with eight short oblique strigulae; a slender waved streak along termen, on lower half dilated into a triangular spot: cilia pale ochreous-yellow, at apex with two dark fuscous hooks. Hindwings whitish-grey, more ochreous-whitish towards base; cilia ochreous-whitish.

One specimen, Maskeliya, Ceylon, in March (Pole).

*Tinea pachypila* n. sp.

♂ ♀. 10-14 mm. Head light greyish-ochreous. Palpi and antennae light fuscous. Thorax light greyish-ochreous, sprinkled with fuscous. Abdomen greyish-ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; light greyish-ochreous sprinkled with fuscous; a round fuscous spot in disc near base; stigmata represented by round rather dark fuscous spots, first discal largest, plical beneath and sometimes confluent with first discal, an additional spot beneath and more or less confluent with second discal: cilia pale greyish-ochreous, somewhat mixed with light fuscous towards base, becoming ochreous-whitish towards tips. Hindwings bronzy-grey; cilia pale bronzy-grey.

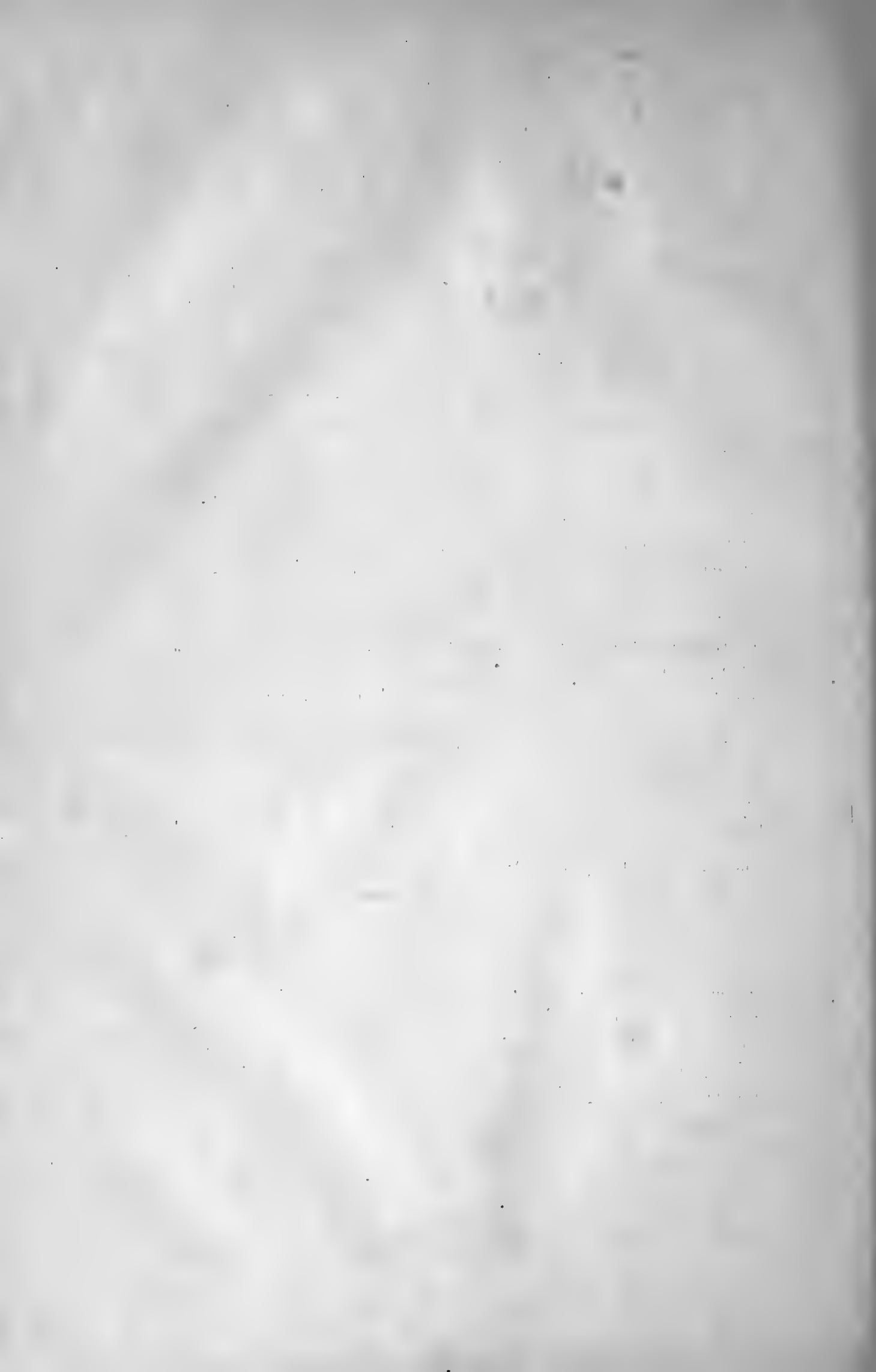
Three specimens, Peradeniya, Ceylon, in March (Green); but also stated by Mr. Green to be common in every bungalow throughout the island. Larva case-bearing, feeding on flannel, fur, &c., all the year round (Green); case relatively large, fusiform-cylindrical, composed of silk covered with grains of sand and fragments of cinder and brick-dust.

*Nemotois corybantis* n. sp.

♂ ♀. 13-15 mm. Head in ♂ dark indigo-grey, in ♀ face metallic-grey, crown ochreous-yellowish. Palpi ochreous, hairs dark fuscous. Antennae in ♂ white, towards base dark fuscous and thickened with metallic-blue scales, in ♀ whitish ringed with dark grey, basal half much thickened, with purple-fuscous scales, uppermost dark fuscous and terminating abruptly. Thorax in ♂ dark purple-bronzy-fuscous, in ♀ bronzy-grey margined with orange. Abdomen dark grey. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen rather strongly oblique, slightly rounded; bright orange; a shot silvery-metallic longitudinal streak from base above middle; a rather narrow direct fascia of ground colour, in ♂ antemedian, in ♀ median, enclosed by two bluish-silvery-metallic lines, second finely edged anteriorly with dark fuscous, and interrupted by an orange dot above middle; wing beyond this wholly bright coppery-purple, in ♀ mixed with blackish-fuscous: cilia in ♂ purple-bronzy, in ♀ dark purple-fuscous. Hindwings rather dark purplish-grey, darker and more purple in ♀; cilia grey.

Six specimens, Peradeniya and Kandy, Ceylon, in July, August, and December (Green).

Linea allutella, Rebel 1892 = Linea uterella, Wm 1897  
= Linea pachyspila, Hagn 1905.





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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

By

E. MEYRICK, B.A., F.R.S., F.Z.S.

II.

Thanks to the energy of the Micro-Lepidopterists of Ceylon, I have now received a considerable quantity of material from that island, and the present paper is mainly devoted to a selection from it. I am indebted for these valuable contributions to Messrs. J. Pole, of Maskeliya; E. E. Green, of Peradeniya; G. B. de Mowbray, of Maskeliya; G. C. Alston, of Maskeliya; and W. Vaughan, of Madulsima.

I have had some instructions for collectors printed, and shall be pleased to send a copy to any collector in the Indian region who will send me his address.

Seventeen genera and seventy-six species are here described as new, and some other species are recorded from the region for the first time.

### ORNEODIDÆ.

— *Orneodes toxophila*, n. sp.

♂. 15–16 mm. Head and thorax white. Palpi with appressed scales, white, towards base sprinkled with fuscous. Antennæ ochreous-whitish, basal joint white. Abdomen whitish-ochreous. Forewings ochreous-whitish, crossed by ill-defined light yellow-ochreous bands before and beyond middle, and a narrow curved darker central fascia, sometimes partially speckled with dark fuscous, not reaching sixth segment, separated from them by fine lines of ground colour; sometimes a few fine blackish specks on segments; sometimes a faint yellowish subterminal line. Hindwings as forewings, but central fascia fuscous, sprinkled with blackish, entire, dark specks on segments rather more numerous, subterminal line sometimes greyish towards dorsum.

Four specimens, Maskeliya, Ceylon, in April and June (de Mowbray).

— *Orneodes sycophanta*, n. sp.

♂ ♀. 15–18 mm. Head and thorax white. Palpi smooth-scaled, white, apex of basal and second joints and subapical ring of terminal joint dark fuscous. Antennæ stout, serrate, whitish-ochreous, basal joint white. Abdomen white,

segments 2—4 partially or wholly dark fuscous above (number of dark segments variable). Forewings white; first segment fuscous, with four blackish white-edged spots, fourth apical; second segment fuscous, with three dark fuscous bands, limited by white spots edged with blackish-fuscous; segments 3—6 crossed by two anterior series of undefined dark fuscous dots, and four posterior pale greyish-ochreous fasciæ, edged with dark fuscous, but these vary much in distinctness and are often partially obsolete; usually a distinct blackish-fuscous spot on middle of sixth segment. Hindwings white, with six transverse series of pale ochreous spots, speckled with black.

Eight specimens, Maskeliya, Ceylon, in January, May, and July (Pole).

*Orneodes trachyptera*, n. sp.

♂ ♀. 10—12 mm. Head palpi, antennæ, thorax, and abdomen dark fuscous mixed with whitish; palpi with second joint dilated with rough scales towards apex above and beneath, terminal joint thickened with loose scales towards apex anteriorly. Forewings with costa roughened with projecting dark fuscous scales, except on the white markings; whitish, densely irrorated with dark fuscous, so as to appear dark grey; costa with six or seven small semioval ochreous-white spots, not reaching more than half across first segment; other segments crossed by about six series of ochreous-white dots, united by outwardly oblique whitish dashes in the cilia to form zigzag lines. Hindwings with ground colour and zigzag lines as in forewings.

Six specimens, Puttakam and Maskeliya, Ceylon, in March, May, November and December (Pole, de Mowbray).

#### PTEROPHORIDÆ.

*Cosmoclostis pesseuta*, n. sp.

♂ ♀. 12—13 mm. Head brownish-ochreous, front of crown white. Palpi short, whitish, sprinkled with fuscous. Thorax white, anterior and posterior margins ochreous. Abdomen in ♂ white, irregularly marked with ferruginous; in ♀ pale yellow, last three segments marked with ferruginous. Forewings cleft from before  $\frac{2}{3}$ , segments linear; white, costal half irrorated with fuscous from base of wing to middle of first segment; first segment with a small dark fuscous mark on its lower margin near base, dark fuscous bands about middle and  $\frac{3}{4}$ , and some irregularly strewn dark fuscous scales posteriorly; second segment with dark fuscous bands towards base, beyond middle, and before apex, variable in development and first two sometimes very wide; cilia light ochreous-grey, somewhat suffused with whitish opposite white areas. Hindwings grey; cilia light grey.

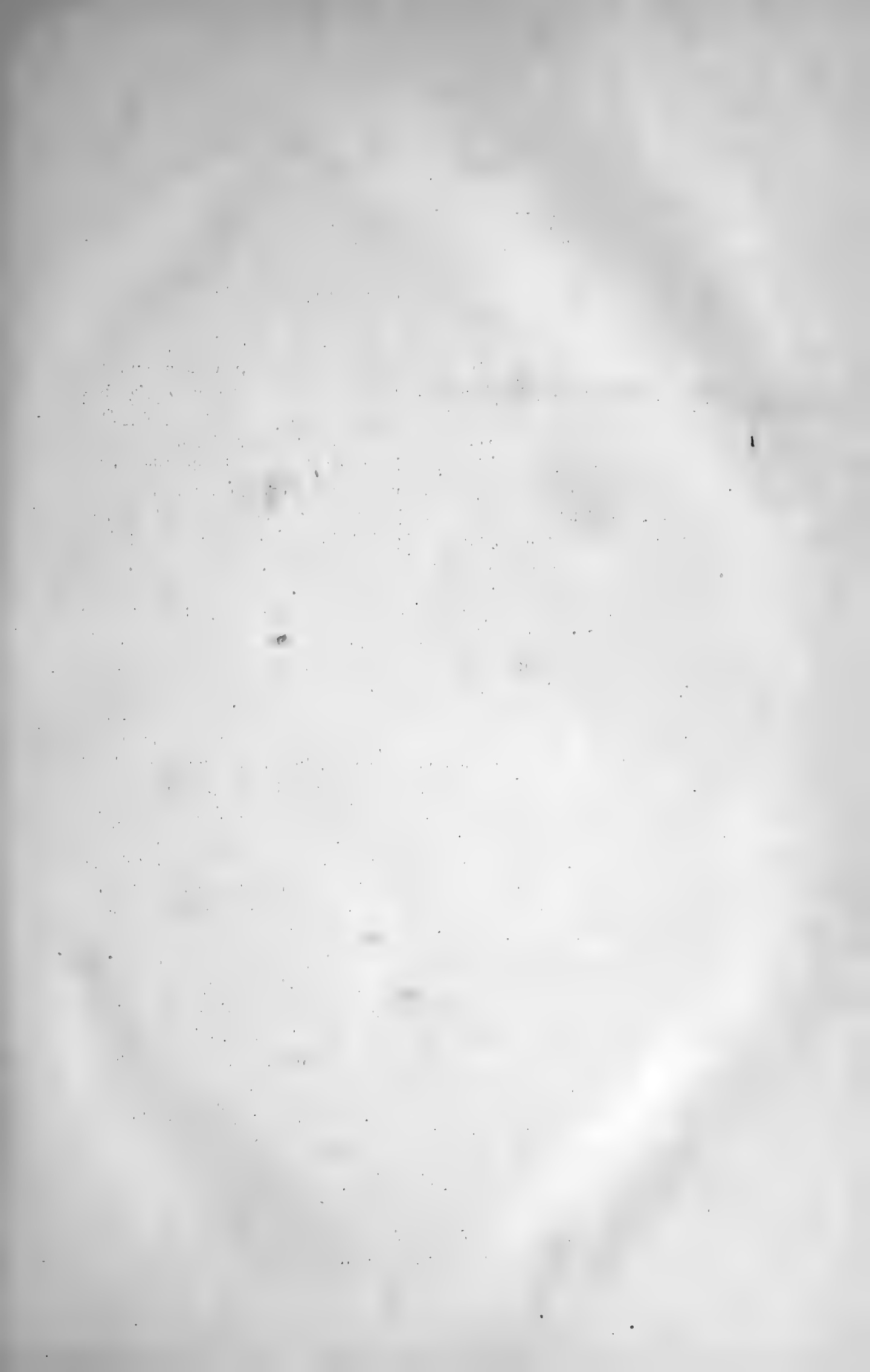
Two specimens, Puttalam, Ceylon, in February and April (Pole).

*Cosmoclostis aglaodesma*, Meyr.

Puttalam, Ceylon, from October to January (Pole). Occurs also in Eastern Australia, and some of the South Pacific and Malayan Islands.

*Trichoptilus xerodes*, Meyr.

Peradeniya, Ceylon, in October (Green, Pole). Widely distributed in Australia.



subodactylus, Py. = Tingitana, Mayr. sub odactylus

*Trichoptilus Wahlbergi*, Zell.

(*Pterophorus Wahlbergi*, Zell. Linn. Ent. VI, 346, Mic. Caff. 117; *P. rutilalis*, Walk. Cat. 943; *Trichoptilus pyrrhodes*, Meyr. Proc. Linn. Soc. N. S. Wales 1889, 1113.)

Maskeliya, Ceylon, in March and May (Pole). Occurs from S. Africa to E. Australia.

*Deuterocopus Tengstroemi*, Zell.

Puttalam, Ceylon, in October (Pole); Surat, Bombay, in August (Maxwel Lefroy). Occurs also from S. Africa to New Guinea.

*Oxyptilus regulus*, n. sp.

♂. 16 mm. Head and thorax fuscous, irrorated with blackish. Palpi white, mixed with blackish, second joint reaching middle of face, terminal joint rather shorter than second. Abdomen fuscous, with dorsal series of undefined blackish marks. Forewings cleft from before  $\frac{2}{3}$ , first segment parallel-sided, subfalcate, second narrow, posteriorly dilated, apex abruptly and moderately produced; fuscous, irrorated with dark fuscous and blackish; an undefined spot of dark suffusion above base of cleft; a broad dark fuscous band on first segment beyond its middle, preceded on costa by a small pale suffusion, and edged posteriorly by a rather outwardly oblique incurved white line; some dark suffusion on second segment before apex; cilia light fuscous, on termen with black basal line, on lower margin of first segment mixed at base with white and elsewhere with black scales, on upper margin of second segment with scattered black scales, on dorsum with three small black scale-teeth near base, some scattered black scales towards middle, a black scale-tooth before cleft, another at  $\frac{1}{4}$  of second segment, preceded and followed by ochreous-whitish spaces, beyond these mixed with black scales. Hindwings cleft firstly from  $\frac{1}{3}$ , secondly from near base, segments linear; rather dark fuscous; cilia fuscous, on upper margin of third segment with a few black scales towards apex, on lower margin with a very large black triangular scale-projection occupying apical third, five small black scale-teeth between this and base, and two very minute, almost basal.

Two specimens, Maskeliya, Ceylon, in March and July (Pole).

*Platyptilia brachymorpha*, Meyr.

Puttalam, Ceylon, in February, April, August, November and December (Pole). Occurs also in the Hawaiian Islands.

— *Platyptilia hemimetra*, Meyr.

Puttalam, Maturatta, Kandy and Maskeliya, Ceylon, in February, March, September, November and December. Described from the Island of Réunion.

— *Platyptilia molopias*, n. sp.

♂ ♀. 16—19 mm. Head, thorax, and abdomen whitish, irrorated with light brown, frontal tuft moderately long. Palpi 2, rather dark fuscous, sprinkled with whitish. Forewings cleft from  $\frac{2}{3}$ , segments moderately broad, somewhat dilated posteriorly, termen of first sinuate, of second slightly prominent in middle; whitish, irrorated with reddish-fuscous and dark fuscous; costal edge dark fuscous, dotted with whitish anteriorly; a roundish spot of dark fuscous

suffusion on fold at  $\frac{1}{3}$ , and another beneath costa before middle ; a dark fuscous suffusion along middle third of dorsum ; a triangular blackish-fuscous costal blotch before cleft, followed by a whitish suffusion on costal edge ; a rather reddish-brown band crossing both segments, obscurely whitish-edged posteriorly ; remaining narrow terminal fascia sometimes dark fuscous ; cilia whitish-ochreous, slightly reddish-tinged, on termen with black basal line, at both angles of each segment with bars of dark grey suffusion, on dorsum with a blackish scale-tooth beyond middle, a smaller one beneath cleft, and some scattered blackish scales anteriorly. Hindwings cleft firstly from before middle, secondly from  $\frac{1}{5}$ , first segment dilated, apex rounded, second subacute, termen very obliquely subsinuate, third linear ; dark fuscous ; cilia fuscous, on lower margin of third segment with a moderate black scale-tooth in middle, and scattered black scales between this and base.

Six specimens, Maskeliya, Ceylon, in October, December, January, and March (Pole).

*Marasmarcha tiophanes*, Meyr.

Puttalam, Ceylon, in February, April, August, and November (Pole). Occurs also in Réunion.

*Agdistis nanodes*, n. sp.

♂ ♀. 15—16 mm. Head, thorax, and abdomen pale brownish-grey, sometimes whitish-mixed ; frontal prominence moderate, acute-conical. Palpi grey, mixed with dark grey and white. Forewings very narrow, posteriorly dilated, costa posteriorly moderately arched, apex pointed, termen rather strongly oblique, almost straight ; pale brownish-grey, costal and dorsal areas sprinkled with whitish and dark fuscous, confluent towards base ; a cloudy dark fuscous dot in disc at  $\frac{1}{3}$ , two below disc before and beyond middle, and one towards costa at  $\frac{3}{4}$  ; cilia pale fuscous mixed with whitish. Hindwings light fuscous, veins darker ; a subdorsal groove ; cilia as in forewings. Undersurface of hindwings beneath with flap of scales from lower margin of cell towards angle, covering some black scales, and rows of minute raised black scales along basal portions of veins 2 and 3 ; dorsal area clothed with dark fuscous scales.

Four specimens, Puttalam, Ceylon, in August, October, and November. The species of this genus (usually attached to sea-coast plants) are extremely similar superficially, and the accessory structural characters must be carefully noticed ; the present species is the smallest known to me.

*Encomiella* = EPIBLEMIDÆ.

*Platypeplus mormopa*, n. sp.

♂. 19 mm. Head and thorax light greyish-ochreous, mixed with dark grey and white. Palpi ochreous-fuscous, mixed with darker. Abdomen grey. Posterior tibiae with hairs ochreous-white. Forewings elongate-triangular, costa moderately arched, apex obtuse, termen slightly rounded, hardly oblique ; whitish, mostly suffused with pale brownish, and strigulated throughout with blackish ; a large roundish black blotch resting on middle of costa, and reaching  $\frac{2}{3}$  across wing, with a small irregular projection in disc posteriorly ; cilia grey.



Agaveploc leucaspis (B.J. XIX. 572)

Enosma oclatins (B.J. XIX. 607)



Hindwings grey, rather darker posteriorly; a short subdorsal groove and marginal thickening from base, clothed with hairs, with a projecting marginal hairpencil from near base; cilia grey.

Two specimens, Maskeliya, Ceylon, in February (de Mowbray, Alston).

*Eucosma leucaspis*, Meyr. (*Gardner's Fauna Geog. Melanesia* I, 126)

Maskeliya, Madulsima, Matale, and Puttalam, Ceylon, in May, October, and November (Pole, Vaughan).

*Epiblema ocladias*, n. sp.

♂ ♀. 18—26 mm. Head white, sides of crown and a frontal bar black. Palpi black, white above and at apex. Antennæ blackish-grey. Thorax white, shoulders and a posterior bar black. Abdomen grey. Forewings elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen almost straight, hardly oblique, rounded beneath; white; markings dark leaden-fuscous, irregularly suffused or marked with black, sharply defined; a zigzag streak from base of costa through disc, angulated thrice downwards and twice upwards, terminating on costa before apex; in ♂ costal area as far as this streak from base to beyond middle wholly blackish, in ♀ with a small wedge-shaped black costal spot at  $\frac{1}{3}$ , and a larger subquadrate one beyond middle, each preceded by a black strigula; two posterior black costal strigulae; four irregular dorsal spots, second sometimes connected with middle angle of median streak; an irregular spot near termen below middle, often confluent with median streak near its extremity: cilia white, beneath tornus blackish. Hindwings dark grey, lighter towards base; cilia grey-whitish, with grey basal line.

Seven specimens, Maskeliya, Ceylon, in March, May, July, August, October, and November (de Mowbray, Pole, Green).

#### PHALONIADÆ.

*Meridarchis*, Zell.

This genus, founded by Zeller on the Indian *trapeziella*, and attributed by him to the *Gelechiadæ*, is, I find, so close to *Tribonica*, Meyr., that it will be better at present to treat them as identical and sink the latter name, although it is possible that the small structural differences existing may ultimately involve their separation. The types of *Meridarchis* and *Tribonica*, and the two additional species now described, agree together, and are distinguished from all nearly allied forms by the stalking of veins 8 and 9 of forewings.

*Meridarchis episacta*, n. sp.

♂. 18—21 mm. Head and thorax white, more or less tinged with ochreous. Palpi porrected, dark fuscous, second joint mixed with white above. Abdomen ochreous-whitish. Forewings elongate, rather narrow, not dilated, costa arched towards base, thence nearly straight, apex round-pointed, termen sinuate, oblique; 3 and 4 separate; white; a black basal patch, edge parallel to termen; a black subdorsal scaletuft at  $\frac{1}{3}$ ; a trapezoidal black patch extending along costa from  $\frac{1}{3}$  to beyond  $\frac{2}{3}$ , rapidly narrowed downwards, reaching more than half across wing, edged beneath with a few ochreous scales; a black strigula on dorsum at  $\frac{3}{4}$ , almost connected with costal patch; a small blackish

costal spot at  $\frac{1}{2}$ , whence proceeds an undefined line of black and grey scales to tornus; a row of black dots round apex and termen: cilia whitish-grey-ochreous. Hindwings pale grey; beneath cell towards base a group of raised black hair scales, partially covered by an expansible pencil of long ochreous-whitish hairs from base; cilia whitish-grey-ochreous.

Three specimens, Maskeliya, Ceylon, in October, December, and January (de Mowbray).

*Meridarchis phæodelta*, n. sp.

♂ ♀. 13—17 mm. Head and thorax whitish-ochreous, tinged with brownish ochreous. Palpi in ♂ moderate, curved, subascending, in ♀ very long, straight, porrected; ochreous-whitish, second joint irrorated with fuscous, terminal joint with dark fuscous band. Abdomen in ♂ grey, in ♀ light greyish-ochreous. Forewings elongate, narrow, hardly dilated, costa slightly arched, apex round-pointed, termen sinuate, rather strongly oblique; 3 and 4 separate; pale greyish-ochreous, partially mixed and suffused with brownish ochreous, sometimes partially sprinkled with dark fuscous; a dark fuscous or blackish triangular patch extending along costa from about  $\frac{1}{3}$  to  $\frac{5}{6}$ , and reaching  $\frac{3}{4}$  across wing, somewhat mixed with pale scales, and on costa with alternate usually obscure pale and blackish spots; a terminal series of connected blackish marks: cilia whitish-ochreous, mixed with dark grey on termen. Hindwings light grey, darker towards apex, veins dark grey; cilia whitish-ochreous, suffused with grey.

Six specimens, Maskeliya and Haputale, Ceylon, in February, June, and November (Alston, Pole).

*Paramorpha laxenta*, n. sp.

♀. 15—17 mm. Head and thorax white, partially tinged with fuscous. Palpi whitish, mixed with dark fuscous. Abdomen ochreous-whitish. Forewings elongate, narrow, hardly dilated, costa gently arched, apex round-pointed, termen slightly sinuate, rather strongly oblique; white; a narrow basal patch of ochreous-grey suffusion, edge inwardly oblique; a wide median band extending from  $\frac{1}{3}$  to somewhat beyond  $\frac{2}{3}$  irrorated with ochreous and grey, with four black marks on costa, and discal scaletufts mixed with black, edges inwardly oblique; a subterminal cloudy fascia of grey irroration; some grey spots with a few black scales round apex and termen: cilia whitish-ochreous, round apex fuscous-tinged. Hindwings whitish-grey: cilia ochreous-grey-whitish.

Three specimens, Matale and Maskeliya, Ceylon, in January and April (Pole, de Mowbray).

#### GELECHIADÆ.

*Aristotelia peltosema*, Low.

Puttalam, Ceylon, from September to December (Pole). Described from Australia.

*Thiotricha saulotis*, n. sp.

♀. 11 mm. Head, palpi, and thorax shining white. Abdomen ochreous-whitish. Forewings almost linear, costa almost straight, apex pointed, termen





rather strongly oblique, slightly rounded; 9 out of 6; shining white; an orange-ochreous spot towards apex, connected by two indistinct oblique grey strigulæ with costa, beneath with two longer similar strigulæ, first reaching fold and angulated on it to margin, second limited below by a yellowish mark; a blackish apical dot, more strongly marked on undersurface: cilia ochreous-whitish, round apex and termen with a grey median shade, on termen with a fine yellowish basal line and some black basal scales at tornus. Hindwings very narrow, cilia 5; pale grey; a minute blackish apical dot; cilia ochreous-grey-whitish, with some blackish median scales opposite apex.

One specimen, Maskeliya, Ceylon, in March (Pole). To this genus is also referable *animosella*, Walk., described under *Gelechia*.

*Idiophantis soreuta*, n. sp.

♂. 13-14 mm. Head pale ochreous, face and palpi whitish-ochreous, terminal joint of palpi with dark fuscous line each side of anterior edge. Antennæ whitish, lined with dark fuscous. Thorax pale ochreous, shoulders narrowly fuscous. Abdomen light grey. Forewings elongate, narrow, costa gently arched, termen very deeply concave, so that apex becomes a narrow twisted strip, tornus a somewhat shorter, strong, rounded prominence; 6 absent; pale brownish-ochreous, towards apex yellowish-tinged; a dark fuscous patch extending along costa from base to  $\frac{2}{3}$ , not reaching half across wing, lower edge with two short darker rounded prominences before middle, posterior edge straight, oblique; a few variable scattered dark fuscous dots or dashes between this and dorsum; a fine whitish fuscous-edged line from  $\frac{3}{4}$  of costa to dorsum before tornus, right-angled above middle, arms subsinuate; a whitish streak along costa towards apex, edged with fuscous beneath; a small dark metallic-bronze spot on termen beneath middle: cilia whitish-ochreous, round apex with a dark fuscous basal line, opposite terminal spot with a metallic-bronze patch. Hindwings fuscous; cilia whitish-fuscous, with darker subbasal shade.

Three specimens, Puttalam, Ceylon, in November and December (Pole). The absence of vein 6 of the forewings is an extension of the generic characters, but the species is in all respects so clearly allied to the Australian insect which forms the type of *Idiophantis* that I do not hesitate to include them together.

*Anacampsis nerteria*, n. sp.

♂ ♀. 10-11 mm. Head, antennæ, and thorax dark bronzy-fuscous, face whitish-ochreous. Palpi ochreous-whitish, terminal joint with anterior and interior blackish lines. Abdomen grey. Forewings elongate, narrow, long-pointed, acute; 6 out of 7; bronzy-fuscous, irrorated with dark fuscous, sometimes paler-sprinkled; stigmata dark fuscous, very obscure, plical obliquely before first discal, edged posteriorly by an ochreous-whitish dot; a small ochreous-whitish costal spot before  $\frac{3}{4}$ : cilia fuscous, towards base mixed with brown and black points, with a median black line. Hindwings and cilia grey.

Thirty-four specimens, Maskeliya, Ceylon, in February and April (Green). Bred in plenty by Mr. Green who gives the following particulars:—"Larva dull

greenish; head and plate of 2 dark brown; spots black: feeds between two leaves spun together on the ground-nut (*Arachis hypogaea*), and is destructive to foliage; egg pale green, irregularly elongate-oval, surface coarsely pitted in irregular longitudinal series, under the microscope remarkably similar both in form and sculpture to seed of *Arachis*." This species is very closely allied to the common European *anthyllidella*, differing only by the ochreous-whitish face and second joint of palpi, which in *anthyllidella* are pale fuscous; also very close to the Australian *clarisignella*, but differing by the absence of the pale dorsal spot. These three species appear to be representative geographical forms.

*Stegasta variana*, Meyr.

Ceylon (without further locality, but probably Puttalam) (Pole). Hitherto only known from Eastern Australia.

*Zalithia amethystias*, n. sp.

♂. 10 mm. Head and thorax dark bronzy-fuscous, shoulders with a prismatic violet-blue spot. Palpi pale yellowish-fuscous, terminal joint longer than second, ochreous-whitish, with black anterior edge. Antennæ ochreous-whitish ringed with dark fuscous, simple. Abdomen dark grey. Legs dark fuscous ringed with white, middle tibiae with a violet-blue streak towards base. Forewings elongate, narrow, posteriorly dilated, costa gently arched towards extremities, apex obtuse, termen slightly sinuate, little oblique; 6 to apex, 8 absent; dull ochreous-orange sprinkled with fuscous; markings prismatic violet-blue, partially edged with dark fuscous; narrow costal and median streaks from base to  $\frac{1}{3}$ ; an oblique mark from costa before middle, not reaching half across wing; a short longitudinal mark beneath disc before middle; a straight narrow fascia at  $\frac{2}{3}$ , interrupted above middle; apical fourth blackish except a terminal line, anterior edge straight, near and parallel to preceding fascia, including a small round violet-silvery-metallic spot on costa and four others before termen: cilia bluish-silvery-metallic, beneath tornus dark fuscous. Hindwings dark fuscous, bronzy-tinged; cilia fuscous, with dark fuscous basal line.

Two specimens, Peradeniya, Ceylon, in January and April (Green). The generic characters are extended in the particulars indicated, but the species is in all essentials closely allied to the type-form of the genus.

*Epicania*, n. g.

Head with appressed scales; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ serrulate, minutely ciliated. Labial palpi long, recurved, second joint with appressed scales, somewhat roughened beneath towards apex, terminal joint almost or quite as long as second, smooth, acute. Posterior tibiae somewhat roughened with scales above. Forewings with 2 and 3 stalked from angle, 7 to costa, 8 absent, 11 from middle. Hindwings 1, trapezoidal, termen sinuate beneath apex, cilia  $\frac{4}{5}$ —1; 3 and 4 connate, 5 somewhat approximated, 6 and 7 stalked.

Type *E. chernetis*. Belongs to the *Protolechia* group; nearest to *Pancenia*, from which it differs essentially by the stalking of 6 and 7 of hindwings.

Strobilia amethystina (B.S. XX.726)

Antisticha anthracina

Antisticha chemetis. This description includes two ~~species~~, chemetis  
and phaulodes (B. J. XVIII. 459)



*Epicania chlorodelta*, n. sp.

♂ ♀. 14—15 mm. Head, palpi, and thorax ochreous-orange, second joint of palpi with lower half irrorated with fuscous and a dark fuscous subapical ring, terminal joint somewhat shorter than second, with traces of a dark fuscous median ring. Antennæ pale ochreous-yellowish ringed with dark fuscous. Abdomen rather dark fuscous. Forewings elongate, costa moderately arched, apex round-pointed, termen slightly rounded, oblique; dark fuscous; a small basal ochreous-orange spot; stigmata and a small prætoral spot very obscurely darker, plical obliquely before first discal; a triangular ochreous-orange blotch extending on costa from  $\frac{2}{5}$  to rather near apex, and reaching more than half across wing: cilia pale ochreous, at apex and tornus with patches of dark fuscous suffusion. Hindwings dark grey; cilia grey.

Four specimens, Maskeliya, Ceylon, in February and October (Pole, do Mowbray).

*Epicania authæma*, n. sp.

♂ ♀. 12—13 mm. Head and thorax whitish-ochreous, mixed with dark fuscous. Palpi whitish-ochreous, second joint irrorated or suffused with dark fuscous except at apex, terminal joint somewhat shorter than second, with dark fuscous median band sometimes extended nearly to base. Antennæ whitish-fuscous or whitish-ochreous tinged with fuscous, obscurely ringed with dark fuscous. Abdomen grey, apex whitish-ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen very obliquely rounded; pale ochreous, irrorated with fuscous and dark fuscous; stigmata rather large, dark fuscous, plical nearly beneath first discal; a small dark fuscous prætoral spot; an almost marginal series of dark fuscous dots along posterior half of costa and termen: cilia whitish-ochreous, basal half yellowish, with a median line of dark fuscous points, apical half with faint whitish-fuscous irroration, on costa sometimes barred with dark fuscous irroration. Hindwings grey, darker in ♀; cilia pale grey, sometimes suffused with whitish-ochreous towards base.

Four specimens, Peradeniya, Ceylon, in February (three bred) (Green). Larva constructs heliciform cases on surface of moss-covered rocks (Green); cases sent seem to consist of a gradually dilated gallery coiled in a flat rounded spiral, and are composed of silk closely covered with grains of sand and fragments of lichens. This species is extremely close to *E. chernetis*, and both appear to vary in small details; *authæma* is smaller, with the forewings obviously narrower and with more strongly oblique termen, and the terminal joint of palpi relatively shorter; the larval habits are distinct.

*Epicania chernetis*, n. sp.

♂ ♀. 16—17 mm. Head and thorax whitish-ochreous, irrorated with fuscous and dark fuscous. Palpi whitish-ochreous, second joint irrorated with dark fuscous except at apex, terminal joint as long as second, with dark fuscous median band. Antennæ whitish-ochreous ringed with dark fuscous. Abdomen fuscous, anal tuft whitish-ochreous. Forewings elongate, costa gently arched

apex obtuse, termen almost straight, rather oblique; whitish-ochreous, tinged with fuscous and irrorated with dark fuscous; a dark fuscous dot on base of costa, followed by an undefined whitish-ochreous dot; stigmata dark fuscous, ~~sometimes rather large~~, plical ~~somewhat before~~ first discal; a small prætornal spot of dark fuscous suffusion; an almost marginal row of dark fuscous or blackish dots along posterior portion of costa and termen: cilia whitish-ochreous, more yellowish towards base, with basal dots and a median line of dark fuscous irroration, on apical half with faint whitish-fuscous irroration. Hindwings grey; cilia whitish-ochreous, tinged with fuscous.

March

Fifteen specimens, Peradeniya and ~~Madulsima~~, Ceylon, from February to ~~April~~ (Green, ~~Vaughan~~). Larva feeding in galleries several inches long on surface of moss-covered rocks, and pupating in an enlarged chamber (Green); specimens of these galleries sent by Mr. Green are composed of silk covered with grains of sand and fragments of lichen, moss, and incidental refuse; from similar undistinguished galleries two other species of different genera were also bred. Not only is this species very close to *E. authæma* as noted above, but also by its obscure and ordinary colouring exceedingly similar superficially to species of other genera, from which it must be carefully distinguished by verifying the neururation.

*Tipha diacma*, n. sp.

♂ ♀. 17—22 mm. Head and thorax ochreous-yellow, face paler, apex of patagia and a posterior spot on thorax metallic-grey. Palpi light ochreous-yellowish, in ♂ with second joint dilated with long projecting scales towards apex and excavated internally (spoon-shaped), interior of excavation metallic-grey, terminal joint short, in ♀ very long, normal. Antennæ light ochreous-yellowish, towards apex suffused with grey. Abdomen whitish-ochreous. Legs pale ochreous-yellowish, anterior and middle tibiæ with indistinct grey subapical ring, posterior tibiæ and tarsi clothed with rough hairs above. Forewings elongate, very narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; 2 remote, 3 from near angle, 4 and 5 stalked, 8 and 9 out of 7, 7 to costa; dull orange-yellow; a minute metallic-grey black-edged basal mark; a small dark metallic-grey black-mixed spot in disc near base; three indistinct cloudy rather broad pale fuscous fasciæ, first at  $\frac{1}{4}$ , angulated in middle, second oblique, from towards middle of costa to before tornus, third oblique, about  $\frac{3}{4}$ , little marked; five linear longitudinal dark metallic-grey streaks mixed with black, two on first fascia in middle and on fold, one on second fascia in middle, and two stronger starting on anterior edge of third fascia and continued along costa and termen respectively almost meeting at apex: cilia ochreous-yellow, at apex with a cloudy dark fuscous spot. Hindwings with 2 remote, in ♂ 3 and 5 absent, in ♀ 3 and 4 short-stalked, 5 approximated, 6 and 7 long-stalked, 6 in ♂ to costa, in ♀ to termen; grey; in ♂ a longitudinal median furrow throughout, suffused with whitish-ochreous, suffusion extending round apex, and a long ochreous-yellow hair-pencil from base, lying in a groove beneath cell, tornal area clothed with

Trigaster diacma (B.J. XVIII. 451)

Trichomanes trichomanes (B.J. XVIII. 451)

modified dark grey hair scales; cilia whitish-yellowish, becoming greyish-tinged towards tornus.

Four specimens, Maskeliya, Ceylon, from December to February (de Mowbray).

*Tipha trichroa*, n. sp.

♂ ♀. 14 mm. Head and palpi glossy whitish-ochreous; palpi in ♂ with second joint broadly dilated beneath with projecting scales towards apex and excavated internally (spoon-shaped), mixed with dark grey towards apex and interior of excavation wholly dark grey, terminal joint concealed. Antennæ whitish-ochreous, more yellow towards base. Thorax dark coppery-bronze. Abdomen whitish-ochreous. Legs whitish, tibiae yellowish-tinged, anterior tibiae with dark grey band, posterior tibiae and basal joint of tarsi roughened with hairs, partially suffused with yellow and irregularly banded with dark grey at middle and apex of tibiae, and apex of two basal joints of tarsi. Forewings elongate, very narrow, costa moderately arched towards base, thence nearly straight, apex round-pointed, termen extremely obliquely rounded; 2 tolerably remote, 3 and 5 stalked, 4 absent, 7 and 9 short-stalked, 7 to costa, 8 absent; dark brown, basal third dark purple-fuscous; a triangular white blotch on dorsum beyond  $\frac{1}{4}$ , reaching more than half across wing; a cloudy ochreous-yellow dot on costa before middle; a triangular ochreous-yellow patch extending along costa from middle to  $\frac{4}{5}$ , and reaching more than half across wing; cilia light fuscous, at base tinged with ochreous-yellowish. Hindwings with termen sinuate; 2 remote, in ♂ 3 and 5 absent, in ♀ 3 and 4 stalked, 5 approximated, 6 and 7 long-stalked; rather dark fuscous; in ♂ a subdorsal furrow throughout, filled with very long expansible pale fuscous hairs; cilia pale fuscous.

Two specimens, Madulsima, Ceylon, in April (Vaughan).

*Timyra tetracina*, n. sp.

♂ ♀. 16—18 mm. Head and thorax ochreous-yellow. Palpi whitish-ochreous, lower half of second joint infuscated, in ♂ with second joint dilated with long projecting scales beneath towards apex and excavated internally (spoon-shaped), interior of excavation mixed with dark grey, terminal joint concealed, in ♀ second joint with tuft of rough projecting ochreous-yellow hairs towards apex beneath, terminal joint longer than second. Antennæ pale ochreous-yellowish, indistinctly ringed with fuscous, basal joint in ♂ with anterior scale-projection. Abdomen pale greyish-ochreous. Legs ochreous-whitish, anterior femora and tibiae suffusedly banded with dark fuscous, middle tibiae banded with dark fuscous and with tuft of yellow scales above towards base, posterior tibiae roughened with ochreous-yellow scales, with dense expanded median tuft of long ochreous-whitish hairs suffusedly banded with grey, and smaller apical similar tuft marked with black, tarsi with interrupted dark fuscous line above. Forewings elongate, narrow, costa anteriorly moderately, posteriorly slightly arched, apex round-pointed, termen extremely obliquely rounded; 4 and 5 stalked, 7 to costa, 9 connate with 7; yellowish-orange, markings fuscous-

purple; a small spot on base of costa; five narrow transverse fasciæ, first at  $\frac{1}{2}$ , rather inwardly oblique, second at  $\frac{1}{3}$ , rather outwardly oblique, third median, oblique, irregularly angulated or dilated, fourth at  $\frac{3}{4}$ , irregular, fifth terminal, meeting fourth at tornus; a small discal spot beyond third, sometimes connected with it: cilia pale ochreous-yellowish, on costa yellowish-orange. Hindwings with 2 in ♂ near 3, in ♀ remote; in ♂ whitish-ochreous, posterior third suffused with dark fuscous, with a deep groove along fold containing a very long expansible whitish-ochreous hair-pencil; in ♀ grey; cilia whitish-ochreous.

Six specimens, Maturatta and Maskeliya, Ceylon, in September (Pole, Alston).

*Timyra palathodes*, n. sp.

♂ ♀. 14—16 mm. Head, palpi, thorax and abdomen whitish-ochreous; palpi in ♂ with second joint infuscated towards base, dilated with rough projecting scales towards apex beneath and internally excavated (spoon-shaped), excavation partly dark fuscous internally, terminal joint concealed, in ♀ with second joint smooth-scaled, slender, terminal joint as long as second. Antennæ whitish, basal joint in ♂ with anterior scale-projection. Legs ochreous-whitish, anterior and middle tibiæ with dark fuscous sub-apical bands, posterior tibiæ clothed with rough yellow-whitish hairs, with dense long median and shorter apical tufts partly suffused with grey and somewhat mixed with blackish. Forewings elongate, narrow, costa gently arched, apex round pointed, termen extremely obliquely rounded; 4 and 5 stalked, 7 to costa, 9 connate or short stalked with 7; ochreous-yellow; small dark fuscous spots on costa at and near base, and near base of dorsum; three irregular obscure brownish-ochreous fasciæ at  $\frac{1}{4}$ , middle, and  $\frac{3}{4}$ , dilated in disc, and a similar transverse line before second, sometimes mostly confluent with it, third sometimes suffused with fuscous: cilia light brownish-ochreous. Hindwings in ♂ dark grey, apex whitish-ochreous, with subdorsal groove enclosing long ochreous-yellowish hair-pencil; in ♀ grey, apex and upper part of termen suffused with whitish-ochreous; cilia whitish-ochreous.

Five specimens, Madulsima and Maturatta, Ceylon, in April, July, and September (Vaughan, Pole).

*Timyra marmoritis*, n. sp.

♂. 21—23 mm. Head light ochreous-yellowish, face paler and greyish-tinged. Palpi long, basal joint dark grey, second joint clothed with long dense ochreous whitish hairs above and beneath, terminal joint moderately long, much thickened with dense dark grey hairs, obtuse. Antennæ dark grey, basal joint with strong anterior scale-tuft. Thorax dark purplish-fuscous. Abdomen pale ochreous, marked laterally with dark fuscous. Legs dark purplish-fuscous, obscurely ringed with ochreous-whitish, posterior tibiæ wholly clothed above with very long projecting curled whitish hairs slightly mixed with dark fuscous and towards apex suffused with ochreous-yellow. Forewings elongate, narrow, costa gently arched, apex obtuse, termen obliquely rounded; 3, 4, 5 approximated, 7 to apex; whitish-ochreous tinged with yellowish and irrorated with dark fuscous







a narrow dark fuscous basal fascia, followed by a clear pale ochreous-yellow subbasal fascia, edged posteriorly with dark fuscous suffusion; a slender cloudy dark fuscous slightly oblique median fascia, slightly bent in middle; a dark fuscous streak along termen: cilia pale whitish-ochreous, becoming ochreous-yellow at base and on costa, with a dark fuscous subbasal line round apex and on termen, beyond this tinged and somewhat mixed with fuscous. Hindwings posteriorly clothed with hair-scales, rather dark fuscous, disc more or less broadly suffused with light ochreous-yellowish; a subdorsal groove enclosing an ochreous-yellowish hair-pencil from base; a dark fuscous terminal line; cilia whitish-ochreous, becoming ochreous-yellowish towards base, with fuscous subbasal line.

Five specimens, Maskeliya and Maturatta, Ceylon, in March, May, June, and October (Pole, de Mowbray).

*Timyra orthadia*, n. sp.

♂ ♀. 16-18 mm. Head whitish-ochreous mixed with fuscous. Palpi very long, whitish, in ♂ second joint much elongated, flatly compressed, clothed with very long whitish hairs above and beneath, terminal joint short, greyish, thickened with dense scales, hardly pointed, in ♀ second joint smooth-scaled, slender. Antennæ grey, in ♂ darker, with large dense concave anterior tuft on basal joint. Thorax rather dark fuscous, posterior extremity ochreous-whitish. Abdomen pale ochreous. Legs dark fuscous ringed with whitish, posterior tibiæ clothed above with very long projecting curled whitish hairs mixed with dark fuscous in middle. Forewings elongate, rather narrow, costa moderately arched towards extremities, apex obtuse, termen obliquely rounded; 3, 4, 5 approximated, 7 to apex; whitish-ochreous; a narrow dark fuscous basal fascia; two broad rather dark fuscous fasciæ about  $\frac{1}{3}$  and  $\frac{2}{3}$ , first somewhat narrowed towards costa, second rather oblique, more or less constricted in disc, beneath dilated and confluent posteriorly with a broad dark fuscous suffusion or irroration in disc; between these fasciæ a very undefined oblique median line of dark fuscous irroration; a dark fuscous terminal streak, thickened at apex: cilia whitish-ochreous becoming ochreous-yellowish towards base, with a dark fuscous antemedian shade. Hindwings fuscous; in ♂ a broad median longitudinal ochreous-yellow band, including a deep central groove, and a subdorsal groove enclosing an ochreous-yellow hairpencil from base; cilia whitish-ochreous.

Eight specimens, Madulsima, Matale, and Maskeliya, Ceylon, in January, April, and October (Vaughan, Alston, Pole). Allied to the following.

*Timyra irrorella*, Wals.

(*Tipha irrorella*, Wals., Moore Lep. Ceyl. iii, 517, pl. 209, 9.)

Peradeniya, Maturatta, Diyatalawa, Puttalam, Ceylon; a common species.

*Timyra crassella*, Feld.

(*Harpella crassella*, Feld. Reis. Nov. pl. cxxxix, 22; *Timyra sphenias*, Meyr.)

Felder's figure is very poor and not characteristic, and the locality is said to be Ternate, hence I failed to recognise his species; but I have since seen his

type, which is certainly this insect; the alleged locality is doubtless erroneous, as is frequently the case with Felder's species.

*Timyra peronetrus*, n. sp.

♂. 29-30 mm. Head, palpi, and thorax rather dark fuscous; palpi very long, basal joint elongate, so that it forms a sharp elbow with second, second joint reaching much above vertex, broadly compressed, internally with large dense expansible tuft of very long whitish hairs, terminal joint about half second, dilated with dense scales, tolerably obtuse. Antennæ fuscous-ochreous, basal joint with large dense anterior dark fuscous scale-tuft. Abdomen fuscous, sides suffused with pale ochreous-yellowish. Legs dark fuscous, ringed with pale yellowish, anterior tibiæ rough-haired beneath, middle tibiæ rough-scaled, posterior tibiæ hairy beneath and with very large curled median tuft of light fuscous scales above, posterior tarsi rough-scaled above throughout. Forewings elongate, narrow, posteriorly somewhat dilated, costa gently arched, apex obtuse, termen rather obliquely rounded; 3, 4, 5 approximated, 7 to termen; dark fuscous, with a few whitish-ochreous scales; a tuft of scales in disc near base; a transverse light ochreous-yellow mark at  $\frac{3}{5}$ , somewhat dilated upwards, reaching from near costa to below middle: cilia whitish-fuscous, darker towards tips, base pale ochreous-yellow, with a dark fuscous subbasal shade. Hindwings oblong, termen beneath apex hardly oblique; ochreous-yellow; a moderate suffused dark fuscous streak along costa, dilated at apex; a suffused dark fuscous streak proceeding from a basal tuft of scales along dorsum and termen to above middle, widest at tornus and gradually attenuated; a groove along fold, enclosing an exceedingly long expansible pale ochreous-yellowish hair-pencil; cilia whitish-ochreous, becoming ochreous-yellow towards base on upper part of termen, with fuscous subbasal shade obsolete on yellow area.

Three specimens, Maskeliya, Ceylon, in January and February (Pole, Alston). Very similar to *crassella*, but structurally distinct in the palpi, especially by the elongate basal joint and resulting elbow, the large whitish interior hairtuft, and the dark fuscous costal streak of hindwings, of which the termen is less oblique on upper portion and therefore more prominently bowed; the reduced yellow mark of forewings is found also sometimes in *crassella*, but is there exceptional.

*Timyra parochra*, n. sp.

♂. 23-27 mm. Head ochreous. Palpi dark purplish-fuscous, internally deep ochreous-yellow, second joint thickened with scales, above rough-scaled, terminal joint shorter than second, thickened with scales, tolerably pointed. Antennæ ochreous faintly ringed with fuscous, basal joint without tuft. Thorax purplish-fuscous, more or less mixed with pale ochreous. Abdomen pale ochreous. Legs dark fuscous, ringed with ochreous-yellowish, posterior tibiæ orange-suffused on basal half, partially rough-scaled, with large curled median purplish-fuscous tuft above, posterior tarsi somewhat rough-scaled above. Forewings elongate, rather narrowed towards base, costa moderately arched, apex obtuse, termen rather obliquely rounded; 3, 4, 5 approximated, 7 to termen; deep yellow-ochreous or brownish-ochreous, irro-

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$ . It is shown that the system has solutions for all values of the parameters  $\alpha$  and  $\beta$  if the function  $f(x)$  is continuous and has a bounded derivative.

2. In the second part of the paper the problem of the uniqueness of the solutions of the system (1) is considered.

3. In the third part of the paper the problem of the stability of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are stable with respect to the initial conditions if the function  $f(x)$  is continuous and has a bounded derivative.

4. In the fourth part of the paper the problem of the asymptotic behavior of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) tend to zero as  $x \rightarrow \infty$  if the function  $f(x)$  is continuous and has a bounded derivative.

5. In the fifth part of the paper the problem of the periodicity of the solutions of the system (1) is considered.

6. In the sixth part of the paper the problem of the boundedness of the solutions of the system (1) is considered. It is shown that the solutions of the system (1) are bounded if the function  $f(x)$  is continuous and has a bounded derivative.

H. lamperis, Wyt. Gen. m. fasc 104, p. 216, t. 4 f. 82. (1926)

rated with purplish fuscous and dark fuscous ; a curved postmedian fascia more or less obscurely indicated by margins of purplish-fuscous and dark fuscous suffusion, narrowed dorsally, enclosed portion sometimes ferruginous-tinged : cilia whitish-ochreous tinged with fuscous, more yellow-ochreous basally, with subbasal fuscous line, on costa deep yellow-ochreous. Hindwings pale whitish-ochreous, towards termen slightly infuscated ; a slight groove on lower margin of cell ; cilia whitish-ochreous, base yellowish-tinged, sometimes with indistinct fuscous subbasal line.

Five specimens, Maturatta, Ceylon, in July (Pole).

*Macrernis rostrata*, n. sp.

♂. 18-21 mm. Head and thorax light brownish-ochreous, faintly lilac-tinged, hairs of crown projecting between antennæ. Palpi pale ochreous, mixed with deeper ochreous and dark fuscous. Antennæ whitish-ochreous, faintly fuscous-ringed. Abdomen pale ochreous. Forewings elongate, narrow, posteriorly slightly dilated, costa gently arched, apex round-pointed, termen sinuate, oblique ; brownish-ochreous, with a few scattered dark fuscous scales ; a dark fuscous mark along base of costa ; a dark fuscous streak of somewhat raised scales along dorsum from base to tornus, enclosing a groove along vein 1 b, with a flap of hairscales curved over it from above towards base, upper edge of streak with two strong projections at  $\frac{1}{3}$  and  $\frac{2}{5}$ , first triangular, reaching half across wing, second fascia-like, parallel to termen, reaching above middle of wing ; a suffused dark fuscous streak along termen : cilia light brownish-ochreous, with one or two indistinct fuscous lines. Hindwings whitish-ochreous-grey ; cilia whitish-ochreous.

Six specimens, Maskeliya, Ceylon, in January, February, and July (Pole, Alston, de Mowbray) It seems probable that *Frisilia nesciatella*, Walk., though described as a male, is the female of a species of this genus, in which case the generic name *Frisilia* would have to be adopted ; but I am not yet able to identify with certainty Walker's species.

*Heliangara*, n. g.

Head with appressed scales, face retreating ; tongue developed. Antennæ over 1, thick, compressed, in ♂ simple, basal joint moderate, without pecten. Labial palpi moderately long, curved, ascending, smooth-scaled, terminal joint shorter than second, acute. Posterior tibiæ rough-scaled above. Forewings with 2 from angle, 3 absent, 7 and 8 stalked, 7 to costa, 9 and 10 from near 7, 11 from before middle. Hindwings 1, elongate-ovate, cilia  $1\frac{1}{2}$  ; 3 and 4 stalked, 5 parallel, 6 and 7 long-stalked.

A genus of very peculiar facies, but apparently bearing much the same relationship to *Nartheoceros* that *Tipha* does to *Macrernis*.

*Heliangara lampetis*, n. sp.

♂ ♀. 11-13 mm. Head shining ochreous-bronze, face paler. Antennæ ochreous-yellowish, tip infuscated. Palpi ochreous-yellow. Thorax shining purple-bronze. Abdomen rather dark bronzy-fuscous. Forewings elongate, narrow, costa slightly arched, somewhat sinuate beyond middle, apex round-

pointed, termen extremely obliquely rounded; bright shining purple-coppery-bronze; a suffused orange-yellow patch extending along dorsum from  $\frac{1}{4}$  to  $\frac{3}{4}$ , narrowed to extremities, not reaching half across wing; two parallel thick transverse ridges of raised scales about  $\frac{2}{3}$ ; cilia light shining yellowish, more or less mixed with bronzy and pale purplish towards base. Hindwings dark fuscous, thinly scaled in disc; cilia rather dark fuscous.

Twelve specimens, Puttalam, Ceylon, from September to November (Pole).

*Narthecceros*, n.g.

Head with appressed scales; tongue developed. Antennæ 1, thick, flatly compressed throughout, basal joint moderate, without pecten. Labial palpi long, curved, ascending, second joint thickened with scales, roughly expanded towards apex above and beneath, terminal joint shorter than second, acute. Posterior tibiæ rough-haired above. Forewings with 2 and 3 stalked, 7 and 8 stalked, 7 to termen. Hindwings 1, trapezoidal, apex round-pointed, termen faintly sinuate, cilia 1; 3 and 4 connate, 5 parallel, 6 and 7 long-stalked.

Type *N. platyconta*, Meyr. Having now obtained a second allied species, I consider the characters warrant generic separation from *Macrotona*, from which the genus is distinguished by the flatly-compressed antennæ, second joint of palpi roughened above towards apex, and terminal joint shorter than second.

*Narthecceros xyloides*, n. sp.

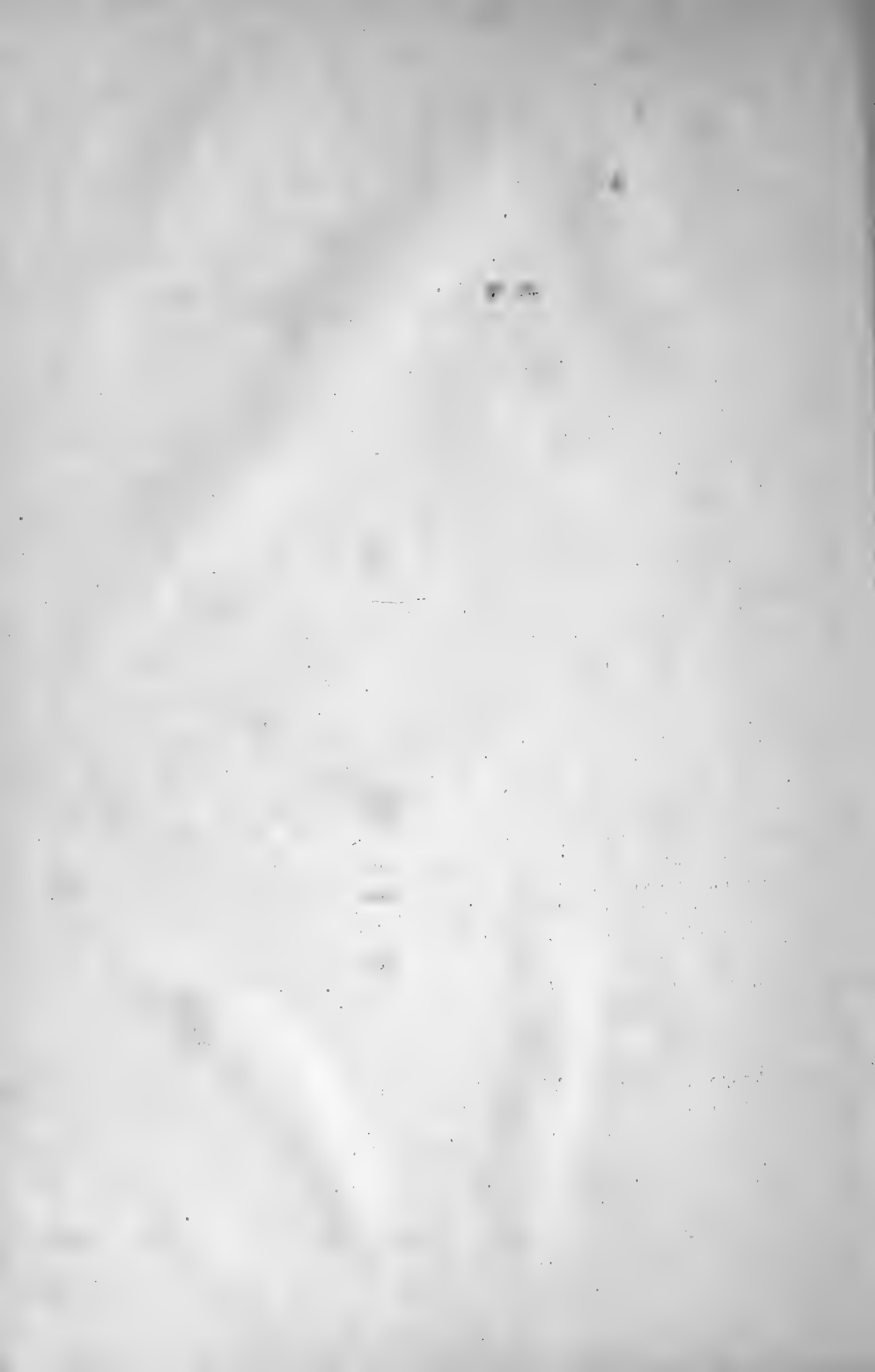
♂. 20-21 mm. Head and thorax pale greyish-ochreous sprinkled with fuscous. Palpi pale brownish-ochreous irrorated with dark fuscous. Antennæ whitish-ochreous tinged with fuscous, with two narrow dark fuscous subapical bands. Abdomen light ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen slightly sinuate, rather strongly oblique; whitish-ochreous, irrorated with fuscous; a moderate dark fuscous suffusion along costa from before middle to apex, and dorsal half posteriorly more or less suffused with dark fuscous irroration, space between these sometimes forming an undefined pale streak; stigmata undefined, dark fuscous, plical very obliquely before first discal; undefined cloudy dark fuscous dots along posterior part of costa and termen: cilia fuscous with rows of ochreous-whitish points, on termen with whitish-ochreous basal shade. Hindwings rather dark fuscous; cilia as in forewings, but lighter and more yellowish-tinged towards tornus.

Three specimens, Maskeliya, Ceylon, in February and March (Pole).

*Macrotona parana*, n. sp.

♂. 23-25 mm. Head, antennæ, thorax, and abdomen light brownish-ochreous. Palpi ochreous-whitish, second joint dark fuscous except apex, terminal joint tinged with fuscous externally. Forewings elongate, narrowed towards base, costa gently arched, apex obtuse, termen sinuate, rather oblique; 7 to apex, 9 separate; light brownish-ochreous, somewhat sprinkled with pale brownish and a few black scales; a minute black subcostal dot near base; discal stigmata small, cloudy, dark brown, first resting on a transverse cloudy purple-fuscous mark beneath it, between first and second a cloudy fuscous dot in disc rather

Leithocera paroena.





above them ; a transverse purple-brownish fascia about  $\frac{3}{4}$ , somewhat angulated in middle, faint towards costa, stronger and much darker on dorsal half : cilia light yellow-ochreous, with subbasal series of undefined fuscous spots. Hindwings with 3 and 4 connate ; light fuscous, ochreous-tinged ; cilia as in forewings but paler.

Three specimens, Maskeliya and Maturatta, Ceylon, in March, May, and October (Pole, de Mowbray).

*Lecithocera cholopsis*, n. sp.

♂. 16-17 mm. Head and thorax rather dark fuscous, face and antennæ ochreous-white. Palpi ochreous-white, towards base fuscous. Abdomen greyish-ochreous. Forewings elongate, narrow, costa gently arched, apex obtuse, termen almost straight, oblique ; 9 out of 7 ; rather dark fuscous : cilia fuscous. Hindwings whitish-grey, greyer posteriorly ; cilia whitish-grey, becoming greyer round apex.

Two specimens, Koni, Burma, in September (Manders). Erroneously recorded by me formerly as *luticornella*, Zell., from which it differs by the neurulation and white face.

*Psammoris*, n. g.

Head smooth ; tongue developed. Antennæ 1, in ♂ rather thick, simple, basal joint moderately elongate, without pecten. Labial palpi long, recurved, second joint thickened with scales, shortly projecting beneath towards apex-terminal joint as long as second, slender, acute. Posterior tibiae with hairs appressed above, projecting beneath. Forewings with 2 and 3 stalked from angle, 7 and 8 stalked, 7 to costa, 9 absent, 11 from beyond middle. Hindwings 1, trapezoidal, termen sinuate, cilia 1 ; 4 absent, 3 and 5 connate or short-stalked, 6 and 7 stalked.

Belongs to the *Macrotona* group.

*Psammoris carpæa*, n. sp.

♂. 13-14 mm. Head, thorax, and abdomen whitish-ochreous tinged with yellow. Palpi ochreous-yellowish, second joint externally dark fuscous except extreme base and apex. Antennæ yellowish, apex suffused with dark fuscous. Forewings elongate, narrow, costa gently arched, apex obtuse, termen very obliquely rounded ; ochreous-yellow, with some fine scattered black scales ; a very small blackish spot on base of costa ; a rather curved outwardly oblique thick black mark in disc about  $\frac{2}{5}$ , and a small round black discal spot before  $\frac{3}{4}$  : cilia pale ochreous-yellowish, with a fine grey postmedian line. Hindwings light grey, paler and whitish-tinged towards base ; cilia whitish-yellowish.

Two specimens, Maskeliya, Ceylon, in January and July (Pole).

*Antiochtha stellulata*, n. sp.

♂. 22 mm. Head pale ochreous-yellowish, slightly fuscous-tinged. Palpi with second joint rather dark fuscous, suffused with pale ochreous-yellowish towards apex, terminal joint longer than second, blackish, anterior and posterior edges pale yellowish. Antennæ pale ochreous-yellowish. Thorax rather dark purplish-fuscous, somewhat mixed with pale ochreous. Abdomen light

ochreous-yellowish. Posterior tarsi with basal joint rough-scaled above. Forewings elongate, narrow, somewhat dilated posteriorly, costa gently arched, apex round pointed, termen concave, oblique; 2 and 4 connate or short-stalked, 5 closely approximated, 7 to apex; pale fuscous irrorated with dark fuscous, with strong purplish reflections; markings pale whitish-ochreous, yellower on costal edge; transverse marks from costa beyond  $\frac{1}{3}$  and  $\frac{2}{3}$ , first narrow, irregular, second rather broader; a dot on fold before middle; two minute dots transversely placed in disc beyond middle; four dots forming a curved transverse subterminal series on dorsal half: cilia rather dark fuscous with darker shades and some ochreous-whitish points, a basal line and some narrow bars on basal third ochreous-yellowish. Hindwings with 3 and 4 connate; fuscous; cilia whitish-ochreous, base more yellowish, with two rather dark fuscous shades.

One specimen, Maskeliya, Ceylon, in February (Pole).

*Antiochtha achnastis*, n. sp.

♂ ♀. 13-20 mm. Head whitish-ochreous, somewhat mixed with grey. Palpi whitish-ochreous, second joint irrorated with dark fuscous, terminal joint somewhat longer than second, with incomplete blackish lateral lines. Antennæ whitish-ochreous, in ♀ more or less mixed with dark fuscous. Abdomen whitish-ochreous. Posterior tibiae with basal joint rough-scaled above, remaining joints ochreous-white. Forewings elongate, narrow, slightly dilated posteriorly, costa slightly arched, apex obtuse, termen sinuate, oblique; 2 and 4 short-stalked, 5 connate, 7 to just below apex; fuscous irrorated with dark fuscous or blackish; stigmata dark fuscous or black, ringed with whitish, sometimes large, plical slightly beyond first discal, these two placed in an indistinct irregular rather oblique narrow fascia of whitish suffusion which forms a more distinct whitish spot on costa, sometimes preceded by a dark fuscous spot; a cloudy subterminal line of ochreous-whitish suffusion, angulated in middle, forming a conspicuous triangular ochreous-white spot on costa: cilia dark fuscous with rows of fuscous-whitish points, basal line and narrow bars on basal third more or less distinctly whitish-ochreous. Hindwings with 3 and 4 connate; grey, darker posteriorly; cilia varying from whitish-ochreous to pale greyish, with two cloudy dark grey shades.

Five specimens, Maskeliya, Ceylon, in March, May, and December (Pole, de Mowbray).

*Antiochtha tetradelta*, n. sp.

♂. 20 mm. Head, palpi, and antennæ ochreous-whitish, palpi with lower  $\frac{2}{3}$  of second joint and anterior edge of terminal joint dark bronzy-fuscous, terminal joint longer than second. Thorax bronzy-fuscous, shoulders suffused with ochreous-whitish. Abdomen light ochreous-yellowish. Posterior tarsi with basal joint smooth. Forewings elongate, narrow posteriorly slightly dilated, costa slightly arched, apex round-pointed, termen concave, somewhat oblique; 2 separate, 4 and 5 connate, 7 to apex; pale greyish-ochreous suffused with ochreous-whitish; base of costa, and an oblique costal strigula before



Organitis chanacopa.

Stelechoris cherandra

middle dark fuscous; a triangular dark fuscous blotch, edged with ochreous-whitish, extending on dorsum from  $\frac{1}{5}$  to beyond middle, and reaching  $\frac{3}{4}$  across wing; a similar blotch extending along costa from middle to  $\frac{4}{5}$ , and nearly reaching to dorsum; a fine dark fuscous terminal line, shortly continued and stronger above apex: cilia ochreous-whitish, towards base yellowish-tinged with median fuscous shade. Hindwings with 3 and 4 stalked; light fuscous; cilia whitish-fuscous, at base and towards tornus pale yellowish.

One specimen, Maskeliya, Ceylon, in October (de Mowbray).

*Organitis*, n. g.

Head with appressed scales; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ shortly ciliated, basal joint moderate, without pecten. Labial palpi long, curved, ascending, second joint thickened with scales, slightly rough beneath, terminal joint as long as second, slender, acute. Posterior tibiæ rough-scaled above. Forewings with 2 and 4 stalked, 3 absent, 8 and 9 out of 7, 7 to apex, 11 from beyond middle. Hindwings 1, trapezoidal, apex rounded, termen hardly sinuate, cilia  $\frac{3}{5}$ ; 3 and 4 connate or stalked, 5 absent, 6 and 7 stalked.

Allied to *Brachmia*; in neuration resembling *Antiochtha*, but distinguished by the shorter antennæ.

*Organitis churacopa*, n. sp.

♂ ♀. 15-17 mm. Head and thorax pale bronzy-ochreous, sometimes fuscous-tinged. Palpi ochreous-whitish, second joint fuscous except apex. Antennæ whitish-ochreous, sometimes fuscous-tinged, basal joint fuscous. Abdomen pale ochreous. Forewings elongate, rather narrow, costa moderately arched, apex obtuse, termen almost straight, rather oblique; pale brassy-ochreous suffused with light fuscous; stigmata rather large, dark fuscous, often elongate, plical very obliquely before first discal, sometimes nearly obsolete, discal stigmata sometimes connected by an obscure paler streak: cilia whitish-ochreous. Hindwings pale fuscous; cilia whitish-ochreous.

Five specimens, Maskeliya, Ceylon, in March, June, and July (Pole).

*Brachmia*, Hb.

I find it necessary to merge *Torodora*, Meyr. in this genus; the differences of neuration and palpi would, if pressed, separate closely allied species; the combined genus is natural and easily recognised, and appears to be specially characteristic of the Indo-Malayan region, where it is very extensively developed. The two following species extend the neural characters somewhat.

*Brachmia cherandra*, n. sp.

♂. 20 mm. Head light ochreous-yellow, crown suffused with light grey except at sides. Palpi pale ochreous-yellowish, second joint suffused externally with dark fuscous on lower  $\frac{2}{3}$ , terminal joint as long as second. Antennæ pale ochreous yellowish. Thorax dark purple-fuscous. Abdomen grey, anal tuft whitish-ochreous. Legs dark grey, middle tibiæ and all tarsi whitish-ochreous, basal joint of posterior tarsi somewhat rough-scaled above. Forewings elongate,

rather narrow, somewhat dilated posteriorly, costa moderately arched, apex obtuse, termen nearly straight, somewhat oblique; 7 absent, 8 and 9 stalked; dark fuscous, purplish-tinged; stigmata small, faintly darker, plical beneath first discal, edged posteriorly by a minute grey-whitish dot; ochreous-yellowish subtriangular dots on costa at  $\frac{2}{5}$  and  $\frac{4}{5}$ , and on dorsum near tornus: cilia light fuscous mixed with slaty-grey. Hindwings with 3 and 4 stalked; grey; cilia grey, with basal ochreous-whitish line.

One specimen, Maskeliya, Ceylon, in May (Pole). The absence of vein 7 in the forewings is an abnormal character, but as in all other respects the species is normal, I do not at present separate it generically.

*Brachmia syrphetodes*, n. sp.

♂ ♀. 25-27 mm. Head brownish-ochreous. Palpi whitish-ochreous, second joint externally dark fuscous except at apex, terminal joint as long as second, anterior edge dark fuscous. Antennæ pale ochreous, obscurely fuscous-ringed. Thorax brownish-ochreous partially suffused with dark fuscous. Abdomen light ochreous. Posterior tarsi with basal joint smooth-scaled. Forewings elongate, rather narrowed anteriorly, costa gently arched, apex obtuse, termen nearly straight, little oblique; 3 and 4 out of 2, 8 and 9 out of 7, 7 to apex; fuscous, partially suffused with dark fuscous, irregularly strewn with pale ochreous; a small dark fuscous subbasal spot towards costa; discal stigmata rather large, suffused, dark fuscous, connected by an irregular elongate pale ochreous patch, an additional dark fuscous dot before and above second; a cloudy whitish-ochreous subterminal line, somewhat curved and indented beneath costa: cilia whitish-ochreous, in ♀ fuscous-tinged, above apex with a dark fuscous patch. Hindwings with 3 and 4 connate or short-stalked, 5 approximated; light fuscous; cilia whitish-ochreous, in ♀ fuscous-tinged.

Two specimens, Maskeliya, Ceylon, in April and June (Pole).

*Demiophila*, n. g.

Head with appressed scales; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ serrulate, minutely ciliated, basal joint moderately elongate, without pecten. Labial palpi long, recurved, second joint thickened with appressed scales, somewhat rough beneath towards apex, terminal joint as long as second, moderate, acute. Posterior tibiae clothed with long rough hairs above. Forewings with 2 from near angle, 3 and 4 stalked, 5 approximated, 7 to apex, 8 absent, 9 approximated, 11 from beyond middle. Hindwings over 1, oblong-ovate, cilia  $\frac{1}{2}$ ; 3 and 4 connate or short-stalked, 5 tolerably parallel, 6 and 7 connate.

A genus of ordinary appearance but somewhat uncertain affinity; the stalking of veins 3 and 4 of forewings is a notable peculiarity.

*Demiophila psaphara*, n. sp.

♂ ♀. 17-21 mm. Head and thorax whitish-ochreous sprinkled with fuscous. Palpi whitish-ochreous, second joint dark fuscous except apex, terminal joint with anterior edge usually suffused with dark fuscous. Antennæ whitish-ochreous, basal joint dark fuscous. Abdomen whitish-ochreous, more or less fuscous-sprinkled. Forewings elongate, slightly narrowed anteriorly, costa gently arched,

Torodora syphetodes

Demiophila psaphara, Mey. Wye. Ge. Mus. fasc. 164, p. 257, (1857 f. 105) (1926)





apex obtuse, termen rather obliquely rounded ; whitish-ochreous, more or less sprinkled with fuscous ; a dark fuscous dot on base of costa, and another beneath it ; stigmata moderate, dark fuscous, plical elongate and often small, obliquely beyond first discal ; an almost marginal series of dark fuscous dots round termen and apical portion of costa : cilia whitish-ochreous, faintly sprinkled with whitish-fuscous, with a faint whitish-fuscous antemedian shade. Hindwings pale whitish-ochreous-grey or whitish-ochreous ; cilia whitish-ochreous.

Eight specimens, Puttalam, Ceylon, in February and from July to September (Pole).

*Dactylethra*, n.g.

Head with appressed scales, sidetufts loosely spreading ; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ serrulate, simple, basal joint moderate, without pecten. Labial palpi long, curved, ascending, second joint with long dense rough projecting tuft beneath, terminal joint as long as second, loosely scaled, acute. Posterior tibiæ rough-haired above. Forewings with 2 from near angle, 2, 3, 4 parallel, 7 and 8 stalked, 7 to apex, 11 from middle. Hindwings 1, trapezoidal, apex obtuse, termen faintly sinuate, cilia  $\frac{4}{5}$  ; 2 remote, 3 and 4 connate, 5 somewhat approximated, 6 and 7 stalked.

Apparently related to the *Ypsolophus* group.

*Dactylethra tetroctas*, n. sp.

*candida*, Mt. 1453 = )

♂ ♀. 14-15 mm. Head, palpi, antennæ, thorax, and abdomen ochreous-white ; second and terminal joints of palpi with blackish supramedian and usually less marked subbasal rings, tuft suffused with brownish, seldom mixed with dark fuscous. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded ; ochreous-white ; a dark fuscous dot towards costa near base, and two transversely placed in disc at  $\frac{1}{3}$  ; about eight short oblique brown strigulæ on costa ; transverse undefined patches of ochreous-brown suffusion in disc at  $\frac{1}{3}$ , beyond middle, and towards termen, first narrow, second broader, reaching costa, third largest, somewhat mixed with black scales and bounded by a grey terminal streak ; between these are two lilac-grey sometimes whitish-centred irregularly 8-shaped spots in disc before middle and at  $\frac{2}{3}$ , first rather oblique, second shorter : cilia brownish, with rows of whitish points. Hindwings fuscous-whitish ; cilia whitish-ochreous.

Ten specimens, Puttalam, Ceylon, in August, October, and November (Pole).

(To be continued.)







[From the JOURNAL OF THE BOMBAY NATURAL HISTORY SOCIETY,  
September 20, 1906.]

## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

E. MEYRICK, B.A., F.R.S., F.Z.S.

II.

(Continued from page 153 of this Volume.)

### XYLORYCTIDÆ.

*Ptochoryctis ancistrias*, n. sp.

♂ ♀. 19 ~~18~~ 23 mm. Head whitish, sides brownish. Palpi pale ochreous, terminal joint with anterior edge suffused with dark fuscous. Antennæ rather dark fuscous, pectinations blackish. Thorax white, sometimes brownish-tinged. Abdomen whitish, in ♂ with more or less developed ferruginous bands. Forewings elongate, moderate, costa moderately arched, apex obtuse, termen obliquely rounded; 4 absent, 7 to costa; shining white, towards dorsum and termen faintly ochreous-tinged; a dark fuscous line posteriorly more or less suffused with brownish, running from  $\frac{3}{4}$  of costa to dorsum before tornus, strongly rounded-angulated in middle so as to approach termen, more or less obsolete or interrupted on angle, subsinuate inwards on lower half and becoming stronger and darker towards dorsum; sometimes a faint brownish longitudinal mark in disc preceding this line; a more or less marked dark fuscous marginal line round apex: cilia white, round apex with a dark fuscous median line interrupted beneath apex, and tips fuscous-tinged. Hindwings ochreous-whitish or pale whitish-ochreous-grey; cilia ochreous-whitish.

Seven specimens, Maskeliya and Puttalam, Ceylon, from January to May (Pole, de Mowbray, Alston); ~~the single Puttalam specimen is much the smallest.~~ This species differs from the others in the neural characters specified, but is otherwise nearly related, and does not at present seem to require generic separation.

*Ptochoryctis scionota*, n. sp.

♂. 16-17 mm. Head and palpi white. Antennæ white, ringed and towards apex suffused with grey, pectinations blackish. Thorax white, posteri-

Removed to  
Metathorica  
as type of genus  
B-J. XVIII 62  
Vein 2 fw. rises  
from 5, 6 cell,  
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3

only tinged with ochreous. Abdomen ochreous-whitish. Forewings elongate, moderate, costa moderately arched, apex obtuse, termen almost straight, oblique; shining white, towards dorsum faintly suffused with pale ochreous: cilia white, beneath tornus pale whitish-ochreous. Hindwings whitish, sometimes faintly greyish-tinged; termen tinged with pale greyish-ochreous; cilia ochreous-whitish, more ochreous-tinged towards tornus.

Three specimens, Puttalam, Ceylon, in April and August (Pole).

*Ptochoryctis acrosticta*, n. sp.

♂ ♀. 11-15 mm. Head, palpi, thorax, abdomen, and legs white; abdomen in ♂ with several more or less indicated ferruginous rings; tarsi indistinctly spotted with grey. Antennæ dark grey, towards base white, pectinations blackish. Forewings elongate, moderate, costa moderately arched, apex round-pointed, termen nearly straight, oblique; shining white; an almost apical dark grey dot: cilia white. Hindwings whitish; cilia white.

Seven specimens, Puttalam and Hambantota, Ceylon, in January, February, and October (Pole).

*Antithyra*, n.g.

Head smooth, side tufts somewhat spreading; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ (?), basal joint moderate, without pecten. Labial palpi moderately long, recurved, second joint somewhat rough-scaled beneath, terminal joint as long as second, acute. Posterior tibiae rough-haired above. Forewings with 2, 3, 4 tolerably parallel, 2 from near angle, 5 absent, 7 to costa, 8 absent, 11 from middle. Hindwings 1, trapezoidal, termen not sinuate, cilia 1; 2 remote, 3 and 4 connate, 5 somewhat approximated, 6 and 7 long-stalked.

*Antithyra vineata*, n. sp.

♀. 11-12 mm. Head and thorax pale yellow-ochreous, sprinkled with dark fuscous. Palpi pale yellowish, more or less sprinkled irregularly with dark fuscous. Antennæ pale yellowish, dotted with dark fuscous. Abdomen elongate, dark grey, apex pale yellowish. Forewings elongate, narrow, costa gently arched, apex obtuse, termen very obliquely rounded; light ochreous-yellow, irregularly chequered throughout with undefined grey spots irrorated with black: cilia whitish-ochreous, towards base yellower, on basal half with a series of similar spots. Hindwings dark grey; cilia grey.

Five specimens, Peradeniya, Ceylon, in February and March (Green). Larva feeds on minute lichens and algæ on stems of various trees; at first in an hour-glass-shaped case, but later constructs a supplementary tube extending in a straight line in both directions, with lateral triangular pointed projections disposed alternately at equal distances, all concealing valves through which the larva can protrude its head for feeding or observation; if disturbed at one point, it re-appears at another: the entire case is temporarily anchored at either end to the bark; when food is exhausted at one spot, the strands are severed and the case shifted to another situation: pupation in the centre, beneath the median pad (Green). Mr. Green has forwarded specimens of these tubes, which are most remarkable examples of ingenuity and neat con-







struction; the longest is 38 mm. in length, and has ten completed projections on each side.

*Epichostis*, n.g.

Head with appressed scales, sidetufts somewhat raised; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ simple, basal joint moderate, without pecten. Labial palpi long, recurved, second joint thickened with appressed scales, slightly rough towards apex beneath, terminal joint as long as second, moderate, acute. Posterior tibiæ shortly rough-scaled above. Forewings with 2 from  $\frac{4}{5}$ , 3 from before angle, 4 and 5 approximated, 7 to apex, 8 absent, 11 from beyond middle. Hindwings over 1, trapezoidal, apex obtuse, termen hardly sinuate, cilia  $\frac{1}{2}$ ; cell shorter than half wing, 3 and 4 connate, 5 parallel, 6 and 7 approximated towards base.

*Epichostis elephantias*, n.sp.

♂. 15-16 mm. Head whitish-ochreous, middle of crown tinged with fuscous. Palpi ochreous-whitish, second joint with lower  $\frac{3}{4}$  and a subapical ring fuscous, terminal joint with base and anterior edge towards middle dark fuscous. Antennæ whitish-ochreous ringed with dark fuscous. Thorax whitish-ochreous dorsally fuscous-tinged. Abdomen dark grey, apex whitish-ochreous. Forewings elongate, narrowed towards base, costa gently arched, apex rounded, termen slightly rounded, not oblique; pale silvery-fuscous; a moderately broad whitish-ochreous costal streak from base to near apex, pointed posteriorly suffused with ochreous-yellow towards costa; two dark fuscous irregular rounded-oblong dorsal blotches edged with whitish-ochreous, reaching costal streak (outline of these blotches somewhat suggestive of that of an elephant); first extending on dorsum from near base to  $\frac{2}{5}$ , second from middle to near tornus; a dark fuscous terminal line interrupted by whitish-ochreous dots on veins: cilia pale whitish-ochreous, towards base more yellowish, with faint pale fuscous antemedian shade. Hindwings rather dark grey; cilia pale grey.

Three specimens, Maskeliya, Ceylon, in April, October, and November (Pole, Green, de Mowbray).

*Myriopleura*, n.g.

Head with appressed scales, side tufts roughly spreading on crown; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ serrulate, shortly or moderately strongly ciliated, basal joint moderate, without pecten. Labial palpi long, recurved, second joint thickened with appressed scales, somewhat roughened towards apex beneath, terminal joint almost or quite as long as second, moderate, acute. Posterior tibiæ rough-haired above. Forewings with 2, 3, 4 tolerably parallel, 2 from towards angle, 5 approximated, 7 and 8 stalked, 7 to apex or termen, 11 from middle. Hindwings over 1, oblong-ovate, apex obtuse, termen not sinuate, cilia  $\frac{1}{2}$ — $\frac{3}{4}$ , 2 rather near angle, 3 and 4 stalked, 5 approximated, 6 and 7 stalked.

Type *M. psilotis*, Meyr. I have formed this genus to include the two species lately referred by me to *Xylorycta*, *M. psilotis* and *M. paracyrta*, as I have now several species all showing the same characters. It is distinguished from *Xylorycta* by the different position of vein 2 of forewings.

*Myriopleura furfurosa*, n. sp.

♂ ♀. 14-19 mm. Head and thorax pale yellowish-ochreous. Palpi whitish-ochreous, second joint more or less suffused with fuscous except apex. Antennæ grey, basal joint yellow-ochreous, ciliations short. Abdomen light grey, sides and apex whitish-ochreous. Forewings elongate, moderate, costa moderately arched, apex obtuse, termen slightly rounded, little oblique; 7 to termen; pale yellowish-ochreous, in ♀ more whitish-ochreous; discal stigmata cloudy, fuscous, first very small and often indistinct, second larger and distinct: cilia whitish-ochreous. Hindwings in ♂ fuscous, in ♀ whitish-ochreous, sometimes fuscous-tinged; cilia pale whitish-ochreous, sometimes greyish-tinged.

Six specimens, Puttalam, Ceylon, in January, February, September, and October (Pole).

*Myriopleura isocentra*, n. sp.

♂. 11-12 mm. Head, palpi, antennæ, and thorax whitish-ochreous; palpi with lower  $\frac{2}{3}$  of second joint fuscous; antennal ciliations short. Abdomen grey-whitish, apex whitish-ochreous. Forewings elongate, moderate, costa moderately arched, apex obtuse, termen somewhat rounded, little oblique; 7 to termen; whitish-ochreous, tinged with yellowish; discal stigmata moderate, dark fuscous or blackish, strongly marked; series of cloudy dark fuscous dots along posterior part of costa and termen: cilia whitish-ochreous. Hindwings and cilia ochreous-whitish.

Two specimens, Puttalam, Ceylon, in October and December (Pole).

## CECOPHORIDÆ.

*Hypercallia catausta*, n. sp.

♂ ♀. 12-13 mm. Head pale ferruginous-ochreous. Palpi moderately long, pale ferruginous-ochreous, more or less sprinkled with dark fuscous. Antennæ dark grey, ciliations in ♂ 4. Thorax ferruginous-ochreous, more or less mixed with dark fuscous. Abdomen grey. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded; ferruginous-ochreous, variably sprinkled or irrorated with fuscous and dark fuscous; a narrow basal fascia of dark fuscous suffusion; stigmata dark fuscous, plical slightly beyond first discal; a triangular spot of dark fuscous suffusion on costa at  $\frac{2}{8}$ , and one on dorsum towards middle; a subterminal line of dark fuscous irroration, forming a suffused spot on costa before apex and usually one at tornus, otherwise very variable in development, sometimes forming an entire almost marginal band; cilia pale ferruginous-ochreous, basal half more or less sprinkled with dark fuscous. Hindwings in ♂ rather dark grey, in ♀ dark fuscous; cilia in ♂ pale grey, base yellowish-tinged, in ♀ grey or dark fuscous.

Seven specimens, Maskeliya, Ceylon, in January and March (Pole). Varies in depth of colouring and density of irroration.

*Hypercallia alseis*, n. sp.

♂. 12-13 mm. Head ochreous-yellow. Palpi long, ochreous-yellow, lower half of second joint sprinkled or suffused with fuscous. Antennæ dark fuscous, ciliations  $2\frac{1}{2}$ . Thorax and abdomen dark bronzy fuscous. Forewings

the first of these is the fact that the  
distribution of the population is not uniform  
over the whole of the country. The population  
is concentrated in the low-lying areas of the  
country, and is very sparse in the high-lying areas.

The second of these is the fact that the  
population is not uniformly distributed over the  
whole of the country. The population is  
concentrated in the low-lying areas of the  
country, and is very sparse in the high-lying areas.  
The third of these is the fact that the  
population is not uniformly distributed over the  
whole of the country. The population is  
concentrated in the low-lying areas of the  
country, and is very sparse in the high-lying areas.  
The fourth of these is the fact that the  
population is not uniformly distributed over the  
whole of the country. The population is  
concentrated in the low-lying areas of the  
country, and is very sparse in the high-lying areas.



elongate, costa moderately arched, apex obtuse, termen obliquely rounded; dark fuscous; a rather broad inwardly oblique ochreous-yellow fascia near base; stigmata blackish, plical rather before first discal, these two resting on posterior edge of anterior fascia, second discal placed in an undefined sometimes interrupted ochreous-yellow transverse streak running from a spot on costa beyond  $\frac{2}{3}$  parallel to anterior fascia: cilia fuscous, on termen pale yellowish on apical half. Hindwings and cilia fuscous.

Three specimens, Maskeliya, Ceylon, in February and March (Pole).

*Eonympha*, n. g.

Head with appressed scales, sidetufts spreading, tongue developed. Antennæ 1, in ♂ filiform, simple, basal joint moderate, with pecten. Labial palpi long, recurved, second joint with appressed scales, somewhat rough towards apex beneath, terminal joint as long as second, slender, acute. Posterior tibiæ clothed with long hairs above. Forewings with 4 absent, 7 and 8 stalked, 7 to apex, 11 from before middle. Hindwings  $\frac{3}{4}$ , ovate-lanceolate, cilia 1; 4 absent, 6 and 7 rather approximated.

Allied to *Pseudodoxia*.

*Eonympha erythrozona*, n. sp.

♂. 12-14 mm. Head and thorax yellow-ochreous mixed with crimson, face whitish-ochreous. Palpi whitish-ochreous, slightly crimson-sprinkled. Antennæ and abdomen whitish-ochreous. Forewings elongate, costa moderately arched, apex round-pointed, termen very obliquely rounded; deep yellow ochreous; basal area suffusedly mixed with crimson; three narrow irregular oblique crimson fasciæ, before and beyond middle, and near apex; a crimson line along apical portion of costa and termen; cilia ochreous-yellowish, round apex mixed with crimson. Hindwings grey; cilia pale whitish-ochreous.

Four specimens, Matale, Ceylon, from October to December (Pole).

*Pseudodoxia chalcias*, n. sp.

♂ ♀. 16-20 mm. Head ochreous-orange. Palpi pale orange-ochreous, second joint dark fuscous except apex. Antennæ bronzy-ochreous, towards base dark fuscous. Thorax dark purplish-fuscous. Abdomen dark fuscous, apex pale ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen very obliquely rounded; ochreous-bronze; base narrowly dark purplish-fuscous; a suffused dark purplish-fuscous terminal fascia, rather broad on costa, narrowed to a point on tornus: cilia dark fuscous. Hindwings more or less dark fuscous, sometimes bronzy-tinged; cilia bronzy-fuscous, sometimes darker-mixed, lighter towards tornus.

Three specimens, Maskeliya, Ceylon, in February and March (Pole).

*Pseudodoxia sepositella*, Walk.

(*Gelechia sepositella*, Walk. Tin. 630; *Pseudodoxia limulus*, Durr. Ent. Mo. Mag., 1895, 107.)

There is no doubt about this identification, which Mr. Durrant must have accidentally overlooked. I have received a series of bred specimens from Mr. Green, with examples of the cases; the larval habits have been already published.

*Pseudodoxia cretata*, n. sp.

♂ ♀. 13-16 mm. Head, palpi, antennæ, and thorax ochreous white, second joint of palpi externally suffused with dark fuscous except apex. Abdomen whitish. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen very obliquely rounded; 8 often absent; white, more or less sprinkled with pale fuscous and sometimes a few dark fuscous scales; a black dot on base of costa; a fine black dash beneath costa near base; stigmata rather large, black, plical beneath or hardly before first discal; a series of irregular black dots along posterior part of costa and termen: cilia white, irrorated with fuscous. Hindwings light grey; cilia whitish-grey.

Four specimens (three bred), Peradeniya and Matale, Ceylon, in February, March, and November (Green, Pole). Closely allied to *P. sepositella*, but certainly distinct by the white head and general colouring, and the position of the plical stigma, which in *P. sepositella* is always obliquely before first discal. The three bred specimens were reared by Mr. Green from larvæ feeding in the same way as *sepositella*, and in cases of precisely the same form; he sent me the three cases, carefully labelled with individual numbers corresponding to the specimens, and I see no difference in form; in both species the individual cases vary much in colour and appearance, according to the nature of the sand-grains and refuse employed in their construction, and one of the *cretata* cases is elegantly marbled with dark grey and white.

*Pseudodoxia zopheropa*, n. sp.

♂ ♀. 12-14 mm. Head, palpi, antennæ, and thorax dark bronzy-fuscous. Abdomen fuscous. Forewings elongate, costa moderately arched, apex obtuse, termen rounded, rather strongly oblique; bronzy-fuscous, suffusedly irrorated with dark fuscous; stigmata obscure, dark fuscous, plical beneath first discal: cilia bronzy-fuscous. Hindwings pale bronzy-fuscous; cilia whitish-fuscous.

Six specimens, Puttalam, Ceylon, in February, November, and December (Pole).

*Epicallima isopselia*, n. sp.

♂ ♀. 8-10 mm. Head deep shining bronze mixed with dark fuscous, sides and face white, collar mixed with white. Palpi white, second joint suffused with deep bronze externally except towards apex, terminal joint blackish. Antennæ blackish spotted with white, ciliations in ♂ 2. Thorax shining orange-bronze. Abdomen dark bronzy-fuscous. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen very obliquely rounded; shining bronzy-orange; markings shining white, edged with dark fuscous suffusion; a slender basal fascia not reaching costa, somewhat extended on dorsum; slender direct fasciæ at  $\frac{1}{3}$  and  $\frac{2}{3}$ , second interrupted in middle; some irregular subconfluent spots round apex and termen: cilia whitish with a dark fuscous apical line, basal half orange, towards tornus suffused with fuscous. Hindwings lanceolate, cilia 2; dark bronzy-fuscous; cilia dark bronzy-fuscous.

Four specimens, Peradeniya, Ceylon, in February (Green, Pole).

THE  
SCHOOL OF THE  
FUTURE

The school of the future will be a place where the child is not only taught to read and write, but also to think and to create. It will be a place where the child is not only taught to follow rules, but also to understand the reasons behind them. It will be a place where the child is not only taught to work, but also to play. It will be a place where the child is not only taught to learn, but also to grow.

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*Epicallima semantris*, n. sp.

♂ ♀. 9-11 mm. Head and thorax shining orange-bronze, forehead shining white. Palpi orange, terminal joint dark fuscous, tip whitish. Antennæ white ringed with dark fuscous, ciliations 1. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; deep orange; markings white, finely edged with dark fuscous irroration; a short almost dorsal mark from middle of base; a narrow somewhat oblique fascia from before  $\frac{1}{3}$  of costa to middle of dorsum; a rather large subquadrate spot on costa at  $\frac{2}{3}$ , more or less confluent beneath with a prætornal spot of purplish-fuscous suffusion; a suffused purplish fuscous apical spot, extended along termen: cilia orange-yellow, towards tornus suffused with purplish-fuscous. Hindwings narrow-lanceolate, cilia 3; grey; cilia light grey.

Six specimens, Puttalam and Kurunegala, Ceylon, from July to December (Pole).

*Scalideutis*, n. g.

Head with loosely appressed scales, side tufts rather spreading; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ pubescent, simple, basal joint moderately elongate, without pecten. Labial palpi moderate, curved, ascending, with appressed scales, second joint not reaching base of antennæ, terminal joint somewhat shorter than second, acute. Posterior tibiae clothed with long fine hairs above. Forewings with 2 from  $\frac{4}{5}$ , 7 and 8 stalked, 7 to costa, 11 from before middle. Hindwings 1, very elongate-ovate, cilia 3; 3 and 4 connate, 5 absent.

Allied to *Borkhausenia*.

*Scalideutis escharia*, n. sp.

♂ ♀. 17-20 mm. Head whitish-ochreous. Palpi ochreous-whitish, second joint suffused with dark fuscous. Antennæ grey. Thorax fuscous, posterior extremity whitish-ochreous. Abdomen grey, apex whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded; pale fuscous, finely irrorated with dark fuscous; spots of dark fuscous suffusion on costa near base and before middle, and a larger dark fuscous spot on costa at  $\frac{2}{3}$ , costa between these and beyond last often more or less broadly suffused with whitish-ochreous; stigmata blackish-fuscous, plical rather beyond first discal, second discal very large, adjacent and sometimes confluent with third costal spot; sometimes an additional dark fuscous dot between and below discal stigmata; sometimes obscure dark fuscous dots round apex and termen: cilia whitish-ochreous sprinkled with dark fuscous. Hindwings light grey; cilia pale whitish-ochreous.

Seven specimens, Maskeliya, Ceylon, in February and May (Pole).

*Ethmia zelœa*, n. sp.

♂. 30 mm. Head, palpi, antennæ, thorax, and abdomen ochreous-yellow; two irregular dots on crown, one on basal joint of antennæ, three anterior and two posterior dots on thorax blackish; anal tuft very large. Forewings elongate, costa moderately arched, apex obtuse, termen nearly straight, rather oblique; deep ochreous-yellow; thirteen black dots, viz., one in middle of base, two small ones beneath costa near base, one in disc at  $\frac{1}{6}$ , one beneath costa

beyond  $\frac{1}{4}$ , one beneath fold at  $\frac{2}{5}$ , one in disc above middle, five in a posterior group in disc, and one on tornus ; a twice interrupted black streak along upper half of termen : cilia ochreous-yellow, paler towards tips, on upper half of termen wholly dark leaden-grey. Hindwings and cilia pale ochreous-yellow ; on undersurface a subcostal furrow from near base to  $\frac{3}{4}$ , covered by a deep fold of membrane from beneath.

One specimen, North Central Province, Ceylon, in December (Pole). The generic name *Ethmia*, Hb. (which I had overlooked) supersedes *Psecadia*.

*Ethmia acontias*, n. sp.

♂. 17-21 mm. Head and thorax pale whitish-fuscous, a dot on crown, two subdorsal on each side of thorax and two posterior blackish. Palpi whitish, submedian and subapical bands of second joint, and median band of terminal joint blackish. Antennæ grey, basal joint grey-whitish, with a blackish dot. Abdomen grey, second segment and sometimes first and third with pale ochreous-yellowish dorsal patches, apex ochreous-yellow. Forewings elongate, costa moderately arched, apex obtuse, termen slightly rounded, rather oblique ; pale whitish-fuscous, markings blackish ; a streak from base of costa to beneath costa at  $\frac{2}{5}$ , brown towards its middle ; an irregular streak along fold from base to near middle, beyond apex of which lies a dot surrounded with whitish ; a median longitudinal streak from before middle to termen beneath apex, its posterior extremity bifurcate ; a series of irregular dots along posterior part of costa and termen ; cilia whitish-fuscous mixed with ochreous-whitish, towards tips ochreous-whitish, with dark fuscous spaces at apex and middle of termen. Hindwings fuscous-whitish, suffused with fuscous towards apex ; cilia pale fuscous, on apical half and towards tornus wholly ochreous-whitish.

Eight specimens, Puttalam, Ceylon, in April and from September to January (Pole).

#### ELACHISTIDÆ.

*Hieromantis fibulata*, n. sp.

♀. 13-14 mm. Head and thorax yellow-orange, face shining white. Palpi whitish-ochreous. Antennæ whitish-ochreous, eyecap white. Abdomen whitish-ochreous. Forewings very narrow-lanceolate, widest near base, thence narrowed to acute apex ; yellow-orange ; dorsum grey towards base ; a black spot near dorsum beyond  $\frac{1}{4}$ , centred with a white dot ; beyond this a larger golden-metallic dorsal spot, partially edged above irregularly with black ; a variably developed fuscous terminal streak from apex to tornus, sometimes wide towards costa : cilia fuscous, towards base tinged with orange-yellowish. Hindwings and cilia grey.

Three specimens, Maskeliya, Ceylon, in May and June (Pole, de Mowbray).

*Stathmopoda masinissa*, n. sp.

♂. 17 mm. Head, palpi, and antennæ whitish-ochreous, base of palpi dark fuscous. Thorax dark purplish-grey, with a whitish-ochreous posterior dot. Abdomen rather dark grey. Legs dark grey, middle tibiæ rough-haired above,

Ethmia xanthias. By an unnoticed misprint these are stated to be all  $\sigma$ ; they  
are in fact all  $\varphi$ . [Ingr., Exot. Insect IV, 603: 1935].



posterior tibiae clothed with very large dense expansible brush of hairs above, all tarsi whitish-ochreous, posterior pair spotted with dark grey, with projecting scales at joints. Forewings linear-lanceolate, widest near base, thence narrowed to acute apex; dark fuscous-grey, faintly purplish-tinged; a somewhat oblique whitish-ochreous mark from costa before  $\frac{3}{4}$ : cilia fuscous-grey. Hindwings dark fuscous, with a narrow longitudinal transparent patch in disc from base to  $\frac{1}{4}$ ; cilia fuscous.

One specimen, Matale, Ceylon, in October (Pole).

*Æoloscelis theoris*, n. sp.

♂ ♀. 10-12 mm. Head whitish-ochreous, back of crown yellow. Palpi, antennæ, and abdomen whitish-ochreous. Thorax yellow. Forewings narrow-lanceolate, widest near base, thence gradually narrowed to acute apex; fuscous, becoming lighter and ochreous-tinged posteriorly; basal  $\frac{2}{5}$  bright yellow, except a spot of groundcolour on costa near base, dividing line nearly straight or rather irregular, direct; usually some very undefined pale yellowish suffusion on costa about  $\frac{3}{4}$ : cilia pale brownish-ochreous. Hindwings grey; cilia pale brownish-ochreous.

Nine specimens, Puttalam, Peradeniya, and Maskeliya, Ceylon, in April, May, September, and October (Pole, Green).

*Persicoptila libanotris*, n. sp.

♀. 14 mm. Head, palpi, and antennæ whitish-ochreous, face white, antennæ spotted beneath with dark fuscous. Thorax whitish-ochreous suffused with yellow-orange. Abdomen white, suffused with whitish-ochreous towards base, beyond middle with yellow-ochreous lateral spots edged above with dark fuscous. Legs ochreous-yellowish, apex of joints white, anterior and middle tibiae obscurely banded with dark fuscous, tuft of posterior tibiae crimson-whitish mixed with blackish. Forewings narrow-lanceolate; greyish-purple irrorated with dark fuscous; base narrowly yellow-orange; a triangular yellow-orange spot extending on costa from before middle to  $\frac{3}{4}$ , and nearly reaching dorsum; costa suffused with yellow towards apex: cilia pale greyish-ochreous tinged with purplish and mixed with dark grey, round apex and on costa whitish-ochreous partly suffused with yellow-orange. Hindwings grey; cilia whitish-ochreous.

One specimen, Maskeliya, Ceylon, in February (Pole).

*Scythris chelota*, n. sp.

♂ ♀. 9-11 mm. Head, palpi, antennæ, thorax and abdomen light greyish-ochreous; abdomen in ♀ ochreous-white beneath. Forewings lanceolate, moderately pointed; 5 present; light greyish-ochreous, sometimes fuscous-tinged, generally more or less strewn with whitish, seldom with a few dark fuscous scales; sometimes a streak of whitish suffusion along fold; plical and second discal stigmata suffused, dark fuscous, sometimes indistinct: cilia light grey or greyish-ochreous, base sometimes sprinkled with whitish. Hindwings  $\frac{2}{3}$ , cilia 3; 5 absent; grey; cilia light grey, sometimes ochreous-tinged.

Nine specimens, Puttalam, Ceylon, from July to September (Pole).

Referred to  
*Statimoboda*  
P. M. 10

## COPROMORPHIDÆ.

*Copromorpha metallitis*, n. sp.

♂ ♀. 15-19 mm. Head and thorax whitish-ochreous, thoracic crest suffused with fuscous. Palpi fuscous irrorated with darker, apex of second joint, and base and apex of terminal joint, ochreous-whitish. Antennæ whitish-ochreous mottled with dark fuscous. Abdomen whitish-ochreous, fuscous-sprinkled. Forewings elongate, costa slightly arched, apex obtuse, termen slightly rounded, little oblique; 2 from near angle, 3 and 4 closely approximated towards base, 5 approximated at base, 7, 8, 9 closely approximated towards base; whitish-ochreous mixed with purplish-fuscous; costa finely strigulated with dark fuscous; about seven more or less irregular transverse series of small pale yellowish raised tufts edged anteriorly with dark fuscous and posteriorly with metallic purple: cilia whitish-fuscous, mixed with darker, with rows of pale points. Hindwings with 3 and 4 connate, 5 approximated; fuscous paler towards base: cilia fuscous-whitish, with pale fuscous subbasal shade.

Five specimens, Puttalam, Ceylon, in April and October (Pole).

*Copromorpha efflorescens*, n. sp.

♀. 17-19 mm. Head whitish-ochreous, face with a fuscous frontal band. Palpi dark fuscous, apex of terminal joint whitish. Antennæ whitish-ochreous, suffusedly mottled with dark fuscous. Thorax whitish-ochreous, shoulders and crest fuscous. Abdomen whitish-ochreous mixed with fuscous. Forewings elongate, narrowed anteriorly, costa posteriorly moderately arched, apex obtuse, termen somewhat rounded, hardly oblique; 2 from towards angle, 3, 4, 5 closely approximated, 7, 8, 9 closely approximated; fuscous (actually ribbed with dark fuscous scales with pale bases); about seven irregular transverse series of ochreous-yellow tufts, edged anteriorly with dark fuscous and posteriorly with metallic slaty-purple; several yellow-whitish marks on veins at  $\frac{3}{4}$ , above and below middle: cilia light slaty-fuscous, with rows of pale points. Hindwings with 3 and 4 separate, 5 closely approximated to 4; fuscous; cilia pale fuscous, tips whitish.

Four specimens, Matale and Madulsima, Ceylon, in April and from October to December (Pole, Vaughan). Very like the preceding species, but easily distinguished by the different form of forewings, which are very obviously broader posteriorly, whilst in *metallitis* they are nearly the same width throughout; the differences in neuration, darker colouring, and posterior whitish marks in disc are also characteristic.

## CHLIDANOTIDÆ.

I find it necessary to form this new family for the reception of the three following genera, together with *Trymalitis*, described in my last paper and there referred to the *Phaloniadæ*, and also *Archimaga*, there referred to the *Plutellidæ*. The family is in fact intermediate between the *Phaloniadæ* and *Epiblemidæ* on the one hand, and the *Plutellidæ* on the other, and appears to

## THEORY OF THE EARTH

The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its various parts. The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its various parts.

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indicate the real genetic transition between these groups ; it is therefore of much interest. The family characters are as follows :—

Head rough or loosely haired ; tongue short or absent. Antennæ about  $\frac{3}{4}$ , simple. Labial palpi ascending or porrected, second joint rough-scaled, terminal joint pointed. Maxillary palpi obsolete. Forewings with 1 bifurcate, 2 from  $\frac{2}{3}$ — $\frac{3}{4}$  of cell, 3 from or near angle, 8 and 9 stalked or coincident, 11 from beyond middle. Hindwings trapezoidal, lower margin of cell without basal pecten of hairs; 3 and 4 connate, stalked, or coincident, 5 parallel, 6 and 7 long-stalked, 8 free.

*Chlidanota*, n. g.

Head rough ; tongue apparently absent. Labial palpi moderate, porrected, second joint broadly dilated with rough scales towards apex above and beneath, terminal joint moderate, tolerably pointed. Antennæ about  $\frac{1}{2}$ , simple. Posterior tibiæ with loosely appressed hairs. Forewings with 2 from before  $\frac{3}{4}$ , 3 from angle, much curved, 4 absent, 5 straight, 7 absent, 8 and 9 long-stalked, 10 from near 8, 11 from  $\frac{3}{4}$  of cell. Hindwings 1, trapezoidal, cilia  $\frac{2}{5}$ ; 4 absent upper margin of cell bent upwards near angle.

*Chlidanota thriambis*, n. sp.

♀. 23 mm. Head and thorax white, shoulders very narrowly fuscous. Palpi white, basal joint and lower half of second dark fuscous. Antennæ, grey. Abdomen light greyish-ochreous. Forewings elongate, costa gently arched, apex round-pointed, termen rather strongly emarginate beneath apex, obliquely rounded beneath ; whitish, irregularly suffused with pale brownish, and strigulated throughout with grey, partly mixed with dark fuscous ; a grey suffusion along costa from before middle to near apex, including some irregular ferruginous-brown strigulae two sharply-defined blackish-fuscous dorsal spots, reaching half across wing, first, at  $\frac{1}{3}$ , forming an irregular narrow rectangularly bent mark, its apex directed posteriorly, second rather broader, erect, anterior edge angulated near dorsum, posterior nearly straight ; a round white apical spot, marked with one or two minute blackish strigulae towards costa anteriorly, and a fine black curved line mixed with brown travelling just within circumference on outer half, its lower extremity shortly produced directly inwards; some irregular black dots or marks on termen: cilia brown, darker round apex, whitish-suffused on tornus and above apex. Hindwings fuscous ; cilia light fuscous, becoming whitish-fuscous towards tornus.

One specimen, Ceylon (Pole).

*Electracma*, n. g.

Head loosely haired ; tongue short. Labial palpi moderate, curved, ascending, second joint with rough projecting tuft of scales beneath, terminal joint shorter than second, loosely scaled, acute. Antennæ  $\frac{3}{4}$ , in ♂ simple. Posterior tibiæ loosely haired above. Forewings with 2 from  $\frac{2}{3}$ , 3 from angle, much curved, 4 closely approximated to 3 at base, 5 remote, straight, 6 to apex, 9 absent, 11 from  $\frac{3}{4}$ . Hindwings 1, trapezoidal, cilia  $\frac{4}{5}$ ; 3 and 4 stalked.

*Electracma hemichroa*, n. sp.

♂ ♀. 12-13 mm. Head fuscous, face white. Palpi white, somewhat fuscous-sprinkled towards base. Thorax white, anteriorly suffused with rather dark

fuscous. Abdomen fuscous, suffused with ochreous towards base. Forewings elongate, costa gently arched, apex round-pointed, termen abruptly and rather deeply excavated beneath apex, rounded beneath; white; anterior half of costa strigulated with blackish; dorsal half of wing strigulated with grey mixed with blackish, with subtriangular erect dark blotches more or less mixed with ochreous at  $\frac{2}{5}$  and  $\frac{4}{5}$ ; costal area on posterior half suffused with light purple-grey, with five yellow-ochreous blackish-edged oblique wedge-shaped marks from costa separated by white costal spaces, second elongated to beneath fourth; a longitudinal streak of dark fuscous suffusion in disc posteriorly; apex of wing forming a yellow-ochreous spot, bisected by a longitudinal white blackish-edged dash; a black dot edged above by a yellow-ochreous mark on termen slightly above middle, and another yellow-ochreous mark lower down: cilia whitish, suffused with pale fuscous except towards base, above apex white with dark fuscous median and apical lines. Hindwings in ♂ tawny-fuscous, in ♀ rather dark fuscous; cilia light fuscous, with darker subbasal line.

Two specimens, Maskeliya, Ceylon, in June (Pole).

*Metrernis*, n.g.

Head loosely haired; tongue apparently absent. Labial palpi moderate, curved, ascending, second joint with rough projecting tuft of scales beneath, terminal joint rather shorter than second, acute. Antennæ  $\frac{3}{5}$ , in ♂ rather thick, simple. Posterior tibiæ loosely haired above. Forewings with 2 from before  $\frac{3}{4}$ , 3 and 4 long-stalked from angle, 5 straight, 7 absent, 8 and 9 stalked, 10 closely approximated to 8 towards base, 11 from  $\frac{5}{6}$ . Hindwings 1, elongate-trapezoidal, cilia 1; 3 and 4 stalked.

*Metrernis ochrolina*, n. sp.

♂ ♀. 12-13 mm. Head brown, lower part of face and back of crown white. Palpi white, towards base pale fuscous, terminal joint with a fuscous line. Thorax white, shoulders fuscous-tinged. Abdomen pale greyish-ochreous. Forewings elongate, costa moderately arched towards base, thence nearly straight, apex round-pointed, termen concave beneath apex, thence obliquely rounded; white, ochreous-tinged except towards costa anteriorly; dorsal half more or less strigulated with fuscous, sometimes partly suffused with pale greyish, with two indistinct dorsal blotches formed of suffused dark fuscous strigæ, first before middle, second broader, about  $\frac{3}{4}$ , with a whitish-ochreous mark above its upper anterior angle; five golden-brown oblique marks on posterior half of costa, first two giving rise to pale ochreous-yellowish lines which run near costa almost to apex, fifth apical, separated beneath by a white dash from a pale ochreous-yellow subapical dash which extends into cilia; an indistinct pale yellowish longitudinal line in disc posteriorly; a blackish dot on middle of termen, edged above with pale yellowish: cilia whitish, with two or three indistinct grey bars on basal half, on upper half of termen fuscous-tinged posteriorly, above apex white with golden-brown subbasal and ochreous apical lines. Hindwings grey; cilia pale greyish-ochreous, with two faint grey shades, darker round apex.

Three specimens, Maskeliya, Ceylon (Alston, Pole).





## PLUTELLIDÆ.

*Pyrozela*, n. g.

Head loosely haired; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ shortly ciliated, basal joint moderate, without pecten. Labial palpi moderate, curved, ascending, with appressed scales, terminal joint shorter than second, pointed. Maxillary palpi rudimentary. Posterior tibiæ loosely scaled. Forewings with 1 bifurcate, 2 from near angle or 2 and 3 stalked, 7 to termen, 8 and 9 from near 7, 10 from  $\frac{4}{5}$ , 11 widely remote, from before middle. Hindwings 1, elongate-ovate, cilia  $\frac{1}{6}$ - $\frac{1}{2}$ ; 3 and 4 connate, 5, 6, 7 parallel, 8 free.

Type *P. xanthomima*. Distinguished from *Mieza* and allied genera by neururation of hindwings. To this genus belongs *Mieza sanguinicornis*, Wals., of which I have a good series, and also two undescribed Australian species.

*Pyrozela xanthomima*, n. sp.

♂ ♀. 19-22 mm. Head deep yellow, sides of face crimson, collar deep crimson. Palpi yellow, more or less suffused with crimson except towards apex. Antennæ deep crimson, basal joint yellow. Thorax deep yellow, anterior and lateral margins deep crimson. Abdomen whitish-ochreous. Forewings elongate, costa gently arched, apex obtuse, termen straight, oblique; bright deep yellow, markings deep crimson; an irregular streak along dorsum from base to tornus, curved upwards between middle and  $\frac{3}{4}$  so as to leave a semioval dorsal spot of ground colour, on tornus with a short upward projection; a thick inwardly oblique spot from apical extremity of costa, reaching half across wing; besides these, in ♂ costal dots at base and  $\frac{1}{6}$ , a subcostal dot before middle, an inwardly oblique mark in disc about  $\frac{1}{3}$ , and a discal dot at  $\frac{2}{3}$ , in ♀ a suffused streak along basal fourth of costa, another from dorsal streak at  $\frac{1}{5}$  to costa before middle, a discal spot at  $\frac{2}{3}$  connected with upward loop of dorsal streak, and sometimes some additional variable suffusion connecting these markings in an irregular network: cilia yellow, more or less crimson-tinged towards base, especially in ♀, above apex and beneath tornus deep crimson. Hindwings and cilia pale whitish-ochreous, in ♀ somewhat crimson-tinged towards apex and tornus.

Seven specimens (4 ♂, 3 ♀), Maskeliya, Ceylon, in February, May, and November (Pole). This and the following species are closely allied to *sanguinicornis*, and as the general markings are similar and variable, and also differ more in the sexes than in the species, they are somewhat confusing; the three species are however readily separated by the colour of the hindwings.

*Pyrozela erythromima*, n. sp.

♂ ♀. 14-18 mm. Head and thorax crimson, in ♂ suffusedly spotted with deep yellow. Palpi yellow, sprinkled or suffused with crimson. Antennæ crimson, basal joint usually mostly yellow. Abdomen pale crimson. Forewings elongate, somewhat narrowed anteriorly, costa gently arched, apex obtuse, termen nearly straight, oblique; in ♂ bright yellow, with a network formed by four irregular very oblique crimson fasciæ (first almost dorsal, fourth not reaching costa or termen) intersecting with a streak on basal fourth of costa

and three very inwardly oblique fasciæ (thus usually leaving about eleven spots of ground colour); in ♀ with similar markings, but the whole almost obscured by general crimson suffusion of ground colour, except that the dorsal and subdorsal spots are lighter or sometimes clear yellow: cilia crimson. Hindwings crimson, thinly scaled anteriorly; cilia crimson.

Nine specimens (5 ♂, 4 ♀), Maskeliya, Ceylon, in January, March, May, August, and October (de Mowbray, Pole). Smaller and narrower-winged than the other two species.

*Comocritis pieria*, n. sp.

♂ ♀. 14-19 mm. Head, palpi, and antennæ white. Thorax white, with a grey dorsal patch and posterior spot. Abdomen pale greyish-ochreous, apex white. Posterior tibiæ clothed with long fine hairs. Forewings elongate, costa gently arched, apex and termen evenly rounded; 7 to apex; white; a moderate very undefined basal fascia of blue-grey suffusion; a large yellow-ochreous patch occupying posterior  $\frac{3}{4}$  of wing except a white marginal streak, edged with blue-grey and finely streaked with blue-grey on all veins; cilia white, with a blackish-grey basal line round apex and termen. Hindwings light grey; cilia  $\frac{1}{2}$ , white, with a faint greyish basal line.

Eleven specimens, all bred, Neboda, Ceylon, in March and April (Green). Larva rather flat, at first reddish, afterwards creamy-white; constructs flat canopies and galleries of fine silk and comminuted fragments of bark on stems of *Hevea brasiliensis* (Para rubber); feeds on lichens and algæ growing on stem; when pupating, a flattened cocoon or case, with valvular opening, is formed in a shallow depression beneath the silken canopy (Green). From specimens sent, however, I should suppose that the bark itself is freely used as food. A very elegant insect, allied nearly to *C. olympia*, but very much smaller.

*Epistomotis*, n.g.

Head with appressed scales; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ shortly ciliated, basal joint short, without pecten. Labial palpi moderately long, second joint porrected, with long projecting triangular apical tuft of scales beneath, terminal joint longer than second, erect, pointed. Maxillary palpi rudimentary. Posterior tibiæ loosely haired above. Forewings with 1 bifurcate, 2 from angle, very short, 3-6 tolerably parallel, 7 to costa, 8 absent, 11 from before middle. Hindwings 1, elongate-ovate, cilia almost 1; 2 remote, 3 and 4 short-stalked, 5 parallel, 6 absent.

Allied to *Cerostoma*, of which it is a development.

*Epistomotis penessa*, n. sp.

♂ ♀. 14-20 mm. Head, palpi, antennæ, and thorax fuscous mixed with white. Abdomen grey-whitish. Forewings elongate, narrow, costa gently arched, apex obtuse, termen very obliquely rounded; brownish-ochreous or fuscous, irrorated with white; stigmata dark fuscous, suffused, discal more or less distinct, plical linear, indistinct, very obliquely beyond first discal cilia whitish, irrorated with brownish or fuscous. Hindwings and cilia fuscous-whitish.

Twenty-two specimens, Puttalam, Ceylon, from August to January (Pole).







## TINEIDÆ.

*Opostega frigida*, n. sp.

♂ ♀. 4-6 mm. Head and thorax white. Antennæ whitish-grey, basal joint white. Abdomen grey. Anterior and middle tibiæ also bristly. Forewings lanceolate; shining white; a narrow triangular or almost linear blackish mark on costa at  $\frac{2}{3}$ : cilia light ochreous-grey, greyer towards tornus, on costa with an oblique blackish median line to apex of wing, before this white. Hindwings and cilia grey.

Eighteen specimens, Peradeniya, Ceylon, in February (Green).

*Opogona lachanitis*, n. sp.

♂ ♀. 11-15 mm. Head, antennæ, thorax and abdomen shining dark bronzy-fuscous, face and palpi glossy whitish-ochreous, thorax posteriorly edged with orange suffusion; palpi stout, truncate. Forewings elongate, costa posteriorly arched, apex acute, termen extremely obliquely rounded; shining dark purplish-bronzy-fuscous a broad suffused dull orange patch extending along dorsum from base to beyond middle, towards extremity projecting triangularly upwards so as nearly to touch costa: cilia rather dark bronzy-fuscous. Hindwings dark bronzy-fuscous; cilia rather dark bronzy-fuscous.

Twenty specimens, Puttalam and Peradeniya, Ceylon, in January, March and from September to November (Green, Pole). Larva feeding in fungus-beds of the common Termite (Green); this curious habit should be further investigated. The flattened coxæ and femora appear to form a protective plating of the sternum, which is probably connected with this mode of life.

*Monopis hemicitra*, n. sp.

♂ ♀. 15-20 mm. Head light ochreous-yellow, hairs in ♂ forming a flat projecting ridge over palpi. Palpi dark fuscous, apex pale, terminal joint longer in ♀. Antennæ pale grey. Thorax dark fuscous. Abdomen pale yellow-ochreous. Forewings elongate, costa strongly arched, apex pointed, termen very obliquely rounded, more strongly in ♂; 2 and 3 out of 4, 7 and 8 long-stalked or coincident; blackish-brown; several blackish-leadened raised scaletufts towards submedian fold; a large irregular trapezoidal pale ochreous-yellow patch extending on costa from  $\frac{2}{3}$  to  $\frac{4}{5}$ , narrowed downwards, with a rounded projection on lower side reaching  $\frac{2}{3}$  across wing; discal impression large, within this patch, not transparent: cilia blackish-brown mixed with dark slaty-leadened. Hindwings pale bronzy-ochreous, in ♀ suffused with grey; cilia light ochreous-yellowish.

Five specimens, Puttalam, Ceylon, in November (Pole.) Very like *monachella*, but abundantly distinct structurally by the different neuration (in *monachella* 2 is nearly or quite connate with stalk of 3 and 4, 6 and 7 are stalked, 8 separate), scaletufts on forewings, and facial tuft of ♂; the costal patch of forewings is broader as well as yellower, and the projection on lower side is less developed in *monachella*.

- *Nemotois scitulellus*, Walk.

(*Glyphipteryx scitulella*, Walk. Tin., 839; *Nemotois corybantis*, Meyr.)

I had missed Walker's type of this species.







[From the JOURNAL OF THE BOMBAY NATURAL HISTORY SOCIETY,  
February 15, 1907.]

## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

E. MEYRICK, B.A., F.R.S., F.Z.S.

### III.

(Continued from page 417 of this Volume.)

Besides previously mentioned contributors, I have received material through the kindness of Major C. G. Nurse and Colonel C. Swinhoe, and also some obtained by native collectors in the Khasi Hills, a portion of which is included in the present instalment, as well as some sent by the Calcutta Museum, mostly collected by Mr. G. C. Dudgeon. Sixteen genera and sixty-one species are described as new.

#### PTEROPHORIDÆ.

##### *Exelastis*, n. g.

Face smooth. Palpi moderate, slender, ascending, pointed. Tibiæ slender, smooth. Forewings cleft from  $\frac{1}{2}$ — $\frac{2}{5}$ , segments narrow, pointed, sometimes broader in ♀; 2 from near angle, 3 and 4 stalked from angle, 5 and 6 very short, 7 from near upper angle, 8 and 10 stalked, 9 absent, 11 from near angle. Hindwings cleft firstly from  $\frac{1}{2}$ , secondly from near base, segments very narrow, pointed, without scale-tooth in dorsal cilia; 2 remote, 3 and 4 stalked from angle, 5 and 6 absent.

Type *E. atomosa*, Wals. To this genus I also refer *liophanes*, Meyr., hitherto included in *Marasmarcha*.

##### *Exelastis atomosa*, Wals.

(*Aciptilia atomosa*, Wals., Proc. Zool. Soc. Lond. 1885, 885.)

The larva feeds in pods of *Cajanus indicus*, and has been bred freely by Mr. H. Maxwell-Lefroy. In this species the forewings are deeply cleft and the segments shorter and broader in the ♀ than in the ♂—an unusual circumstance.

#### ORNEODIDÆ.

##### *Orneodes ochrozona*, n. sp.

♂ ♀. 19-22 mm. Head and thorax whitish-ochreous, sprinkled with dark fuscous. Palpi long, whitish-ochreous, second and terminal joints each with two bands of dark fuscous irroration, second joint with projecting scales above

and beneath. Forewings light yellow-ochreous; costa with about twelve short whitish strigulae edged with dark fuscous; apex suffused with blackish; basal third of wing irrorated with dark fuscous; median and subterminal zigzag bands of dark fuscous irroration, margined by whitish lines edged with dark fuscous, obsolete on costal lobe; apex of each lobe with a black dot. Hindwings as forewings, but costal lobe marked like the rest, median band nearer base.

Bhotan, in June; several specimens in collection of Calcutta Museum, to which I am indebted for examples. Near *sikkima*, Moore, but that is a grey species.

*Eucosma* (EPIBLEMIDÆ.)

*Chrosis ephippias*, n. sp.

♂ ♀. 11-16 mm. Head and thorax whitish-ochreous, sometimes partially tinged with brownish-ochreous. Abdomen grey, anal tuft whitish-ochreous. Forewings elongate, rather broader in ♀, costa gently arched, apex obtuse, termen straight, somewhat oblique; whitish-ochreous, strewn with brownish-ochreous strigulae which are finely sprinkled with black; costa more sharply and darkly strigulated throughout; basal patch very obscurely indicated, edge obtusely angulated in middle; upper half of central fascia dark-brown, truncate beneath, posterior edge with a strong acute projection above truncation; rest of central fascia represented by an elongate dark-brown discal mark at  $\frac{2}{3}$ , its anterior end sometimes curved and connected with costal half, and a brown blotch with two upward diverging lobes on dorsum towards tornus; a triangular brown spot in disc towards apex; a small dark brown apical spot: cilia ochreous-whitish, sprinkled with fuscous, with dark fuscous subbasal line. Hindwings with 6 and 7 stalked, rather dark fuscous; cilia as in forewings.

Puttalam and Maskeliya, Ceylon (Pole, de Mowbray, Green, Vaughan); Bombay (Young); from July to April, twenty specimens.

*Proschistis*, n. g.

Palpi moderate, porrected. Antennæ in ♂ strongly fasciculate-ciliated (3). Thorax with small posterior crest. Forewings in ♂ without fold, termen sinuate; 7, 8, 9 approximated at base. Hindwings with 3, 4, 5 approximated at base, 6 and 7 approximated towards base.

Allied to *Eucosma*.

*Proschistis zaleuta*, n. sp.

♂ ♀. 18-25 mm. Head and thorax dark fuscous, irrorated and thorax sometimes partly suffused with whitish. Abdomen fuscous. Forewings elongate, slightly dilated, costa moderately arched, apex obtuse, termen sinuate, little oblique; white, sprinkled with dark fuscous and strewn with dark fuscous strigulae, veins except posteriorly obscurely suffused with dark purplish-leadens; costa spotted with dark fuscous; basal patch indicated by coalescence of dark fuscous strigulae, but undefined; central fascia dark fuscous, narrow, irregular and undefined on upper half, broad and strongly marked on lower half; a subquadrate dark fuscous spot on costa towards apex, whence proceeds a narrow







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striga to tornus, sometimes confluent with a narrow transverse spot before middle of termen: cilia fuscous, irrorated with white and indistinctly barred with dark fuscous. Hindwings and cilia fuscous.

Maskeliya, Ceylon (Pole, Alston, de Mowbray, Green); from July to September, twenty specimens.

*Platypeplus tetracona*, n. sp.

♂ ♀. 24-29 mm. Head and thorax brownish-ochreous, sprinkled with dark fuscous. Abdomen light fuscous. Brush of posterior tibiae whitish in ♂, shorter and ochreous-tinged in ♀. Forewings elongate, considerably dilated, costa rather strongly arched, apex obtuse, termen hardly rounded, nearly vertical; ochreous-whitish, more or less strigulated variably with ochreous, ferruginous, or dark fuscous; triangular dark fuscous dorsal blotches indicating posterior portions of basal patch and central fascia, respectively; basal patch otherwise indicated by dark striae, little defined, outer edge irregular; rest of central fascia deep ochreous, dark ferruginous, or dark fuscous, moderately broad, reaching from costa  $\frac{3}{4}$  across wing, then posteriorly with an abrupt upwardly oblique elongate lobe extending above the triangular dorsal blotch, but clearly separated from it; a broad similarly coloured triangular apical patch: cilia ochreous-whitish, suffusedly mixed with fuscous or dark fuscous, except towards tornus. Hindwings and cilia fuscous.

Maskeliya, Ceylon (de Mowbray, Alston, Pole); in February, March, and October, seven specimens.

*Eucosma orophias*, n. sp.

♂ ♀. 21-24 mm. Head and thorax grey, mixed with dark grey and whitish-ochreous, sometimes suffused with ferruginous; crest of thorax strong, bifid. Antennae and abdomen rather dark grey. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen almost straight, somewhat oblique; dark purplish-fuscous, very finely irrorated with whitish, sometimes ferruginous-tinged, costa finely strigulated with dark and pale; dorsal area more or less suffused with whitish, its outline running from costa near base obliquely to fold, then forming a triangular projection upwards before middle, beyond this running upward in a straight line to apex, edged above with darker suffusion posteriorly, terminal area sometimes clearer whitish, sometimes suffused with deep ferruginous; dorsum suffused with blackish towards base; a transverse-linear white mark in disc at  $\frac{2}{3}$ ; several minute black dots on termen, and a larger blackish dot before tornus: cilia whitish, ferruginous, or dark grey, variably intermixed, but always with small dark præapical and prætornal spots. Hindwings with 3 and 4 sometimes short-stalked; fuscous, darker towards termen; cilia fuscous-whitish, with two fuscous shades.

Simla (Nurse), Khasi Hills; in August and September, seven specimens.

*Sporocelis*, n. g.

Palpi moderate, porrected. Antennae in ♂ shortly ciliated. Thorax with posterior crest. Forewings in ♂ without fold, termen subsinuate, surface with

raised tufts; 7, 8, 9 approximated at base. Hindwings with 3 and 4 connate, 5 parallel, 6 and 7 closely approximated towards base.

Probably an early form in the line of development of *Eucosma*.

*Sporocelis marmaropa*, n. sp.

♂ ♀. 16-18 mm. Head and thorax dark fuscous, partially finely sprinkled with whitish. Abdomen fuscous, sprinkled with darker. Forewings elongate, dilated, costa gently arched, bent at  $\frac{3}{4}$ , apex obtuse, termen subsinuate, oblique; rather dark fuscous, strewn with blackish strigulae, costa suffused with blackish; small scattered tufts of raised scales in disc; basal, antemedian, and subterminal bands of purplish-leadens striae interspersed with irregular white dots and scattered scales; a larger white mark in disc beyond middle: cilia purplish-leadens, mixed with dark fuscous. Hindwings rather dark fuscous; cilia fuscous.

Maskeliya, Ceylon; in May and August, three specimens (de Mowbray, Pole).

*Epiblema ancyrota*, n. sp.

♂. 22-25 mm. Head and collar light brownish. Thorax grey-whitish, shoulders spotted with black, two dark grey dorsal dots. Abdomen grey. Forewings very elongate, narrow, gradually dilated, costa slightly arched, apex obtuse, termen subsinuate, little oblique, rounded beneath, costal fold strong, reaching from base to middle; silvery-grey, closely irrorated with white, and strewn with more or less distinct dark fuscous strigulae; a broad dark brown suffusion, mixed with purplish-leadens, extending over costal half of wing from near base to  $\frac{2}{3}$ , then suddenly contracted and continued as a narrow and less defined costal suffusion to apex; posterior half of costa with pairs of short whitish strigulae; an irregular dark fuscous spot in disc at  $\frac{1}{3}$ , resting on edge of dark costal suffusion; a curved black linear mark from angle of costal suffusion at  $\frac{2}{3}$ ; a series of six or seven short black linear marks before termen; a small dark fuscous apical spot: cilia grey, irrorated with white, suffused with white towards base, on upper part of termen suffused with brown towards tips. Hindwings with 3 and 4 stalked; fuscous, becoming dark fuscous posteriorly; cilia fuscous, with pale basal line.

Maskeliya, Ceylon; in January, March, June, and August, five specimens (Pole, de Mowbray).

*Cydia porpota*, n. sp.

♂ ♀. 13-15 mm. Head and palpi whitish-fuscous, second joint of palpi tufted beneath, terminal very short. Thorax whitish, suffused with pale fuscous, except posteriorly. Abdomen light fuscous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen nearly straight, faintly sinuate in middle, somewhat obliquely rounded beneath; whitish; costa suffused with fuscous, and obliquely strigulated with dark ferruginous-brown and whitish; dorsum suffused with fuscous and strigulated with darker fuscous; some scattered fuscous or dark fuscous strigulae in disc anteriorly; a small dark fuscous spot beneath fold at  $\frac{1}{3}$ , indicating angle of basal patch; a narrow,

stated the parallel; it should be "rather approximated to 4".  
(E. Mayr, in litt. S. TX. 27)



undefined, fuscous and brown fascia from  $\frac{3}{5}$  of costa to before tornus, almost interrupted beneath costa, broadest on lower half and somewhat marked with black posteriorly; a moderate round brown or fuscous spot towards apex, marked with about 6—8 variable black dots; a ferruginous-brown stria from costa before apex to termen above tornus, preceded and followed by silvery-leaden striae from costa; a small ferruginous-brown apical spot: cilia fuscous, irrorated with white, with a white tornal patch. Hindwings with 3 and 4 long-stalked; grey; cilia grey-whitish, with two grey shades.

Mhow, in June, four specimens (Swinhoe).

*Cydia clydonias*, n. sp. *mosaica*, Lw. (Lc XIX. 437) = *clydonias*, Meyr.

♂ ♀. 22—24 mm. Head and thorax light fuscous, irrorated with fuscous-whitish. Abdomen fuscous. Forewings elongate, posteriorly somewhat dilated, costa gently arched, apex obtuse, termen slightly sinuate, little oblique, rounded beneath; fuscous, all scales finely tipped with whitish, sometimes with faint darker strigulae; costal edge dark fuscous with pairs of oblique whitish strigulae; a rather oblique more or less dark fuscous irregular streak from  $\frac{1}{4}$  of dorsum, reaching half across wing, sometimes almost wholly obsolete; a very oblique more or less defined fuscous mark from middle of costa, extremity curved up to near costa at  $\frac{3}{4}$ ; an irregular fuscous spot in middle of disc, partially marked with black and edged with whitish, two upper angles produced into elongate lobes, so as to form a crescent concave above, sometimes partially obsolete; a strongly upcurved fuscous mark, edged with black and then with whitish, from near posterior arm of this spot to middle of termen, always well defined, from anterior extremity of which proceed one or two darker strigae to tornus; a small blackish-fuscous apical spot: cilia fuscous, towards tornus whitish-fuscous. Hindwings with 3 and 4 connate; fuscous, darker towards termen; cilia fuscous, with darker sub-basal line.

Wellawaya, Ceylon (Green); Muok-lek, Siam (Swinhoe); in November and January, seven specimens.

*Laspeyresia tricentra*, n. sp.

♂ ♀. 11-13 mm. Head and thorax rather dark fuscous, closely irrorated with ochreous-grey-whitish. Abdomen fuscous. Forewings elongate, lightly dilated, costa slightly arched, apex obtuse, termen sinuate, little oblique; rather dark fuscous, finely irrorated with ochreous-grey-whitish, with indistinct darker transverse striae; a series of short oblique dark fuscous strigae from costa, alternating with bluish-leaden-metallic strigae which rise from pairs of pale costal strigulae, becoming longer posteriorly; a very faint hardly paler slightly leaden-tinged subtriangular blotch on middle of dorsum; ocellus laterally margined with leaden-metallic, marked with three somewhat elongate black dots touching posterior edge: cilia fuscous, irrorated with whitish. Hindwings dark fuscous, lighter towards base; cilia pale fuscous, with dark fuscous basal line.

Maskeliya, Peradeniya, and Puttalam, Ceylon; Travancore, Mhow, Bombay, Poona (Pole, Green, Swinhoe); ten specimens. Larva feeds in stems of

*Crotalaria* ( " Dekkan hemp " ) (Green). This is the insect recorded in Swinhoe's Catalogue (No. 4768) as *Dichrorampha subsequana*, Haw., an erroneous identification. I have seen Swinhoe's original specimens ; there is no reason to suppose that the true *subsequana* occurs in India, and it should be removed from the list.

#### TORTRICIDÆ.

##### *Oxygrapha dictyodes*, n. sp.

♂ ♀. 16-18 mm. Head, thorax, and abdomen grey. Forewings elongate, oblong, costa strongly arched towards base, slightly roughened with scales towards  $\frac{1}{2}$ , faintly sinuate in middle, apex round-pointed, termen sinuate, oblique ; fuscous, finely and densely irrorated with white, appearing pale grey ; veins and numerous transverse strigulae fuscous, forming an irregular network ; five slender transverse fuscous striae mixed with black slightly raised scales, first marking edge of basal patch, angulated in middle, second and third marking edges of central fascia, second slightly curved, third irregular, fourth from  $\frac{2}{3}$  of costa to tornus, fifth from costa near apex to near middle of termen ; costa sometimes with a triangular grey or fuscous suffusion, extending from second stria to fifth : cilia grey, sprinkled with whitish, with blackish-grey subbasal line. Hindwings light grey, faintly strigulated with darker ; cilia as in forewings.

Maskeliya, Ceylon, in August, January, and February ; five specimens (Pole, de Mowbray, Alston).

##### *Oxygrapha loxoscia*, n. sp.

♂ ♀. 14-16 mm. Head and thorax reddish-ochreous, tinged with purplish. Abdomen whitish-ochreous-grey. Forewings elongate, rather narrow, hardly dilated, costa anteriorly moderately, posteriorly slightly arched, apex round-pointed, termen slightly sinuate, oblique ; ochreous or ferruginous, in lighter specimens obscurely strigulated with fuscous, in darker specimens with indistinct purplish-leadene transverse strigae ; scattered minute black dots of raised scales ; an oblique undefined fuscous shade from  $\frac{3}{5}$  of costa to middle of dorsum : cilia ochreous, between apex and tornus light ochreous-yellowish, on tornus suffused with grey. Hindwings ochreous-grey-whitish, in ♀ suffused with pale grey posteriorly ; cilia ochreous-whitish, in ♀ greyish-tinged.

Maskeliya, Ceylon, in October ; six specimens (Pole, Alston).

##### *Tortrix encausta*, n. sp.

♂ 23-25 mm. ♀ 32-34 mm. Head and thorax light brownish-ochreous. Palpi very short, with appressed scales, subascending. Abdomen in ♂ greyish-ochreous, in ♀ yellow-ochreous. Forewings moderately broad, in ♂ narrowed anteriorly, in ♀ sub-oblong, costa towards base in ♂ gently, in ♀ strongly arched, thence in ♂ nearly straight, in ♀ sinuate, apex obtuse, termen in ♂ hardly sinuate, little oblique, in ♀ strongly sinuate beneath apex, bowed beneath, vertical ; brownish-ochreous, with fine scattered grey or dark grey strigulae, chiefly towards margins, often more or less suffused with light purplish-fuscous ; basal patch represented in ♂ by a very dark green trapezoidal







blotch resting on dorsum towards base, reaching half across wing, in ♀ by a small irregular dark green transverse mark beneath costa at  $\frac{1}{6}$ ; in ♂ upper half of central fascia very dark green, irregular, becoming brown on costa, in ♀ this mark is broken up and much reduced, rising on costa nearer base at  $\frac{1}{3}$ ; three small semi-oval dark brown marks on posterior half of costa: cilia pale brownish-ochreous, tips brown, except towards tornus. Hindwings in ♂ fuscous, towards costa posteriorly sometimes slightly tinged with orange, and strigulated with darker; in ♀ light ochreous-orange, towards dorsum sometimes slightly infuscated, posteriorly strigulated with fuscous, terminal edge sometimes fuscous; cilia in ♂ fuscous, in ♀ light fuscous.

Peradeniya, Maskeliya, Gampola, Ceylon, from May to January; fourteen specimens (Pole, Green, Alston).

*Ulodemis*, n. g.

Antennæ in ♂ shortly ciliated, with dorsal notch in stalk near base. Palpi rather long, porrected. Thorax without crest. Forewings with 7 and 8 stalked, 7 to termen. Hindwings with 3 and 4 connate, 5 closely approximated at base, 6 and 7 connate or short-stalked.

Apparently allied to *Pandemis*.

*Ulodemis trigrapha*, n. sp.

♂ ♀. 20-23 mm. Head, palpi, and thorax brown, forehead in ♂ with blackish spot. Abdomen bronzy-grey. Forewings elongate-oblong, costa anteriorly moderately arched, posteriorly slightly sinuate, apex obtuse, termen in ♂ almost straight, somewhat oblique, in ♀ somewhat sinuate, hardly oblique, rounded beneath; brown, more or less strewn with blackish-grey strigulae, in ♀ sometimes hardly perceptible; three obscure slender whitish oblique transverse lines, nearly straight and tolerably parallel, indicating edge of basal patch and margins of moderate central fascia, which are hardly darker than ground colour: cilia brown, tips pale. Hindwings in ♂ with subdorsal groove containing expansible hair-pencil; grey; cilia light grey, with darker basal line.

Bhotan (3,000 feet) in April, May and August; three specimens (Dudgeon).

GELECHIADÆ.

*Thyrsostoma*, n. g.

Head smooth; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ moderately ciliated (1), basal joint very long, without pecten, second joint also elongate, about half basal, its apex angularly prominent above. Labial palpi long, recurved, second joint with very long fine expansible fringe of hairs beneath, terminal joint as long as second, thick, tolerably pointed. Maxillary palpi rudimentary. Posterior tibiae with three tufts of scales above. Forewings with 4 absent, 7 and 8 stalked, 7 to costa, 9 absent, 11 from beyond middle. Hindwings  $\frac{1}{2}$ , very narrowly elongate-trapezoidal, acutely pointed from  $\frac{3}{4}$ , cilia 4; 2-5 parallel, 6 and 7 approximated towards base.

Apparently related to *Aristotelia*.

*Thyrsostoma glaucitis*, n. sp.

♂. 12-13 mm. Head and thorax shining white. Palpi white, apex greyish. Antennæ white, stalk grey above. Abdomen pale shining silvery-grey, basal half dorsally greyish-ochreous. Forewings linear-lanceolate, widest near base, gradually attenuated to acute apex; grey with pale metallic-blue reflections; a narrow inwardly oblique whitish fascia at  $\frac{1}{3}$ ; an ill-defined irregular whitish discal spot at  $\frac{2}{3}$ ; cilia light grey. Hindwings and cilia grey, towards base paler and ochreous-tinged.

Peradeniya, Ceylon, in June; two specimens bred "from mango leaf" (Green).

*Pachnistis*, n. g.

Head with appressed scales; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ rather thick, serrate, basal joint moderate, without pecten. Labial palpi long, recurved, second joint considerably thickened with appressed scales, terminal joint rather longer than second, stout, compressed, acute. Maxillary palpi rudimentary. Posterior tibiae clothed with rather short rough scales. Forewings with 1b furcate, 2 and 3 stalked from angle, 7 and 8 stalked, 7 to costa, 9 absent, 11 from middle. Hindwings 1, trapezoidal, apex obtuse, termen slightly sinuate, cilia  $\frac{2}{3}$ ; 3 and 4 connate, 5 tolerably parallel, 6 and 7 stalked.

Allied to *Protolechis*.

*Pachnistis cephalochra*, n. sp.

♂. 15 mm. Head pale whitish-ochreous. Palpi whitish-ochreous, second joint dark fuscous except towards apex, terminal joint with two or three dark fuscous scales. Antennæ dark fuscous. Thorax and abdomen rather dark fuscous, paler-mixed. Forewings elongate, costa gently arched, apex obtuse, termen slightly rounded, rather oblique; rather dark fuscous, sprinkled with light greyish-ochreous; cilia light fuscous, sprinkled with darker. Hindwings fuscous, paler towards base; cilia light greyish-ochreous, sprinkled with fuscous.

Bhotan (4,500 feet), in July; two specimens (Dudgeon).

*Tiriza*, Walk.

This name supersedes *Macrotona*, Meyr.; I have recently obtained the type-species from Borneo.

*Tiriza trigonopsis*, n. sp.

♂. 21-24 mm. Head and thorax glossy whitish-ochreous, shoulders fuscous. Palpi ochreous-whitish, second joint fuscous except at apex, terminal longer than second. Antennæ ochreous-whitish, thinly ciliated ( $1\frac{1}{2}$ ). Abdomen pale greyish, apex whitish-ochreous. Forewings elongate, narrow, costa slightly arched, subsinuate in middle, apex obtuse, termen sinuate, oblique; light fuscous or brownish, suffusedly mixed with whitish-ochreous; a suffused dark fuscous spot on base of costa; an elongate-triangular dark fuscous patch extending in disc from near base to  $\frac{1}{3}$ ; an undefined dark fuscous dot beneath costa just beyond this; a small triangular dark fuscous spot in disc at  $\frac{2}{3}$ ; a pale line, preceded by darker suffusion, from  $\frac{3}{4}$  of costa to  $\frac{4}{5}$  of dorsum,

Pachnistis cephalochra, from Kangra Valley (4500 ft.) is Heyrick's collection.

"Two specimens are mentioned in the original description, and I only have one; however, I think probably Bhutan may be for some misunderstanding on my part". [Heyr, in Ent, 23. VII, 26]

Leictocera trigonospis.



slightly indented above middle: cilia whitish-ochreous, with a pale fuscous antemedian shade. Hindwings whitish-grey; cilia whitish-ochreous.

Simla, in May; two specimens (Nurse).

*Lecithocera plocamandra*, n. sp.

♂ ♀. 15-16 mm. Head and thorax fuscous, face paler, frontal fillet white. Palpi whitish-fuscous, terminal joint anteriorly dark fuscous. Antennæ white. Abdomen greyish-ochreous, anal tuft yellowish-ochreous. Posterior tibiae in ♂ with large expansible tuft of very long pale ochreous-yellowish hairs from base above. Forewings elongate, narrow; costa gently arched, apex round-pointed, termen nearly straight, oblique; 8 and 9 out of 7, 7 to termen; light fuscous: cilia pale fuscous, tips more whitish. Hindwings in ♂ beneath with large expansible tuft of very long pale ochreous-yellowish hairs from base of dorsum; light fuscous, somewhat lighter towards base; cilia as in forewings.

Sikkim (1,800 feet), Bhotan; in May and July, three specimens (Dudgeon).

*Brachmia arcifera*, n. sp.

♂ ♀. 14-15 mm. Head and thorax dark bronzy-fuscous, sides of crown with a whitish-ochreous line. Palpi dark fuscous, terminal joint longer than second, ochreous-whitish in front. Antennæ ochreous-whitish, spotted with fuscous beneath. Abdomen grey. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen concave, oblique; 2 and 3 long-stalked, 8 and 9 out of 7, 7 to termen; dark purplish-bronzy-fuscous; stigmata blackish, plical and first discal confluent, edged posteriorly by a slightly curved ochreous-whitish line from  $\frac{2}{5}$  of costa to middle of dorsum, second discal obscurely edged with whitish and with an additional similar dot beneath it; an ochreous-whitish dot on costa at  $\frac{4}{5}$ : cilia fuscous, base obscurely paler. Hindwings and cilia fuscous.

Bhotan, in June; two specimens (Dudgeon).

*Thymiatris*, n. g. (*Xy longitarsis*)

Head with loosely appressed hairs; tongue obsolete. Antennæ  $\frac{3}{5}$ , in ♂ moderately ciliated (1), basal joint elongate, stout, without pecten. Labial palpi rather long, recurved, second joint with rough projecting scales beneath, terminal joint shorter than second, rather loosely scaled, pointed. Maxillary palpi rudimentary. Anterior tarsi thickened with rough projecting scales throughout; posterior tibiae rough-haired above and beneath. Forewings with 1b long-furcate, 2 from  $\frac{4}{5}$ , 8 and 9 out of 7, 7 to apex, 10 remote, 11 from before middle. Hindwings considerably over 1, trapezoidal-ovate, termen not sinuate, cilia  $\frac{1}{6}$ ; 3 and 4 short-stalked, 5 parallel, 6 and 7 stalked.

Allied to *Brachmia*.

*Thymiatris melitacma*, n. sp.

♂. 42-44 mm. Head and palpi pale ochreous, palpi suffused with dark fuscous towards base. Antennæ dark fuscous towards base, pale ochreous above. Thorax whitish, irrorated with fuscous. Abdomen pale greyish-ochreous. Forewings very elongate, narrow, gradually slightly dilated, costa almost straight, apex rounded-obtuse, termen slightly rounded, hardly oblique; ochreous-whitish, irrorated with fuscous and dark fuscous, costa and subcostal veins

suffused with dark fuscous ; two cloudy dark fuscous dots placed transversely in disc beyond  $\frac{2}{3}$  ; traces of a cloudy darker angulated subterminal line ; an ochreous-yellowish streak mixed with fuscous round apex and termen to near tornus : cilia whitish-ochreous, tips and an antemedian line ochreous-fuscous mixed with dark fuscous. Hindwings and cilia whitish-ochreous, cilia with an interrupted fuscous subbasal line.

Khasi Hills ; two specimens.

#### XYLORYCTIDÆ.

##### *Æolanthæ*, n. g.

Head with appressed scales, side-tufts erect and meeting above crown ; tongue developed. Antennæ  $\frac{4}{5}$ , stout, flattened, in ♂ simple, basal joint short, without pecten. Labial palpi long, curved, ascending, second joint thickened with scales, somewhat rough towards apex beneath, terminal joint much shorter than second, thick, pointed. Maxillary palpi rudimentary. Thorax with posterior crest. Posterior tibiæ rough-haired above. Forewings with anterior costal scale-projection ; 1 b furcate, 2 and 3 stalked from angle, 7 and 8 stalked, 7 to termen, 9 closely approximated to 7, 11 from middle. Hindwings, 1, trapezoidal, apex obtuse, termen hardly sinuate, cilia  $\frac{1}{2}$  ; cell shorter in ♂, less than half wing, 3 and 4 stalked, 5 somewhat approximated, 6 and 7 stalked, upper margin of cell curved upwards, but not connected with 8.

Type *Æ. callidora*.

##### *Æolanthæ callidora*, n. sp.

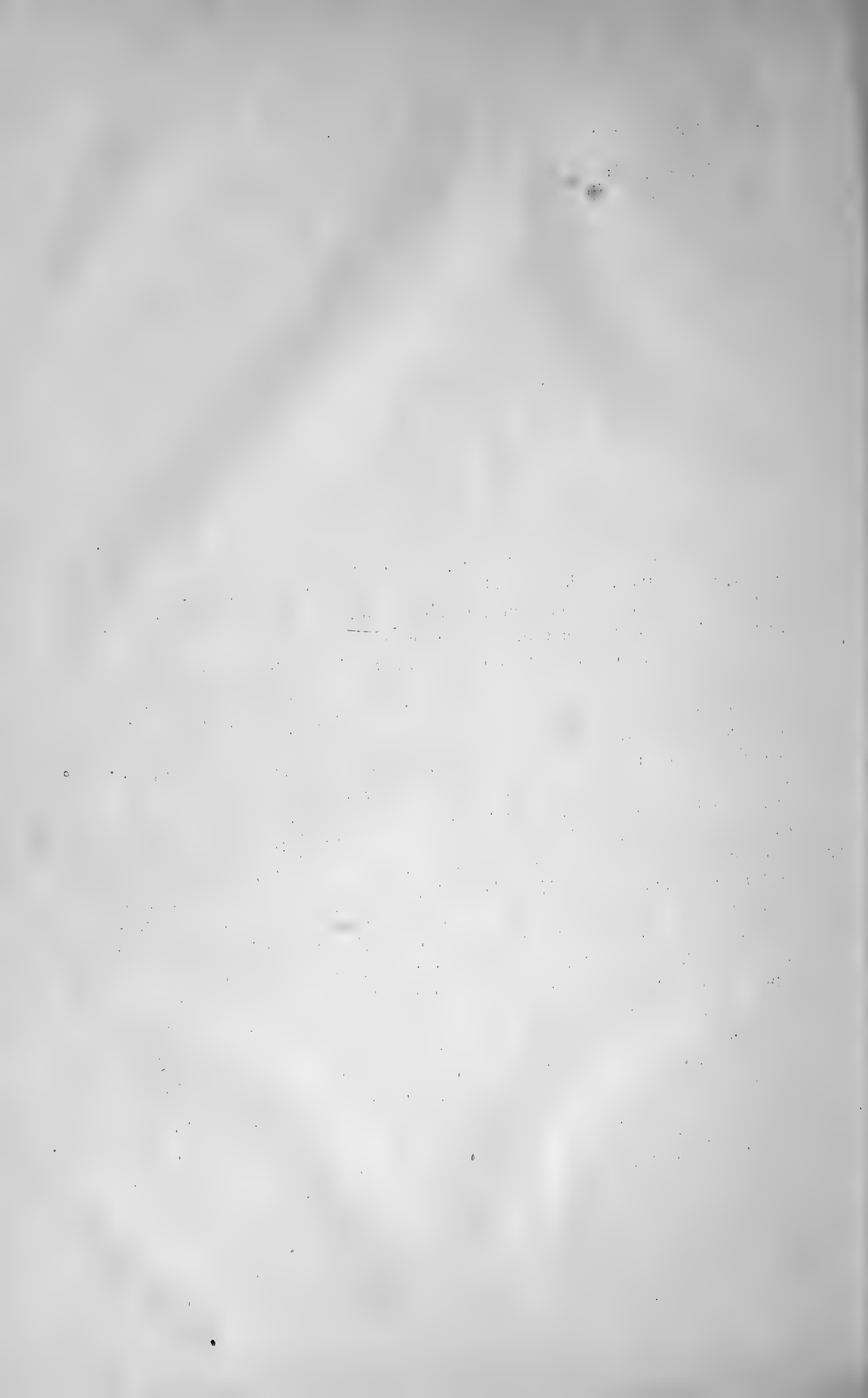
♂ ♀. 21-24 mm. Head and thorax brown, mixed with ochreous and whitish. Palpi ochreous-brown, terminal joint fuscous, somewhat sprinkled with whitish. Antennæ and abdomen fuscous. Forewings elongate, moderately broad, costa gently arched, with broad scale-projection before middle, apex obtuse, termen rather oblique, in ♂ nearly straight, in ♀ more rounded ; deep orange-ochreous, more orange towards costa ; a narrow white median longitudinal streak from near base to middle, edged with grey ; space between this and costa broadly suffused with white, towards costal scale-protuberance white mixed with leaden-grey ; a dark red-brown streak along dorsum from near base to  $\frac{3}{4}$ , edged with purplish-grey suffusion, and posteriorly dilated into a triangular spot edged with white ; a transverse discal mark at  $\frac{2}{3}$  and some irregular suffused spots between veins beyond and above this pale yellow ; an oblique white mark beneath costa towards apex and two or three dots beneath it, preceded by some red-brown suffusion ; between this and apex some leaden-grey suffusion beneath costa ; an irregular interrupted white streak along termen : cilia ochreous, mixed with darker and whitish. Hindwings pale greyish-ochreous, with fine scattered dark fuscous hair-scales, especially towards tornus ; cilia ochreous-whitish, towards tornus with fuscous subbasal shade.

Khasi Hills ; three specimens (Swinhoe).

##### *Æolanthæ rhodochrysa*, n. sp.

♂. 18-19 mm. Head pale ochreous. Palpi deep ochreous mixed with fuscous ; subapical ring of second joint and basal, median, and apical rings of terminal







joint whitish-ochreous. Antennæ ochreous-fuscous. Thorax deep orange-ochreous. Abdomen grey. Forewings elongate, moderate, costa anteriorly moderately, posteriorly gently arched, with broad scale-projection before middle, apex obtuse, termen nearly straight, oblique; deep orange-ochreous suffused with yellow, and partially tinged with crimson; an oblique spot of crimson suffusion in disc towards base; a broad curved oblique whitish fascia from costa before middle, suffused with yellowish posteriorly, becoming broken up in disc and not reaching dorsum; beyond this a narrower fascia of purplish-crimson suffusion, edges irregularly dentate and marked with dark fuscous, obsolete towards dorsum, an acute median projection of posterior edge followed by some whitish suffusion; a pale crimson streak mixed with white round apex and tornus: cilia deep yellow, obscurely barred with yellow-whitish, above apex suffused with orange on basal half. Hindwings pale grey, darker towards tornus; cilia whitish-yellowish.

Khasi Hills; two specimens.

*Paradoris*, n. n.

I propose this name for the genus described by Heinemann under the name of *Euteles*, which is preoccupied in *Coleoptera* (1834).

*Paradoris anaphracta*, n. sp.

♂. 12-13 mm. Head ochreous-whitish, slightly sprinkled with fuscous. Palpi fuscous irrorated with blackish, apex of second joint white, terminal joint whitish with a few dark fuscous specks. Antennæ fuscous. Thorax ochreous-whitish sprinkled with fuscous, shoulders narrowly dark fuscous. Abdomen pale ochreous, more or less suffused with fuscous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen very obliquely rounded; ochreous-whitish or pale whitish-ochreous, thinly sprinkled with fuscous; a small blackish spot on base of costa; stigmata blackish, plical somewhat beyond first discal, second discal connected by a slightly incurved blackish streak with dorsum before tornus, followed by an undefined band of darker irroration from  $\frac{3}{4}$  of costa to tornus; undefined spots of blackish irroration round apex and termen: cilia ochreous-whitish. Hindwings grey; cilia pale whitish-ochreous.

Bhotan (4,500 feet), from May to July; three specimens (Dudgeon).

*Ptochoryctis rosaria*, n. sp.

♂ ♀. 23-24 mm. Head, thorax, and abdomen snow-white. Palpi and antennæ grey. Forewings elongate, moderately broad, costa moderately arched, apex rounded-obtuse, termen obliquely rounded, shining snow-white; a sub-marginal series of seven black dots round apex and termen: cilia white. Hindwings and cilia white.

Bhotan, in April and May; two specimens (Dudgeon).

*Trypherantis*, n. g.

Head with appressed scales, side-tufts loosely raised; tongue obsolete. Antennæ  $\frac{3}{4}$ , in ♂ moderately ciliated, basal joint moderate, without pecten. Labia, palpi long, recurved, with appressed scales, terminal joint somewhat shorter than second, acute. Maxillary palpi rudimentary. Posterior tibiae clothed with

rough hairs above. Forewings with 1b furcate, 2 from  $\frac{4}{5}$ , 4 and 5 approximated, 7 and 8 stalked, 7 to termen, 9 absent, 11 from about middle. Hindwings over 1, ovate, cilia  $\frac{1}{4}$ ; 3 and 4 stalked, 5 parallel, 6 and 7 short stalked.

Apparently allied to *Ptochoryctis*.

*Trypherantis atelogramma*, n. sp.

♂. 24-26 mm. Head, palpi, and antennæ ochreous-whitish, base of palpi fuscous. Thorax and abdomen whitish-ochreous. Forewings elongate, posteriorly dilated, costa gently arched, apex rounded-obtuse, termen rather obliquely rounded; whitish-ochreous; all veins marked by rather irregular lines of blackish irroration, broadly obsolete towards base and ceasing abruptly near other margins, streak of transverse vein more or less dilated; an interrupted blackish line round apex and termen: cilia whitish-ochreous, with an obscure interrupted fuscous antemedian line. Hindwings whitish-ochreous; a terminal series of fuscous marks; cilia whitish-ochreous.

Bhotan, Sikkim, in May and June; three specimens (Dudgeon).

*Epimactis*, n. g.

Head loosely haired; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ strongly ciliated (2), basal joint moderate, without pecten. Labial palpi long, recurved, second joint with appressed scales, terminal joint shorter than second, slender, acute. Maxillary palpi rudimentary. Posterior tibiae clothed with long hairs above. Forewings with 1b furcate, 2 from towards angle, 7 and 8 stalked, 7 to apex, 11 from middle. Hindwings 1, trapezoidal-ovate, cilia  $\frac{1}{3}$ ; 4 absent, 3 and 5 approximated at base, 6 and 7 stalked.

Allied to *Myriopleura* and *Trichernis*. = *Oletia* (Dudgeon); *Oletia* (Dudgeon).

*Epimactis monodoxa*, n. sp.

♂ ♀. 19-23 mm. Head, palpi, antennæ, thorax, and abdomen whitish-ochreous, slightly yellowish-tinged. Forewings elongate, costa moderately arched, apex rounded-obtuse, termen obliquely rounded; whitish-ochreous, yellowish-tinged, towards dorsum slightly tinged with brownish; discal stigmata fuscous, first minute, second moderate, round: cilia whitish-ochreous. Hind wings in ♂ light grey, in ♀ whitish-ochreous; cilia whitish-ochreous.

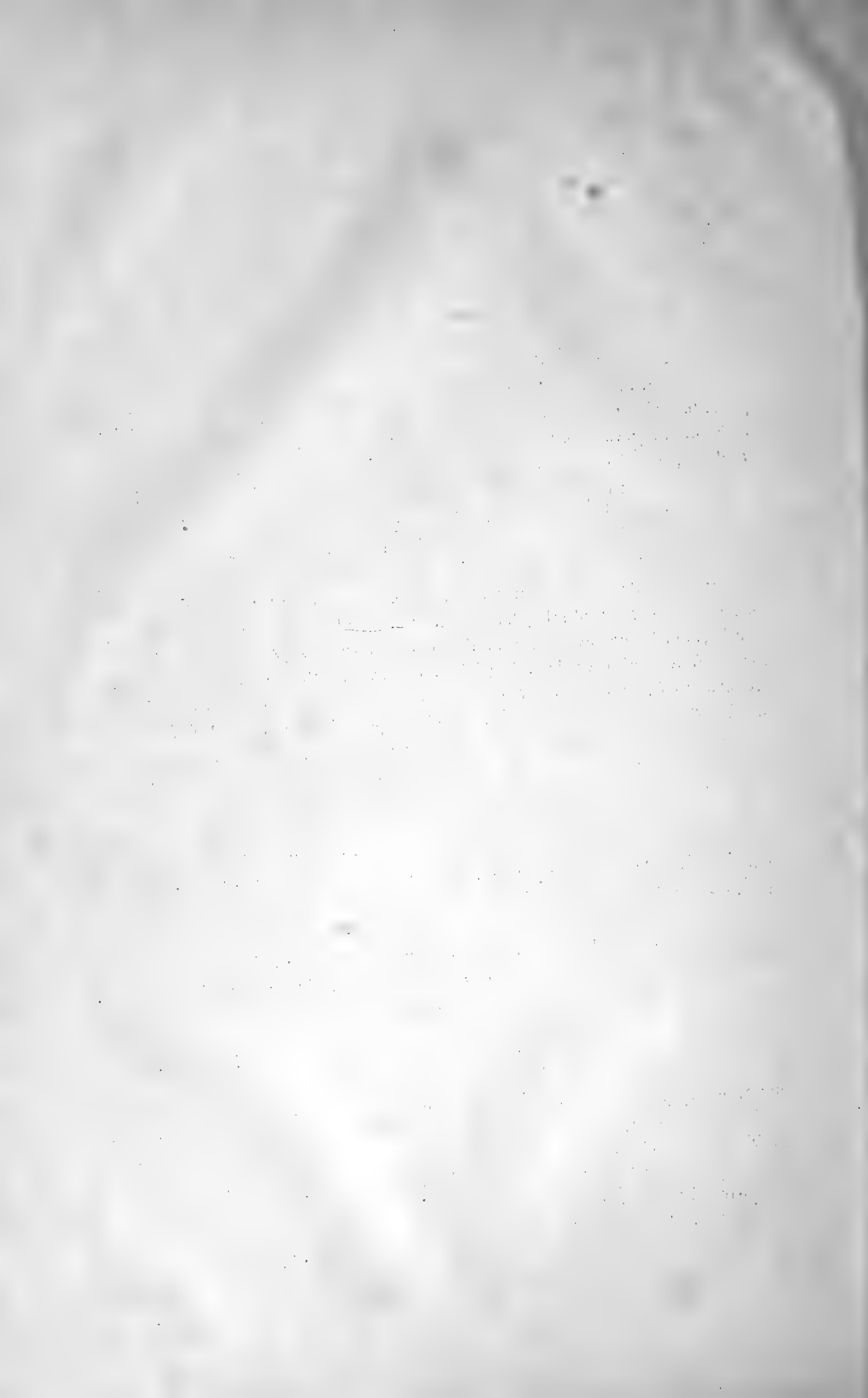
Bhotan, in June; four specimens (Dudgeon).

#### CECOPHORIDÆ.

*Lactistica*, n. g.

Head with loosely appressed hairs; tongue obsolete. Antennæ  $\frac{3}{4}$ , in ♂ strongly ciliated with fascicles (3), basal joint stout, ~~without~~ pecten (2). Labial palpi moderately long, recurved, second joint much thickened with dense rough projecting scales beneath, almost tufted anteriorly, terminal joint shorter than second, moderate, acute. Maxillary palpi rudimentary. Abdomen rather elongate. Anterior tibiae and tarsi thickened with dense hair-scales, posterior tibiae and tarsi sometimes greatly elongated. Forewings with tufts of raised scales in disc; 1b furcate, 2, 3, 4 closely approximated from angle, 7 and 8 stalked, 7 to apex, 11 from before middle. Hindwings, elongate-ovate, cilia  $\frac{1}{4}$ ; 3 and 4 connate, 5-7 parallel.





Type *L. geranodes*. This curious genus is perhaps related to *Chimabache*.  
*Lactistica geranodes*, n. sp.

♂. 47 mm. Head, palpi, antennæ, thorax, and abdomen grey mixed with dark fuscous. Legs dark grey, anterior pair mixed with whitish and blackish, posterior tibiæ very elongate, tufted with scales towards apex above and externally, posterior tarsi greatly elongate, half as long again as tibiæ, at apex with tuft of scales above. Forewings elongate, narrow, costa almost straight, apex obtuse, termen somewhat sinuate, oblique; rather dark fuscous, sprinkled with white and irrorated with black; posterior edge of cell marked by an oblique white line; a submarginal series of white interneural marks round posterior third of costa and termen, followed by terminal spots of blackish suffusion, extremities of veins between these light reddish: cilia dark fuscous, with a white spot beneath tornus. Hindwings rather dark fuscous, with traces of a submarginal whitish line round apex and upper part of termen; cilia white, with dark fuscous subbasal line.

Khasi Hills; one specimen. The great development of the posterior tibiæ and tarsi is a very singular feature.

*Lactistica demotarcha*, n. sp.

♂ ♀. 59-60 mm. Head whitish-ochreous, with a blackish mark on middle of crown. Palpi ochreous-whitish, second joint mixed with dark fuscous, terminal joint with dark fuscous median band. Antennæ whitish-ochreous, rounded-dentate. Thorax whitish-ochreous, with a dorsal stripe mixed with brown and blackish. Abdomen dark fuscous, segmental margins whitish-ochreous, preceded by ferruginous rings, and tuft whitish-ochreous. Anterior and middle tibiæ ochreous mixed with reddish, black, and whitish, with expansible tuft of black scales towards apex, anterior tarsi roughened with whorls of scales, all coxæ with patches of black scales, posterior legs normal, ochreous-whitish spotted with blackish, tibiæ long-haired above. Forewings elongate, narrow, costa gently arched, apex rounded, termen very obliquely rounded; whitish-ochreous, partially faintly pinkish-tinged, irregularly irrorated with ochreous-brown, especially towards termen; a blackish dot on base of costa; stigmata raised, mixed with black, plical and first discal small, plical beneath first discal, second discal large, roundish, a similar spot on fold obliquely before second discal; a submarginal series of white dots or marks preceded by black irroration or suffusion round posterior part of costa and termen: cilia whitish-ochreous mixed with blackish. Hind-wings and cilia whitish-ochreous.

Khasi Hills; two specimens.

*Eulechria phabas*, n. sp.

♀. 15-16 mm. Head, palpi, and thorax ochreous-yellow. Antennæ pale yellowish, towards apex ringed with dark fuscous. Abdomen grey, apex yellowish. Forewings elongate, rather narrow, costa gently arched, apex roundpointed, termen nearly straight, very oblique; rather deep ochreous-yellow, posteriorly slightly brownish-tinged; base of costa narrowly dark fuscous; stigmata black, plical obliquely beyond first discal, a small additional

black dot beneath second discal: cilia yellow. Hindwings grey; cilia whitish-ochreous.

Bhotan (4,500 feet), in June; four specimens (Dudgeon).

*Mylothra*, n. g.

Head loosely haired, sidetufts raised; tongue apparently rudimentary. Antennæ  $\frac{4}{5}$ , in ♂ filiform, simple, basal joint moderate, without pecten. Labial palpi long, recurved, second joint thickened with dense scales, somewhat rough beneath towards apex, terminal joint as long as second, moderate, acute. Maxillary palpi rudimentary. Posterior tibiae clothed with long hairs. Forewings with 1b furcate, 2 and 3 stalked from angle, 7 and 8 stalked, 7 to apex, 11 from middle. Hindwings 1, elongate-ovate, cilia almost 1; 3 and 4 connate, 5-7 tolerably parallel.

Allied to *Phæosaces*.

*Mylothra creseritis*, n. sp.

♂ ♀. 19-20 mm. Head and thorax whitish-ochreous, edge of shoulders infuscated. Palpi ochreous-whitish, second joint irrorated with dark fuscous. Antennæ fuscous. Abdomen whitish-ochreous, sprinkled with fuscous. Forewings elongate, rather narrow, costa gently arched, apex rounded-obtuse, termen obliquely rounded, whitish-ochreous, very finely and thinly sprinkled with fuscous; stigmata and a præternal dot very faintly indicated by similar irroration, plical beneath first discal: cilia whitish-ochreous. Hindwings pale grey irrorated with dark grey; cilia pale greyish-ochreous, with two faint fuscous shades.

Quetta, in June and July; two specimens (Nurse).

#### STENOMIDÆ.

*Agriophara argoplaca*, n. sp.

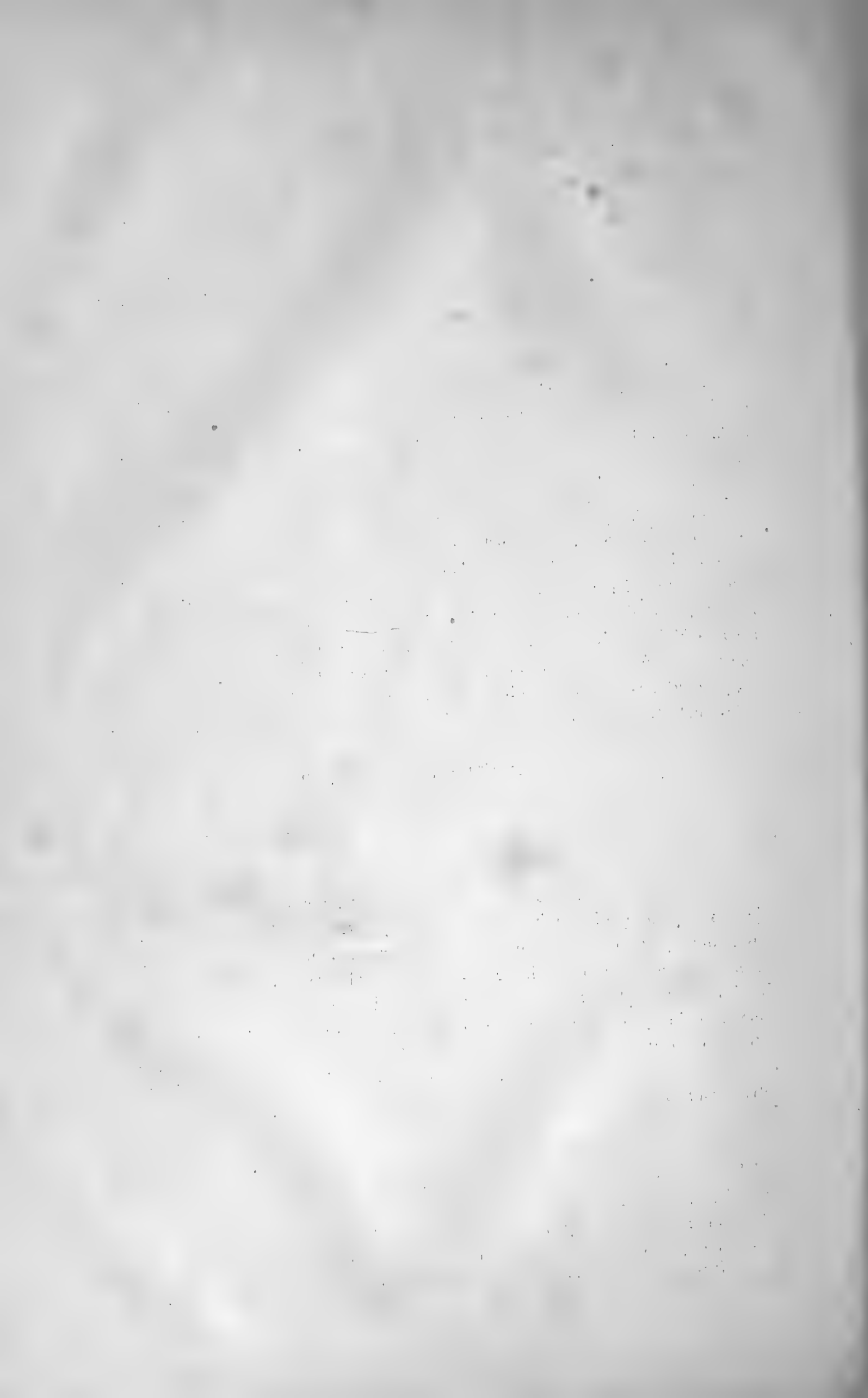
♂. 25-28 mm. Head whitish-ochreous, sides of face more or less infuscated, crown posteriorly brownish. Palpi whitish-ochreous, second joint infuscated, towards base dark fuscous. Antennæ fuscous, ciliations 7. Thorax pale fuscous. Abdomen light greyish-ochreous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen rather obliquely rounded; 2 from angle of cell; dark bronzy-brown, becoming whitish-fuscous towards dorsum and termen; a broad white patch extending along costa from near base to  $\frac{3}{4}$ , and reaching nearly half across wing, posterior edge inwardly oblique and somewhat concave; an interrupted dark fuscous terminal line: cilia pale fuscous. Hindwings and cilia whitish-fuscous.

Maskeliya, Ceylon, in March, June, and October; three specimens (de Mowbray, Pole).

*Agriophara encryphias*, n. sp.

♂ ♀. 23-24 mm. Head ochreous-whitish, crown fuscous-tinged. Palpi whitish, second joint fuscous except towards apex. Antennæ grey. Thorax fuscous mixed with whitish. Abdomen grey. Forewings elongate, moderately broad, costa anteriorly moderately, posteriorly slightly arched, apex obtuse, termen somewhat oblique, slightly rounded; 7 to termen; white, with some







scattered fuscous scales, costa ochreous-tinged, dorsal half suffused with light fuscous; very small fuscous spots on costa at  $\frac{2}{5}$  and  $\frac{3}{5}$ , giving rise to indistinct oblique series of fuscous dots on costal half of wing; cloudy subtriangular spots of dark fuscous suffusion on dorsum before middle and at  $\frac{3}{4}$ ; a terminal series of minute dark fuscous dots: cilia whitish, tinged with fuscous towards tornus. Hindwings pale grey; cilia whitish with grey subbasal line.

Khasi Hills; two specimens (Swinhoe).

ELACHISTIDAE.

*Stathmopoda hexatyla*, n. sp.

♂ ♀. 18-20 mm. Head yellow-ochreous, face paler. Palpi whitish-ochreous, base dull bronzy-grey. Antennæ pale ochreous, ciliations in ♂ 6. Thorax yellow-ochreous, with three anterior leaden-grey spots. Abdomen whitish-grey. Posterior tibiae and tarsi at apex of joints with grey spots and expanded whorls of yellow-ochreous scales. Forewings linear-lanceolate, widest near base, attenuated to acute and slightly curved apex; deep ochreous-yellow; three round metallic leaden-grey spots in disc, first almost basal, second at  $\frac{1}{3}$ , third at  $\frac{2}{3}$ : cilia pale greyish-ochreous to grey. Hindwings linear, cilia 8; pale grey; cilia pale greyish-ochreous or greyish.

Maskeliya and Madulsima, Ceylon, in April, July, and October; four specimens (Pole, Vaughan).

*Stigmatophora arachnitis*, n. sp.

♂ ♀. 14-17 mm. Head and thorax ferruginous-ochreous, face whitish, sides of crown slenderly white. Palpi whitish, second joint ferruginous except apex, terminal joint longer than second, with base and two bands blackish. Antennæ white, with blackish annulations connected by a blackish line. Abdomen grey, basal half golden-ochreous. Forewings lanceolate, apex slightly curved; 7 and 8 out of 6; ferruginous-brown; very slender white lines finely edged with black as follows, viz., an irregular line from beneath base of costa to  $\frac{1}{3}$  of disc, nearly meeting at an acute angle an oblique white mark beneath fold, a line along fold from base to beyond middle, a line along costa from near base to  $\frac{2}{3}$ , where it forms a transverse white posteriorly black-edged mark reaching nearly half across wing, and an irregular angulated line from beneath costa at  $\frac{2}{3}$  through disc almost to apex of this mark; a subtriangular leaden-grey-metallic laterally black-edged spot beneath this mark, separated from it by a light ferruginous-ochreous spot; some irregular marks between this and apex, and an elongate apical spot light ferruginous-ochreous, surrounded with fuscous suffusion; a transverse black mark from costa at  $\frac{3}{4}$ , edged posteriorly with whitish: cilia ochreous sprinkled with dark fuscous towards base, beneath tornus greyer. Hindwings grey; cilia light grey.

Maskeliya, Ceylon, in January, February, May, and July; six specimens (Pole).

*Stigmatophora notochorda*, n. sp.

♂ ♀. 10-13 mm. Head, palpi and antennæ ochreous-whitish, terminal joint of palpi with dark fuscous anterior line except towards base. Thorax light

reddish-brown, with broad ochreous-whitish dorsal stripe. Abdomen pale ochreous. Forewings narrow-lanceolate, 7 and 8 out of 6; light brown, slightly reddish-tinged; a fine costal streak from near base to  $\frac{2}{3}$ , a fine median line from base to  $\frac{2}{3}$ , a broad dorsal streak (sometimes partially broken up with ground colour) from base to tornus, and fine streaks on veins posteriorly ochreous-whitish; undefined marks of black irroration on upper edge of dorsal streak at  $\frac{1}{3}$  and beyond middle, first sometimes strong, oblique, and sometimes other scattered variable short marks of blackish irroration between veins: cilia pale ochreous-grey. Hindwings grey; cilia light grey.

Puttalam, Ceylon, from November to February; six specimens (Pole).

*Limnæcia proclina*, n. sp.

♀. 14-15 mm. Head dark bronzy-fuscous, face more or less mixed with whitish-ochreous. Palpi whitish, second joint with four, terminal joint with three longitudinal blackish lines. Antennæ whitish, ringed and lined with blackish. Thorax dark bronzy-fuscous, more or less mixed with whitish. Abdomen rather dark grey mixed with whitish-ochreous and whitish. Forewings lanceolate; dark bronzy-fuscous or blackish; a moderate oblique whitish fascia partly suffused with ochreous-yellowish about  $\frac{1}{4}$ , dilated on dorsum; an ochreous-whitish dot on middle of costa, a small spot on dorsum a little beyond it, and a small spot on costa at  $\frac{4}{5}$ , more yellowish on margin; some minute white marginal dots round apex: cilia light grey sprinkled with blackish, with a large whitish-ochreous tornal patch. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in February, March, June and October; five specimens (Pole).

#### PLUTELLIDAE.

I propose to transfer the groups of *Gracilaria* and *Zelleria* to this family, reserving discussion for the present.

*Gracilaria thriambica*, n. sp.

♂. 13 mm. Crown of head yellow, face white, each with a transverse crimson band. Palpi crimson, terminal joint of labial white, becoming ochreous-yellow towards apex. Antennæ ochreous-grey, basal joint yellow, above it a crimson ring. Thorax crimson, posterior half white. Abdomen light grey, beneath white with dark grey rings. Legs ochreous-whitish ringed with dark grey, anterior and middle femora and tibiae yellow banded with crimson. Forewings elongate, very narrow, parallel-sided, short-pointed; crimson; markings bright yellow, partially edged with black; an oblique fascia near base, a curved oblique mark from costa before  $\frac{1}{3}$ , four approximated oblique wedge-shaped marks from costa between  $\frac{2}{5}$  and  $\frac{3}{4}$ , a rounded spot on dorsum about middle, and another more trapezoidal on tornus; a black longitudinal streak in disc from beyond middle to  $\frac{5}{6}$ ; a transverse series of three yellow-ochreous dots towards apex, costal preceded and followed by white marks, median followed by a round black præapical spot: cilia pale grey, round apex yellow with basal third crimson. Hindwing grey; cilia light grey.

Maskeliya, Ceylon, in January; one specimen (Pole).

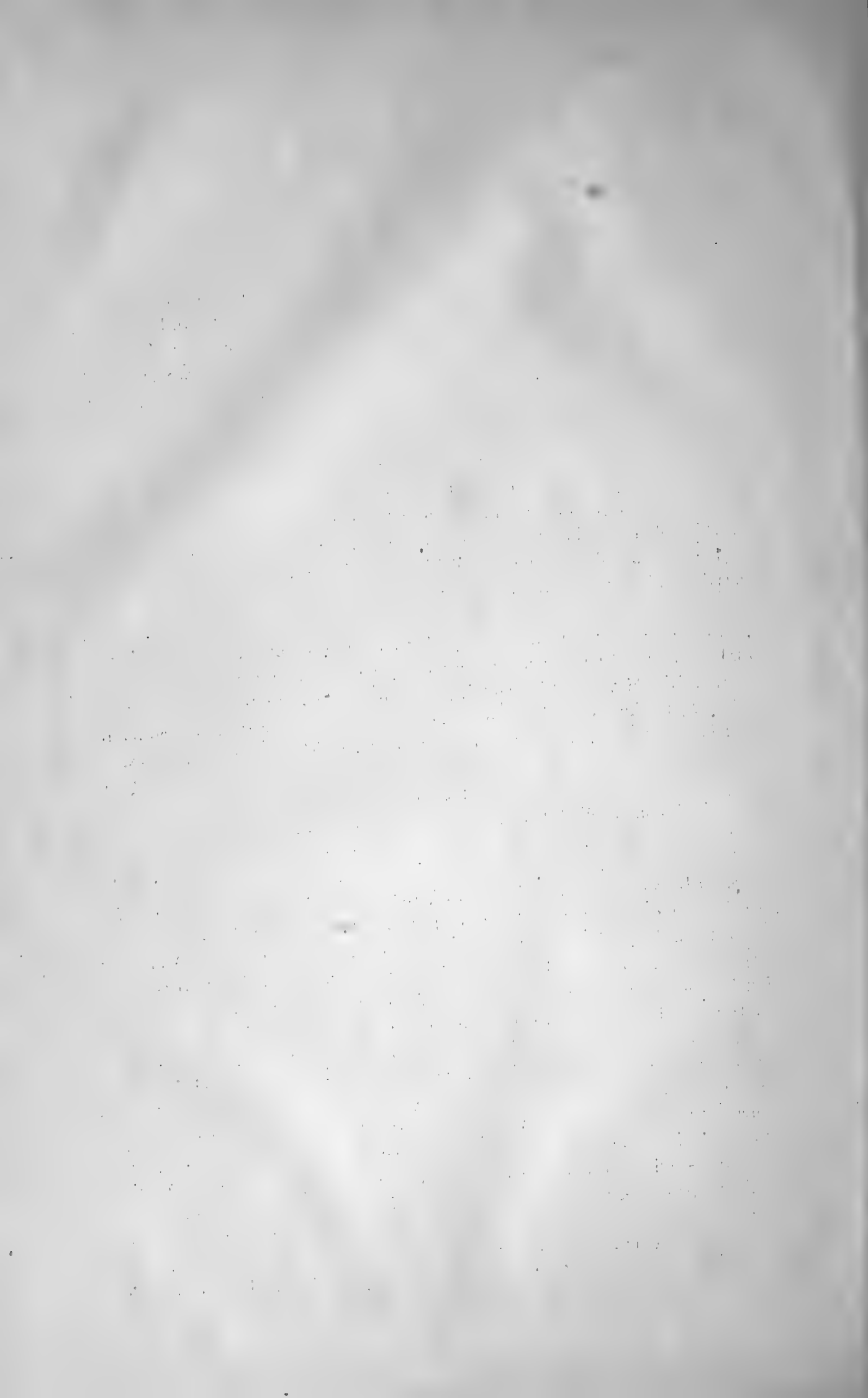
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*Coriscium hieranthus*, n. sp.

♂ ♀. 10-11 mm. Head white, crown yellowish-tinged, collar pale crimson. Palpi pale crimson, terminal joint of labial yellowish-white. Antennæ light ochreous, basal joint yellowish-white. Thorax crimson, posterior third white. Abdomen grey. Legs yellowish ringed with dark grey. Forewings sublinear, slightly narrowed posteriorly, shortly round-pointed; crimson; markings pale yellow, finely edged with blackish; a dot on costa near base, a curved oblique mark from costa at  $\frac{1}{5}$ , four approximated oblique parallel-sided marks from costa between  $\frac{2}{5}$  and  $\frac{3}{4}$ , and four semi-oval equidistant dorsal spots; a round almost apical fuscous spot, centred with black, and edged beneath by a white mark: cilia grey, at apex yellow with basal third crimson, above apex with a dark grey hook. Hindwings and cilia rather dark grey.

Maskeliya, Ceylon, in August; two specimens (de Mowbray).

*Conopomorpha isochorda*, n. sp.

♂ ♀. 6-7 mm. Head and thorax greyish-bronze, face white. Palpi white. Antennæ grey ringed with white, beneath white. Abdomen grey. Forewings linear, pointed; bronzy-grey; costal edge whitish; a series of oblique cloudy pale ochreous strigæ from dorsum, becoming obsolete towards costa; a fine whitish line from tornus to near apex; a dark grey præapical dot, extreme apex ferruginous-orange: cilia ochreous-whitish, basal third light shining rosy-purple, edged by a deep violet line. Hindwings grey; cilia ochreous-grey-whitish.

Peradeniya, Ceylon; twenty specimens (Green). Larva mines in young leaves of ebony, *Diospyros emblyopteris* (Green). Owing to the extreme slenderness and delicacy of the wings the neuration proved very difficult to ascertain, but in a denuded specimen the forewing appeared to be as follows: lb simple, 2 from  $\frac{4}{5}$ , 4 and 5 approximated from angle, 6 and 8 long-stalked, 6 to termen, 7 absent, 9 and 10 from near 8, 11 absent.

*Zelleria petrias*, n. sp.

♂ ♀. 20-21 mm. Head and thorax pale whitish-ochreous, more or less mixed with fuscous. Palpi fuscous, mixed with whitish-ochreous towards apex of joints. Antennæ grey. Abdomen grey, apex ochreous-whitish. Forewings elongate, very narrow, costa gently arched, apex acute, somewhat produced, termen sinuate, extremely oblique; 4 and 5 separate; light grey; four longitudinal series of minute black dots, first subcostal, not reaching beyond middle, others fairly complete; an oblique spot of blackish-grey suffusion above dorsum at  $\frac{2}{5}$ , and some undefined dark fuscous scales in disc at middle and  $\frac{3}{4}$ : cilia pale greyish-ochreous, on costa mixed with dark grey, at apex with a blackish basal dot. Hindwings light grey, with a small transparent basal patch; cilia whitish-ochreous-grey.

Simla, in April and May; two specimens (Nurse).

*Yponomeuta melanaster*, n. sp.

♂ ♀. 20-24 mm. Head, palpi, antennæ, and thorax grey; thorax with two black dots on shoulders, four on back, and one on posterior extremity. Abdomen dark grey. Forewings elongate, narrow, costa gently arched, apex

Transferred to  
Microlepidoptera  
B.J. XVIII

Acrocampa  
notulata, Stn  
(B.J. XVIII. 825)

obtuse, termen nearly straight, oblique; ochreous-grey; 17-21 moderate round black dots scattered throughout disc, viz., two near base, four in a subdorsal series, three or four in a subcostal series, three approximated in a curved transverse series above fold at  $\frac{1}{3}$ , one or two on fold posteriorly, and a group of from three to six towards apex: cilia ochreous-grey. Hindwings with lanceolate transparent basal patch; dark fuscous; cilia fuscous, with darker basal shade.

Puttalam, Ceylon, in December and January; two specimens (Pole).

*Pyrozela easta*, n. sp.

♂. 17-18 mm. Head, palpi, antennæ, and thorax shining white. Abdomen grey-whitish. Forewings elongate, costa moderately arched, apex obtuse, termen nearly straight, oblique, shining white; extreme base of costa blackish; a transparent patch and longitudinal groove beneath between cell and vein 12 near base, 11 bent at base to make room for this: cilia white. Hindwings and cilia whitish-grey.

Bhotan, in September; two specimens (Dudgeon).

*Pyrozela argophenes*, n. sp.

♂ ♀. 15-18 mm. Head, antennæ, and thorax white. Palpi white, apex of second joint sometimes tinged with fuscous. Abdomen light grey. Forewings elongate, moderate, costa gently arched, apex obtuse, termen rather obliquely rounded; shining white; an oblique streak of dark fuscous irroration from middle of dorsum, reaching nearly half across wing; a short fuscous mark along dorsum before tornus; sometimes a few scattered fuscous scales in disc, and on costa towards apex: cilia light brown, outer third dark fuscous. Hindwings grey, paler towards base; cilia grey-whitish, with grey basal line.

Khasi Hills; five specimens.

*Pyrozela tridelta*, n. sp.

♂ ♀. 20-24 mm. Head yellow, back of crown red. Palpi yellow, second joint mixed with red. Antennæ pale yellowish, towards base reddish-tinged, thorax yellow, anterior margin and posterior half except extremity crimson. Abdomen pale crimson. Forewings elongate, somewhat dilated, anteriorly gently, posteriorly strongly arched, apex obtuse, termen obliquely rounded; 2 and 3 stalked; crimson-fuscous, becoming bright crimson on margins of wing or of markings; markings clear yellow; a triangular blotch extending on costa from  $\frac{1}{4}$  to  $\frac{3}{5}$ , and reaching nearly half across wing; a bent streak from near dorsum towards base to near apex of costal blotch; two small spots near dorsum towards middle, first sometimes obsolete; an oblique streak from lower angle of cell to dorsum just before tornus; an irregular marginal streak round posterior fourth of costa and apex to below middle of termen: cilia yellow, on lower part of termen crimson-fuscous. Hindwings pale crimson; cilia pale crimson, at apex pale yellowish.

Khasi Hills; twelve specimens.

*Pyrozela anticlina*, n. sp.

♂ ♀. 18-19 mm. Head yellow, lower part of face and a dot on crown red. Palpi red, apex pale yellowish. Antennæ yellow. Thorax yellow, collar

THE HISTORY OF THE  
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TO THE PRESENT TIME  
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VOL. I.

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and posterior margin crimson-red. Abdomen light ochreous-rosy. Forewings elongate, costa moderately arched towards base and apex, nearly straight towards middle, apex rounded-obtuse, termen oblique, slightly rounded; rather light crimson, deeper on margins, dorsum more or less orange; costa narrowly yellow from about  $\frac{1}{4}$  to  $\frac{3}{4}$ ; an outwardly oblique yellow bar from  $\frac{1}{4}$  of dorsum, reaching nearly half across wing, and a similar inwardly oblique bar from before tornus; a yellow dot above middle of dorsum: cilia yellow, on lower half of termen crimson. Hindwings and cilia light ochreous-rosy, costal cilia pale yellowish.

Sikkim and Bhotan (1,800 feet), in May; two specimens (Dudgeon).

*Cerace sardias*, n. sp.

♀. 33-40 mm. Head and palpi blackish. Antennæ black, spotted with white. Thorax purple-blackish with scattered yellow scales. Abdomen purple-blackish with lateral series of thick yellow bars. Forewings elongate, costa strongly arched, apex obtuse, termen nearly straight, very oblique; 6 to costa; bright yellow; extreme base purple-blackish; a narrow irregular-edged deep purplish fascia, mixed with black and strewn with small bluish-lead-metallic spots, from beyond middle of costa to dorsum before tornus, including a yellow dot on costa and dorsum; apical area beyond this fascia wholly deep red, strewn with bluish-lead-metallic dots: cilia purple-blackish. Hindwings bright yellow; apical third purple-blackish, anterior edge straight; cilia purple-blackish, round tornus and dorsum yellow.

Khasi Hills; three specimens (Swinhoe).

*Simæthis sandaracina*, n. sp.

♂. 16-18 mm. Head dark grey, irrorated with white. Palpi white, sprinkled with dark grey. Antennæ white, ringed with black. Thorax dark grey, suffused with red-brown and sprinkled with white. Abdomen dark fuscous, sprinkled with whitish, apex ferruginous. Forewings elongate-triangular, costa moderately arched, apex obtuse, termen bowed, rather oblique; red-brown, posterior  $\frac{2}{3}$  of costa broadly suffused with ferruginous-ochreous; exterior half of dorsum broadly suffused with dark grey; a short fine white line from costa near base; an irregular fine white line from  $\frac{1}{3}$  of costa to before middle of dorsum, irrorated with dark grey except on costa; a very indistinct fine irregular line of grey irroration from a white spot on costa beyond middle to  $\frac{3}{4}$  of dorsum, followed on costa by a patch of dark grey irroration; a sub-terminal line of grey irroration from beneath apex to tornus: cilia dark red-brown, tips white on subapical and submedian patches. Hindwings orange-ochreous, partially suffused with ferruginous; costa rather broadly dark fuscous, dorsum rather broadly suffused with grey; cilia grey, suffused with white round apex and with red-brown on termen.

Simla, in August and September; two specimens (Nurse).

*Brenthia catenata*, n. sp.

♀. 8-9 mm. Head, antennæ, thorax, and abdomen dark fuscous. Palpi whitish, second and terminal joints with basal and subapical dark fuscous rings.

Forewings elongate-triangular, costa moderately arched, apex obtuse, termen little rounded, slightly oblique; dark fuscous; four (subbasal, first, median, and second) irregular curved transverse shades of fine whitish irroration, median forming part of a transverse-oval discal spot outlined with whitish irroration; a small blue-green-metallic spot on costa at  $\frac{1}{4}$ ; a slender partially interrupted whitish subterminal line, curved parallel to apical part of costa and termen; a series of black spots round apex and termen, centred with violet-silvery-metallic dots; cilia fuscous, with two dark fuscous shades, between which is a whitish shade. Hindwings dark fuscous; an oblique oval spot in middle of disc outlined with whitish; a subterminal whitish line, more or less interrupted below middle; a violet-metallic line between this and termen; cilia as in forewings.

Poona, in December; four specimens (Swinhoe).

*Glyphipteryx tetrachrysa*, n. sp.

♂ ♀. 9-12 mm. Head and thorax ochreous-bronzy. Palpi ochreous-whitish, second joint with two oblique black bars, scales projecting beneath towards apex, terminal joint with a black lateral line. Antennæ dark fuscous. Abdomen grey. Forewings elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen somewhat sinuate, oblique; light ochreous-bronze; markings silvery-white edged with dark fuscous, viz., a streak from base to near dorsum before middle, an oblique streak from  $\frac{1}{2}$  of costa reaching to fold, a slightly bent transverse streak from  $\frac{2}{5}$  of costa to beyond middle of dorsum, a slightly inwards oblique streak from costa beyond middle reaching nearly half across wing, a slightly incurved transverse streak from beyond  $\frac{2}{3}$  of costa to before tornus, a sometimes interrupted streak from  $\frac{3}{4}$  of costa to termen beneath apex, and a short streak across apex; between the last two streaks and the preceding transverse streak a black tornal patch extending nearly to costa, upper portion crossed and obscured by several longitudinal irregular pale ochreous streaks, lower portion marked with four small round golden-metallic dots, of which three are marginal and one above and between the two anterior of these: cilia whitish, basal half ochreous-bronze edged with dark fuscous, with a whitish indentation on termination of metallic streak. Hindwings dark grey, lighter anteriorly; cilia grey.

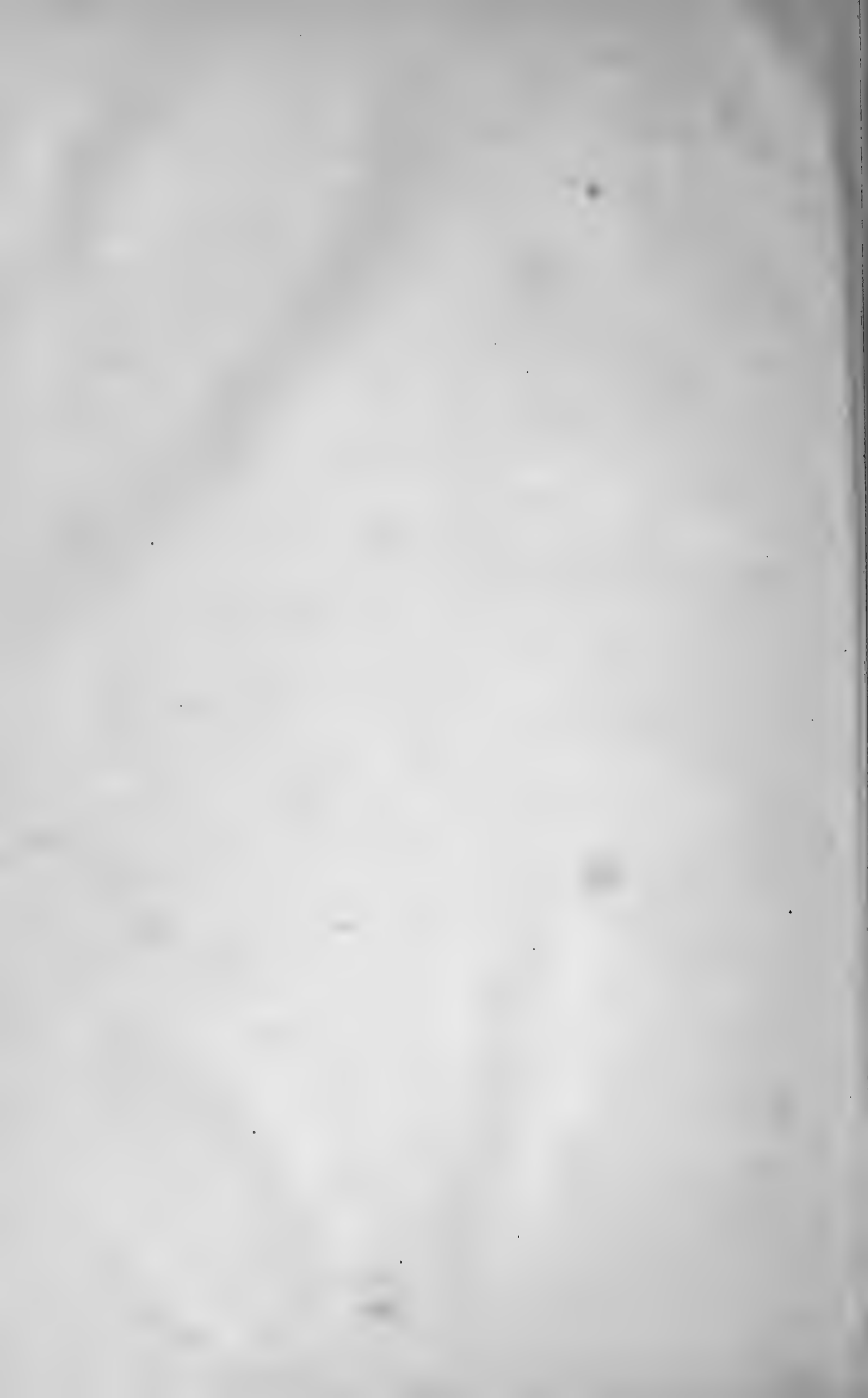
Maskeliya, Ceylon, in January and February; six specimens (Pole).

*Automachæris*, n. g.

Head loosely hairy on crown, face smooth; tongue developed. Antennæ  $\frac{2}{5}$ , in ♂ simple-basal joint elongate, somewhat dilated, with pecten of scales. Labial palpi long, recurved, second joint with appressed scales somewhat angularly dilated beneath at apex, terminal joint as long as second, with appressed scales, acute. Maxillary palpi obsolete. Anterior tibiae and tarsi dilated with rough scales, posterior tibiae with appressed scales. Forewings with tufts of scales on surface; 2 from towards angle, 2-10 approximated, parallel, 7 to apex, 7 and 8 closely approximated, 11 from before middle. Hindwings 1, elongate-lanceolate, cilia  $1\frac{1}{2}$ ; 2 remote, 3 and 4 connate, 5-7 nearly parallel.

Allied to *Cerostoma*.





*Automachæris epichlora*, n. sp.

♂ ♀. 20-22 mm. Head and thorax whitish, sprinkled with pale ochreous. Palpi, antennæ, and abdomen ochreous-whitish, palpi with a few fuscous specks. Forewings elongate-lanceolate, apex caudate, subfalcate; ochreous-whitish, sprinkled with pale ochreous scales, sometimes tipped with fuscous, especially posteriorly, with a few minute black specks; three transversely placed pairs of small black dots, at about  $\frac{1}{5}$ , before middle, and at  $\frac{2}{3}$ , lower dot of each pair subdorsal, preceded by a tuft of scales, upper dot of first two pairs discal, of third costal: cilia whitish, more or less speckled with dark fuscous round apex, with some minute black dots at base, a median dark line round apex, and sometimes a median series of undefined dark dots. Hindwings and cilia whitish.

Khasi Hills; five specimens.

## TINEIDÆ.

*Opogona amphicausta*, n. sp.

♂. 11-12 mm. Head dark purplish-fuscous on crown; face, fillet, antennæ and palpi whitish-ochreous. Thorax dark purplish-fuscous. Abdomen light bronzy-grey. Posterior tarsi with whorls of projecting bristles at joints. Forewings lanceolate; bright brassy-yellow; base and apex rather narrowly dark purplish-fuscous; a small dark bronzy-fuscous dorsal spot before tornus, sometimes almost obsolete: cilia fuscous. Hindwings dark grey; cilia fuscous. Maskeliya, Ceylon, in January and February; two specimens (Pole).

*Agriothera*, n. g.

Head densely tufted on crown, face smooth; tongue developed. Antennæ over 1, basal joint rather large, dilated with scales. Labial palpi rather long, slender, smooth-scaled, slightly curved, porrected, terminal joint shorter than second, pointed. Maxillary palpi obsolete. Posterior tibiæ clothed with long hairs above and beneath. Forewings with 1 b furcate, 2 from angle, 7 to costa, 8 absent, 11 from beyond middle. Hindwings 1, subtrapezoidal, apex pointed, produced, termen sinuate, cilia  $\frac{4}{5}$ ; 4 absent, 5-7 parallel, transverse vein very oblique inwards.

*Agriothera melanacma*, n. sp.

♂. 13 mm. Hairs of crown white, posteriorly greyish-tinged, in centre dark grey, face whitish, sprinkled with grey. Palpi dark grey, terminal joint white. Antennæ and thorax grey. Abdomen pale grey. Forewings elongate, narrow, costa gently arched, apex pointed, produced, termen concave, very oblique; bronzy-fuscous, irrorated with dark fuscous, towards costa mixed with grey-whitish; an irregular white streak beneath middle from base almost to termen; lower edge with an abrupt indentation before middle; margin of apex and upper half of termen black, preceded by a curved white mark in apex, and some irregularly arranged white scales before this: cilia whitish, with dark fuscous antemedian shade, and subapical shade round apex. Hindwings grey, thinly scaled, except towards termen; cilia pale grey, tips whitish.

Maskeliya, Ceylon, in July; one specimen (Pole).

*Endophthora phepsalias*, n. sp.

♂. 9 mm. Head yellow-ochreous. Palpi dark fuscous, base and apex of terminal joint whitish. Antennæ 1, grey. Thorax golden. Abdomen grey. Forewings elongate, very narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded, 6 and 7 stalked; bright golden, toward costa suffused with dark bronzy-fuscous; six short white oblique strigulae on posterior half of costa; about twenty-five small white dots irregularly strewn in disc; about twelve small white dots along dorsum and termen, mostly accompanied by small raised or projecting black dots: cilia pale whitish-golden. Hindwings and cilia grey.

Maskeliya, Ceylon, in February and May; two specimens (Pole).

*Decadarchis*, Meyr.

Head densely rough-haired, tongue obsolete. Antennæ  $\frac{5}{6}$ , in ♂ simple, sometimes with subbasal notch, basal joint moderate, thickened with scales. Labial palpi moderate, slightly curved, subascending, second and terminal joints with dense tufted fringe of very long projecting scales beneath, terminal joint short. Maxillary palpi long, filiform, folded. Posterior tibiae clothed with long hairs above and beneath. Forewings with 1 b furcate, 2 from about  $\frac{1}{3}$ , 3 from angle, 6 absent, 7 to costa, 8 absent, 11 from before middle, apex turned up in repose. Hindwings 1, ovate-lanceolate, cilia 1; 2-4 parallel, 5 and 6 stalked, 6 to costa, 7 parallel.

I am now able to re-constitute this genus as a good and natural one, well characterised by the peculiar palpi. Besides the type *D. simulans*, I refer to it the Australian *mystacinella*, Walk., and the three following species.

*Decadarchis platydelta*, n. sp.

♂ ♀. 18-27 mm. Head white. Palpi white, externally somewhat mixed with dark fuscous. Antennæ whitish-grey. Thorax white, with a fuscous curved mark near posterior extremity. Abdomen whitish or pale grey. Forewings elongate, narrow, costa moderately arched, apex acute, termen sinuate, extremely oblique; white, with a few scattered ochreous and brown scales; two flattened-triangular dark fuscous dorsal blotches, not reaching half across wing, first extending from near base to before middle, second larger, extending from beyond middle to tornus, enclosing a spot of whitish suffusion; an irregular dark fuscous apical dash, sometimes incomplete: cilia white, with two dark fuscous lines more or less obsolete except round apex, tips suffused with brownish. Hindwings grey, paler towards base; cilia whitish-grey, more or less suffused with white round apex.

Ceylon (North Central Province), in November; four specimens (Pole).

*Decadarchis antimicras*, n. sp.

♀. 14-22 mm. Head white. Palpi white, externally somewhat mixed with dark fuscous. Antennæ whitish, sometimes tinged with dark fuscous. Thorax white, with a curved fuscous mark before posterior extremity. Abdomen whitish. Forewings elongate, narrow, costa moderately arched, apex acute, termen sinuate, extremely oblique; white with scattered dark fuscous scales;







two triangular dark fuscous spots on dorsum before middle and before termen, not reaching half across wing; small oblique dark fuscous spots on costa at  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$ ; a small dark fuscous spot in disc at  $\frac{1}{3}$ , sometimes connected with apex of first dorsal spot; an elongate dark fuscous spot before middle of termen and another at apex; dorsal and posterior area sometimes much suffused with fuscous: cilia white, sprinkled with dark fuscous, above apex with two dark fuscous lines. Hindwings grey, lighter towards base; cilia whitish-grey, more or less suffused with white round apex.

Peradeniya, Udagama, and Matale, Ceylon, from October to February; four specimens (Pole).

*Decadarchis gephyrias*, n. sp.

♂♀. 12-18 mm. Head and thorax ochreous-whitish, shoulders dark fuscous. Palpi dark fuscous, apex of second and terminal joints whitish. Antennæ ochreous-whitish, ringed with dark fuscous. Abdomen ochreous-whitish. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen hardly rounded, extremely oblique; pale whitish-ochreous, with a few scattered dark fuscous scales; a broad dark purplish-fuscous streak mixed with black from base of costa through middle of disc to apex, connected by broad bars with costa about  $\frac{1}{4}$  and  $\frac{3}{4}$ , so as to enclose three semi-oval costal blotches of ground colour, central much largest and containing a small undefined blackish spot on middle of costa: cilia ochreous-whitish, sprinkled with dark fuscous, round apex with dark fuscous basal line. Hindwings grey, darker towards apex; cilia grey or whitish-grey.

Maskeliya, Ceylon, in May; two specimens (Pole).

*Pylætis*, n. g.

Head rough-haired; tongue developed. Antennæ  $\frac{1}{6}$ , basal joint moderate thickened with scales. Labial palpi moderate, porrected, second and terminal joints clothed with long rough projecting scales beneath, terminal joint short. Maxillary palpi moderate, porrected, loosely rough-scaled. Posterior tibiae clothed with long hairs above. Forewings with 1 b furcate, 2 from  $\frac{4}{5}$ , 3 from angle, 7 to costa, 8 absent, 11 from before middle. Hindwings  $\frac{2}{3}$ , linear-lanceolate, cilia 2; 2-4 parallel, 5 and 6 stalked, 6 to termen, 7 parallel.

*Pylætis ophionota*, n. sp.

♀. 13-19 mm. Head and palpi blackish-fuscous, hairs of crown whitish-ochreous above. Antennæ whitish-ochreous, basal joint blackish. Thorax dark fuscous, with broad whitish-ochreous dorsal stripe. Abdomen pale ochreous. Forewings elongate, very narrow, costa gently arched, apex acute, termen slightly sinuate, extremely oblique; blackish-bronze; a fine whitish ochreous streak along dorsum and termen throughout, upper edge five or six times irregularly sinuate: cilia whitish-ochreous with some scattered blackish points, on costa blackish-bronze except extreme base. Hindwings rather dark fuscous; cilia fuscous, becoming paler and sometimes whitish-ochreous towards upper half of termen.

Matale and Puttalam, Ceylon, in April and October; five specimens (Pole).

*Mimosa*, Stt  
= *Seminivna*, Stt  
= *ophionota*, Meyr

*Crypsithyris*, n. g.

Head densely rough-haired ; tongue obsolete. Antennæ 1 or over 1, in ♂ simple, basal joint moderate, with pecten. Labial palpi moderately long, porrected, second joint beneath somewhat roughly scaled towards apex, with several long bristles, terminal joint shorter than second, pointed. Maxillary palpi long, filiform, folded. Posterior tibiæ clothed with long fine hairs. Forewings with round discal impression in cell ; 1 b simple, 2 from angle, 4 and 5 stalked, 7 and 8 stalked, 7 to costa, 9 absent, 11 from beyond middle, on discal impression. Hindwings  $\frac{2}{3}$ , lanceolate, cilia 2 ; 2-7 parallel, or 5 and 6 stalked, upper margin of cell mostly obsolete, sometimes transverse vein absent between 3 and 7, then 4 and stalk of 5 and 6 also becoming obsolete anteriorly.

Type *C. mesodyas*. Allied to *Monopis*, of which it has the discal impression of forewings, but not the characteristic stalking of veins 3 and 4 ; the long antennæ are also a distinguishing point. Besides the following, *amandatella*, Walk., and *fissella*, Walk., described under *Tinea*, are referable here.

*Crypsithyris orchas*, n. sp.

♀. 12-14 mm. Head pale yellow-ochreous. Palpi whitish-ochreous, suffused with dark fuscous except towards apex. Antennæ light fuscous. Thorax whitish-ochreous, sprinkled with dark fuscous. Abdomen whitish-ochreous. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen very oblique ; pale ochreous-yellowish, sprinkled with dark fuscous ; an oblique cloudy dark fuscous mark from base of costa ; discal impression semitransparent ; a transverse cloudy dark fuscous spot from dorsum beneath discal impression, not quite reaching it ; a similar larger spot from middle of costa, passing just behind discal impression and reaching its lower edge ; some undefined small cloudy dark fuscous spots round apex and termen : cilia ochreous-yellow, at base with a few dark fuscous scales. Hindwings with transverse vein absent between 3 and 7, 5 and 6 stalked ; light grey, apex yellowish-tinged ; cilia pale yellowish.

Maskeliya and Peradeniya, Ceylon, in February, May, and July ; seven specimens (Pole, Green).

*Crypsithyris mesodyas*, n. sp.

♂ ♀. 9-10 mm. Head whitish. Palpi white, externally dark fuscous except towards apex. Antennæ pale fuscous. Thorax whitish, irrorated with fuscous. Abdomen grey. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded ; whitish, variably irrorated with ochreous-brown and towards costa with dark fuscous ; an oblique cloudy brown subbasal fascia ; discal impression semitransparent ; two round cloudy spots of ochreous-brown suffusion, irrorated with dark fuscous beneath and beyond discal impression : cilia whitish, with rows of brown and dark fuscous points. Hindwings with transverse vein entire ; dark grey ; cilia ochreous-whitish, sometimes suffused with grey towards base.

Peradeniya, Ceylon, from March to May ; twelve specimens (Green). Larva in a portable case, feeding on lichens under rock-ledges and on tree-

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Indian Micro-Lepidoptera.

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trunks (Green) ; case consisting of a broad elliptic-oblong arched upper roof (12 mm. long, 5 mm. broad), with four neat round holes arranged midway between corners and centre, and a slighter and less extensive floor beneath this, constructed of silk covered with lichen-grains and refuse, colour varying from grey-whitish to greyish-ochreous ; the lateral connections outside the perforations are often worn away.

*Crypsithyris hypnota*, n. sp.

♀. 13 mm. Head whitish-ochreous, sides of face mixed with fuscous. Palpi whitish-ochreous, irrorated with fuscous, except towards apex. Antennæ whitish-ochreous, ringed with fuscous. Thorax whitish-ochreous, irrorated with fuscous, shoulders with a dark fuscous spot. Abdomen grey. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded ; whitish-ochreous, irrorated with fuscous and dark fuscous ; base suffused with dark fuscous ; a streak of dark fuscous suffusion along fold from base to beneath discal impression ; discal impression semi-transparent, followed by a round cloudy spot of dark fuscous suffusion : cilia whitish-ochreous, sprinkled with dark fuscous. Hindwings with transverse vein entire ; grey ; cilia pale whitish-ochreous, mixed with pale grey towards base.

Peradeniya, Ceylon, in February ; one specimen (Green). Larva case-bearing, feeding on lichens under rock-ledges (Green) ; case tortoise-shaped, consisting of a broad oval arched upper roof (13 mm. long, 10 mm. broad) of silk covered with sand and refuse, whitish-grey mixed with brown and black, and a less extensive lower floor of whitish silk.

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icella, red. c.; Meyer. P. h. in J. N. H. XXXVI 285 (1911)



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June 29, 1907.]

## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

E. MEYRICK, B.A., F.R.S., F.E.S.

IV.

(Continued from page 754 of this Volume.)

Fuscina 12

EPIBLEMIDÆ.

*Lobesia æolopa*, n. sp.

♂ ♀. 10-12 mm. Head and thorax ochreous mixed with brown. Abdomen dark grey. Forewings elongate, narrow at base, gradually dilated, costa slightly arched, apex obtuse, termen slightly rounded, oblique; pale ochreous, with a few scattered blackish strigulæ; costa strigulated with blackish; basal patch irregularly suffused with brown sprinkled with blackish, outer edge obtusely angulated in middle, followed on dorsum by a dark grey triangular blotch reaching more than half across wing; central fascia brown, mixed with blackish on upper half, posterior edge with a large irregular prominence below middle; a small dark fuscous spot on costa at  $\frac{2}{3}$ , surrounded with some brown suffusion; a more or less defined triangular spot of dark grey suffusion on dorsum before tornus, whence an irregular line of blackish grey scales proceeds towards costa; a suboval brown transverse blotch resting on lower half of termen; a small brown apical spot: cilia pale ochreous, with a brown basal line. Hindwings dark grey, in ♂ thinly scaled throughout, in ♀ towards base only; cilia grey, with darker basal line.

Ten specimens, Maskeliya and Peradeniya, Ceylon; Bombay; from November to May (Pole, Green, Young). Closely related and similar to the European *L. permixtana*, but in that species the ♂ has white hindwings. Veins 3 and 4 of hindwings appear to be connate in ♂ but closely approximated in ♀.

*Articolla*, n. g.

Antennæ in ♂ simple. Palpi moderate, porrected, densely scaled. Thorax with posterior crest. Posterior tibiæ clothed with rough projecting scales above and beneath. Forewings with small tufts of raised scales; 8 and 9 stalked. Hindwings with 3 and 4 stalked, 5 approximated, 6 and 7 stalked.

Allied to *Platyplus*, from which it differs by the stalking of 8 and 9 of forewings.

*Articolla cyclidias*, n. sp.

♂. 13-14 mm. Head and palpi dark grey, crown light ochreous or reddish. Thorax fuscous, dorsally more or less ochreous, sides dark fuscous. Abdomen dark grey, anal tuft whitish-ochreous. Forewings elongate-triangular, costa gently arched, apex obtuse, termen slightly rounded, rather oblique; dark fuscous, sprinkled with blackish; a narrow patch of pale ochreous suffusion on dorsum from  $\frac{1}{4}$  to beyond middle; a large roundish ochreous-whitish blotch occupying apical  $\frac{2}{3}$  of wing, containing a central spot of ochreous suffusion, costal and terminal edges with some dark fuscous dots: cilia dark fuscous mixed with ferruginous, with a blackish basal line. Hindwings and cilia dark grey.

Three specimens, Maskeliya, Peradeniya, and Matale, Ceylon, in October, January, and April (Pole, de Mowbray, Green).

*Eucosma cerographa*, n. sp.

♂. 10-12 mm. Head and palpi pale yellowish-ochreous. Thorax pale ochreous mixed with blackish. Abdomen dark grey, apex pale ochreous. Forewings elongate, moderate, posteriorly somewhat dilated, costa gently arched, apex obtuse, termen slightly rounded, oblique; light yellowish-ochreous, with several pairs of irregular glistening ochreous-whitish transverse striæ, enclosing a few fine scattered black scales, and separated on costa by small blackish spots and strigulæ; basal patch ill-defined, blackish, with acute angular projections on costa and dorsum and in middle; central fascia represented by a subquadrate blackish spot on middle of costa, and a group of undefined blackish marks before tornus: cilia pale yellowish-ochreous, with a blackish apical patch. Hindwings and cilia dark grey.

Eight specimens, Maskeliya, Ceylon, in March and April (Pole).

## TORTRICIDÆ.

*Cucaccia cumulata*, n. sp.

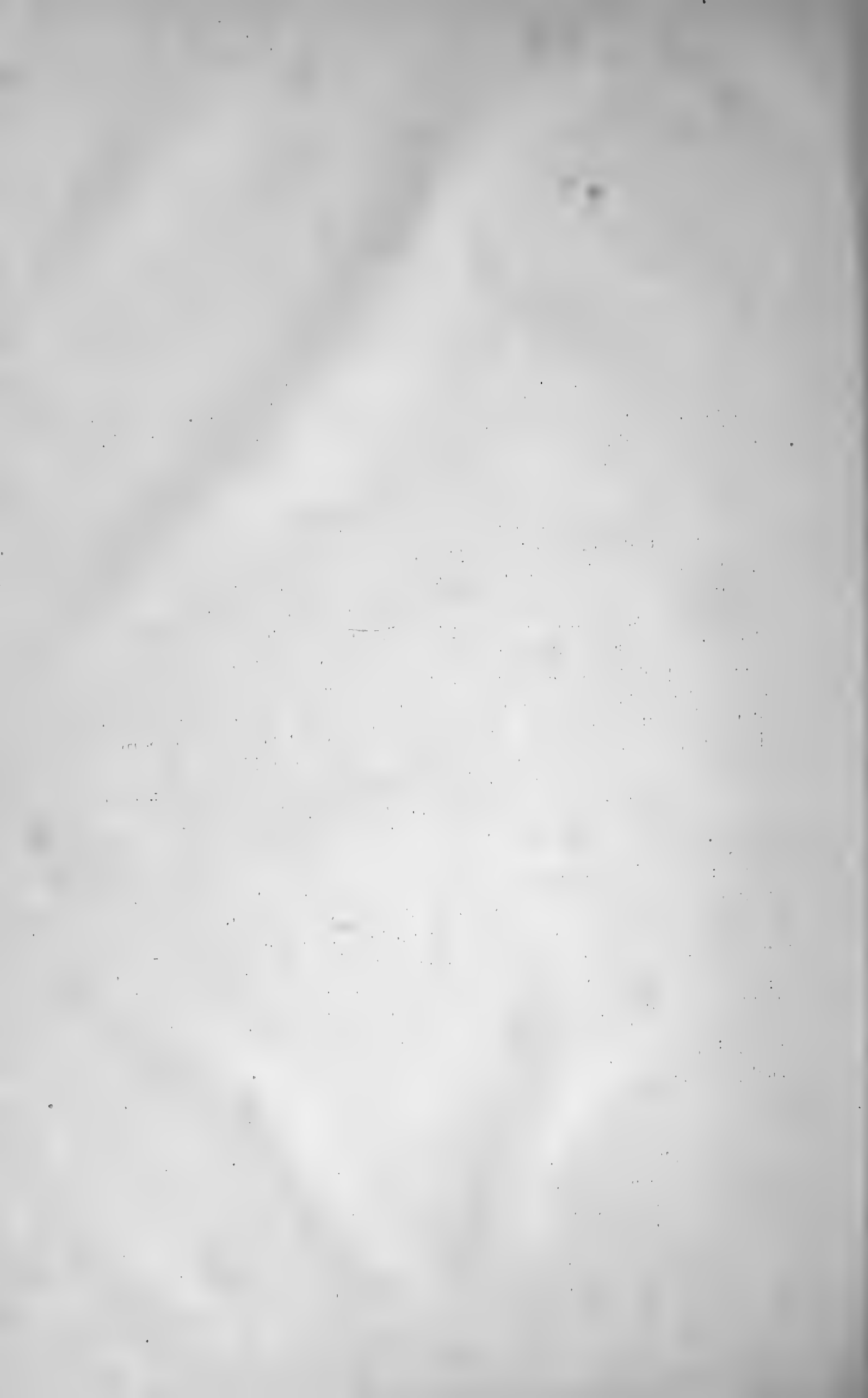
♂ ♀. 11-15 mm. Head, palpi, and thorax brown-reddish sprinkled with whitish-ochreous. Abdomen grey. Forewings suboblong, costa anteriorly strongly arched, prominent and dilated with rough scales in middle, concave on posterior half, apex obtuse, termen vertical, rounded beneath; brown-reddish, with some scattered blackish scales, and several oblique irregular transverse whitish-ochreous striæ: cilia whitish-ochreous, with a brown-reddish line. Hindwings and cilia grey, in ♀ darker; 3 and 4 stalked.

Twenty specimens, Maskeliya, Madulsima, Kaduganawa, Ceylon; Coorg (3,500 feet); from February to May, and in August and September (Pole, de Mowbray, Green, Vaughan, Newcome).

*Epagoche probolias*, n. sp.

♂ ♀. 10-14 mm. Head and thorax whitish-ochreous, partially tinged with brownish-ochreous. Palpi pale ochreous, more or less infuscated basally, second joint broadly rough-scaled above and beneath. Forewings elongate, costa gently arched, apex obtuse, termen faintly sinuate, oblique; whitish-ochreous, more or less strigulated with brownish or fuscous; markings ochreous-fuscous; basal patch indicated chiefly by an oblique transverse spot





from dorsum near base, reaching half across wing; central fascia entire, oblique, nearly of equal width throughout, posterior edge suffused on lower half, often followed in middle by a distinct dark fuscous or black dot; costal patch semioval: cilia whitish-ochreous, with a fuscous line. Hindwings pale grey, strigulated with darker; cilia grey-whitish, with a grey shade.

Fifteen specimens, Maskeliya, Ceylon; Travancore, Palni Hills (6,000 feet), Coorg (3,500 feet); from January to April, and in September (Pole, de Mowbray, Campbell, Newcome).

*Drachmobola*, n. g.

Antennæ in ♂ shortly ciliated. Palpi moderate, porrected, second joint rough-scaled beneath. Forewings with tufts of scales on surface, and dorsal projecting tufts; 7 to termen, 8 and 9 out of 7. Hindwings with 3 and 4 connate, 5 approximated, 6 and 7 stalked.

Allied to *Epagoge* and to the following genus.

*Drachmobola periastra*, n. sp.

♂ ♀. 12-13 mm. Head, thorax, and abdomen whitish-ochreous. Palpi ochreous-whitish. Forewings elongate-oblong, costa moderately arched, apex round-pointed, termen concave, little oblique; pale ochreous, more or less strigulated with deeper ochreous; basal patch, central fascia, and a narrow terminal fascia more or less obscurely indicated by undefined deeper yellow-ochreous suffusion; about twenty scattered variable small silvery-metallic spots, mostly arranged along dorsum and in four irregular curved or bent transverse series; sometimes a large tornal patch of rather dark fuscous suffusion: cilia pale ochreous, suffused with brownish-ochreous towards tornus. Hindwings ochreous-whitish, posterior half suffused with pale fuscous and strigulated with darker; a patch of ferruginous-ochreous suffusion on tornus, containing three small silvery-metallic spots and sometimes partly suffused with dark fuscous.

Fifteen specimens, Khasi Hills, in June.

*Spatalistis*, n. g.

Antennæ in ♂ simple. Palpi moderately long, porrected, second joint rough-scaled above and beneath. Forewings with tufts of scales on surface, in ♂ sometimes with expansible brush of hairs from towards costa anteriorly, but without membranous fold; 3 and 4 stalked, 7 to termen. Hindwings with 3 and 4 stalked, 5 approximated, 6 and 7 closely approximated towards base.

Type *S. rhopica*.

*Spatalistis paryphcea*, n. sp.

♂ ♀. 14-17 mm. Head and thorax pale yellowish, mixed with ferruginous-orange, in ♀ sometimes partly infuscated. Palpi pale ferruginous. Abdomen whitish-ochreous, in ♀ more or less greyish-suffused. Forewings elongate-oblong, costa gently arched, apex pointed, termen concave, rather oblique, in ♂ with expansible brush of hairs towards costa anteriorly; ferruginous-reddish, somewhat mixed with pale yellowish towards dorsal half posteriorly, suffused

with fuscous on basal half and along costa posteriorly and termen, and sometimes wholly except a small round yellow spot in disc at  $\frac{2}{3}$ ; oblique striæ of purplish-leadensuffusion, seldom forming distinct spots and alternating with incomplete series of dots of blackish raised scales: cilia pale yellow, on costa and dorsum ferruginous, at tornus suffused with grey. Hindwings pale greyish-ochreous, anteriorly semitransparent, apex suffused with fuscous; cilia whitish-ochreous, more brownish-tinged towards base.

Eight specimens, Khasi Hills, in June.

*Spatalistis cyanoxantha*, n. sp.

♂ ♀. 8-10 mm. Head and palpi orange-yellow. Thorax orange suffused with brown. Abdomen grey. Forewings elongate-oblong, costa gently arched, apex round-pointed, termen concave, oblique; orange strigulated with darker, suffused with fuscous except towards costa and termen; two spots at base and four angulated transverse series of about four rounded leaden-blue-metallic spots each, alternating with some small blackish tufts; some pale golden metallic dots on posterior half of costa and termen: cilia clear yellow, beneath tornus orange becoming fuscous on dorsum. Hindwings rather dark grey; cilia grey, round apex and upper half of termen whitish-yellowish.

Three specimens, Maskeliya, Ceylon, from April to June (de Mowbray, Pole).

*Spatalistis hormota*, n. sp.

♂ ♀. 15-17 mm. Head, palpi, and thorax light ochreous-yellowish. Abdomen whitish-ochreous. Forewings oblong, costa moderately arched, apex round-pointed, termen concave, rather oblique; light ochreous-yellowish, finely strigulated with deeper ochreous; a slender slightly incurved deep yellow-ochreous streak, sometimes sprinkled with a few dark fuscous points, from apex of wing to  $\frac{2}{3}$  of dorsum, continued along dorsum to near base: cilia pale whitish-yellow, with traces of an ochreous line. Hindwings whitish-ochreous, posteriorly broadly suffused with fuscous-ochreous, apex more fuscous; cilia whitish-ochreous, round apex and upper part of termen whitish-yellowish.

Twenty specimens, Khasi Hills, in June and July.

*Spatalistis rhopica*, n. sp.

♂ ♀. 14-16 mm. Head, palpi and thorax light yellowish. Abdomen grey. Forewings suboblong, costa moderately arched, apex round-pointed, termen concave, rather oblique; pale yellowish, finely strigulated with light ochreous; about seven oblique transverse series of silvery-metallic dots; small discal tufts above middle at  $\frac{1}{4}$  and  $\frac{1}{2}$ , sometimes tipped with dark ferruginous-fuscous; often a large deep ferruginous semioval blotch extending along dorsum from  $\frac{1}{4}$  to beyond tornus, posteriorly reaching more than half across wing and with an oblique projection inwards, but this blotch is sometimes wholly absent: cilia whitish-yellowish, at tornus sometimes ferruginous or dark grey. Hindwings whitish-fuscous or grey, posteriorly more or less suffused with brown or dark fuscous; cilia grey, round apex and upper half of termen whitish-yellowish, basal half more or less ferruginous-tinged.

Fifteen specimens, Khasi Hills, in June.







*Diactenis*, n. g.

Antennæ in ♂ moderately ciliated. Palpi moderate, porrected, second joint above with rough projecting scales diminishing to apex. Forewings with raised scales on surface; 1b simple, 3 and 4 closely approximated from angle, 7 to termen, cell in ♂ very short and narrow. Hindwings  $\frac{1}{2}$ , cilia  $1\frac{1}{4}$ ; 3 and 4 separate, cell open between 4 and 6, 4 and 5 rising as branches of parting-vein from near base, 6 and 7 as branches of upper margin of cell from before middle.

Apparently allied to *Tortrix*, but the narrow hindwings with long cilia, the reduction in the cell and consequent increase in length of veins, and the curious scale-distribution make it seem abnormal.

*Diactenis pteroneura*, n. sp.

♂ ♀. 8-10 mm. Head and thorax ochreous-white, more or less tinged with yellow-ochreous. Abdomen grey, apex whitish-ochreous. Forewings suboblong, costa moderately arched, more strongly in ♂, apex obtuse-pointed, termen obliquely rounded; whitish-ochreous, pellucid between veins except towards margins, veins fringed with ochreous and dark fuscous scales; a more or less developed suffused spot of ochreous and blackish scales on or towards dorsum at  $\frac{1}{4}$ ; upper half of central fascia more or less defined, ochreous, suffused with blackish on costa; a more or less indicated curved transverse series of blackish specks in disc posteriorly; costa posteriorly sometimes dotted with dark fuscous: cilia whitish-ochreous, on costa mixed with dark fuscous. Hindwings pellucid, veins fringed with whitish and grey scales, apex and termen more or less suffused with grey; cilia ochreous-whitish.

Ten specimens, Maskeliya and Madulsima, Ceylon; Coorg (3,500 feet); from February to October (Pole, Vaughan, Newcome).

*Paratorna*, n. g.

Antennæ in ♂ minutely ciliated. Palpi moderate, second joint curved, ascending, with tolerably appressed scales, terminal joint moderate, oblique. Anterior tibiæ and tarsi very short, stout. Forewings with tufts of raised scales, apex obliquely rounded and termen prominent, so that apparent apex is on vein 5. Hindwings with 3 and 4 stalked, 5 approximated, 6 and 7 closely approximated towards base.

Related to *Oxygrapha*.

*Paratorna dorcas*, n. sp.

♂ ♀. 12-16 mm. Head and thorax reddish-brown. Abdomen dark fuscous. Forewings elongate, costa strongly arched throughout in a continuous even curve from base almost to tornus, somewhat roughened with scales towards middle; varying from pale whitish-fuscous to dark red-brown, more or less strigulated with ferruginous or variably mottled with reddish-fuscous, always with a dark reddish-fuscous streak along costa throughout from base to tornus; sometimes a thick dark fuscous streak along dorsum, or a large dark fuscous rounded dorsal blotch extending from base to tornus and reaching more than half across wing; sometimes some scattered silvery-white dots,

a transverse silvery-white mark in disc before middle, and an oblique mark before apex, apparently only in ♂; sometimes several dots of raised black scales in disc: costal cilia ferruginous-orange throughout from base to apparent apex, beneath this fuscous. Hindwings dark fuscous; cilia grey, base darker, round apex whitish or orange-tinged.

Eighteen specimens, Khasi Hills, in June. This is a highly variable species, but easily recognised.

#### PHALONIADÆ.

*Meridarchis bryodes*, n. sp.

♂ ♀. 19-21 mm. Head and thorax whitish tinged with green, and somewhat sprinkled with grey. Palpi white, basal and lower half of second joint blackish-grey. Abdomen grey. Forewings elongate, rather narrow, somewhat dilated, costa slightly arched, apex obtuse, termen slightly rounded, rather oblique; green-whitish, sprinkled with dark grey; costa and termen dotted with blackish; a blackish transverse bar on end of cell, parallel to termen; a spot of dark grey suffusion on dorsum towards tornus; an irregular ill-defined subterminal line of dark grey suffusion from  $\frac{5}{6}$  of costa to tornus: cilia grey barred with whitish. Hindwings and cilia light grey.

Two specimens, Khasi Hills, in June.

#### GELECHIADÆ.

*Ypsolophus ochrophanes*, n. sp.

♂ ♀. 11-13 mm. Head and thorax light ochreous-yellow, crown centrally greyish-tinged. Palpi blackish-grey sprinkled with whitish, tuft long, terminal joint ochreous-whitish, anterior edge blackish. Antennæ whitish-ochreous, ringed with blackish. Abdomen grey. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded; ochreous-yellow; dorsal half of wing, a patch on costa beyond middle, a cloudy subterminal line, and a streak along termen more or less irrorated with fuscous, sometimes largely suffused together; discal stigmata blackish: cilia ochreous-yellowish. Hindwings light grey, veins dark grey; cilia whitish-grey.

Seven specimens, Ambulangoda and Puttalam, Ceylon; Pusa, Bengal; from August to November (Pole, Maxwell-Lefroy).

*Ypsolophus eridantis*, n. sp.

♂ ♀. 17-20 mm. Head and thorax ochreous-whitish irrorated with light fuscous, thorax sometimes partially suffused with rather dark fuscous. Palpi dark fuscous sprinkled with whitish, tuft long, terminal joint white with three black lines. Antennæ pale greyish-ochreous dotted with dark fuscous. Abdomen whitish-ochreous irrorated with fuscous. Forewings elongate, rather narrow, slightly dilated, costa gently arched, apex obtuse, termen hardly sinuate, oblique; light greyish-ochreous irrorated with fuscous and sometimes a few blackish scales, sometimes yellowish-tinged; costa obliquely strigulated with blackish from base to beyond middle; stigmata formed by blackish irroration, plical beneath first discal, usually also an additional dot in disc at  $\frac{1}{4}$ , and sometimes one beneath second discal; a row of blackish dots along posterior

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part of costa and termen: cilia greyish-ochreous, with an antemedian blackish interrupted line. Hindwings grey, darker posteriorly; cilia light ochreous-grey.

Seven specimens, Pusa, Bengal, in April and May (Maxwell-Lefroy).

#### STENOMIDÆ.

*Agriophara rhombota*, n. sp.

♂ ♀. 28-38 mm. Head and thorax pale whitish-ochreous with a few dark fuscous specks. Palpi whitish-ochreous, towards base dark grey. Antennæ light greyish-ochreous. Abdomen pale whitish-ochreous. Forewings elongate, costa gently arched, apex obtuse, termen hardly rounded, little oblique; pale whitish-ochreous, with scattered dark grey specks; an ill-defined longitudinal streak of dark grey suffusion from base of costa through middle of disc to  $\frac{3}{8}$ ; three angulated transverse lines of grey suffusion, first two little defined and often reduced to costal marks, third usually distinct, running from  $\frac{3}{4}$  of costa to dorsum before tornus, strongly curved or bent; plical and second discal stigmata blackish, plical linear, second discal often transverse; a series of blackish dots along posterior part of costa and termen: cilia pale whitish-ochreous, with grey subbasal shade. Hindwings ochreous-grey-whitish, towards tornus sprinkled with grey; cilia grey-whitish, with dark grey subbasal shade.

Fourteen specimens, Khasi Hills and Silchar, Assam, from June to August (Antram). Larva yellowish-red, sides yellow-orange; subdorsal stripe broad, blackish; head and 2 black; feeds between spun leaves of the tea-bush, and when foliage is stripped will attack the bark, doing great damage (Antram).

#### ELACHISTIDÆ.

*Batrachedra psilopa*, n. sp.

♂ ♀. 8-10 mm. Head pale whitish-ochreous. Palpi whitish-ochreous, second joint with two rings, and terminal joint with two broad bands of blackish irroration. Antennæ whitish-ochreous ringed with fuscous. Thorax whitish-ochreous sprinkled with dark grey. Abdomen whitish-ochreous. Forewings very elongate, extremely narrow, rather short-pointed; pale ochreous, more or less evenly sprinkled with fuscous or dark fuscous; plical stigma elongate, blackish; several more or less indicated blackish dots on posterior part of costa and termen: cilia pale greyish-ochreous. Hindwings ochreous-grey; cilia pale greyish-ochreous.

Seven specimens, Maskeliya, Ceylon, from February to July (Pole).

*Rhadinastis phænicopa*, n. sp.

♂ ♀. 16-18 mm. Head, palpi and thorax reddish-ochreous. Antennæ dark fuscous, basal joint reddish-ochreous. Abdomen dark fuscous. Forewings narrow-lanceolate; dark purplish-fuscous; extreme base reddish-ochreous; cilia dark fuscous. Hindwings and cilia dark fuscous.

Three specimens, Maskeliya, Ceylon, in July, November, and December (Pole).

*Stathmopoda antidelta*, n. sp.

♂ ♀. 7-10 mm. Head and thorax dark shining purplish-bronze, face shining whitish-bronze. Palpi pale yellowish, anterior edge of terminal joint dark fuscous. Antennæ grey, basal joint yellowish. Abdomen dark bronze,

segmental margins grey, on sides white, beneath wholly silvery-white. Posterior tibiae and tarsi blackish banded with white, above tufted with rough scales and bristles. Forewings elongate, narrow, widest at  $\frac{1}{3}$ , thence narrowed to pointed apex; dark purplish-bronze-fuscous; two whitish-ochreous or pale ochreous-yellowish spots, first on dorsum before middle, subquadrate, reaching more than half across wing, second on costa at  $\frac{2}{3}$ , triangular, nearly reaching tornus: cilia dark bronzy-fuscous. Hindwings and cilia dark bronzy-fuscous.

Seven specimens, Maskeliya and Puttalam, Ceylon, in February, March and June (Pole).

*Aeloscelis triloxias*, n. sp.

♂ ♀. 9-12 mm. Head prismatic shining ochreous-whitish, crown ochreous-yellow. Palpi whitish-yellow, second joint sometimes with some blackish scales. Antennae whitish ringed with fuscous. Thorax yellow-ochreous or orange, sometimes irrorated with blackish grey. Abdomen greyish-ochreous tinged with orange. Posterior tibiae with expansible whorls of long bristles. Forewings narrow-lanceolate; ochreous-orange, usually partially and sometimes largely suffused with grey; three slender oblique white streaks, more or less margined beneath or posteriorly with dark grey suffusion, first from before  $\frac{1}{3}$  of costa to  $\frac{1}{3}$  of dorsum, second from  $\frac{2}{3}$  of costa to near dorsum at  $\frac{2}{3}$ , third curved downwards, from beneath costa about  $\frac{2}{3}$  to costa almost at apex: cilia ochreous-orange, becoming paler and fuscous-tinged towards tornus. Hindwings grey; cilia pale greyish-ochreous.

Twelve specimens, Maskeliya, Ceylon, in February, April, June and July (Pole). I note that *Aeloscelis theoris*, Meyr., is however properly referable to *Stathmopoda*.

#### PLUTELLIDÆ.

*Gracilaria zachrysa*, n. sp.

♂ ♀. 14-15 mm. Head and thorax deep purple, face silvery-white. Palpi whitish, spotted beneath with ferruginous, apical half of terminal joint dark fuscous. Antennae whitish-grey ringed with dark grey. Abdomen dark grey. Middle tibiae thickened with purple scales, tarsi white dotted with ferruginous. Forewings very narrow, parallel-sided, pointed, acute; ferruginous-ochreous, along dorsum strigulated with deep purple, elsewhere suffused with bright deep purple; a bright yellow patch along costa from  $\frac{1}{4}$  to near apex, reaching more than half across wing, lower edge with triangular deep purple indentation about middle of wing, costa with a few fine blackish dots: cilia dark grey. Hindwings and cilia dark grey.

Five specimens, Maskeliya, Ceylon, from March to June (Pole).

*Gracilaria prismatica*, n. sp.

♂ ♀. 13-15 mm. Head and thorax greyish-ochreous, mixed with dark grey, face prismatic. Palpi greyish-ochreous, suffusedly irrorated with dark fuscous. Antennae greyish-ochreous ringed with dark grey. Abdomen dark grey, beneath shining whitish-ochreous. Middle tibiae greyish-ochreous irrorated with blackish, thickened and tufted beneath, tarsi white. Forewings sublinear,

# 1881

Jan 1st - New Year's Day

Feb 1st - Groundhog Day

Mar 1st - St. Patrick's Day

Apr 1st - April Fool's Day

May 1st - Labor Day

Jun 1st - Father's Day

Jul 1st - Independence Day

Aug 1st - Back to School

Sep 1st - Labor Day

Oct 1st - Halloween

Nov 1st - Thanksgiving

Dec 1st - Christmas

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gradually pointed; dark greyish-ochreous, with prismatic violet or blue reflections, strewn with numerous small fine blackish dots or strigulae in longitudinal series; larger blackish dots above dorsum before middle, and on costa in middle; apex mottled with blackish: cilia grey, round apex with several rows of black points. Hindwings and cilia grey.

Six specimens, Maskeliya and Kandy, Ceylon, in May, June and September (Pole, de Mowbray, Green). *Also in Ceylon*

*Gracilaria syrphetias*, n. sp.

♂ ♀. 14-15 mm. Head and thorax light metallic greyish-bronze, face paler. Palpi pale ochreous, suffusedly banded with blackish irroration. Antennae pale ochreous ringed with blackish. Abdomen shining dark grey, apex whitish-ochreous. Middle tibiae bronzy-grey, thickened above with blackish scales, tarsi ochreous-whitish. Forewings sublinear, parallel-sided, moderately pointed; ochreous, densely and irregularly strigulated and mottled throughout with dark purple-fuscous: cilia dark grey, round apex with rows of blackish points. Hindwings and cilia dark grey.

See also D.J.

XVIII 829

Also in Ceylon

Four specimens, Maskeliya, Ceylon, in July and October (Pole). Very similar to the Australian *G. eurycnema*, but darker and much narrower-winged, and without the long hairpencils beside abdomen.

*Argyresthia icterias*, n. sp.

♂ ♀. 8-10 mm. Head white, face tinged with ochreous-yellowish. Palpi light ochreous. Antennae whitish-ochreous ringed with blackish. Thorax white, patagia golden-bronze. Abdomen pale silvery-grey. Forewings narrow, elongate-lanceolate; 7 and 8 separate; whitish-brown, tinged with coppery-purplish, darker towards base, strigulated throughout with dark fuscous; an irregular attenuated white streak along dorsum to tornus, in ♀ little defined and suffused into ground colour, strigulated with dark fuscous, interrupted opposite middle of wing by a subquadrate dark fuscous spot; sometimes some irregular white marks along termen, and dots on costa posteriorly: cilia whitish-grey, round apex purplish-tinged and with rows of black points. Hindwings grey; cilia whitish-grey.

Sixteen specimens, Maskeliya, Ceylon, from February to June (Pole, de Mowbray).

*Xyrosaris maligna*, n. sp.

♂ ♀. 12-14 mm. Head, palpi, and thorax white, finely irrorated with fuscous or dark fuscous. Antennae and abdomen grey. Forewings elongate, very narrow, gradually narrowed from before middle, apex round-pointed; light brownish, irregularly or wholly suffused with grey and whitish scales finely tipped with blackish, and strewn with minute raised black dots; indistinct spots of dark fuscous suffusion on costa and dorsum before middle, and on dorsum towards tornus; an interrupted transverse ridge of blackish scales at  $\frac{2}{3}$ ; apex brownish with a slight reddish tinge: cilia grey, round apex with several black lines. Hindwings dark grey, basal third and cell transparent; cilia grey.

Six specimens, Maskeliya and Puttalam, Ceylon, in March, May, October and November (Pole).

*Prays peperitis*, n. sp.

♂ ♀. 9-14 mm. Head, palpi, and thorax pale grey, more or less mixed with dark fuscous. Antennæ dark fuscous. Abdomen dark grey, apex pale greyish-ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen very obliquely rounded; 7 and 8 stalked; whitish, irrorated and sometimes suffused with grey, and coarsely strigulated more or less closely throughout with dark fuscous or blackish: cilia grey. Hindwings rather thinly scaled, grey, becoming dark fuscous towards apex; cilia grey. Forewings beneath irregularly streaked or spotted with raised black scales towards base.

Seven specimens, Maskeliya, Ceylon, from March to May, and in October and November (Pole).

*Glyphipteryx argyromis*, n. sp.

♂ ♀. 6-7 mm. Head and thorax shining greyish-bronze. Palpi with six whorls of black white-tipped scales. Antennæ dark fuscous. Abdomen grey, beneath white. Forewings elongate, costa gently arched, apex round-pointed, termen faintly sinuate, oblique; 7 and 8 separate; shining golden-bronze; basal  $\frac{2}{3}$  occupied by a shining bluish-silvery-whitish patch, followed on dorsal half by some blackish suffusion; five bluish-silvery black-edged streaks from posterior, half of costa, and two from dorsum towards tornus, nearly or quite uniting with first two costal streaks, first resulting fascia angulated, second slightly curved; a bluish-silvery dot on tornus, and one on termen beneath apex: cilia grey, with blackish basal and postmedian shades, indented beneath apex, on costal streaks spotted with white. Hindwings rather dark grey; cilia grey.

Ten specimens, Maskeliya, Ceylon, from February to April (Pole, de Mowbray.) The blue-whitish basal patch is a unique distinguishing character.

TINEIDÆ.

*Opostega euryntis*, n. sp.

♀. 7 mm. Head, palpi and thorax white. Antennæ ochreous-whitish, basal joint white. Abdomen whitish-ochreous. Forewings lanceolate; white; a broad dark fuscous transverse median band occupying more than  $\frac{1}{3}$  of wing, somewhat broadest on dorsum: cilia white. Hindwings and cilia pale grey.

One specimen, Coorg (3,500 feet), in June (Newcome).

*Opostega epactra*, n. sp.

♂ ♀. 6-7 mm. Head and thorax white. Palpi and abdomen whitish-ochreous. Antennæ whitish-ochreous, basal joint white. Forewings lanceolate; white; a dark grey dot on dorsum before middle of wing, sometimes faint; a more or less defined dark fuscous line along apical fourth of costa: cilia ochreous-whitish, tinged with fuscous round apex, with two oblique blackish-

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fuscous lines in costal cilia directed forward to apex. Hindwing and cilia whitish-ochreous.

Six specimens, Maskeliya, Ceylon, in February and March (Pole).

*Opostega machærias*, n. sp.

♀. 6 mm. Head and thorax white. Palpi pale whitish-ochreous. Antennæ ochreous-whitish, basal joint white. Abdomen whitish-ochreous. Forewings lanceolate; white; a slender outwardly oblique somewhat incurved dark brown streak from middle of dorsum, reaching more than half across wing dilated in disc; a dark brown line along posterior third of costa: cilia light brownish-ochreous, on costa with subbasal blackish line. Hindwings and cilia pale greyish-ochreous.

One specimen, Maskeliya, Ceylon, in March (Pole).

*Opostega tetraea*, n. sp.

♂ ♀. 11-12 mm. Head white. Palpi whitish-ochreous. Antennæ light yellowish, basal joint white. Thorax white, with a postmedian transverse orange stripe. Abdomen whitish-ochreous. Forewings lanceolate; shining white; an irregular ochreous-orange streak along costa from base to apex, edged beneath with dark fuscous, more broadly posteriorly; a variable ochreous-orange dorsal streak sometimes extending from  $\frac{1}{4}$  to tornus, sometimes reduced to a spot before middle, variably edged above with dark fuscous; costal and dorsal streaks connected by a variable median dark fuscous fascia or line: cilia whitish-ochreous, round apex with an orange line. Hindwings and cilia whitish-ochreous.

Three specimens, Maskeliya, Ceylon, in December and January (de Mowbray, Pole).

*Opogona fumiceps*, Feld.

(*Opogona fumiceps*, Feld. Reis. Nov. pl. CXXXIX, 8.)

♂ ♀. 12-18 mm. Head dark fuscous, face bronzy white. Palpi whitish. Antennæ ochreous-whitish, basal and next two or three joints dark fuscous. Thorax yellow, anterior third dark fuscous. Abdomen pale grey or greyish-ochreous. Forewings elongate-lanceolate; bright yellow; a thick dark fuscous streak along basal fifth of costa; apical half beyond an irregular line from middle of costa to beyond middle of dorsum rather dark fuscous except a triangular yellow spot on costa towards apex; small suffused dark fuscous spots beneath costa and on dorsum immediately beyond dividing line: cilia dark fuscous. Hindwings fuscous; cilia pale fuscous.

Twelve specimens, Maskeliya, Ceylon, in February, April, May, July, November, and December (Pole, Green, Alston). This species is figured by Felder, but not described.

*Opogona trigonomis*, n. sp.

♂ ♀. 11-12 mm. Head and thorax dark brown, face and forehead shining whitish-bronze. Palpi whitish-fuscous. Antennæ fuscous-whitish, basal joint very long, fuscous. Abdomen bronzy-grey. Forewings lanceolate, apex somewhat produced; yellow; an elongate triangular dark brown spot occupying

basal fifth of costa, and extending at base almost to dorsum ; apical half of wing rather dark brown, dividing line marked with a few blackish scales, straight, almost direct : cilia fuscous. Hindwings dark fuscous ; cilia fuscous.

Two specimens, Ambulangoda, Ceylon, in August (Pole).

*Opogona isoclinu*, n. sp.

♂ ♀. 15-18 mm. Head pale bronzy, forehead and face shining ochreous-whitish. Thorax pale bronzy, becoming pale yellowish posteriorly. Palpi whitish ochreous, externally tinged with fuscous. Antennæ pale whitish-ochreous. Abdomen pale shining greyish-ochreous. Forewings lanceolate, apex somewhat produced ; shining brassy-yellow ; a very small purplish-fuscous spot on base of costa ; apical half pale shining purplish-bronze, with brassy reflections, its anterior edge marked with some dark fuscous scales and running obliquely from before middle of costa to dorsum near before tornus : cilia shining greyish-ochreous. Hindwings bronzy-grey ; cilia shining greyish-ochreous.

Two specimens, Palui Hills (6,000 feet), (Campbell).

*Opogona chloraema*, n. sp.

♂ ♀. 9-11 mm. Head and thorax dark bronzy-fuscous, forehead and face shining ochreous-whitish. Palpi whitish-ochreous, basal and second joints externally with a black streak. Antennæ ochreous-whitish. Abdomen bronzy-grey. Forewings narrow-lanceolate ; shining bronzy-fuscous, sometimes with faint purplish tinge ; a small triangular whitish ochreous apical spot, anterior edge subconcave, sometimes preceded by darker violet-fuscous suffusion ; cilia bronzy-fuscous, round apical spot whitish-ochreous. Hindwings and cilia bronzy-grey.

Sixteen specimens, Maskeliya, Ceylon, from April to September (de Mowbray Pole).

*Amathyntis*, n. g.

Head with appressed scales, side-tufts rough behind ; tongue obsolete. Antennæ  $\frac{5}{6}$ , in ♂ simple, basal joint moderate. Labial palpi moderately long, porrected, diverging, with appressed scales, second joint with two or three projecting lateral bristles, terminal joint shorter than second, obtuse. Maxillary palpi rather short, several-jointed, filiform. Posterior tibiae clothed with long fine hairs. Forewings with 2 from towards angle, 7 to costa, 11 from before middle. Hindwings under 1, ovate-lanceolate, cilia  $1\frac{1}{2}$  : 2-7 separate, nearly parallel.

An interesting genus which appears to form a direct connection between *Tinea* and *Opogona*.

*Amathyntis physatma*, n. sp.

♂ ♀. 11-12 mm. Head and thorax pale ochreous-yellowish. Palpi whitish-ochreous more or less suffused with dark fuscous externally except towards apex. Antennæ whitish-ochreous, somewhat infuscated above. Abdomen whitish-ochreous. Forewings elongate, narrow, long-pointed, acute ; glossy whitish-ochreous ; some scattered fuscous scales along fold ; an undefined

10. 10. 1944

From the 10th to the 12th of October 1944, the weather was very fine and the sun shone for most of the day. The temperature was between 15°C and 20°C.

On the 10th, I went to the park and saw many beautiful flowers. The children were playing happily in the grass. In the afternoon, I went to the cinema and saw a very good film. The weather was perfect for a picnic.

On the 11th, I went to the market and bought some fresh fruit and vegetables. The children went to school and had a very good day.

On the 12th, I went to the park again and saw many beautiful flowers. The children were playing happily in the grass. In the afternoon, I went to the cinema and saw a very good film.

The weather was very fine and the sun shone for most of the day. The temperature was between 15°C and 20°C. I went to the park and saw many beautiful flowers. The children were playing happily in the grass. In the afternoon, I went to the cinema and saw a very good film.

On the 13th, I went to the market and bought some fresh fruit and vegetables. The children went to school and had a very good day. The weather was very fine and the sun shone for most of the day.

On the 14th, I went to the park and saw many beautiful flowers. The children were playing happily in the grass. In the afternoon, I went to the cinema and saw a very good film.

The weather was very fine and the sun shone for most of the day.

11. 10. 1944





longitudinal streak of fuscous irroration in posterior part of disc, expanded along termen in an undefined patch from apex to tornus: cilia pale whitish-ochreous. Hindwings and cilia ochreous-whitish.

Five specimens, Maskeliya, Ceylon, in January and February (Pole).

*Drimylastis*, n. g.

Head densely rough-haired; tongue obsolete. Antennæ  $\frac{4}{5}$ , in ♂ simple, basal joint moderate, thickened with scales. Labial palpi moderate, porrected, loosely scaled, second joint with two or three long bristles, terminal joint rather short, obtuse. Maxillary palpi long, filiform, folded. Posterior tibiae clothed with long hairs above. Forewings with 1 b furcate, 2 from angle, 3 and 4 closely approximated at base, 7 and 8 out of 6, 7 to costa, 10 remote, 11 from  $\frac{1}{2}$ . Hindwings 1, ovate-lanceolate, cilia 1; towards base a longitudinal transparent patch in cell; 2 remote, 3 and 4 stalked from angle, 5 absent, 6 and 7 long-stalked.

*Drimylastis telamonia*, n. sp.

♂ ♀. 10-11 mm. Head and thorax white. Palpi and antennæ dark fuscous. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; white; two small blackish marks on costa towards base; a broad direct dark fuscous fascia rather before middle; a small black spot on costa before  $\frac{3}{4}$ ; some ochreous scales posteriorly in disc and towards margins; costa and termen round apex suffused with blackish irroration: cilia grey, irrorated with white and blackish, becoming whitish towards tornus. Hindwings grey; cilia pale greyish-ochreous.

Three specimens, N.C. Province, Ceylon, in November (Pole).

*Tinex othello*, n. sp.

♂ ♀. 11-20 mm. Head and palpi blackish-fuscous. Antennæ slightly over 1, in ♂ stout, somewhat flattened, pale ochreous, base blackish-fuscous. Thorax whitish-ochreous, anterior edge blackish-fuscous. Abdomen pale ochreous. Forewings elongate, costa moderately arched, apex round-pointed, termen very obliquely rounded; all veins separate; pale yellowish-ochreous; costa more or less suffused with fuscous anteriorly, sometimes very little, usually from base to about  $\frac{2}{3}$ , darkest at base, sometimes whole costal half of wing tinged with fuscous: cilia pale yellowish-ochreous. Hindwings with all veins separate; whitish-ochreous tinged with grey; cilia whitish-ochreous, deeper towards base.

Twelve specimens, Puttalam, Peradeniya, Kandy, Ceylon, from July to March (Pole, Green). This belongs to the group which I have called *Chrysoryctis*; but in view of gradational forms, I find it now impracticable to maintain *Chrysoryctis* as a distinct genus.

*Peritrana*, n. g.

Head rough-haired; tongue absent. Antennæ  $\frac{4}{5}$ , in ♂ shortly ciliated, basal joint moderate. Labial palpi moderately long, subascending, second joint loosely rough-scaled beneath, with two or three bristles at apex above, terminal joint shorter than second, smooth-scaled, obtuse. Maxillary palpi

obsolete. Posterior tibiae clothed with long hairs. Forewings with 1 b simple, 2 from  $\frac{4}{3}$ , 3 from angle, 7 and 8 stalked, 7 to costa, 9 absent, 11 from before middle. Hindwings 1, ovate-lanceolate, cilia 1; 2-4 parallel, 5 and 6 tolerably approximate at base.

*Peritrana distactæ*, n. sp.

♂ ♀. 12-18 mm. Head grey-whitish. Palpi grey sprinkled with blackish, apex whitish. Antennæ grey. Thorax whitish, shoulders suffused with dark grey. Abdomen grey. Forewings elongate, narrow, pointed, acute whitish sprinkled with pale grey, and strewn with small indistinct fuscous or brownish strigulae; two narrow semioval blackish spots on costa near base and in middle, and a smaller blackish spot on costa at  $\frac{3}{4}$ ; usually several blackish-grey costal spots or strigulae besides these, sometimes mostly obsolete; sometimes a small black spot below middle beyond  $\frac{1}{3}$ ; a blackish mark in disc beneath median costal spot, sometimes elongated and connected anteriorly with it, a dot on dorsum before tornus, and a dot above tornus, all variable in development: cilia whitish irrorated with fuscous. Hindwings grey; cilia grey-whitish.

Ten specimens, Maskeliya, Ceylon, in May, July, and from November to February (Pole, Alston).

*Thisizima sedilis*, n. sp.

♂ ♀. 17-21 mm. Head and antennæ whitish-ochreous. Palpi whitish-ochreous, second joint dark fuscous except towards apex. Thorax dark fuscous, posteriorly ochreous-whitish. Abdomen whitish-ochreous. Forewings elongate, costa moderately arched, apex rounded-obtuse, termen obliquely rounded; pale whitish-ochreous with a few scattered fuscous scales; markings deep purplish-fuscous; a moderately broad basal fascia, slightly broader on costa and sometimes connected with median blotch; a large rounded-triangular blotch extending over central third of costa and reaching more than half across wing, narrowed downwards and rounded off beneath; a small round spot in disc at  $\frac{3}{4}$ , sometimes confluent with this blotch; a small rounded-triangular spot on costa towards apex: cilia pale whitish-ochreous, sometimes partially tinged with fuscous. Hindwings grey; cilia pale whitish-ochreous, with grey subbasal shade.

Three specimens, Bhutan and Sikkim, in June and July (Calcutta Museum). In *T. ceratella* the median blotch extends further on costa and is triangularly indented in middle of lower margin.

*Scardia trachypsamma*, n. sp.

♀. 21-24 mm. Head, palpi, and thorax ferruginous-ochreous. Antennæ pale ochreous. Abdomen elongate, dark grey, apex pale ochreous. Forewings elongate, narrow, costa moderately arched, apex obtuse, termen very obliquely rounded; 7 and 8 stalked; ochreous irregularly mottled with reddish-ochreous or ferruginous; numerous irregularly strewn small raised tufts, three beneath fold and one beyond middle larger and more conspicuous: cilia reddish ochreous, towards tornus suffused with dark fuscous. Hindwings and cilia rather dark purplish-fuscous, towards apex of wing more or less tinged with ochreous.

My dear Mr. [Name],  
I have just received your letter of the 10th inst. and am  
glad to hear that you are well and happy. I am  
also well and hope these few lines will find you  
the same.

I am very sorry to hear that you are  
ill and hope you will soon be  
able to get on your feet again. I am  
sending you a few lines to let you know  
that I am thinking of you.

Yours truly,  
[Name]

I am very sorry to hear that you are  
ill and hope you will soon be  
able to get on your feet again. I am  
sending you a few lines to let you know  
that I am thinking of you.

I am very sorry to hear that you are  
ill and hope you will soon be  
able to get on your feet again. I am  
sending you a few lines to let you know  
that I am thinking of you.

I am very sorry to hear that you are  
ill and hope you will soon be  
able to get on your feet again. I am  
sending you a few lines to let you know  
that I am thinking of you.

Yours truly,  
[Name]



Four specimens, Bombay, from December to February (Swinhoe, Young).

ADELIDÆ.

*Adela augantha*, n. sp.

♂. 17-19 mm. Head orange, face metallic-bronze. Palpi moderate, orange. Antennæ whitish, becoming dark grey towards base. Thorax metallic bronze, striped with orange (imperfect). Abdomen dark fuscous. Posterior tibiæ yellowish, apex dark fuscous, above with thin fringe of long hairs. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen very obliquely rounded; 8 and 9 stalked; orange; markings prismatic leaden-metallic, edged with black; a short slender streak on base of costa; a median streak from base to  $\frac{2}{5}$ , upper edge angularly expanded in middle; a narrow subdorsal streak from near base to middle; two transverse spots from costa before and beyond middle, reaching nearly half across wing, and one from dorsum at  $\frac{3}{4}$  nearly reaching second costal; an incurved streak from  $\frac{3}{4}$  of costa to tornus, nearly or quite interrupted in middle; posterior area beyond this crossed by about seven black lines on veins: cilia dark brassy-grey, base more or less violet-metallic. Hindwings and cilia dark fuscous, slightly purplish-tinged.

Five specimens, Khasi Hills.

*Adela chalcomis*, n. sp.

♂ 15-16 mm., ♀ 12 mm. Head and thorax bright metallic brass. Palpi very small, ochreous-whitish. Antennæ dark fuscous, basal joint large, coppery-purple, brassy-scaled towards base. Abdomen dark fuscous. Posterior tibiæ in ♂ above with a very long expansible fringe of ochreous-whitish hairs. Forewings elongate, moderate, costa moderately arched, apex rounded, termen very obliquely rounded; 8 and 9 separate; shining coppery or purple; a metallic brassy basal patch occupying about  $\frac{1}{4}$  of wing, containing a longitudinal black mark above middle, and edged with black posteriorly and on dorsum; an undefined central fascia of black and pale yellowish irroration, narrowest on dorsum; an irregular similar patch towards apex: cilia fuscous suffused with coppery-purple. Hindwings and cilia dark grey.

Six specimens, Maskeliya and Puttalam, Ceylon, in May, September, and October (Pole).

*Nemotois chionites*, n. sp.

♂. 15-17 mm. Face white, crown with mixed black and whitish hairs. Palpi moderately long, white, beneath black, with very long spreading white and black hairs. Antennæ whitish, towards base thickened with metallic blue-blackish scales, above this a short space ringed with blackish. Thorax blackish, laterally with some whitish hairs. Abdomen blackish, anal tuft mixed with white. Anterior and middle tibiæ and basal joint of anterior tarsi with spreading tufts of white hairs; posterior tibiæ white with narrow black subapical band, above with very long fringe of white hairs continued on first joint of tarsi. Forewings elongate, posteriorly dilated, costa posteriorly moderately arched, apex obtuse, termen very obliquely rounded; 8 and 9 stalked; bluish-white, irrorated with black; small snow-white spots on costa, at  $\frac{1}{3}$  and  $\frac{3}{4}$ ; a slender

snow-white median fascia, triangularly dilated on costa, anteriorly edged with black and then by a silvery-metallic fascia: cilia white, basal half blackish-grey with a white subbasal line. Hindwings white, pellucid; apical fourth dark grey extended along costa to middle; cilia white, on costa to apex dark grey.

Four specimens, Khasi Hills, in October. Resembles *N. cassiterites*, but recognisable by tufts of anterior legs, white costal spots and white cilia of forewings and smaller dark area of hindwings.

*Nemotois cassiterites*, n. sp.

♂ 14-17 mm., ♀ 13 mm. Face silvery-metallic, crown whitish, with a few black hairs. Palpi moderately long, white, black beneath, with long spreading black and white hairs. Antennæ whitish, in ♂ purple-blackish above and towards base, rough-scaled above near base, in ♀ thickened with dark purple-grey scales from base to a supramedian patch of spreading black scales. Thorax dark silvery-grey. Abdomen blackish. Posterior tibiae white with broad posterior blackish band, above with long fringe of whitish hairs. Forewings elongate, costa moderately arched, apex obtuse, termen rounded, rather strongly oblique; 8 and 9 stalked; purple closely irrorated with silvery-white and black, sometimes towards apex with pale yellowish; a short black subcostal dash near base; a slender white median fascia, edged anteriorly first by a slender black fascia and then a bluish-silvery-metallic fascia, and posteriorly similarly but towards costa only: cilia grey, basal half bluish-silvery. Hindwings in ♂ white, pellucid, posterior half purplish-grey, extending as a pale suffusion along costa towards base, in ♀ wholly dark grey; cilia grey, in ♂ white on dorsum and lower half of termen.

Twenty-eight specimens, Khasi Hills, from July to September.

*Nemotois solstitiellus*, Wals.

Of two specimens from Simla, communicated by Major Nurse, one has 7 and 8 out of 9 in both forewings, the other has 7 separate, 8 and 9 stalked in one forewing and coincident in the other. Lord Walsingham does not mention the neururation.

*Nemotois seraphias*, n. sp.

♂. 17-18 mm. Face brassy-metallic, hairs of crown yellow mixed with blackish. Palpi rather long, whitish, beneath with long spreading blackish and a few whitish hairs. Antennæ whitish, above blackish, towards base purple-tinged. Thorax bright metallic bronze. Abdomen blackish-bronze. Posterior tibiae white, with broad posterior blackish band, above with long fringe of white hairs. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen very obliquely rounded; 8 and 9 stalked; deep yellow; markings metallic purplish-silver, strongly edged with black; a subcostal streak from base, curved upwards to costa at  $\frac{1}{4}$ ; two approximated fasciæ towards or somewhat before middle, first straight, extended along dorsum to base, second straight or rather curved; an incurved fascia from  $\frac{2}{5}$  of costa to tornus, continued as a golden-metallic streak along termen to apex: cilia blackish-







grey, base coppery-golden, tips pale. Hindwings white, pellucid, apical third, and costa dark grey; cilia white, round apex grey.

Three specimens, Khasi Hills, in October.

*Nemotois fluorites*, n. sp.

♂ ♀. 20-21 mm. Head wholly clothed with whitish-ochreous hairs. Palpi moderate, above whitish, beneath with long spreading blackish-grey hairs. Antennæ whitish, towards base dark purplish-grey, in ♀ clothed with purple-black scales on basal  $\frac{3}{4}$ . Thorax purple-blackish striped with yellowish (imperfect). Abdomen blackish. Posterior tibiæ yellowish, apex dark fuscous, above with long fringe of grey-whitish hairs. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen hardly rounded, very oblique; 8 and 9 stalked; deep ochreous-yellow; markings violet-lead-metallic, irregularly edged with blackish; a fine streak along anterior half of costa, in ♂ mostly reduced to a black line; in ♂ subcostal, median, and subdorsal streaks from base to about middle or beyond, and a black line along dorsum; two narrow transverse fasciæ beyond middle, curved towards each other and in ♂ usually connected in disc; an irregular black line round apical portion of costa and termen to extremities of second fascia: cilia tawny-ochreous, base violet-metallic, outer half dark fuscous. Hindwings dark purplish-fuscous; cilia fuscous, with blackish basal line.

Six specimens, Khasi Hills.

*Nemotois melichlorias*, n. sp.

♀. 16 mm. Head and palpi yellowish. Antennæ slender, dark purple-fuscous, with a median tuft of blackish scales above, beyond this wholly ochreous-whitish. Forewings elongate, moderate, costa more strongly arched posteriorly, apex obtuse, termen very oblique, rounded; 8 and 9 separate; deep purple, posteriorly sprinkled with black and pale yellowish scales; a light brassy-yellow triangular median blotch extending from base to near  $\frac{1}{2}$  of disc, upper posterior angle connected with costa at  $\frac{1}{4}$ ; a moderate straight light brassy-yellow fascia from middle of costa to  $\frac{3}{4}$  of dorsum, somewhat narrowed on costa: cilia dark coppery-bronze. Hindwings and cilia dark fuscous.

One specimen, Koni, Burma (Manders).

*Nemotois chrysoprasias*, n. sp.

♂. 20-22 mm., ♀ 18-19 mm. Face metallic green, hairs of crown whitish, in ♂ mixed with blackish. Palpi moderate, slender, with long fine blackish and whitish hairs. Antennæ in ♂ grey, towards base dark purplish-fuscous, below middle with a whitish band, in ♀ dark purplish-fuscous, below middle with a patch of spreading black scales, above this with a white band. Thorax light metallic brassy-green. Abdomen dark grey, often clothed with white scales. Posterior tibiæ and basal joint of tarsi in ♂ with expansible fringe of long white hairs, less developed in ♀. Forewings elongate, costa moderately arched, apex obtuse, termen obliquely rounded; 8 and 9 separate; light metallic brassy-green on posterior half sprinkled with black; a narrow almost straight orange black-edged fascia before middle, sometimes dilated towards extremities, margined

by two narrow greenish-blue-metallic fasciæ, more or less edged externally with black, especially towards costa: cilia grey, basal half scaled with brassy-green. Hindwings white; a dark purplish-grey apical patch extending furthest along costa; cilia grey, on dorsum and lower half of termen white.

Thirty specimens, Khasi Hills, in September and October.

*Nemotois pyrites*, n. sp.

♂ ♀. 17-20 mm. Head and palpi orange. Antennæ whitish, in ♂ dark purple-grey towards base, in ♀ with basal half thickened with deep purple scales, terminated by a median dilation of black scales. Thorax shining bronze. Abdomen dark bronzy-fuscous. Posterior tibiæ shining bronze, apex coppery, above with long fringe of light greyish hairs. Forewings elongate, costa moderately arched, apex obtuse, termen nearly straight, rather strongly oblique; 8 and 9 separate; deep purple, overlaid with bright shining coppery-golden scales, towards base lighter golden; a short black subcostal dash near base; a rather narrow orange black-edged fascia somewhat before middle, rather dilated towards costa, margined by two narrow silvery-metallic fasciæ; beyond the outer is an undefined band of black irroration: cilia purplish-fuscous, basal half coppery-golden. Hindwings dark grey, purplish-tinged towards apex; cilia grey, with blackish-grey basal line.

Thirty specimens, Khasi Hills, in September and October.

*Nemotois engraptis*, n. sp.

♂. 17 mm. Head orange-yellow, face brassy-metallic. Palpi short, slender, thinly haired, light yellowish. Antennæ ochreous-whitish becoming deep purple towards base. Thorax bright brassy-metallic, purplish-coppery on sides. Abdomen dark purplish-bronze, beneath with segmental margins broadly pale yellowish. Forewings elongate, moderate, costa more strongly arched posteriorly, apex obtuse, termen very obliquely rounded; 8 and 9 separate; bright coppery-purple, with brassy-golden reflections; an irregular deep yellow blotch extending along costa from base to  $\frac{2}{3}$ , and reaching about half across wing, marked with a purple-blackish subcostal streak from near base to near  $\frac{1}{3}$ , and three variable irregular transverse bars posteriorly; a roundish deep yellow blotch resting on upper portion of termen, marked with seven variable irregular purple-blackish spots: cilia coppery-purple. Hindwings and cilia dark purple-fuscous.

Two specimens, Kandy, Ceylon, in August (Green, Pole).

*Nemotois pollinaris*, n. sp.

♂. 17-19 mm. Face shining metallic brass, hairs of crown pale orange. Palpi short, pale orange-ochreous. Antennæ whitish, above fuscous, becoming dark purple towards base. Thorax bright metallic coppery, sides deep purple. Abdomen dark bronzy-fuscous. Posterior tibiæ metallic coppery, tips purple, above with long fringe of pale greyish hairs. Forewings elongate, costa moderately arched, apex obtuse, termen very obliquely rounded; 8 and 9 separate; very deep shining purple; broad golden-metallic costal and median streaks from base to about  $\frac{1}{3}$ , merged posteriorly in an orange-ochreous





suffusion irrorated with black which occupies nearly all median area and extends on dorsum to near base; a round patch of similar suffusion resting on termen beneath apex: cilia dark golden-bronze. Hindwings blackish-grey, slightly purple-tinged; cilia dark grey, with blackish basal line.

Two specimens, Maskeliya, Ceylon, in April (Pole).

*Nemotois phœnicites*, n. sp.

♂. 13-15 mm. Face coppery-bronze, crown orange. Palpi extremely short, dark grey. Antennæ whitish, becoming dark purple-fuscous near base. Thorax metallic-bronze, patagia metallic green or coppery. Abdomen blackish. Posterior tibiæ coppery-bronze, with long fringe of grey and whitish hairs above. Forewings elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen nearly straight, rather strongly oblique; 8 and 9 separate; bright metallic golden-bronze, suffused with purple-coppery except on dorsal half from base to fascia; a slender black transverse fascia slightly beyond middle, on upper half somewhat broader and divided into two by a slender tawny streak: cilia coppery-golden-bronze. Hindwings and cilia blackish-grey, faintly purplish-tinged.

Two specimens, Coorg (3,500 feet), in August (Newcome).









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November 12, 1907.]

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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

By

E. MEYRICK, B.A., F.R.S., F.Z.S.

V

(Continued from page 994 of Vol. XVII.)

(= EPIBLEMIDÆ.)

*Eucosma attica*, n. sp.

♂ ♀. 18-23 mm. Head pale ochreous mixed with dark fuscous, face blackish. Palpi ascending, pale ochreous suffused with grey, ochreous-white towards base beneath, terminal joint very short. Thorax pale ochreous mixed with blackish and ferruginous. Abdomen pale ochreous suffused with grey. Posterior tibiæ in ♂ clothed with dense long projecting hair scales above. Forewings elongate, posteriorly considerably dilated, costa moderately arched, apex obtuse, termen almost straight, nearly vertical; pale ochreous mixed with ferruginous, and irregularly strewn with leaden-grey dots; costa with pairs of ochreous-whitish strigulæ separated with black; basal patch undefined, mixed with blackish, sometimes with strong blackish suffusion extending to central fascia; central fascia moderate, suffused with blackish, its posterior edge marked with a white discal dot, and followed except on costa by a suffused white fascia mixed with leaden-grey on anterior half; apical area ferruginous, mixed with blackish anteriorly, with several short leaden-metallic marks from costa, and a striga from costa at  $\frac{3}{4}$  continued along lower half of termen to tornus: cilia leaden-grey, on upper half of termen with basal half ferruginous, sometimes mixed with blackish, towards tornus suffused with ochreous-whitish. Hindwings in ♂ with dorsal fold enclosing thin pencil of long grey hairs; fuscous, becoming darker posteriorly; cilia light greyish-ochreous or grey, with dark grey subbasal line.

Khasi Hills, from June to September; seven specimens. I find that *Platy-peplus*, Wals., cannot be properly maintained as a distinct genus; the development of brushes of scales on the posterior tibiæ, especially in the ♂ but

sometimes in both sexes, is found in a proportion of the Indian species of most genera in this family, and appears to have little value as a test of affinity; I shall therefore treat it as affording specific characters only, and refer all those species described under *Platypeplus* to *Eucosma*.

*Eucosma iograptæ*, n. sp.

♂ ♀. 13-15 mm. Head and thorax ferruginous-ochreous, thorax sometimes mixed with dark grey. Palpi porrected, ferruginous-ochreous mixed with dark grey, towards base beneath ochreous-whitish. Abdomen dark grey. Posterior legs without tufts. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen almost straight, hardly oblique; ferruginous-ochreous; costa obscurely strigulated with blackish and grey-whitish; a rather oblique rounded-triangular deep ferruginous blotch on dorsum at  $\frac{1}{3}$ , reaching half across wing; central fascia deep ferruginous, sometimes mixed with black, becoming broad dorsally, posterior edge with three irregular acute projections, preceded and followed by rather broad purplish-leadén grey fasciæ, each consisting of several subconfluent strigæ; apical area deep ferruginous somewhat mixed with blackish, including several small purplish-leadén marks beneath costa and an oblique striga: cilia dark purplish-grey irrorated with whitish points, with a blackish-grey subbasal line mixed with deep ferruginous. Hindwings rather dark fuscous, darker posteriorly; cilia grey, with darker subbasal line.

Khasi Hills, in June and July; twelve specimens.

*Eucosma rhodantha*, n. sp.

♂. 20 mm. Head and palpi yellow-ochreous. Thorax pale ochreous, yellower anteriorly. Abdomen grey. Posterior tibiæ clothed with dense projecting scales above. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen nearly straight, hardly oblique; bright crimson-rose, costa faintly darker-strigulated; a greenish-ochreous basal patch, deep yellow in middle of base, and with a small ochreous-brown dorsal mark near base, outer edge rather irregular, running from before  $\frac{1}{3}$  of costa to beyond middle of dorsum; a small ochreous apical spot, edged below by a triangular white mark; cilia crimson-rose, with a whitish-ochreous apical patch extending to near middle of termen. Hindwings rather dark grey, darker posteriorly; cilia grey, round apex whitish-grey, with dark grey subbasal line.

Khasi Hills, in September; one specimen.

*Eucosma mnioclora*, n. sp.

♂ ♀. 22-23 mm. Head, palpi, and thorax rather deep green, thoracic crest large, bifid. Abdomen rather dark grey. Posterior legs without tufts. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen sinuate, hardly oblique; rather deep green, somewhat mixed with whitish on margin of dark markings; markings dark bronzy-fuscous, somewhat mixed with deep green, and finely edged with black; costal edge ochreous-whitish, with scattered dark fuscous dots; an irregular transverse spot on costa at  $\frac{1}{4}$ , and a longitudinal upwards-angulated mark in disc beneath it; two small spots

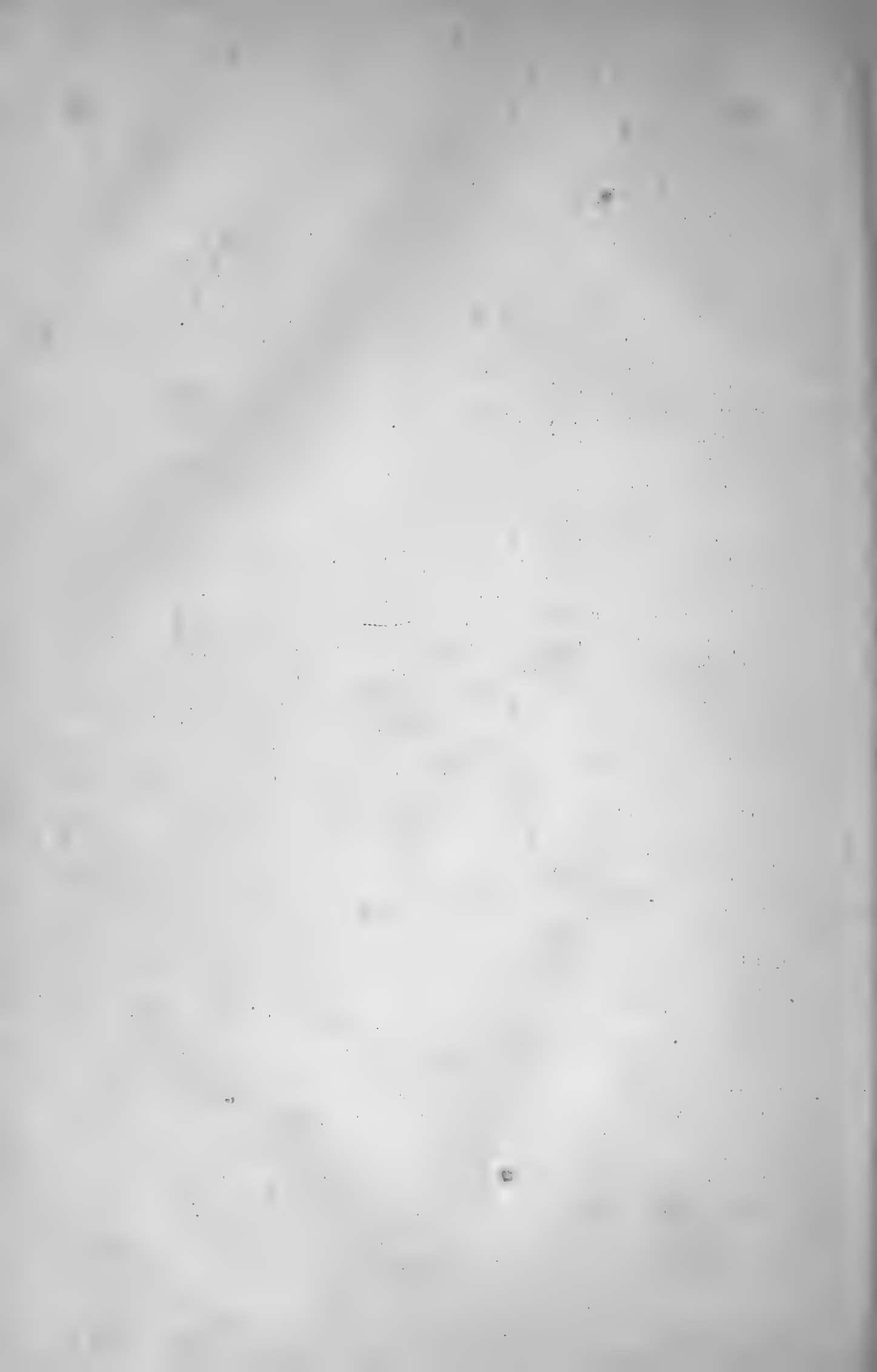
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on dorsum at  $\frac{1}{4}$  and  $\frac{1}{2}$ ; central fascia moderate, irregular, widely interrupted below middle, dorsal portion reduced to a triangular præternal spot; four small spots on costa posteriorly; a triangular blotch in disc posteriorly, of which one angle touches third of these spots, one almost reaches central fascia, and one is connected by an arm with termen above tornus; one or two small white marks beneath anterior angle of this: cilia green, indistinctly barred with fuscous towards middle of termen, base ochreous-whitish. Hindwings rather dark grey, darker posteriorly; cilia grey.

Palni Hills (6000 feet); six specimens (Campbell).

*Eucosma* ~~*mosaica*~~, n. sp. *poetica*, Mey., N.J. xix. 437 (*see mosaica*, Lw.)

♂ ♀. 19-20 mm. Head and thorax brownish-ochreous, thorax more or less mixed with grey, crest tinged with ferruginous. Palpi ascending, with appressed scales, whitish-ochreous or pale ochreous with two or three black scales, terminal joint very short. Abdomen dark grey. Posterior legs without tufts. Forewings elongate, hardly dilated, costa gently arched, apex obtuse, termen gently rounded, somewhat oblique; brownish-ochreous; markings shining blue-grey, finely edged with whitish; a broad patch occupying costal  $\frac{3}{4}$  towards base, whence proceeds a thick downwards curved streak from beneath costa before middle through disc, nearly reaching a round subterminal spot beneath apex; upper edge of streak broken by a small dark-brown spot in middle of curve; a short thick oblique streak from middle of costa, followed by more or less blackish suffusion; several costal dots, and a subcostal dot above subapical spot; a broad dark-brown streak occupying dorsal fourth towards base and continued following margin of grey marking above it to termen, where it is expanded to reach tornus; a transverse rounded spot on middle of dorsum, anteriorly edged by this streak; an irregular mark on tornus, and a subterminal dot above it: cilia brown, somewhat sprinkled with whitish, in middle of termen and beneath tornus more or less marked with dark grey. Hindwings whitish-fuscous, with broad blackish-fuscous terminal fascia; cilia ochreous-whitish, with dark fuscous basal line, round apex fuscous.

Maskeliya, Ceylon (Alston); Palni Hills (Campbell); three specimens.

*Eucosma* *miltographa*, n. sp.

♂ ♀. 17-19 mm. Head grey irrorated with white, sides ferruginous-ochreous. Palpi ochreous-orange, upper surface white irrorated with dark fuscous. Thorax ferruginous ochreous or fulvous, with broad dark grey dorsal stripe sprinkled with whitish. Abdomen dark fuscous. Posterior legs without tufts. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen almost straight, hardly oblique; varying from ferruginous-ochreous to brownish, towards costa and on anterior  $\frac{2}{3}$  of disc irregularly strewn with small ferruginous-red spots or strigulae; a narrow dorsal streak varying from whitish to fuscous, sometimes edged with reddish or dark fuscous above, with an obtuse-triangular projection beyond middle, whence an angulated ferruginous-red or dark purplish-fuscous striga crosses wing to costa beyond middle: cilia

deep ferruginous becoming whitish-ochreous towards tornus, outer half whitish on upper half of termen, dark grey on lower half of termen and at apex. Hindwings dark fuscous, disc thinly scaled and semiopaque, obscurely and irregularly marked with ochreous-yellowish; cilia ochreous-whitish tinged with grey, with dark grey subbasal line.

Peradeniya, Ceylon (Green); Palni Hills (Campbell); in November, four specimens.

(*Enarmonia*) *ioxantha*, n. sp.

♂ ♀. 16-18 mm. Head and thorax grey, shoulders tinged with ferruginous. Palpi whitish, somewhat mixed with grey. Abdomen grey. Posterior tibiae and basal joint of tarsi in ♂ clothed with long dense rough scales above. Forewings elongate-triangular, costa gently arched, apex obtuse, termen straight, little oblique; deep ferruginous; costa with seven pairs of oblique whitish strigulae between  $\frac{1}{4}$  and apex, first five emitting short violet streaks, longest anteriorly, costal edge blackish between these; a broad ochreous-grey streak along dorsum from base to near tornus, narrowed posteriorly, upper edge with two pale violet whitish-edged projections, first before middle, triangular, second narrow, rising from its extremity and directed obliquely towards apex, reaching half across wing; terminal area beyond this forming a deep orange fascia, containing some deep ferruginous marking in middle, two whitish dots on termen beneath apex, and a wedge-shaped pale violet partly whitish-edged spot on tornus: cilia dark grey mixed with deep ferruginous, on upper half of termen with outer  $\frac{2}{3}$  ochreous-whitish. Hindwings in ♂ with large dorsal expansible pencil of long whitish-ochreous hairs; dark fuscous; cilia grey-whitish, with dark fuscous basal line.

Khasi Hills, from June to August; twenty specimens.

(*Enarmonia*) *ancalota*, n. sp.

♂ ♀. 17-18 mm. Head, palpi, and thorax grey-whitish, thorax with small posterior crest. Abdomen in ♂ whitish-grey-ochreous, in ♀ grey. Posterior tibiae in ♂ clothed with hairs above. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen slightly sinuate, nearly vertical; yellow-ochreous, irregularly mixed with ferruginous-brownish; costa with some obscure pairs of minute pale strigulae; a broad pale whitish-fuscous dorsal streak edged above with white, broadest at  $\frac{1}{4}$ , where it reaches more than half across wing, rapidly narrowed to tornus, upper edge with a triangular indentation in middle of wing filled with brown; a somewhat curved transverse series of six blackish dots from tornus, reaching more than half across wing, two lowest preceded by similar dots; an oblique series of blackish dots from near costa at  $\frac{4}{5}$  to termen above tornus: cilia ochreous mixed with brownish, at tornus suffused with whitish. Hindwings in ♂ with dorsal edge recurved, forming a shallow pocket clothed with loose hairs; in ♂ pale fuscous, in ♀ rather dark fuscous, darker posteriorly; cilia in ♂ whitish-fuscous, in ♀ grey.

Kandy and Maskeliya, Ceylon, in May and September to November; six specimens (Green, Polo).







*Enarmonia melanacta*, n. sp.

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♂. 14-16 mm. Head and palpi dark grey, palpi curved, ascending, smooth-scaled. Thorax dark grey mixed with black, posterior half of patagia and a posterior spot white. Abdomen rather dark grey. Posterior tibiae clothed with long rough expansible hairs above. Forewings elongate, costa slightly arched, apex obtuse, termen slightly rounded, somewhat oblique; yellowish-white, somewhat marked with pale yellow on margins of dark markings; costa spotted with black; a thick black zigzag streak above middle from base to apex, angulated thrice downwards and twice upwards, upper angulations suffused into dark leaden-grey costal blotches on basal fourth and beyond middle, lower edge towards tornus irregular and mixed with leaden-grey; two large trapezoidal black spots on dorsum at  $\frac{1}{3}$  and before tornus; a pale yellow angulated striga from  $\frac{2}{3}$  of costa to tornus, interrupted by the black streak: cilia yellowish-white, with blackish bars in middle of termen and at apex. Hindwings rather dark grey; cilia grey.

Khasi Hills, in June; three specimens. The palpi are peculiar, but do not seem here to be of more than specific value.

*Erinæa*, n. g.

Antennæ in ♂ stout, serrulate, pubescent. Palpi moderate, porrected, second joint with expanded scales towards apex. Thorax smooth. Forewings in ♂ without fold, termen sinuate; 3 and 4 curved and approximated throughout, 5 absent, 7 and 8 stalked. Hindwings with 3 and 4 stalked, 5 closely approximated at base, 6 and 7 closely approximated towards base.

Allied to *Cydia* but characterised by the peculiar neururation.

*Erinæa chlorantha*, n. sp.

♂ ♀. 17-21 mm. Head grey-whitish, sides mixed with blackish. Palpi blackish-grey, apex of joints whitish. Thorax olive-greenish somewhat mixed with whitish, on shoulders and posteriorly mostly suffused with black. Abdomen grey. Posterior tibiae in ♂ with brush of dense long projecting scales on basal half beneath. Forewings elongate, costa moderately arched, apex tolerably pointed, termen slightly sinuate, somewhat oblique; pale grey or whitish, irregularly mixed with olive-green; markings purplish-grey or fuscous, irregularly edged and mixed with blackish; seven irregular costal spots, first with an angulated streak extending to dorsum forming edge of basal patch, second extended as an irregular fascia to dorsum before middle, thence angulated upwards to disc beyond middle, and again downwards to near tornus; some small scattered variable black marks on costa and dorsum, and in disc; an irregular blotch towards apex: cilia whitish, somewhat mixed with grey and olive-greenish. Hindwings grey; cilia grey, with darker subbasal line.

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Maskeliya, Ceylon, from December to April; nine specimens (Pole, de Mowbray).

*Tmetocera calceata*, n. sp.

♂ ♀. 14-18 mm. Head ochreous-white. Palpi whitish irrorated with grey.

Thorax ochreous-white, anteriorly more or less suffused with grey. Abdomen grey. Forewings elongate, costa gently arched, apex, obtuse, termen faintly sinuate, little oblique, rounded beneath; ochreous-white, strigulated with brown, grey, or dark fuscous, except on a broad undefined streak extending from middle of dorsum to costa before apex, interstices of strigulation more or less silvery or filled up with leaden-metallic, sometimes forming definite streaks from costa; ocellus long, narrow, broader upwards, margined laterally with thick leaden-metallic streaks, and filled with six or seven irregular small black spots, preceded on dorsum by a short erect leaden-metallic mark enclosed between two black streaks: cilia grey speckled with dark grey. Hindwings rather dark grey; cilia grey.

Khasi Hills, in June; eleven specimens. Very close to the European *ocellana*, but easily distinguished by the white head.

*Ancylis thalera*, n. sp.

♂ ♀. 13-15 mm. Head and thorax fulvous-ochreous, face whitish. Palpi whitish-ochreous mixed or suffused with grey, beneath white towards base, second joint tufted with long scales beneath. Abdomen dark-grey. Forewings elongate, costa moderately arched, apex tolerably pointed, termen concave, little oblique, rounded beneath; ochreous, obscurely strigulated with fulvous, posterior half suffused with deeper fulvous; costa with pairs of obscure pale strigulae, separated by a few blackish scales, last five emitting short oblique leaden-metallic streaks, second of these extended as a very oblique striga to near termen beneath apex; a triangular tornal blotch mixed with grey and grey-whitish, becoming leaden-metallic towards apex, anterior edge oblique, so that apex is near middle of termen; a blackish terminal line: cilia whitish-ochreous, basal half silvery-grey-whitish, sometimes partly tinged with fulvous, above apex fulvous edged beneath with white, beneath this with two slender fulvous bars separated with white. Hindwings with 3 and 4 connate; dark grey; cilia grey, with darker subbasal line.

Khasi Hills, from June to August; twenty specimens. Though differing from other species in having 3 and 4 of hindwings connate instead of stalked or coincident, this species otherwise agrees well here.

*Cydia capitulata*, n. sp.

♂. 12-14 mm. Head pale greyish-ochreous, anterior half of crown blackish. Palpi blackish, terminal joint and apex of second grey-whitish. Thorax grey-whitish variably spotted with black. Abdomen pale grey, anal tuft whitish-ochreous. Forewings elongate, rather narrow, costa anteriorly gently arched, apex round-pointed, termen sinuate, oblique; grey-whitish, base of scales mostly finely grey, with a few scattered grey strigulae; costa strigulated with blackish, dorsum and termen also with some minute blackish strigulae; a dark fuscous or blackish trapezoidal blotch, more or less mixed with leaden-grey, extending on costa from before middle to rather near apex, and reaching half across wing, much narrowed downwards so that lower edge is about half upper, including four pairs of pale strigulae on costa: cilia whitish,





sprinkled towards tips with blackish. Hindwings grey ; cilia light greyish-ochreous, with grey subbasal line.

Maskeliya, Ceylon, in June and November ; three specimens (Pole).

*Cydia glaciata*, n. sp.

♂ ♀. 11-14 mm. Head white, sides fuscous. Palpi dark fuscous, terminal joint and apex of second white. Thorax ochreous-white, with blackish spots on shoulders and at posterior extremity. Abdomen pale grey. Forewings elongate, somewhat dilated, costa gently arched, apex obtuse, termen slightly sinuate, somewhat oblique ; ochreous-white, more distinctly ochreous-tinged posteriorly ; a broad almost basal dark fuscous fascia mixed with leaden-metallic and black, outer edge nearly straight, oblique, running from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of dorsum ; four small dark fuscous spots on posterior half of costa, and some scattered black costal strigulae ; a triangular dark fuscous spot mixed with black on dorsum at  $\frac{4}{5}$ , and two or three black dorsal strigulae ; an interrupted black terminal line : cilia dark grey sprinkled with white, and at tips with black. Hindwings grey ; cilia pale grey.

Khasi Hills, in June and July ; four specimens.

*Cydia speculatrix*, n. sp.

♂ ♀. 12-15 mm. Head light ochreous, sides mixed with dark fuscous. Palpi dark fuscous, basal joint and a subapical bar of second joint whitish-ochreous. Thorax dark fuscous mixed with pale ochreous. Abdomen dark fuscous, in ♂ suffused with pale ochreous on sides and apex. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen sinuate, rather oblique ; dark fuscous, more or less mixed irregularly with pale ochreous ; costa with eight pairs of oblique whitish strigulae, second to fourth giving rise to three obscurely double leaden-metallic striae mixed with whitish, first limiting basal patch, angulated in middle, second irregular, preceding central-fascia, which is blackish-fuscous, obliquely interrupted with pale ochreous in middle and leaden-metallic below middle, third following central fascia, rather curved or obtusely bent in middle ; a leaden-metallic stria from fifth pair of costal strigulae to sinuation of termen, continued along termen to tornus, enclosing with the preceding stria the ocellus, which is crossed by three longitudinal pale ochreous dashes ; last three pairs of strigulae emitting short leaden-metallic marks, surrounded with ochreous : cilia light ochreous-yellowish, with a black median line preceded by a dark leaden-grey shade base, whitish. Hindwings in ♂ thinly scaled, whitish-grey tinged with yellowish, apex mottled with grey, with dorsal pencil of blackish hairs, cilia whitish-ochreous, with grey subbasal line ; in ♀ dark grey, cilia grey, with darker subbasal line.

Khasi Hills, in September ; twelve specimens. Also one ♂ from Darjiling, in August, with hindwings greyer, but apparently not otherwise different.

*Laspeyresia leucitis*, n. sp.

♀. 19 mm. Head, palpi, and thorax leaden-grey, palpi beneath whitish. Abdomen grey-whitish. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen little oblique, rounded, faintly sinuate beneath

apex ; rich brown ; a leaden-grey basal patch, outer edge angulated, cut by a streak of ground colour above middle ; seven pairs of minute white costal strigulae, separated with blackish, and giving rise to leaden-grey streaks, first two subconfluent, very strongly angulated in disc, where they are connected by a streak with angle of basal patch, surrounded on dorsal half by a broad blackish suffusion, third sinuate-curved, running to dorsum before tornus, fourth and fifth extremely short, sixth and seventh slender, confluent beneath apex and running to tornus, interrupted above and below middle ; some dark fuscous suffusion extending from beneath fourth and fifth towards middle of termen ; cilia leaden-grey, with blackish basal line. Hindwings white ; a small basal patch of blackish suffusion ; a moderate blackish terminal band, attenuated downwards and not reaching tornus ; cilia white, round apex grey, with blackish basal line.

Khasi Hills ; one specimen.

*Laspeyresia callisphena*, n. sp.

♂ ♀. 10-11 mm. Head leaden-grey, forehead and sides yellow, face whitish. Palpi pale yellow. Thorax bluish-leaden. Abdomen dark grey. Forewings elongate-triangular, costa gently arched, apex obtuse, termen obliquely rounded ; bluish-leaden-grey, posterior half suffused with blackish ; six oblique pale yellow wedge-shaped marks from posterior half of costa, surrounded with black, each pair of marks terminating beneath in a short violet-metallic mark ; an oblique violet-metallic bar from middle of dorsum, broadly edged with black anteriorly, reaching more than half across wing ; beyond this two converging pale yellow wedge-shaped marks from dorsum, reaching half across wing, sometimes united above, surrounded with black suffusion ; a transverse violet-metallic bar above tornus, not quite reaching it ; cilia bluish-leaden-grey. Hindwings dark fuscous ; cilia light grey, with a blackish basal line, tips blue-whitish.

Khasi Hills, in September and October ; fifty specimens.

*Laspeyresia isacma*, n. sp.

♂ ♀. 9-10 mm. Head rather dark bronzy-fuscous, face and palpi whitish. Thorax and abdomen dark bronzy-fuscous. Forewings elongate, somewhat dilated, costa moderately arched, apex obtuse, termen somewhat obliquely rounded ; dark fuscous, with prismatic reflections ; nine well defined short oblique whitish streaks from costa between  $\frac{1}{4}$  and apex, second, fourth, sixth, and ninth emitting indistinct short bluish-leaden-metallic streaks ; a patch of four indistinct fuscous-whitish oblique strigae from about middle of dorsum, reaching about half across wing ; ocellus narrow, obscurely margined with bluish-leaden-metallic : cilia fuscous, with blackish basal line. Hindwings dark fuscous ; cilia grey, with dark fuscous basal line.

Khasi Hills, in May and September ; fifteen specimens.

*Laspeyresia ochropa*, Meyr.

(*Lipoptycha ochropa*, Meyr., Journ. Bombay N. H. Soc. XVI., 587.)

This species should be referred here ; veins 6 and 7 of the hindwings are separate but not parallel as in *Lipoptycha*, and the different palpi afford a reliable character.







*Laspeyresia dissias*, n. sp.

♂. 8 mm. Head pale brownish-ochreous, face pale ochreous-yellowish, becoming whitish beneath. Palpi whitish-ochreous. Thorax light fuscous. Abdomen rather dark fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen rather obliquely rounded, distinctly sinuate beneath apex; rather dark fuscous, base of scales whitish, appearing finely striated; five oblique hardly perceptibly double whitish streaks from costa between  $\frac{1}{4}$  and  $\frac{3}{4}$ , alternating with dark fuscous streaks, first two terminating in short leaden-metallic streaks, third and fifth in somewhat interrupted bent bluish-leadene-metallic striæ running to about tornus; two short whitish costal streaks before apex converging to a bluish-leadene-metallic dot; dorsal half with more or less indistinct whitish strigæ, four towards middle more distinct and forming an oblique patch reaching half across wing; two black dots resting on termen below middle; apex ochreous-tinged: cilia light bluish-grey, with black basal line. Hindwings dark fuscous; cilia light grey, with dark fuscous subbasal line edged with whitish.

Barberyn Island, Ceylon: in February; one specimen (Fletcher).

*Laspeyresia hemidora*, n. sp.

♂ ♀. 11-12 mm. Head yellow mixed with blackish. Palpi yellow, with some black scales in middle of second joint. Thorax yellow irrorated with blackish. Abdomen dark grey. Forewings elongate-triangular, costa moderately arched, apex obtuse, termen somewhat rounded, rather oblique; deep coppery-orange or orange-red; basal half yellow strigulated with black, limited by a thick dark purplish-leadene transverse streak not reaching costa, its posterior edge very irregular; posterior half of costa with pairs of obscure whitish strigulæ separated with black; a dark purplish-leadene streak from middle of costa to near termen beneath apex, thence abruptly curved and continued near termen to tornus; four small dark purplish-leadene spots beneath costa posteriorly; space between stria and median streak strewn with irregular dark purplish-leadene marks; a row of irregular blackish dots before termen: cilia ochreous-yellow, irregularly barred with dark leadene-grey, and with a dark leadene-grey basal line. Hindwings dark grey; cilia ochreous-whitish, suffused with pale grey towards apex and tornus, with dark grey basal line.

Khasi Hills, in September; four specimens.

*Laspeyresia endrosias*, n. sp.

♂ ♀. 10-13 mm. Head, palpi, and thorax dark fuscous, closely irrorated with pale greyish-ochreous. Abdomen dark fuscous. Forewing elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen rather obliquely rounded, sinuate beneath apex; dark fuscous, basal area as far as a line running from  $\frac{1}{3}$  of costa to tornus finely irrorated with pale greyish-ochreous; remainder of wing crossed by irregular curved partly confluent ferruginous-fulvous lines, rising from numerous very fine paired oblique whitish costal strigulæ, and three bluish-leadene lines, third running to termen beneath apex; between the first two metallic lines towards tornus the ground-colour appears as a transverse

series of four blackish dots or very short dashes : cilia leaden-grey, with black basal line. Hindwings grey, with whitish-grey suffusion in middle of disc, and broad blackish terminal band ; cilia whitish-grey, with blackish basal line.

Khasi Hills, in June and July ; eight specimens.

*Laspeyresia chelias*, n. sp.

♂. 11 mm. Head, thorax, and abdomen fuscous, face and palpi whitish-ochreous. Forewings elongate, somewhat dilated, costa gently arched, apex obtuse, termen little oblique, rounded, sinuate beneath apex and rather prominent in middle purplish-fuscous, with prismatic reflections ; posterior half of costa with several pairs of minute whitish strigulae, and two approximated triangular ochreous-white spots immediately before apex ; a bluish-leaden line from middle of costa obliquely to disc near middle of termen, thence obtusely angulated to tornus, and another from  $\frac{3}{4}$  of costa to termen beneath apex ; three blackish dots close before lower half of termen : cilia fuscous, with dark bluish-fuscous basal line. Hindwings rather dark fuscous, lighter towards base ; cilia whitish-fuscous, with dark fuscous basal line.

Maskeliya, Ceylon, in October ; one specimen (Pole).

*Laspeyresia cyanogona*, n. sp.

♂. 10-11 mm. Head pale ochreous-grey, face more whitish-ochreous. Palpi whitish-ochreous, a dot in apical scales of second joint beneath, and terminal joint above grey. Thorax ochreous-grey. Abdomen grey. Forewings elongate, somewhat dilated posteriorly, costa gently arched, apex obtuse, termen somewhat obliquely rounded, sinuate beneath apex ; rather dark fuscous, basal half with a purplish-leaden gloss, posterior half mostly suffused with light yellow-ochreous ; fine pairs of oblique whitish costal strigulae between  $\frac{1}{4}$  and  $\frac{3}{4}$ , each emitting a short oblique blue-leaden-metallic streak except fourth which is single and has no streak, third angulated in middle and continued as a thick striga to tornus ; indistinct blackish strigae from costa before and beyond this streak, some irregular black dots in disc before angle, and four undefined black dots following its lower half ; two short thicker white marks on costa before apex, beneath which is a leaden-blue metallic dot ; a triangular central dorsal patch of four purplish-grey strigae converging upwards to a point, reaching half across wing : cilia shining bluish-grey, with a black basal line, very finely cut with white on subapical sinuation. Hindwings dark fuscous ; cilia grey-whitish, with dark fuscous basal line.

Khasi Hills, in September ; two specimens.

*Laspeyresia crocopa*, n. sp.

♂. 14 mm. Head and palpi ochreous-yellow. Thorax and abdomen fuscous. Forewings elongate, hardly dilated, costa slightly arched, apex obtuse, termen somewhat obliquely rounded, faintly sinuate beneath apex ; rather dark fuscous, finely irrorated with grey-whitish except towards costa, crossed by about ten dark purplish-leaden-grey lines rising from pairs of indistinct minute whitish costal strigulae, angulated above middle, suffused and indistinct in disc, sixth and seventh forming margins of ocellus with two well-defined leaden





streaks, last three converging towards termen beneath apex; three short undefined blackish dashes in ocellus, and an oblique blackish striga above it: cilia rather dark fuscous, irrorated with grey-whitish. Hindwings fuscous; cilia light fuscous, with somewhat darker sub-basal line.

Galboda, Ceylon, in November; one specimen (Pole).

*Laspeyresia pseudonectis*, n. sp.

♂. 10 mm. Head greyish-ochreous. Palpi pale greyish-ochreous. Thorax fuscous irrorated with pale greyish-ochreous. (Abdomen broken.) Posterior tibiae and basal joint of tarsi beneath clothed with long dense projecting scales. Forewings elongate, not dilated, costa gently arched, apex obtuse, termen straight, little oblique, rounded beneath; dark fuscous, finely irrorated with fuscous-whitish except on costa; costa between  $\frac{1}{4}$  and apex with seven pairs of whitish strigulae, whence proceed obscure short purple-leadene strigae, those from third and fifth pairs crossing wing, angulated in middle, forming margins of ocellus; three short black dashes in ocellus, diminishing in length downwards: cilia fuscous irrorated with fuscous-whitish. Hindwings fuscous, dorsal area broadly sprinkled with black; cilia whitish-fuscous.

Surat, in October; one specimen (Maxwell-Lefroy). Larva tunnels stems of *Crotalaria juncea* (Maxwell-Lefroy). Very similar to *L. tricentra*, but distinct by the sexual characters of posterior legs and hindwings.

*Laspeyresia ptychora*, n. sp.

♂ ♀. 12-15 mm. Head and thorax fuscous sprinkled with whitish-ochreous. Palpi whitish-ochreous, slightly sprinkled with fuscous. Abdomen grey, slightly sprinkled with black. Forewings elongate, not dilated, costa gently arched, apex obtuse, termen slightly sinuate beneath apex, hardly oblique, rounded beneath; dark fuscous, finely irrorated with ochreous-whitish except towards costa posteriorly; costa throughout with nine pairs of whitish strigulae, last six giving rise to short oblique leaden-metallic streaks, seventh running to termen beneath apex; ocellus margined laterally by leaden-metallic streaks, and containing three elongate black dots: cilia dark fuscous, irrorated with ochreous-whitish. Hindwings grey; in ♂ a very slender submedian hair-pencil from base, followed by a few dark grey scales, dorsal area rather broadly strewn blackish-grey scales, dorsal edge and cilia recurved upwards to form a pocket; cilia light grey.

N. Coorg (3,000 feet), in August (Newcome); Madulsima, Ceylon, in November (Vaughan); six specimens. Also very close to *L. tricentra*; the hindwings have black scales as in *L. pseudonectis*, and dorsal pocket as in *L. parastrepta*.

*Laspeyresia parastrepta*, n. sp.

♂ ♀. 12-13 mm. Head and thorax dark fuscous irrorated with whitish-ochreous. Palpi whitish-ochreous sprinkled with grey, terminal joint grey above. Abdomen dark fuscous. Forewings rather elongate, moderately broad, costa gently arched, apex obtuse, termen hardly oblique, rather abruptly indented beneath apex; dark fuscous, irrorated with whitish-ochreous; seven pairs of oblique whitish costal strigulae, followed by three single strigulae

towards apex, third to seventh pairs emitting oblique blue-lead-metallic streaks, sixth very short, seventh running to termen beneath apex, præapical strigula terminating in a blue-lead-metallic dot; two oblique blue-lead-metallic lines from dorsum near middle, converging upwards and nearly reaching streak of fifth pair of costal strigulae; ocellus margined laterally by strong blue-lead-metallic streaks, and containing three elongate black dots resting on posterior edge: cilia dark grey, towards base grey-whitish, with a blackish basal line. Hindwings in ♂ with dorsal margin and cilia curved upwards so as to form a groove or pocket; dark fuscous, becoming blackish-fuscous posteriorly; cilia grey, with dark fuscous basal line, extreme tips white.

Khasi Hills, in September; twenty-five specimens. Very similar to *L. tricenra*; this group of closely allied species requires much care in determination; the secondary sexual characters of the ♂ afford easy distinctions, but in the ♀ the shape of wings is perhaps the most reliable guide; in *L. durastrepta* the forewings are broader and the termen more obviously indented than in the others.

#### GELECHIADÆ.

##### *Idiophantis melanosacta*, n. sp.

♂ ♀. 12-13 mm. Head, palpi, antennæ, thorax, and abdomen whitish-ochreous; terminal joint of palpi with dark fuscous lateral line; shoulders dark fuscous. Forewings elongate, costa slightly arched, termen with a deep elliptical excavation between slender acute apical and broader obtuse tornal prominences; 2 and 3 long stalked, 6 absent; whitish-ochreous; an elongate blackish patch extending along costa from base to beyond middle, apex oblique, lower edge forming two broad subtriangular prominences reaching about half across wing; two undefined blackish dots longitudinally placed in disc beyond middle; an angulated whitish line from  $\frac{3}{4}$  of costa to dorsum before tornal prominence, edged with fuscous and on costa with blackish; a fine oblique parallel fuscous line beyond this on upper half; a bronzy-metallic dot edged anteriorly with black on termen beneath base of excavation: cilia whitish-ochreous, tips whitish, within excavation with a blackish sub-basal line towards apex of both prominences. Hindwings grey; cilia pale grey, round apex with a blackish-grey sub-basal line edged with whitish-ochreous suffusion.

N. Coorg (3,000 feet), in June; three specimens (Newcome).

##### *Idiophantis chalcura*, n. sp.

♂. 15 mm. Head greyish-ochreous, face whitish-ochreous. Palpi bronzy-grey, upper edge whitish-ochreous. Antennæ whitish dotted with dark grey, towards base lined with black, toward apex with two blackish-grey bands. Thorax light greyish-bronze. Abdomen grey, segmental margins ochreous-whitish, basal half blackish-grey above. Forewings elongate, rather narrow, costa slightly arched, termen with deep elliptical excavation between slender acute apical and broad rounded tornal prominence; 2 and 3 separate, 6 present; light ochreous-fuscous, costal half suffused with dark fuscous; plical and second discal stigmata large, cloudy, dark fuscous, latter preceded by an

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additional elongate dot; two oblique white streaks, black-edged posteriorly, from costa about  $\frac{3}{4}$ , first running to base of excavation, second to apex, apex between and beyond these pale ochreous; a black dot on base of excavation; tornal prominence bronzy-metallic, edged anteriorly with blackish at extremities, and crossed by two longitudinal pale yellowish lines: cilia whitish-ochreous, on termen bronzy-metallic, beneath apical prominence mixed with dark grey, at apex with a triangular white mark. Hindwings blackish-grey; cilia dark grey, round apex with a blackish subbasal line edged with pale greyish-ochreous.

Khasi Hills, in October; one specimen.

*Idiophantis discura*, n. sp.

♂ ♀. 13-14 mm. Head and thorax light bronzy-ochreous, face paler, thorax fuscous-tinged. Palpi whitish-ochreous, anteriorly irrorated with fuscous. Antennæ pale grey, above dark fuscous. Abdomen grey, anal tuft whitish-ochreous. Forewings elongate, rather narrow, costa slightly arched, termen with a deep elliptical excavation between slender pointed apical and broad obtuse tornal prominence; 2 and 3 separate, 6 present; fuscous; a strongly-curved light leaden-bluish dark-edged line from  $\frac{2}{3}$  of costa to dorsum before tornal prominence, more or less obscurely margined with ochreous anteriorly; apical and tornal prominences, beyond this light ochreous-yellow, with a grey-whitish streak along upper part of apical prominence, and some black suffusion towards middle of termen: cilia bronzy-fuscous at base of excavation and on lower side of tornal prominence light ochreous-yellow. Hindwings grey; in ♂ beneath with a furrow along lower margin of cell, covered with a fringe of long hairs; cilia grey, on upper half of termen whitish-yellowish, round apex with dark fuscous subbasal line.

Maskeliya, Ceylon; in February and September, three specimens (de Mowbray, Alston).

*Idiophantis hemiphæa*, n. sp.

♂ ♀. 13-16 mm. Head pale ochreous, face whitish-ochreous. Palpi light silvery-grey. Antennæ ochreous-whitish, on basal half with a blackish line above, towards apex with three narrow dark fuscous bands. Thorax pale ochreous, anteriorly suffused with dark fuscous. Abdomen whitish-ochreous sprinkled with grey. Forewings elongate, rather narrow, costa slightly arched, termen with a deep circular excavation between slender acute apical and broader obtuse tornal prominence; 2 and 3 separate, 6 present; pale ochreous, costal half from base to posterior streaks suffused with rather dark fuscous, darkest towards base; two fine oblique whitish posteriorly black-edged streaks, first meeting a very undefined erect line of pale bronzy-metallic and blackish scales from dorsum before tornal prominence, second running into apex; tornal prominence beyond this line suffused with coppery-metallic on margins; a black dot at base of excavation: cilia whitish-ochreous, on termen metallic bronze with two undefined dark fuscous lines, above apex with a triangular white black-edged mark. Hindwings grey; cilia pale greyish-ochreous or whitish-fuscous, round apex with a blackish subbasal line.

Khasi Hills, from April to October ; twenty specimens.

*Idiophantis stoica*, n. sp.

♂. 15-16 mm. Head and thorax light bronzy-ochreous, face whitish-ochreous. Palpi whitish-ochreous, anterior edge white margined with blackish lines. Antennæ whitish lined with blackish. Abdomen whitish-ochreous suffused with grey. Forewings elongate, rather narrow, costa gently arched, termen semicircularly concave beneath produced pointed apex, tornus rounded-prominent ; 2 and 3 separate, 6 present ; pale ochreous, irregularly tinged with fuscous ; a cloudy dark fuscous subdorsal dot at  $\frac{1}{4}$  ; stigmata blackish, plical represented by two transversely placed dots enclosed in fuscous suffusion, second discal by two transversely placed dots, an additional dot midway between lower of these and upper plical ; an oblique white line from  $\frac{4}{5}$  of costa, edged with black on costa, angulated opposite terminal concavity and continued obsoletely to near tornus ; a white dark-edged line from costa beyond this running to apex ; some blackish suffusion on termen towards middle : cilia pale greyish-ochreous, on termen tipped with grey, beneath apex with a black basal line, towards middle of termen with a bronzy-metallic basal spot. Hindwings grey, paler towards base ; cilia pale grey, round apex whitish with a black subbasal line.

Palni Hills, Gooty ; two specimens (Campbell).

*Anorthosia sandycitis*, n. sp.

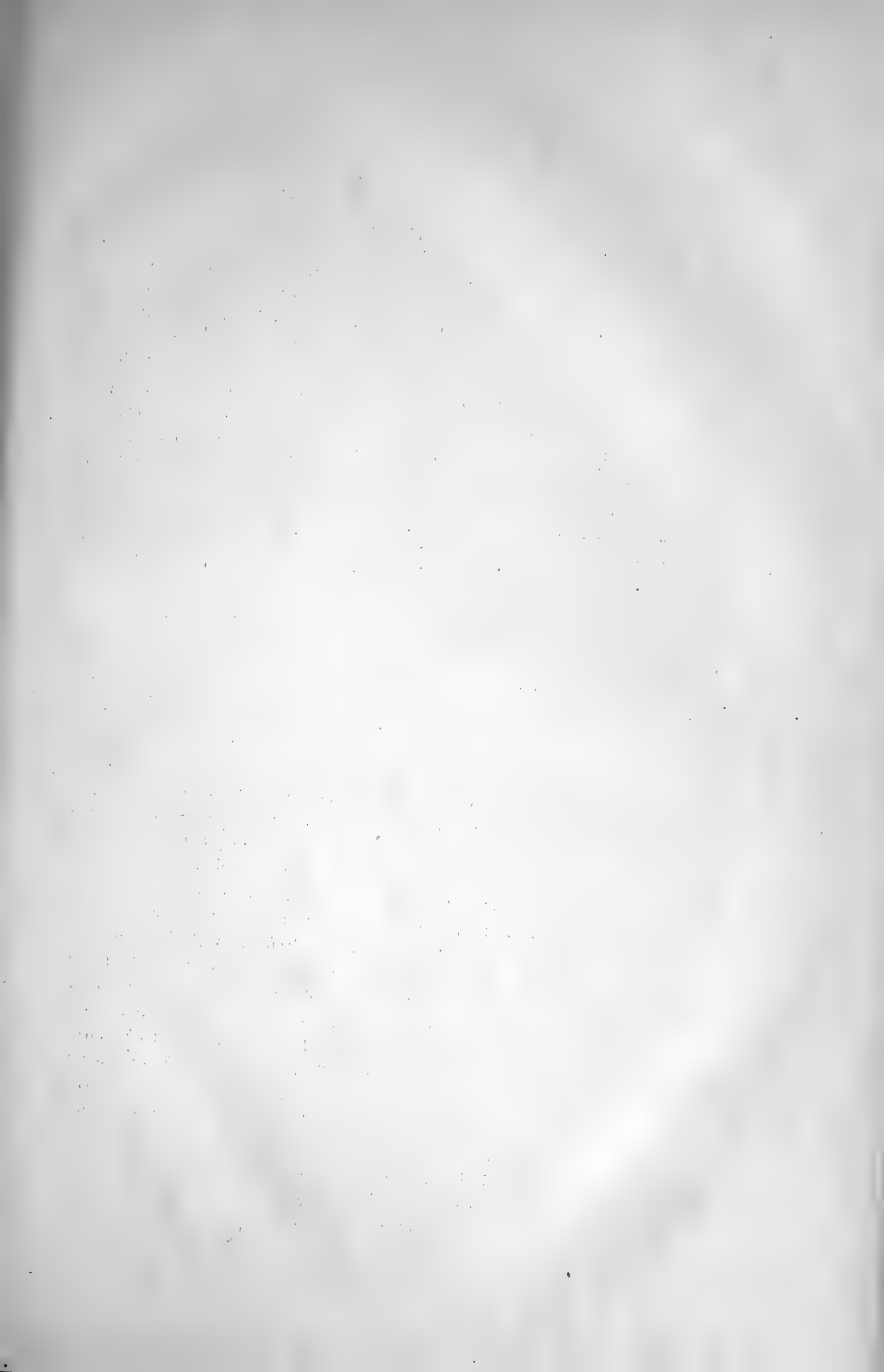
♂ ♀. 18-19 mm. Head fuscous. Palpi fuscous, second joint becoming ochreous-brown anteriorly, expansible hairs sprinkled with whitish, terminal joint whitish, anterior edge dark fuscous. Antennæ greyish, spotted with dark fuscous. Thorax fuscous in ♂ with two red dorsal marks. Abdomen rather dark fuscous. Forewings elongate, rather narrow, slightly dilated posteriorly, costa slightly arched, apex obtuse, termen somewhat sinuate, rather oblique ; glossy fuscous, markings blood-red ; an oblique mark near base ; six small spots in disc arranged in three pairs, and a seventh between and above second and third pairs ; a dot on dorsum towards tornus, sometimes united with third pair to form a curved bar ; a narrow streak along costa from  $\frac{1}{5}$  to  $\frac{4}{5}$ , thence continued as a transverse streak to tornus ; a blackish line along posterior part of costa and termen : cilia yellow-ochreous, beneath tornus fuscous. Hindwings grey, in ♀ rather darker ; cilia grey, round apex and upper half of termen suffused with pale yellow-ochreous, with grey subbasal shade.

Khasi Hills, in June and September ; ~~Kandy, Ceylon, in April (Green)~~ ; six specimens.

#### XYLORYCTIDÆ.

*Ptochoryctis simbleuta*, n. sp.

♂ ♀. 11-17 mm. Head, palpi, antennæ, thorax, and abdomen white ; antennal pectinations in ♂ short, grey ; thorax usually with a few blackish scales ; abdomen broadly banded with ferruginous. Forewings suboblong, moderate, costa gently arched, apex obtuse, termen hardly rounded, rather oblique ; white, with some irregularly scattered black scales, especially in disc ; a patch of cloudy fuscous suffusion extending from disc beyond middle to





tornus ; a præmarginal series of black dots from  $\frac{1}{5}$  of costa to tornus : cilia white, with fine black median line, apical third grey except above apex and on tornus. Hindwings pale grey ; cilia white, with a faint grey median line.

Gazepore, Assam, in March and April ; eight specimens bred (Antram). Larva brick-red ; feeds beneath a web covered with refuse and pieces of bark, on bark of shoots of tea-plant (*Thea*), eating right through to the cambium, and thus killing the branch or plant (Antram).

**BLASTOBASIDÆ** ~~(ECOPHORIDÆ)~~

*Blastobasis decolor*, n. sp.

♂ ♀. 11-15 mm. Head and thorax whitish-ochreous. Palpi whitish-ochreous, irrorated with fuscous except at apex of joints, terminal joint in ♂ stout, tolerably obtuse. Antennæ greyish-ochreous, basal joint whitish-ochreous. Abdomen whitish-ochreous, in ♂ with a dark fuscous transverse streak on each segment before margin. Forewings elongate, narrow, moderately pointed, tolerably acute ; whitish-ochreous, partially tinged with brownish, in ♂ thinly, in ♀ more largely sprinkled with dark fuscous ; a curved or obtusely angulated ochreous-whitish fascia at  $\frac{1}{3}$ , followed by more or less dark fuscous suffusion ; stigmata dark fuscous, distinct, plical obliquely before first discal, and touching posterior edge of pale fascia, a larger dark fuscous dot on tornus beneath second discal : cilia whitish-ochreous or whitish-fuscous, somewhat sprinkled with dark fuscous. Hindwings in ♂ pale fuscous, basal third suffused with whitish-ochreous or pale yellowish, in ♀ fuscous, darker towards apex ; cilia whitish-ochreous or whitish-fuscous.

Puttalam, Ceylon, from November to January ; fourteen specimens (Pole).

*Hypatima* *Blastobasis pulverea*, n. sp.

♂ ♀. 14-16 mm. Head ochreous-whitish, crown irrorated with fuscous. Palpi whitish-ochreous irrorated with dark fuscous, terminal joint in ♂ slender, acute. Antennæ pale greyish-ochreous. Thorax ochreous-whitish irrorated with fuscous. Abdomen pale greyish-ochreous, in ♂ with ferruginous segmental bands. Forewings elongate, rather narrow, moderately pointed, apex tolerably obtuse ; grey-whitish, suffusedly irrorated with dark fuscous ; discal stigmata tolerably distinct, round, dark fuscous, at  $\frac{1}{2}$  and  $\frac{3}{4}$  respectively ; cilia pale greyish, sprinkled with whitish points, and with a few dark fuscous scales towards base. Hindwings with vein 5 connate with or out of stalk of 3 and 4 ; grey, towards base and in cell pale and subhyaline ; cilia light grey, slightly ochreous-tinged.

India (without further locality) ; four specimens, bred from larvæ feeding on colonies of *Tachardia lacca* (Green).

*Hypatima doleropa*, n. sp.

♂. 12-15 mm. Head whitish, crown irrorated with dark grey, face sometimes ochreous-tinged. Palpi whitish, irrorated with dark grey except apex of second joint. Antennæ dark grey. Thorax whitish, mixed with pale grey and irrorated with dark grey. Abdomen grey-whitish mixed with grey, segments with ferruginous bands. Forewings elongate, narrow, costa slightly arched, apex round-pointed, termen extremely obliquely rounded ; whitish,

Really refers to  
*Hypatima*  
with the species  
placed in  
*Blastobasis*  
B.S. X. 111. 139

irregularly irrorated with dark grey or blackish ; stigmata cloudy, formed of blackish irroration, discal rather large, round, often placed in a longitudinal whitish streak, plical elongate, slightly before first discal; cilia light grey, round apex irrorated with whitish and blackish. Hindwings grey, becoming semitransparent towards base ; cilia grey, paler towards tips.

Satpura Range, Khandesh, bred in February ; five specimens (Annandale). "Parasitic in lac, in company with the Noctuid *Eublemma amabilis*" (Annandale).

#### STENOMIDÆ.

##### *Agriophara byrsina*, n. sp.

♂ ♀. 22-25 mm. Head fuscous-whitish, sometimes brownish-tinged. Palpi fuscous-whitish, lower half of second joint suffused with dark fuscous. Antennæ, thorax, and abdomen whitish-fuscous. Forewings elongate, costa moderately arched, apex obtuse, termen rounded, somewhat oblique ; pale greyish-ochreous slightly sprinkled with whitish and dark fuscous, sometimes ochreous-tinged ; dorsum sometimes suffused with fuscous ; basal fourth of costa more or less suffused with dark fuscous ; subtriangular spots of dark fuscous suffusion on costa at  $\frac{1}{2}$  and  $\frac{3}{4}$  ; very indistinct traces of suffused fuscous lines from costa at  $\frac{1}{4}$  and the two spots, first hardly traceable, second very irregular, angulated in disc, third curved ; first discal stigma sometimes fuscous, second large, dark fuscous ; a marginal series of blackish dots round apex and termen : cilia pale greyish-ochreous. Hindwings whitish-grey ; cilia pale greyish-ochreous.

Khasi Hills, from July to September ; five specimens.

##### *Agriophara minax*, n. sp.

♂. 22-25 mm. Head pale brownish-ochreous, sides of face fuscous. Palpi whitish-ochreous, basal half of second joint suffused with fuscous. Antennæ and thorax whitish-ochreous irrorated with fuscous. Abdomen greyish, apex whitish-ochreous. Forewings elongate, costa moderately arched, apex obtuse, termen rounded, rather oblique ; whitish-ochreous tinged with brownish and irrorated with fuscous ; basal fourth of costa suffused with dark fuscous ; a very indistinct irregular line of fuscous suffusion from costa at  $\frac{1}{4}$  to dorsum before middle ; a broad oblique fascia of dark fuscous suffusion, sharply defined and pale-edged anteriorly, very undefined posteriorly, from costa about middle, reaching more than half across wing ; a suffused fuscous curved line from costa about  $\frac{3}{4}$ , almost obsolete on dorsal half ; a marginal row of blackish dots round apex and termen : cilia light brownish-ochreous. Hindwings pale grey ; cilia pale greyish-ochreous, with grey subbasal line.

Khasi Hills, in July ; two specimens.

#### COPROMORPHIDÆ.

##### *Copromorpha cymbalora*, n. sp.

♂ ♀. 13-17 mm. Head and thorax white. Palpi white, sometimes with a few black specks. Antennæ ochreous dotted with black. Abdomen white, on apical half mixed or suffused with grey or dark fuscous. Forewings elongate-

Enarmonia (= Gdia = Aspergeria) cymbalora - (E. conidii)





triangular, costa gently arched, apex obtuse, termen slightly bowed, little oblique; 7-9 separate; ochreous, more or less suffused with bright fulvous; a white patch occupying basal  $\frac{2}{3}$  of wing, outer edge straight, vertical; a violet-golden metallic irregular transverse streak near beyond and parallel to edge of this; one or two short violet-golden metallic oblique marks beneath costa beyond this, a striga from  $\frac{3}{4}$  of costa to termen above middle, and a short mark just before apex; area between this striga and the transverse streak occupied by a large roundish fuscous blotch finely irrorated with whitish and crossed by numerous fine incomplete longitudinal black lines, marked on upper edge with two small round violet-golden-metallic spots, on middle of posterior edge with a violet-golden-metallic transverse mark, and crossed below middle by an irregular bar of ground-colour containing four small round violet-golden metallic spots partly margined with irregular black marks: cilia purplish-grey with two dark fuscous shades. Hindwings white; a broad blackish terminal fascia irregularly attenuated downwards, on lower third of termen very narrow or absent; cilia grey with blackish subbasal line, becoming white on lower half of termen.

Khasi Hills, from June to September; five specimens.

#### CHLIDANOTIDÆ.

*Trymalitis cataracta*, n. sp.

♂. 16-19 mm. Head white, crown mixed with fuscous. Palpi white, upper surface dark fuscous except apex of joints. Thorax white, more or less mixed on back with light fuscous, sometimes speckled with blackish. Abdomen pale whitish-ochreous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen obliquely rounded, slightly indented beneath apex; white; a few fuscous dots on costa; blackish subcostal dots near base and before middle; a streak of suffused fuscous strigulation occupying dorsal fourth from base almost to tornus, and a similar but fainter and less defined streak extending from dorsum beyond middle to apex of wing, marked with two or three blackish dots and a yellowish discal dot at end of cell; a yellow-ochreous apical spot, enclosing a white longitudinal mark; a submarginal series of blackish dots, followed by a marginal series of small grey spots: cilia white, with two shades of fuscous or dark fuscous irroration. Hindwings and cilia whitish-grey, slightly yellowish-tinged.

Maskeliya, Ceylon, in October, November and March; five specimens (de Mowbray). Closely allied to *T. margarias*, but with the colouring of oblique streak much reduced; easily distinguished by having posterior half of costa white with at most one or two minute fuscous dots, whereas in *margarias* it is ochreous strigulated with white.

#### PLUTELLIDÆ.

*Yponomeuta corpuscularis*, n. sp.

♂. 27 mm. Head grey-whitish, forehead with two black dots, centre of crown with some black scales. Palpi grey-whitish, base of terminal joint with a blackish dot. Antennæ grey. Thorax grey-whitish, with dots on shoulders, three antemedian, two postmedian dots, and two at posterior extremity black.

Abdomen grey. Forewings elongate, narrow, costa gently arched, apex obtuse, termen obliquely rounded; grey, irregularly strewn with small white dots, thickest in disc anteriorly, most thinly towards costa between middle and  $\frac{5}{6}$ ; six longitudinal series of small black dots, first of nine dots beneath costa from base to middle, second of ten dots from near base to  $\frac{3}{4}$ , third of three dots before middle and two towards apex, fourth median, of seven dots from near base to middle and three posteriorly, fifth above fold, of twelve or thirteen dots, sixth of ten dots; three additional dots before termen between fourth and fifth rows; a small white spot on costa towards apex: cilia grey, towards base mixed with white. Hindwings and cilia slaty-grey; a moderate roundish rather undefined transparent basal patch.

Nilgiri Hills (6,000 feet), in May; one specimen (Andrewes).

*Antiarates asterias*, n. sp.

♂. 16 mm. Head, palpi, antennæ, thorax, and abdomen dark fuscous; palpi with several white dots; antennæ with a shining white subbasal mark above. Forewings elongate, costa moderately arched, apex obtuse, termen sinuate, oblique; 2 from before angle, 3 and 4 approximated, 7—9 separate; dark fuscous tinged with bronze, strewn throughout with numerous pale violet-blue-metallic dark-edged dots, tending to form transverse series, especially two angulated series beyond middle, and one along termen: cilia light ochreous-yellow, basal half bronzy-fuscous, towards tornus more blackish. Hindwings dark fuscous, cilia whitish-fuscous basal half dark fuscous.

Khasi Hills, in June; one specimen.

#### TINEIDÆ.

*Dacryphanes*, n. g.

Head with loosely appressed hairs; ocelli present; tongue absent. Antennæ  $\frac{1}{2}$ , in ♂ moderately ciliated (1), basal joint short, without pecten. Labial palpi moderately long, curved, ascending, thickened with dense scales, second joint rough beneath, with an exterior series of projecting bristles, terminal joint rather short, obtuse. Maxillary palpi several-jointed, folded. Posterior tibiae with appressed scales. Forewing with 1 b furcate, 2 from near angle, 7 to apex, 11 from before middle. Hindwings 1, elongate-ovate, cilia  $\frac{1}{4}$ ; 3 and 4 approximated at base, 5—7 parallel.

Intermediate in some respects between *Tinea* and *Setomorpha*.

*Dacryphanes cyanastra*, n. sp.

♂ ♀. 15-18 mm. Head and palpi dark ochreous-fuscous. Antennæ, thorax, and abdomen dark fuscous. Anterior legs spotted with silvery-white. Forewings elongate, posteriorly somewhat dilated, costa moderately arched, apex rounded, termen obliquely rounded; dark fuscous; six indeterminate groups of blue-metallic or violet-metallic dots, sometimes surrounded by an indefinite cloudy paler suffusion, viz., basal, towards costa before middle, towards middle of dorsum, towards costa about  $\frac{3}{4}$ , tornal, and apical: cilia rather dark ochreous-fuscous. Hindwings rather dark bronzy-fuscous, darker towards apex; cilia

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fuscous, with dark fuscous basal line. Forewings in ♂ beneath with expandible subcostal fringe of hairs before middle.

Khasi Hills, in July and August; twenty specimens.

*Struthisca mysteris*, n. sp.

♂ 19-22 mm., ♀ 28-32 mm. Head light ochreous-yellowish, lower part of face dark fuscous. Palpi very short, loosely scaled, fuscous. Antennæ fuscous, basal joint pale yellowish, pectinations in ♂ 12. Thorax light fuscous. Abdomen light greyish-ochreous. Forewings elongate, in ♂ moderate, in ♀ narrower, costa moderately arched, apex obtuse, termen obliquely rounded; 5 absent, 8 and 9 stalked; pale fuscous, with scattered cloudy dark fuscous strigulae; these cause obscure indications of a cloudy dark transverse mark from disc before middle to dorsum, preceded by faint pale suffusion: cilia pale fuscous or greyish-ochreous. Hindwings thinly scaled, grey; cilia light greyish-ochreous.

Madulsima and Peradeniya, Ceylon, from July to September; six specimens (Vaughan, Green).

*Struthisca zygitis*, n. sp.

♂ 13-14 mm., ♀ 19-22 mm. Head and thorax whitish irrorated with fuscous, lower half of face fuscous. Palpi short, slender, fuscous, apex of joints whitish. Antennæ whitish sprinkled with fuscous, pectinations  $2\frac{1}{2}$ . Abdomen light greyish-ochreous. Forewings elongate, moderate, costa moderately arched, more strongly in ♀, apex obtuse, termen rounded, rather strongly oblique; 9 absent; whitish, sometimes partially tinged with fuscous, strewn throughout with fuscous or dark fuscous strigulae; an irregular transverse median fascia, and a spot beneath costa at  $\frac{3}{4}$ , more or less indicated with fuscous suffusion, but usually very ill-defined: cilia whitish, sprinkled with pale fuscous. Hindwings and cilia pale fuscous or whitish-fuscous.

Puttalam, Ceylon, from September to June; ten specimens (Pole).

*Struthisca charadrias*, n. sp.

♂ 18-23 mm., ♀ 28-31 mm. Head and thorax light fuscous, sprinkled with whitish. Palpi very small, slender, fuscous. Antennæ whitish, pectinations in ♂ 5, lined with fuscous. Abdomen pale whitish-fuscous. Forewings elongate, rather narrow, rather dilated posteriorly, costa posteriorly moderately arched, apex round-pointed, termen very obliquely rounded; all veins present, separate; whitish finely irrorated with fuscous, sometimes forming indistinct strigulae; the absence of irroration forms a more or less distinct suffused white median streak from near base to  $\frac{2}{3}$ , costal area above this more or less suffused with fuscous: cilia whitish-fuscous. Hindwings and cilia fuscous-whitish.

Hambantota, Ceylon, from June to August; ten specimens (Pole).

*Sapheneutis*, n. g.

Head loosely rough-scaled; ocelli present; tongue absent. Antennæ  $\frac{1}{2}$ , in ♂ biciliated with fascicles. Labial palpi moderate, porrected or ascending, loosely scaled, obtuse. Maxillary palpi obsolete. Posterior tibiae clothed with

long hairs. Forewings with 1b furcate, 2 from towards angle, 7 to apex or termen, 8 stalked with 7 or absent, 11 from before middle. Hindwings 1, elongate-ovate, cilia  $\frac{4}{5}$ —1; 2—7 tolerably parallel.

Type *S. camerata*. Allied to *Melasina*, from which it differs essentially by the antennæ not being pectinated in ♂.

*Sapheneutis camerata*, n. sp.

♂. 12-15 mm., ♀ 21-23 mm. Head, palpi, antennæ, thorax, and abdomen pale whitish-ochreous; basal half of palpi mixed with blackish; shoulders with a blackish-fuscous spot. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen very obliquely rounded; 8 absent; pale whitish-ochreous; markings rather dark fuscous edged with black; an irregular fascia near base, not black-edged anteriorly; an irregular fascia before middle, anterior edge concave, posterior angularly prominent in middle; a subquadrate spot on costa about  $\frac{3}{4}$ , and narrow sometimes nearly obsolete spot on tornus opposite it; sometimes two undefined dots on costa and termen near apex; cilia pale whitish-ochreous. Hindwings in ♂ ochreous-whitish more or less tinged with grey, in ♀ pale grey; cilia pale whitish-ochreous.

Maskeliya, Ceylon (Pole); N. Coorg (Newcome); in April, May, October, and November, nine specimens.

*Sapheneutis marmarurga*, n. sp.

♂ ♀. 15-20 mm. Head ochreous-yellow. Palpi fuscous, towards apex pale yellowish. Antennæ pale ochreous, ciliations in ♂ 1. Thorax light purplish-bronzy, mixed with blackish and sometimes with yellow-ochreous with posterior crest. Abdomen whitish-ochreous more or less suffused with grey. Forewings elongate, posteriorly rather dilated, costa moderately arched, apex obtuse, termen straight, oblique; 7 and 8 long-stalked, 9 sometimes out of 7 near base; white, in ♂ sprinkled with ochreous, especially posteriorly, and more or less sprinkled with blackish, in ♀ much more largely suffused and strigulated with ochreous-fuscous or purplish-fuscous and irrorated with blackish, so as to obscure ground colour except on a fascia following basal patch and dilated towards costa; markings slaty-purplish or purplish-fuscous irrorated with black, viz., a basal patch with outer edge running from  $\frac{1}{4}$  of costa to  $\frac{2}{5}$  of dorsum, slightly curved, and a transverse or subtriangular blotch on costa somewhat beyond middle, reaching half across wing; cilia fuscous sprinkled with blackish. Hindwings in ♂ pale grey, brassy-tinged, in ♀ grey; cilia ochreous-whitish more or less tinged with grey, usually with grey subbasal line.

Maskeliya, Ceylon, in February, March, and June; sixteen specimens (Pole).

*Sapheneutis metacentra*, n. sp.

♂. 14-18 mm., ♀ 24-26 mm. Head rather dark fuscous. Palpi ascending, dark fuscous, apex of second and terminal joints light greyish-ochreous. Antennæ pale greyish-ochreous. Thorax fuscous-whitish, anteriorly narrowly suffused with dark fuscous. Abdomen pale greyish-ochreous. Forewings elongate-oblong, costa moderately arched towards extremities, apex rounded, termen obliquely rounded; 7 and 8 stalked; very pale greyish-ochreous,







with some scattered dark fuscous strigulae, especially towards termen; a large blackish dot of partially raised scales in disc at  $\frac{2}{3}$ : cilia ochreous-whitish. Hindwings grey, thinly scaled; cilia grey-whitish, with two grey shades.

Puttalam, Eppawela, Wellawaya, Maskeliya, and Madulsima, Ceylon, from September to November and in May (Pole, Green, Vaughan).

*Melasina epiclera*, n. sp.

♂. 16-18 mm., ♀ 18-20 mm. Head ochreous-whitish, hairs somewhat appressed, lower part of face fuscous. Palpi very small, fuscous. Antennae in ♂ ochreous-whitish, pectinations 5, in ♀ fuscous. Thorax ochreous-whitish, in ♀ more or less infuscated. Abdomen whitish-fuscous, in ♀ with dense ochreous-whitish anal hairs. Forewings rather elongate, more so in ♀, costa gently arched, apex obtuse, termen obliquely rounded; 8-10 rather approximated; in ♂ clear whitish with some scattered fuscous strigulae, in ♀ light fuscous somewhat mixed with darker; in ♂ one or two small spots towards base, a moderate straight fascia from middle of costa to beyond middle of dorsum, and a transverse mark from costa at  $\frac{4}{5}$  reaching half across wing fuscous, in ♀ these markings are more or less indicated by darker fuscous suffusion but very undefined; a terminal row of fuscous dots: cilia in ♂ ochreous-whitish, becoming more ochreous towards base, in ♀ whitish-fuscous. Hindwings pale fuscous; cilia as in forewings.

Palni Hills (6,000 feet); four specimens (Campbell).

*Melasina autopetra*, n. sp.

♂. 18-21 mm., ♀ 25-29 mm. Head light ochreous-yellowish. Palpi moderate, light fuscous. Antennae pale greyish-ochreous, towards base infuscated, pectinations, in ♂ 6. Thorax light fuscous, with posterior crest. Abdomen light greyish-ochreous, apex whitish-ochreous. Forewings elongate, in ♂ moderate, in ♀ narrower, costa moderately arched, apex rounded, termen obliquely rounded; 8-10 rather approximated; light greyish-ochreous finely irrorated with fuscous, in ♂ with indications of darker strigulae, in ♀ almost uniform; in ♂ sometimes indistinct dark dots along posterior part of costa and termen: cilia pale greyish-ochreous irrorated with fuscous. Hindwings whitish-fuscous; cilia whitish-ochreous, with two pale fuscous shades.

Puttalam, Ceylon, in September and October; eleven specimens (Pole).

*Melasina expedita*, n. sp.

♂. 24-27 mm., ♀ 38 mm. Head shortly scaled, ochreous-yellow, lower third of face dark fuscous. Palpi moderate, dark fuscous, terminal joint pale yellowish beneath. Antennae ochreous-yellow, pectinations in ♂ 3. Thorax whitish-ochreous, anteriorly suffused with blackish-fuscous. Abdomen whitish-ochreous, in ♀ with long anal tuft. Forewings elongate, moderate, somewhat dilated posteriorly, costa moderately arched, apex obtuse, termen obliquely rounded; 8 and 9 stalked, 10 approximated; whitish-ochreous, with scattered dark fuscous strigulae, in ♀ largely suffused with light fuscous; a well-defined dark fuscous spot occupying basal fifth of costa; a narrow dark fuscous fascia from  $\frac{2}{5}$  of costa to beyond middle of dorsum; a cloudy dark fuscous spot

beneath costa at  $\frac{2}{3}$ ; in ♀ these markings are more obscure: cilia whitish-ochreous, in ♀ fuscous-tinged. Hindwings light grey; cilia ochreous-grey-whitish, with a fuscous subbasal line.

N. Coorg (3,000 feet), in August; four specimens (Newcome).

*Melasina leucosceptra*, n. sp.

♂. 25-28 mm. Head and thorax whitish-ochreous, sometimes tinged with brownish, thorax with posterior crest. Palpi moderate, brownish. Antennæ ochreous-whitish, pectinations 6. Abdomen ochreous-whitish. Forewings elongate, costa gently arched, apex rounded, termen obliquely rounded; 8-10 approximated; whitish-ochreous, more or less tinged with fuscous, and irrorated with fuscous or dark fuscous; a well-marked clear white streak along submedian fold from base to beyond middle; a white spot in cell and streaks between veins and along dorsum and termen more or less developed, very variable in extent and sometimes partially confluent: cilia pale whitish-ochreous, somewhat sprinkled with fuscous. Hindwings ochreous-whitish, tinged or finely sprinkled with pale fuscous; cilia ochreous-whitish, sometimes sprinkled with pale fuscous.

Puttalam, Ceylon, in October; five specimens (Pole).

*Melasina isopeda*, n. sp.

♂. 20-26 mm. Head fuscous-whitish mixed with fuscous. Palpi moderate, fuscous, apex fuscous-whitish. Antennæ ochreous-whitish, pectinations 8. Thorax fuscous mixed with fuscous-whitish. Abdomen whitish-fuscous. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded; 8-10 approximated; whitish-fuscous sprinkled with dark fuscous, and strewn with numerous small cloudy dark fuscous dots, sometimes coalescing to form longitudinal streaks in disc and between veins posteriorly; a larger dark fuscous dot in disc at  $\frac{2}{3}$ : cilia fuscous-whitish with two fuscous shades. Hindwings pale fuscous; cilia fuscous-whitish, with light fuscous subbasal line.

Cuddapah, Palni Hills (6,000 feet), and Bombay, in May and June; four specimens (Campbell).

*Melasina pericrossa*, n. sp.

♂. 24-27 mm. Head and palpi fuscous mixed with dark fuscous, palpi moderate. Antennæ whitish-ochreous sprinkled with dark fuscous, pectinations 6. Thorax fuscous mixed with white and dark fuscous. Abdomen light fuscous. Forewings elongate, moderate, costa moderately arched, apex rounded, termen obliquely rounded; 8-10 approximated; fuscous, irrorated with dark fuscous, costa and dorsum except basal third, and termen suffused with white and strigulated with dark fuscous, costa posteriorly spotted with dark fuscous; a broad dark fuscous submedian suffusion from base to  $\frac{2}{3}$ , interrupted by a whitish spot before middle; an undefined discal spot of whitish suffusion at  $\frac{2}{3}$ , followed by a spot of dark fuscous suffusion; a series of undefined spots of dark fuscous suffusion preceding a suffused white terminal streak: cilia ochreous-whitish indistinctly barred with fuscous, with a dark fuscous subbasal line.





Hindwings fuscous ; cilia pale whitish-ochreous, with fuscous sub-basal line.

Sikkim (600 feet), in May ; three specimens (Dudgeon).

*Melasina anasactis*, n. sp.

♂ 28-34 mm., ♀ 50 mm. Head pale brownish-ochreous, crown sometimes suffused with blackish-fuscous. Palpi moderate, dark fuscous, apex whitish-ochreous. Antennæ pale ochreous, pectinations in ♂ 5. Thorax pale brownish-ochreous, suffusedly mixed with dark fuscous and blackish, especially on sides, with posterior crest. Abdomen fuscous. Forewings elongate, much more so in ♀, costa gently arched, apex rounded, termen obliquely rounded ; secondary cell very small or in ♀ absent, 9 and 10 rising from it on a moderately long stalk ; pale brownish-ochreous, irregularly sprinkled with blackish-fuscous, in disc and towards dorsum and termen more or less suffused with whitish in ♂ ; basal area more or less suffused with dark fuscous ; a fuscous band irregularly suffused with blackish running from upper portion of basal patch to near dorsum beyond middle, its lower edge there rather obtusely angulated and running almost straight to apex ; a dark fuscous costal spot beyond middle and a smaller one at  $\frac{2}{3}$  ; in ♀ these markings are very obscure and ill-defined : cilia pale whitish-ochreous mixed with fuscous, obscurely barred with darker fuscous. Hindwings rather light fuscous ; cilia light fuscous, base whitish-ochreous.

Madulsima, Haputalte, and Peradeniya, Ceylon, from June to August, and in February (Vaughan, Pole, Alston, Green) ; seven specimens. Differs from *M. Thwaitesii* (to which it is very closely allied) by different form of dark band, which in *Thwaitesii* forms two obtuse angles towards dorsum ; and by venuration of forewings, since in *Thwaitesii* the secondary cell is large, 9 and 10 approximately connate from its angle or in ♀ short-stalked ; this is due to the position of cross-vein, which in *Thwaitesii* is in a line with posterior margin of cell, whilst in *anasactis* it is very much retracted towards base.

*Melasina ethalea*, n. sp.

♂. 30-34 mm., ♀ 46 mm. Head and palpi ochreous-yellow, in ♀ somewhat mixed with dark fuscous, palpi rather short, densely scaled, in ♀ hairy. Antennæ in ♂ ochreous mottled with blackish, pectinations 6, in ♀ wholly clothed with loose dark brown and black scales. Thorax and abdomen dark brown. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen obliquely rounded ; 8 approximated, 9 and 10 short-stalked ; in ♂ dark fuscous finely irrorated with whitish, in ♀ paler, strewn with blackish-fuscous strigulae ; a dark fuscous transverse fascia-like blotch from middle of dorsum, reaching about half across wing ; a similar blotch from middle of costa directed towards tornus, reaching more than half across wing ; costa posteriorly more or less spotted alternately with pale ochreous-yellowish and dark fuscous ; two or three dark fuscous subterminal spots sometimes united into an incomplete fascia : cilia dark fuscous, base mixed with whitish-fuscous. Hindwings and cilia blackish-fuscous, cilia round apex and upper half of termen pale ochreous-yellowish except at base.

Khasi Hills ; three specimens.

*Melasina stratifica*, n. sp.

♂. 32-36 mm. Head pale brownish-ochreous, sometimes mixed with dark fuscous on crown. Palpi moderate, rough-scaled, dark fuscous, apex whitish-ochreous. Antennæ whitish-ochreous, pectinations 7. Thorax pale brownish-ochreous mixed with brown and dark brown, with posterior crest tipped with blackish-fuscous. Abdomen light brownish-ochreous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen obliquely rounded ; 8 approximated, 9 and 10 stalked ; pale whitish-ochreous, somewhat sprinkled with fuscous and blackish ; markings fuscous, suffusedly mixed with blackish, ill-defined ; a suffused basal patch ; two moderate straight parallel fasciæ, first from  $\frac{1}{3}$  of costa, connected on costa with basal patch, not crossing fold, second from middle of costa to tornus ; a short inwardly oblique mark from costa before apex : cilia ochreous-whitish, more ochreous-tinged on basal half, indistinctly barred with grey and blackish. Hindwings whitish-fuscous ; cilia pale whitish-ochreous ; with an indistinct pale fuscous line.

Maskeliya and Madulsima, Ceylon, in January, February, and May ; eight specimens (de Mowbray, Vaughan).

1870

1871

1872

1873





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April 13, 1908.]

## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

E. MEYRICK, B.A., F.R.S., F.Z.S.

VI.

(Continued from page 160 of this Volume.)

GELECHIADÆ.

*Aristotelia thalamitis*, n. sp.

♂ ♀. 11-12 mm. Head glossy pale ochreous, with fuscous lateral stripes, sides yellower. Palpi whitish-ochreous, irrorated with blackish except at apex of joints, scales of second joint roughened above towards apex, terminal joint thickened, somewhat shorter than second. Antennæ dark fuscous, towards apex irregularly dotted with whitish. Thorax whitish-ochreous irrorated with dark fuscous, and mixed on sides with yellowish. Abdomen shining bronzy-fuscous. Forewings elongate, very narrow, attenuated from  $\frac{1}{3}$ , acute; 6 and 7 out of 8; whitish-ochreous densely irrorated with fuscous and dark fuscous, sometimes mixed with white in disc; oblique blackish marks on costa near base and at  $\frac{1}{4}$ , and blackish marks on fold obliquely beyond each of these, second representing plical stigma and edged posteriorly with ochreous-yellowish suffusion, which is sometimes extended along fold; round black dots beneath middle of costa and in disc at  $\frac{2}{3}$ , edged with ochreous-yellowish suffusion; some ochreous-yellow suffusion towards base of dorsum, and towards apex; costa posteriorly suffused with dark fuscous, and marked with three or four white specks; several white specks along termen: cilia light grey, at apex ochreous-yellowish with two blackish lines. Hindwings  $\frac{3}{4}$ , cilia 5; grey, thinly scaled in disc anteriorly; cilia light grey.

Khasi Hills, in September and October; thirty specimens.

*Aristotelia citrocosma*, n. sp.

♂ ♀. 7-9 mm. Head pale shining fuscous, sides brassy-yellow, face pale yellowish. Palpi light yellow, a subapical ring of second joint and anterior edge of terminal joint dark fuscous, terminal joint longer than second. Antennæ dark fuscous, with white rings at intervals of three joints. Thorax brassy-yellow, patagia light fuscous. Abdomen grey. Forewings elongate-lanceolate; 6 separate; fuscous, darker-irrorated; markings brassy-yellow; a very

oblique fascia near base ; a thick streak running from  $\frac{1}{4}$  of costa to near dorsum about middle, thence curved upwards to disc beyond middle, again angulated downwards to tornus and continued along termen to apex ; an oblique strigula on costa beyond origin of this, and another at  $\frac{3}{4}$  : cilia grey, round apex yellow. Hindwings  $\frac{3}{4}$ , cilia 4 ; grey, thinly scaled in disc ; cilia pale grey.

Khasi Hills, from September to November ; Maskeliya, Ceylon, in March and May (Pole) ; thirty specimens.

*Aristotelia galcotis*, n. sp.

♂ ♀. 7-8 mm. Head ochreous-whitish, partially sprinkled with dark fuscous. Palpi ochreous-whitish, second joint with blackish irroration increasing upwards except at apex, and rather thickened towards apex, terminal joint white with two blackish rings, as long as second. Antennæ white, ringed and narrowly banded with blackish. Thorax whitish-ochreous, partially sprinkled with blackish. Abdomen grey, in ♂ whitish-ochreous towards base. Forewings elongate-lanceolate ; 6 separate ; brownish-ochreous or yellow-ochreous, paler towards base, irregularly sprinkled with black ; a small round spot of black irroration on fold at  $\frac{1}{3}$ , another in disc about middle, a third on costa at  $\frac{2}{5}$ , and a fourth rather larger and more triangular on tornus : cilia whitish-ochreous with basal dots of blackish irroration. Hindwing under  $\frac{1}{2}$ , cilia 7, rather dark grey, thinly scaled in disc ; cilia grey.

Maskeliya, Ceylon, in January and February ; six specimens (Pole).

*Aristotelia leucophanta*, n. sp.

♂ ♀. 10 mm. Head and thorax brown, face suffused with whitish. Palpi pale brownish-ochreous, anterior edge dark fuscous, terminal joint longer than second. Antennæ fuscous, towards apex irregularly dotted with ochreous-white. Abdomen dark fuscous. Forewings elongate, very narrow, long-pointed, apex obtuse ; 6 separate ; brown, more or less suffused irregularly with dark fuscous ; a small oval white spot beneath fold at  $\frac{2}{5}$ , and an oblique linear white mark beneath costa at  $\frac{2}{5}$  ; a few scattered white scales in middle of disc ; an irregular, sometimes interrupted white line from  $\frac{4}{5}$  of costa to before tornus, double on median third and enclosing a blackish mark ; some whitish dots along termen : cilia dark grey, at apex with outer half brownish-ochreous, beneath apex with brownish-ochreous bars on basal half. Hindwings  $\frac{3}{4}$ , cilia 3 ; dark fuscous, thinly scaled anteriorly ; cilia purplish-grey.

Khasi Hills, from September to November ; four specimens.

*Aristotelia brochodesma*, n. sp.

♂ ♀. 8-9 mm. Head light brownish, face glossy pale whitish-ochreous. Palpi light greyish-ochreous, anterior edge dark fuscous, apex of second joint ochreous-whitish, terminal joint longer than second. Antennæ ochreous-whitish ringed with blackish. Thorax brown. Abdomen dark fuscous. Forewings elongate, very narrow, long-pointed, apex obtuse ; 6 separate ; brown ; a slender angulated white fascia at  $\frac{1}{5}$ , preceded by spots of blackish suffusion on costa and below middle, and followed below middle by an elongate blackish mark terminated by a whitish dot, but these dark markings are sometimes merged in a general dark fuscous suffusion ; a slender or irregular oblique

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whitish median fascia, preceded by a blackish spot on costa and a dot above dorsum, and followed by a blackish mark beneath costa terminated by a white dot; a slender white fascia from  $\frac{3}{4}$  of costa to before tornus, central third somewhat enlarged and containing a linear oblique black mark: cilia purplish-grey, round apex pale ochreous with basal half blackish. Hindwings  $\frac{4}{5}$ , cilia 3; dark fuscous, thinly scaled in disc; cilia purplish-grey.

Khasi Hills, in September and October; twenty specimens.

*Thiotricha*, Meyr.

This genus, characterised by the long antennal ciliations of ♂, and absence of veins 4 and 8 of forewings, includes ten Australian species and two from New Zealand. I have already referred to it *animosella*, Walk., and described two Indian species; I now describe fifteen more.

*Thiotricha animosella*, Walk.

(*Gelechia animosella*, Walk. 1022.)

Muskeliya, Ceylon; N. Coorg; Khasi Hills; in February, March, and June.

*Thiotricha glenias*, n. sp.

♂ ♀. 8-10 mm. Head, palpi, antennæ, thorax, and abdomen silvery-white; palpi in ♂ with expansible fringe of long fine hairs on second joint above. Forewings elongate, very narrow, parallel-sided, round-pointed; 6 and 9 out of 7; silvery-white, more or less tinged with ochreous; apical  $\frac{2}{5}$  orange-ochreous anteriorly suffused; a grey mark from dorsum before tornus, angulated inwards near dorsum, then outwardly oblique, reaching more than half across wing, a round black dot at apex, and another on termen, each preceded by a whitish dot: cilia pale whitish-ochreous, round apex with basal half orange limited by a grey line. Hindwings  $\frac{1}{2}$ , cilia 6; whitish-grey, thinly scaled, apex tinged with orange; a blackish apical dot: cilia pale whitish-ochreous, at apex with postmedian blackish-grey dot.

Maskeliya, Ceylon, in December, January, and May; four specimens (Pole). Allied to *animosella*, but grey dorsal mark differently formed; and also characterised by the expansible fringe of palpi, which is absent in *animosella*.

*Thiotricha centrītis*, n. sp.

♂. 11 mm. Head, palpi, antennæ, thorax, and abdomen shining ochreous-whitish; palpi with long fine expansible hairs on second joint above. Forewings elongate, very narrow, gradually attenuated posteriorly, round-pointed; 6 and 9 out of 7; shining pale whitish-ochreous; apical third ochreous-orange, anteriorly suffused; some grey suffusion on dorsum before tornus and on middle of termen; a large round black apical dot, edged with white in cilia, cilia otherwise whitish-ochreous, round apex with a grey median line. Hindwings  $\frac{1}{2}$ , cilia 6; whitish-grey, apex slightly tinged with orange; a blackish apical dot: cilia whitish-ochreous, at apex with postmedian blackish dot.

Palni Hills (6,000 feet); one specimen (Campbell).

*Thiotricha clidias*, n. sp.

♂ ♀. 8-11 mm. Head, palpi, antennæ, thorax and abdomen ochreous-whitish; palpi in ♂ with short expansible hairs towards apex of terminal joint

above. Forewings elongate, very narrow, gradually attenuated, round-pointed; 6 and 9 out of 7; in ♂ ochreous-whitish, in ♀ pale greyish-ochreous; apical third orange, anteriorly suffused; costal edge posteriorly blackish, marked towards apex with three irregular white or whitish dots; in ♂ sometimes grey marks along dorsum towards  $\frac{1}{4}$  and middle; two blackish streaks from about tornus, acutely angulated inwards near dorsum, then very oblique outwards, reaching  $\frac{2}{3}$  across wing, separated with whitish; beyond these a whitish terminal dot, followed by a black dot connected by a line with a black apical dot: cilia pale greyish-ochreous, round apex with a blackish-grey line. Hindwings  $\frac{1}{2}$ , cilia 6; light grey, thinly scaled, apex tinged with orange; a blackish apical dot; cilia pale greyish-ochreous, at apex with postmedian blackish dot.

Khasi Hills, from June to November; Maskeliya, Ceylon, in April (Pole); seven specimens. Very similar to *T. saulot's*, but the latter is easily distinguished by the differently shaped forewings with well-defined prominent tornus.

*Thiotricha epiclista*, n. sp.

♂. 9 mm. Head, palpi, and antennæ whitish; terminal joint of palpi dark grey towards apex anteriorly, nearly twice as long as second. Thorax pale shining grey. Abdomen grey. Forewings elongate, very narrow, attenuated from near base, apex round-pointed, termen very oblique; 6 and 9 out of 7; shining dark grey; an orange patch occupying apical third of wing, not reaching margins except at apex and tornus, enclosing a wedge-shaped blackish terminal streak, and with its anterior end indented by an acute triangular projection of ground colour; a blackish streak crossing this patch from near lower anterior angle almost to apex, and a blackish longitudinal dash above this; three white dots on costa posteriorly, and a black apical dot; some indistinct whitish dots or strigulae on dorsum posteriorly and termen: cilia grey, round apex with a darker shade. Hindwings  $\frac{1}{2}$ , cilia 6; rather dark grey, cilia grey, at apex with a postmedian blackish dot.

Khasi Hills, in September; one specimen.

*Thiotricha acrantha*, n. sp.

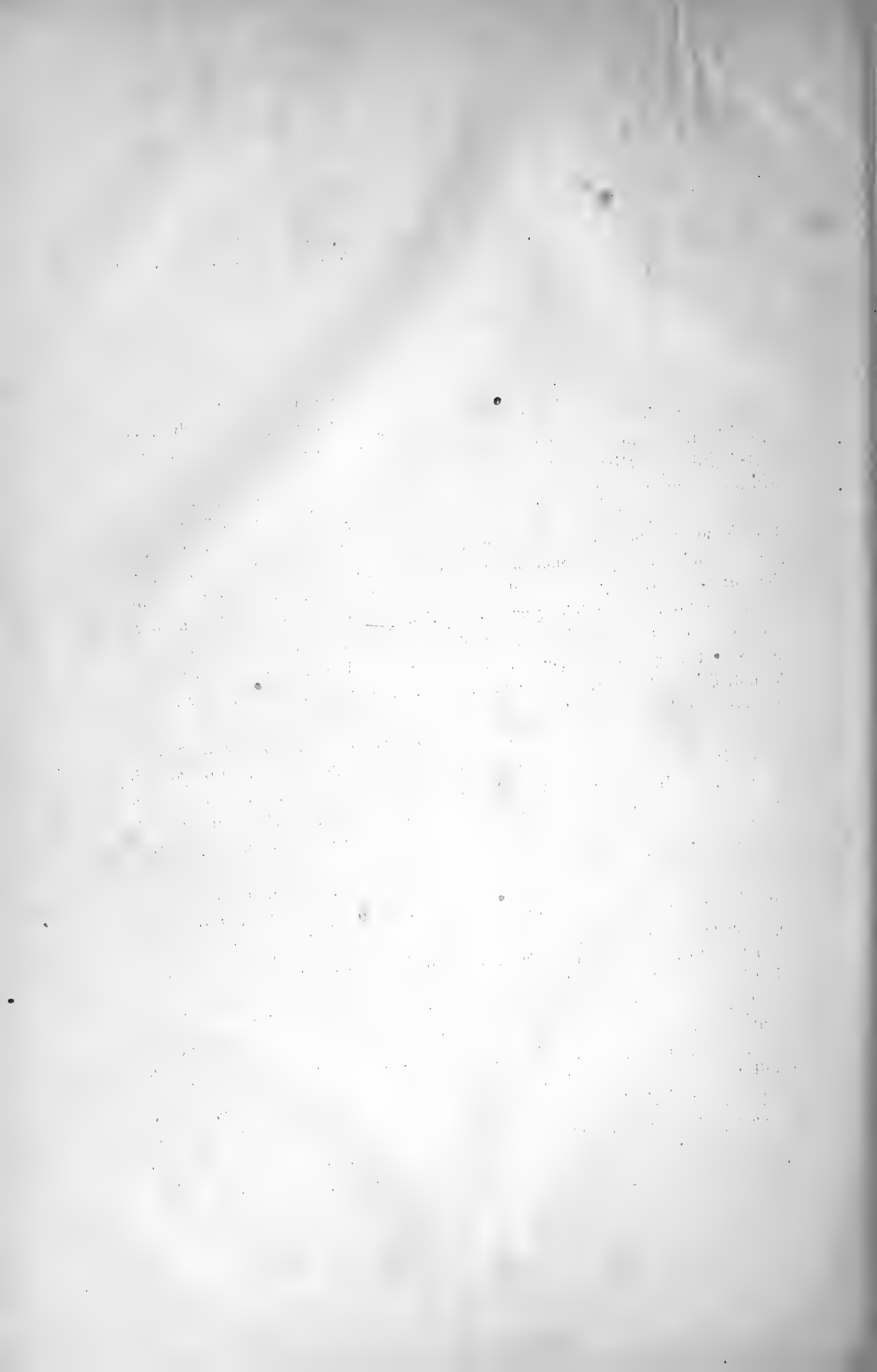
♂. 10 mm. Head, palpi, antennæ, and thorax ochreous-whitish; second joint of palpi grey, with a few long expansible hairs at its apex above. Abdomen pale grey, anal tuft whitish-ochreous. Forewings elongate, very narrow, long-pointed, acute; 6 and 9 out of 7; shining ochreous-whitish; an acutely angulated whitish line from  $\frac{4}{5}$  of costa to tornus, edged anteriorly on upper half by a blackish streak, elsewhere indistinctly with fuscous, angle nearly reaching apex; apex faintly rosy-tinged; small blackish dots at apex and on termen towards apex: cilia pale whitish-ochreous, at apex with a grey median line; apex of wing beneath distinctly rosy-tinged. Hindwings  $\frac{3}{4}$ , cilia 4; light grey thinly scaled towards base; a dark grey apical dot; cilia pale greyish-ochreous, at apex with dark grey postmedian dot.

Khasi Hills, in September; one specimen.

*Thiotricha characias*, n. sp.

♂ ♀. 13-14 mm. Head and antennæ white. Palpi white, anterior edge of terminal joint blackish. Thorax and abdomen ochreous-grey-whitish. Forewings







elongate, very narrow, parallel-sided, apex round-pointed, termen somewhat sinuate beneath apex, very oblique; 6 out of 7, 9 separate; pale greyish-ochreous; dorsum in ♂ slenderly suffused with fuscous; a slender very oblique blackish streak from near dorsum in middle, reaching  $\frac{2}{3}$  across wing; apical fourth more or less infuscated, browner towards termen; a whitish wedge-shaped mark on tornus, and dot on costa opposite; a snow-white dot before apex, partially edged with blackish, and a whitish dot on termen beneath it: cilia greyish-ochreous, round apex with two blackish lines separated with whitish. Hindwings  $\frac{4}{5}$ , cilia 3; light grey, thinly scaled anteriorly; a blackish apical dot; cilia greyish-ochreous, at apex with a black postmedian bar preceded by whitish suffusion.

Palni Hills; two specimens (Campbell).

*Thiotricha galactea*, n. sp.

♂ ♀. 13—15 mm. Head, palpi, antennæ, and thorax ochreous-whitish; anterior edge of terminal joint of palpi blackish. Forewings elongate, very narrow, parallel-sided, apex round-pointed; termen somewhat sinuate, very oblique; 6 out of 7, 9 separate; ochreous-whitish; two elongate blackish dots obliquely placed towards dorsum about  $\frac{1}{4}$ ; a very oblique blackish median streak reaching from near dorsum to above middle; a blackish longitudinal mark above dorsum towards tornus; posterior fourth of costa and termen more or less suffused with dark fuscous; a short oblique whitish streak from costa at  $\frac{4}{5}$ , and a whitish streak almost along termen; a white dot before apex, partially edged with black: cilia ochreous-whitish round apex, with two blackish lines. Hindwings  $\frac{4}{5}$ , cilia 3; pale grey, thinly scaled; a dark grey dot at apex; cilia pale whitish-ochreous, at apex with a black postmedian bar.

Palni Hills (6,000 feet); three specimens (Campbell).

*Thiotricha hoplomacha*, n. sp.

♂. 15 mm. Head, palpi, antennæ, thorax, and abdomen pale whitish-ochreous; second joint of palpi with a lateral fuscous stripe, anterior edge of terminal joint dark fuscous. Forewings elongate, very narrow, pointed; 6 out of 7, 9 separate; whitish-ochreous, markings blackish-fuscous; a thick streak along costa from base, attenuated and becoming subcostal towards middle, continued to apex; a very oblique streak from costa about  $\frac{3}{4}$ , running into this; a very oblique curved wedge-shaped streak from dorsum towards base, not crossing fold; a thick oblique streak from dorsum about middle, running into subcostal streak, dilated on dorsum; a streak from tornus before termen to apex, finely attenuated upwards; a blackish pale-edged apical dot: cilia whitish-ochreous, on costa pale ochreous with blackish-fuscous basal streak, round apex with median and apical fuscous lines. Hindwings  $\frac{4}{5}$ , cilia  $2\frac{1}{2}$ , pale whitish-grey; cilia whitish-ochreous, at apex with dark grey subapical line.

Khasi Hills, in September; one specimen.

*Thiotricha pylartis*, n. sp.

♂ ♀. 11—13 mm. Head and palpi shining white, anterior edge of terminal joint of palpi blackish. Antennæ white. Thorax whitish. Abdomen ochreous-whitish. Forewings elongate, very narrow, gradually attenuated from near base,

acutely pointed, in ♂ with expansible hair pencil from base lying beneath costa; 6 separate, 9 out of 7; ochreous-whitish, markings dark slaty-grey; a slender basal fascia, sometimes interrupted; two irregular zigzag sometimes interrupted lines from costa at  $\frac{1}{5}$  and  $\frac{2}{5}$ , confluent towards dorsum; inwardly oblique fasciæ at middle and  $\frac{3}{4}$ , first narrow, second broader, sometimes not reaching dorsum often connected by a line in disc; a small spot or bar just before apex: cilia grey. Hindwings  $\frac{3}{4}$ , cilia 6; light grey, darker in ♀, thinly scaled towards base, cilia grey.

Khasi Hills, from August to December and in March; thirty specimens.

*Thiotricha graminis*, n. sp.

♂ ♀. 10—11 mm. Head, palpi and antennæ ochreous-white. Thorax and abdomen ochreous-whitish. Forewings elongate, very narrow, apex strongly produced, acute, termen oblique; 6 separate, 9 out of 7; pale whitish-ochreous; an elongate black dot beneath costa near base; sometimes a dark fuscous dot beneath costa at  $\frac{1}{5}$ ; a short inwardly oblique blackish mark from costa at  $\frac{2}{5}$ ; disc and dorsum obscurely streaked with fuscous suffusion; a dark fuscous dot above dorsum at  $\frac{1}{3}$  and an oblique dark fuscous mark from dorsum at  $\frac{2}{3}$ , both sometimes almost obsolete; four longitudinal dark fuscous lines on posterior half of wing, first and third converging to near apex, second terminating at  $\frac{3}{4}$ , fourth running to tornus, between third and fourth an acutely inwards angulated line running from termen to  $\frac{3}{4}$  and back to termen; a silvery spot on termen beneath apex: cilia pale whitish-ochreous, on costa with a blackish basal line, at apex with two dark grey bars beyond middle, on termen with basal half ochreous-yellowish edged externally with a thick violet-silvery-metallic mark. Hindwings  $\frac{4}{5}$ , cilia 3; grey, thinly scaled towards base; cilia pale greyish.

Khasi Hills, in December and March; three specimens.

*Thiotricha scotaea*, n. sp.

♀. 13 mm. Head and thorax bronzy-fuscous, face pale shining grey. Palpi grey-whitish. Antennæ grey. Abdomen bronzy-grey. Forewings elongate, very narrow, apex round-pointed, termen extremely obliquely rounded; 6 separate, 9 out of 7; rather dark purplish-fuscous; an oblique fuscous-whitish mark towards apex; two minute whitish dots on costa near apex; a blackish apical dot, edged posteriorly with a few whitish scales: cilia pale fuscous, on costa with a dark fuscous shade. Hindwings  $\frac{3}{4}$ , cilia 3; rather dark grey, thinly scaled in disc; cilia grey, at apex with a dark grey postmedian line.

Maskeliya, Ceylon, in June; one specimen (Pole).

*Thiotricha rhodopa*, n. sp.

♂. 11 mm. Head, palpi and antennæ ochreous-whitish, anterior edge of terminal joint of palpi finely dark fuscous. Thorax and abdomen whitish-ochreous. Forewings elongate, very narrow, gradually narrowed from near base, apex pointed, termen sinuate, very oblique; 6 and 9 apparently separate; whitish-ochreous; base of costa slenderly blackish; a dark fuscous streak at first thick but rapidly attenuated rising from dorsum near base and running in a curve near costa to disc at  $\frac{4}{5}$  and a similar less curved streak from middle of dorsum, posteriorly coincident with first; between and beyond





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these dorsal half of wing is mainly occupied by two white blotches ; an acutely inwards angulated dark fuscous mark above tornus, and a longitudinal mark beneath costa opposite it ; apical area beyond these mostly suffused with white, with a black dot beneath apex : cilia whitish, towards tornus suffused with whitish-ochreous, on costa with a dark fuscous basal streak edged with ochreous, beneath subapical dot with a small crimson spot followed by some silvery scales. Hindwings  $\frac{3}{4}$ , cilia 4 ; light grey, thinly scaled anteriorly ; cilia whitish-ochreous, at apex with a blackish-grey subapical bar.

Khasi Hills, in September ; one specimen.

*Thiotricha chrysantha*, n. sp.

♂. 11 mm. Head and antennæ ochreous-whitish. Palpi yellowish, anterior edge of terminal joint dark fuscous. Thorax orange-ochreous. Abdomen blackish-grey. Forewings elongate, very narrow, gradually narrowed from near base, apex pointed, termen somewhat sinuate, very oblique ; 6 and 9 apparently separate ; deep ochreous-yellow, suffused with orange-red on margins of dark markings ; two pairs of very oblique dark fuscous streaks from costa and dorsum near base and before middle respectively, each pair meeting at a very acute angle, first connected with second in disc by dark fuscous suffusion, angle of second extended as a blackish line to termen beneath apex ; two white dorsal blotches between and beyond these streaks respectively, second followed by a dot of dark fuscous suffusion ; an oblique blackish wedged shaped mark from costa at  $\frac{3}{4}$ , edged with pink : cilia dark grey, on costa ochreous-yellowish with a black basal line, on termen with basal half light crimson edged with pale golden-metallic. Hindwings  $\frac{3}{4}$ , cilia 4 ; blackish-grey, thinly scaled towards base ; cilia blackish-grey.

Khasi Hills, in June ; one specimen.

*Thiotricha pteropis*, n. sp.

♀. 8—10 mm. Head, palpi, antennæ, thorax, and abdomen pale whitish-ochreous. Forewings elongate, narrow, costa posteriorly slightly arched, apex much produced, pointed, termen sinuate, very oblique ; 6 and 9 separate ; ochreous-white or whitish-ochreous ; an elongate rounded-triangular leaden-grey spot finely edged with blackish extending along termen from tornus to apex, broadest anteriorly ; an oblique blackish line from  $\frac{3}{4}$  of costa running into this before apex ; a small triangular ochreous-brown costal mark before apex, meeting apex of terminal spot ; a round black apical dot : cilia light greyish, beneath apex orange at base, round apex with two short blackish lines. Hindwings  $\frac{2}{3}$ , cilia 5 ; grey ; cilia light greyish.

Khasi Hills, in July and September ; Maskeliya, Ceylon, in March (Pole) three specimens.

*Thiotricha galenaea*, n. sp.

♀. 16 mm. Head, palpi, antennæ, and thorax shining ochreous-white, anterior edge of terminal joint of palpi grey. Abdomen ochreous-whitish. Forewings elongate, very narrow, apex obtuse, termen very obliquely rounded ; 6 and 9 separate ; shining ochreous-white ; an indistinct grey very acutely angulated transverse line about  $\frac{3}{4}$ , not reaching either margin ; some grey

suffusion towards termen ; a white almost marginal line along posterior part of costa and termen, at apex preceded by an orange dot and followed by a black dot, whence proceeds a blackish line along upper part of termen : cilia whitish-ochreous. Hindwings  $\frac{4}{5}$ , cilia  $2\frac{1}{2}$  ; whitish-grey, towards apex whitish-ochreous ; a blackish apical dot ; cilia whitish-ochreous, at apex with a blackish median bar.

Maskeliya, Ceylon, in February ; two specimens (Pole).

*Timyra isochra*, n. sp.

♂. 12—14 mm. Head, palpi, thorax, and abdomen whitish-ochreous; second joint of palpi dilated towards apex and rough-scaled beneath, internally excavated and filled with blackish scales, terminal joint minute, concealed ; thorax partly suffused with deeper ochreous. Antennæ ochreous-yellowish, basal joint with anterior scale-projection. Legs whitish-ochreous, anterior and middle tibiae with a grey spot, posterior tibiae and basal joint of tarsi clothed with long rough projecting ochreous-whitish hairs, mixed with dark fuscous, with a tuft of blackish metallic-tipped scales towards apex of tibiae. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded ; 4 and 5 stalked, 7 to costa, 9 connate with 7 ; light ochreous-yellowish ; four somewhat oblique rather broad undefined fasciae of deeper ochreous or brownish suffusion, first sometimes rather dark fuscous, second narrowest : cilia whitish-ochreous. Hindwings with 3 absent, 6 to costa ; light ochreous-yellowish, with subdorsal groove enclosing long pencil of ochreous-yellowish hairs ; cilia whitish-ochreous.

Maskeliya, Wellawaya, and Puttalam, Ceylon, in May, November and December ; five specimens (Pole, Alston).

*Timyra phorcis*, n. sp.

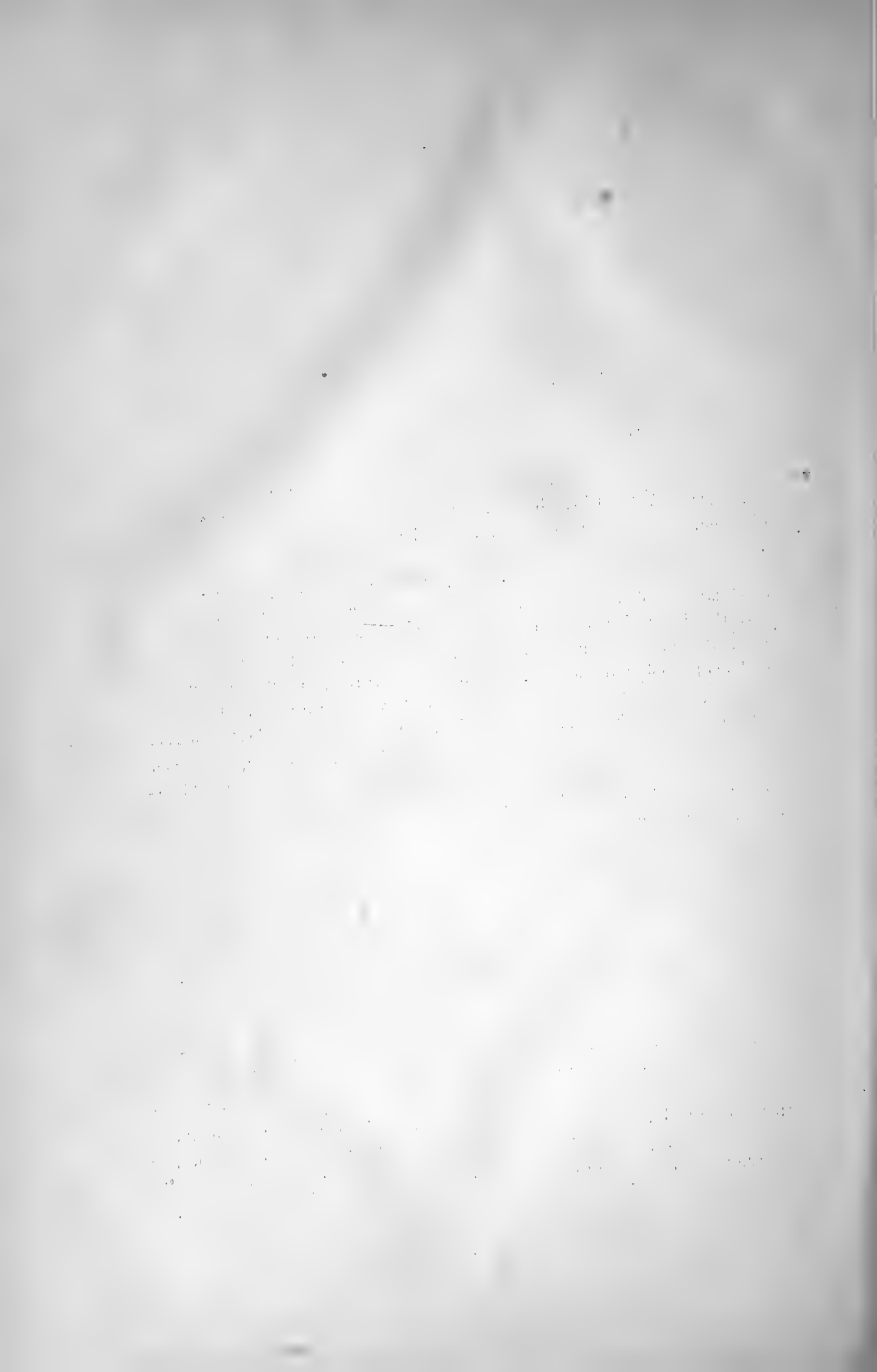
♀. 13—14 mm. Head fuscous, face whitish. Palpi whitish, anterior edge dark fuscous. Antennæ whitish. Thorax rather dark fuscous, posterior extremity whitish. Abdomen whitish-ochreous. Legs light ochreous ringed with whitish, posterior tibiae clothed above with very long projecting curved whitish hairs mixed with blackish. Forewings elongate, rather narrow, costa moderately arched, apex obtuse, termen slightly rounded, oblique ; 7 to apex ; ochreous-whitish ; a narrow dark fuscous basal fascia ; a very broad rather dark purplish-fuscous antemedian fascia, considerably narrowed towards costa ; an ill-defined triangular spot of dark fuscous irroration on costa beyond middle, and a sub-triangular dark fuscous spot on tornus, connected anteriorly by a pale ochreous-yellowish streak, the fascia of ground colour which precedes these bisected by an undefined line of dark fuscous scales ; apical area between and beyond these irregularly strewn with dark fuscous scales : cilia ochreous-whitish base mixed with fuscous. Hindwings with 6 to termen ; grey, lighter towards base ; cilia ochreous-grey-whitish.

Puttalam, Ceylon, from September to November ; three specimens (Pole).

*Timyra pastas*, n. sp.

♂ ♀. 19—23 mm. Head whitish-ochreous, tinged on crown and sometimes mixed with bronzy-fuscous, sides more yellowish. Palpi whitish-ochreous, second joint in ♂ internally with long expansible whitish-ochreous scales, terminal







joint long, slender, basal and terminal joints tinged with fuscous. Antennæ ochreous-yellowish, towards apex ringed with fuscous, basal joint simple. Thorax whitish-ochreous mixed with dark fuscous. Abdomen pale ochreous-yellowish, segments suffused with fuscous towards base, apex deeper yellow. Legs dark fuscous, banded with pale yellowish, posterior tibiae and tarsi clothed above with rough dark fuscous hairs irrorated with whitish, with very large expanded median tuft of whitish, ochreous-yellow, black, and bright steel-metallic scales. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen slightly rounded, oblique; 7 to apex; whitish-ochreous-yellowish irregularly sprinkled with blackish and dark fuscous; a small blackish basal spot; a broad suffused dark fuscous antemedian fascia; a broad suffused fascia of dark fuscous and black irroration occupying apical fourth of wing: cilia bronzy-grey, basal half deep ochreous-yellow limited by a dark fuscous shade. Hindwings with 3 in ♂ absent, 6 to termen; dark fuscous, in ♂ with a short subdorsal groove, beneath which is a short fringe of whitish-ochreous hairs; cilia bronzy-grey, basal third pale ochreous-yellowish.

N. Coorg (3,500 feet), in May, September and October; five specimens (Newcome).

*Timyra autarcha*, n. sp.

♂ ♀. 18—19 mm. Head ochreous-yellow. Palpi light ochreous-yellow, basal joint fuscous, terminal joint long, slender, anterior edge dark fuscous. Antennæ whitish-ochreous ringed with dark fuscous, basal joint simple. Thorax blackish. Abdomen ochreous-yellow; segments rather dark fuscous towards base. Legs dark fuscous, femora and tarsi banded with pale ochreous-yellowish, posterior tibiae and tarsi clothed above with rough dark fuscous hairs, tufted in middle of tibiae, with an ochreous-whitish band before middle. Forewings elongate, rather narrow, posteriorly somewhat dilated, costa posteriorly moderately arched, apex rounded, termen obliquely rounded; 7 to apex; whitish-ochreous; three blackish fasciæ, first narrow, basal extended along costa to meet second, second broad, antemedian, third very broad, from about  $\frac{2}{3}$  of costa to tornus, with a few ochreous-whitish specks, posterior edge curved parallel to margin of wing; a deep ochreous-yellow streak along posterior part of costa and termen: cilia dark bronzy-grey, with blackish basal line. Hindwings with 3 in ♂ absent, 6 to termen; dark fuscous; cilia bronzy-grey, with pale basal line and darker subbasal shade.

Palni Hills (6,000 feet); N. Coorg (3,500 feet); in May, two specimens (Campbell, Newcome).

*Timyra stachyophora*, n. sp.

♂. 18—19 mm. Head whitish-ochreous. Palpi whitish-ochreous, basal joint fuscous, second joint very long, clothed internally and above with very long expansible ochreous-whitish hairs, terminal joint about half second, clothed with dense hairs above, mixed or suffused with dark fuscous. Antennæ dark grey, basal joint with large tuft of whitish-ochreous scales becoming dark grey towards apex, internally blackish. Thorax fuscous. Abdomen whitish-ochreous, dorsally more yellowish, with slight fuscous suffusion. Legs dark fuscous

ringed with ochreous-whitish, posterior tibiae with very large median tuft of long curved pale yellowish scales mixed with blackish. Forewings elongate, narrow, costa gently arched, apex obtuse, termen slightly rounded, oblique; 7 to apex; whitish-ochreous, irregularly mixed with fuscous and sprinkled with blackish; a slender dark fuscous basal fascia, followed by a narrow clear whitish-ochreous fascia; a curved slightly oblique clear whitish-ochreous transverse median line; an irregular dark fuscous line round apex and termen: cilia whitish-ochreous, with dark fuscous antemedian and fuscous apical shades. Hindwings with 3 absent, 6 to termen; whitish-ochreous; a narrow fuscous streak along termen, sometimes interrupted, and a fuscous patch along posterior half of costa; submedian and subdorsal grooves suffused with light ochreous-yellowish, latter with a very long expansible pencil of whitish-ochreous hairs; cilia whitish-ochreous, with faint fuscous line.

Diyatalawa (4,000 feet), Ceylon, in August and September (Fletcher); three specimens.

*Timyra holocona*, n. sp.

♂. 16—18 mm. Head dark fuscous, sides yellowish. Palpi dark fuscous, externally suffused with pale yellowish, second joint much thickened with dense projecting scales above and beneath, terminal joint very short, concealed. Antennae pale yellowish, basal joint dark fuscous, with anterior scale-projection. Thorax dark fuscous, with angulated posterior ochreous-yellow mark. Abdomen dark fuscous, beneath whitish-ochreous. Legs whitish-ochreous banded with dark fuscous, posterior tibiae with expansible median tuft of whitish-ochreous hairs becoming dark fuscous on upper half, basal joint of tarsi rough-scaled above. Forewings elongate, narrow, costa anteriorly moderately arched, apex obtuse, termen obliquely rounded; 4 and 5 stalked, 7 to costa; dark fuscous, faintly purplish-tinged; a yellowish basal dot; two irregular inwardly oblique pale yellowish transverse lines before and beyond  $\frac{1}{4}$ ; a triangular ochreous-yellow blotch on costa beyond middle, reaching more than half across wing, and a yellow dot in disc beyond apex of this: cilia dark fuscous. Hindwings with 3 absent, 6 to apex, dark fuscous, a submedian groove containing an expansible pencil of very long whitish-ochreous hairs; cilia dark fuscous.

Maskeliya, Ceylon, in August, two specimens (de Mowbray).

*Timyra dipsalea*, n. sp.

♂. 17.—19 mm. Head orange, lower part of face infuscated. Palpi fuscous, much thickened throughout with dense projecting scales beneath, second joint internally with long expansible pale greyish-ochreous hairs, terminal joint shorter than second, wholly clothed with dense scales. Antennae about 1, dark fuscous, basal joint with projecting scales anteriorly. Thorax fuscous, darker anteriorly. Abdomen pale ochreous-yellowish. Legs fuscous, anterior pair dark fuscous, streaked and dotted with white, posterior tibiae with large median tuft of curved ochreous-whitish scales becoming blackish and steel-metallic on upper half, basal joint of tarsi rough-scaled above. Forewings elongate, rather

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

which are satisfied by the functions  $u_i$  and  $v_i$  in the case when the functions  $f_i$  and  $g_i$  are continuous and the functions  $h_i$  and  $k_i$  are piecewise continuous. The second part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations

in the case when the functions  $f_i$  and  $g_i$  are continuous and the functions  $h_i$  and  $k_i$  are piecewise continuous.

2. The third part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations

in the case when the functions  $f_i$  and  $g_i$  are continuous and the functions  $h_i$  and  $k_i$  are piecewise continuous.

3. The fourth part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations

in the case when the functions  $f_i$  and  $g_i$  are continuous and the functions  $h_i$  and  $k_i$  are piecewise continuous.

4. The fifth part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations

in the case when the functions  $f_i$  and  $g_i$  are continuous and the functions  $h_i$  and  $k_i$  are piecewise continuous. The sixth part of the paper is devoted to a study of the problem of the existence of solutions of the system of equations



narrow, posteriorly dilated, costa gently arched, apex rounded, termen obliquely rounded; 7 to apex; fuscous, irrorated with fuscous-whitish scales tipped with blackish; a suffused whitish-ochreous streak along dorsum; some raised scales in disc near base: cilia greyish or grey-whitish, with a dark fuscous subbasal line, base ochreous-tinged. Hindwings with 3 absent, 6 to termen; whitish-ochreous, towards apex tinged with fuscous; a subdorsal groove containing an expansible pencil of very long pale ochreous-yellowish hairs; cilia whitish-ochreous.

Khasi Hills, in June; five specimens. In this species the antennæ are shorter than usual, being only about as long as forewings, whereas in general they are very obviously longer, but otherwise there seems no structural difference.

*Timyra stasiotica*, n. sp.

♂ ♀. 24—28 mm. Head pale ochreous mixed with fuscous. Palpi in ♂ fuscous, basal joint elongate forming an elbow, second joint very long, much thickened with dense scales, internally with very long expansible pencil of whitish-ochreous hairs, terminal joint about half second, much thickened with dense scales, obtuse, in ♀ pale ochreous-yellowish mixed with fuscous and dark fuscous. Antennæ ochreous-yellowish, ringed and sometimes mixed with fuscous, basal joint in ♂ with large curved anterior tuft of shining dark fuscous scales. Thorax ochreous-fuscous mixed with dark fuscous. Abdomen pale ochreous-yellowish, with dark fuscous lateral line. Legs dark fuscous banded with pale yellowish, apex of middle tibiæ white in ♂, posterior tibiæ with very large median tuft of curved yellowish and fuscous scales becoming blackish and shining bronzy towards apex. Forewings elongate, narrow, rather dilated posteriorly, costa slightly arched, apex obtuse, termen rather obliquely rounded; 7 to termen; fuscous or whitish-fuscous, irrorated with dark fuscous, sometimes sprinkled with whitish or deep ochreous; in ♂ a tuft of raised scales in disc near base; an indistinct rather oblique sometimes curved slender deep yellow-ochreous fascia from  $\frac{2}{3}$  of costa to  $\frac{3}{4}$  of dorsum, often incomplete or reduced to a small discal spot: cilia ochreous-whitish, becoming yellowish towards base, with dark fuscous subbasal shade, and two posterior fuscous shades. Hindwings with 3 in ♂ absent, 6 to termen; whitish-ochreous-yellowish; costa and termen narrowly suffused throughout with fuscous, in ♂ more widely towards apex; in ♂ a submedian groove containing an expansible pencil of very long ochreous-whitish hairs; cilia whitish-ochreous-yellowish.

Maskeliya, Ceylon, in April, May and August; five specimens (Green, Pole, de Mowbray). Might be mistaken for a dark form of *T. cingalensis*, but certainly distinct by narrower forewings and obtuse palpi of ♂; fascia of forewings differently placed, and in *cingalensis* always distinct.

*Timyra aulonitis*, n. sp.

♂ ♀. 17—19 mm. Head whitish-ochreous, crown suffused with fuscous except on sides. Palpi ochreous-whitish, in ♂ much thickened throughout with dense scales, second joint internally with very large expansible tuft of long whitish hairs mixed basally with black, terminal joint shorter than second, obtuse,

internally excavated and filled with black scales; in ♀ with terminal joint and anterior edge of second blackish. Antennæ ochreous-whitish ringed with dark fuscous, basal joint in ♂ with large anterior scale-projection. Thorax rather dark fuscous, with ochreous-whitish stripe on each side of back. Abdomen whitish-ochreous dorsally suffused with fuscous towards base. Legs ochreous-whitish banded with dark fuscous, posterior tibiae and tarsi above with short rough orange scales mixed with black, and long scattered whitish and black scales, forming a tuft before middle of tibiae. Forewings elongate, narrow, costa slightly arched, apex obtuse, termen nearly straight, rather strongly oblique; 7 to termen, 9 out of 7; dark fuscous; all veins marked by ochreous-whitish lines, sometimes partially tinged with ochreous-yellow; costal edge pale ochreous-yellowish: cilia whitish-ochreous, base more yellowish, with two dark fuscous shades. Hindwings with 3 absent in ♂, 6 to termen; grey, in ♂ with broad whitish-ochreous patch extending through disc from near base to near termen, beneath which is a groove containing pencil of whitish-ochreous hairs; cilia whitish-ochreous, with two indistinct fuscous shades except on upper portion of termen.

Kandy and Peradeniya, Ceylon, in August, October and February; five specimens (Green).

*Timyra xanthaula*, n. sp.

♂. 19—22 mm. Head, palpi, antennæ, thorax and abdomen ochreous-yellowish; centre of crown tinged with fuscous; palpi alike in both sexes; anterior edge dark fuscous; antennæ with a dark fuscous line on basal joint; shoulders with a fuscous spot. Legs whitish-ochreous banded with blackish-grey, posterior tibiae and basal joint of tarsi orange with a black lateral line, above clothed with rough yellowish hairs mixed with black, with a large median tuft of yellowish hairs tipped with black. Forewings elongate, narrow, costa gently arched, apex obtuse, termen nearly straight, oblique; 7 to termen; ochreous-yellowish, deeper on margins; a moderate somewhat oblique deep ochreous-yellow median fascia, with traces of fuscous edging; two fuscous longitudinal lines in disc before this, coincident towards base, and one along fold not reaching fascia; a series of interneural fuscous streaks on posterior half of wing: cilia whitish-ochreous with a black subapical line, basal half deep ochreous-yellow. Hindwings with 3 absent, 6 to termen; whitish-ochreous; submedian and subdorsal grooves, latter containing expansible whitish-ochreous hairs; cilia whitish-ochreous.

Palni Hills (6,000 feet); three specimens (Campbell).

*Timyra schenota*, n. sp.

♂ ♀. 24—27 mm. Head orange-yellow, centre of crown bronzy. Palpi alike in both sexes, orange-yellow, anterior edge black, terminal joint in ♀ almost wholly blackish. Antennæ ochreous-yellowish, anteriorly suffused with fuscous, in ♀ ringed with fuscous, basal joint in ♂ with large anterior tuft of curved yellowish scales mixed with dark grey. Thorax dark fuscous, with ochreous-yellow stripe on each side of back. Abdomen orange-yellow, towards base







suffused with fuscous. Legs orange-yellow banded with dark fuscous, posterior tibiae and tarsi above with rough black scales and longer scattered pale yellowish hairs with black tips, tibiae with large median tuft of similar hairs. Forewings elongate, narrow, costa gently arched, apex obtuse, termen slightly rounded, oblique; 7 to termen; in ♂ ochreous-orange, in ♀ pale ochreous-yellowish streaked with orange; a costal streak from base to  $\frac{3}{5}$ , and a series of well-marked interneural streaks, not reaching costa posteriorly or termen, blackish or dark fuscous, interrupted by a somewhat curved oblique double median fascia, of which first half is ochreous-yellow, paler in ♀, and second deep ochreous-orange suffusedly edged with dark fuscous; a blackish line along posterior part of costa and termen: cilia pale whitish-ochreous, basal half orange, with a blackish postmedian line becoming double towards tornus. Hindwings with 3 in ♂ absent, 6 to termen; dark fuscous; in ♂ an ochreous-yellow streak from base along a subdorsal groove enclosing a pencil of long ochreous-whitish hairs, posteriorly dilated into a broad patch extending all along termen but not quite reaching it, in which is a curved line of appressed hairs; cilia ochreous-whitish, more yellowish towards base, with two dark fuscous shades.

Palni Hills and Cuddapah; three specimens (Campbell).

*Timyra toxastis*, n. sp.

♀. 17—20 mm. Head fuscous, face and side-tufts ochreous-whitish. Palpi ochreous-whitish, anterior edge and terminal joint dark fuscous. Antennae fuscous-whitish, more or less suffused with fuscous and ringed with dark fuscous. Thorax bronzy-fuscous, with slender whitish stripe on each side of back. Abdomen light ochreous-yellowish. Legs ochreous-yellowish longitudinally streaked with black edged with whitish, posterior tibiae with large median tuft of long curved whitish and black hairs. Forewings elongate, narrow, costa slightly arched, apex obtuse, termen slightly rounded, rather oblique; 7 to termen; brown sprinkled with dark fuscous, narrow orange subcostal and submedian streaks from base, not reaching middle; a slender curved rather oblique white median fascia; veins on posterior third of wing marked with irregular white streaks; a slender white streak along posterior part of costa and termen: cilia white, basal half yellowish-tinged, limited by a blackish line, tips fuscous. Hindwings with vein 6 to termen; grey; cilia grey-whitish, base yellowish-tinged, with a subbasal fuscous line.

N. Coorg (3,500 feet), in June and November; three specimens (Newcome).

*Timyra toreutis*, n. sp.

♂. 17—20 mm. Head dark bronzy-fuscous, face suffused with ochreous-whitish. Palpi simple, sickle-shaped, whitish-yellow, anterior and posterior edges blackish. Antennae pale yellowish anteriorly suffused with dark fuscous basal joint with yellowish anterior tuft mixed with dark fuscous. Thorax dark bronzy-fuscous, with a whitish line on each side of back, and a yellow mark on each side of posterior extremity. Abdomen ochreous-yellowish, base of segments suffused with dark fuscous. Legs yellowish, banded with

blackish sprinkled with white, posterior tibiae with large median tuft of long curved purplish-fuscous and ochreous-yellow scales tipped with black. Forewings elongate, narrow, costa gently arched, apex obtuse, termen slightly rounded, oblique; 7 to apex, 9 out of 7; dark fuscous; two or three short whitish streaks from base; transverse lines of white irroration at  $\frac{1}{4}$  and  $\frac{1}{3}$ , partly marked with orange; three orange longitudinal streaks from about middle to  $\frac{3}{4}$ , third furcate posteriorly, separated by streaks of purplish-leadensuffusion; veins 3, 4, and 7—10 marked more or less completely with white streaks, 5 and 6 with orange streaks; a short white streak along costa near apex: cilia fuscous-whitish, basal third pale yellowish limited by a black line, with two postmedian dark fuscous lines. Hindwings with 3 absent, 6 to termen; dark fuscous, a subdorsal groove enclosing a pencil of whitish-ochreous hairs; cilia rather dark fuscous, base pale yellowish.

Maskeliya, Ceylon, from August to October; four specimens (Alston). Very like *mendicella*, but differing by the smaller size, white streaks from base (in *mendicella* orange), fewer and longer orange postmedian streaks, more numerous white and fewer orange lines on veins posteriorly, and wholly dark fuscous hindwings.

*Timyra selmatias*, n. sp.

♀. 18—19 mm. Head and thorax bronzy-fuscous. Palpi whitish tinged with fuscous, anterior, edge dark fuscous. Antennae white ringed with dark fuscous. Abdomen ochreous-whitish. Legs fuscous ringed with yellowish and whitish, posterior tibiae with very long rough whitish hairs, and very large median tuft of curved yellowish and whitish hairs tipped with black and silvery-metallic, and smaller apical yellowish tuft tipped with grey and violet-whitish, basal joint of tarsi above with rough yellowish scales tipped with grey and violet-whitish. Forewings elongate, narrow, costa slightly arched, apex obtuse, termen slightly rounded, oblique; 7 to just below apex; purplish-fuscous, sprinkled with blackish; median third obscurely streaked with whitish on veins; a narrow irregular orange transverse fascia from  $\frac{3}{5}$  of costa to  $\frac{3}{4}$  of dorsum; a triangular spot of whitish suffusion on costa about  $\frac{4}{5}$ , and an irregular suffused whitish streak immediately before termen; apical and terminal edge suffused with dark fuscous: cilia grey-whitish, basal third pale yellowish limited by a fuscous line. Hindwings with 6 to termen; grey; cilia whitish-ochreous, more yellowish towards base.

Maskeliya, Ceylon, in August and October; two specimens (Alston).

*Timyra sphaeristis*, n. sp.

♂ ♀. 16—17 mm. Head and thorax shining light ochreous-yellowish, centre of crown fuscous. Palpi yellowish, alike in both sexes. Antennae pale yellowish. Abdomen whitish-ochreous, segments dorsally suffused with fuscous. Legs whitish-ochreous, anterior and middle tibiae yellowish with blackish subapical spots, posterior tibiae with expansible tufts of yellowish scales at middle and apex spotted with blackish at base. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; 7 to termen;





ochreous-yellow; a dark fuscous basal median dot; a moderate oblique fuscous fascia from near costa at  $\frac{1}{4}$  to middle of dorsum; a round fuscous blotch resting on dorsum before tornus and reaching  $\frac{4}{5}$  across wing; a triangular patch of fuscous suffusion resting on termen: cilia ochreous-yellow. Hindwings with 3 present in ♂, stalked with 4, 6 to termen; pale whitish-yellowish; in ♂ basal half mostly occupied by a patch of modified brownish scales, including a long expansible pencil of brown hairs from base in a submedian groove; cilia whitish-yellowish.

Palni Hills (6,000 feet); two specimens (Campbell).

*Timyra hippastis*, n. sp.

♂ ♀. 10—12 mm. Head ochreous-yellowish, face whitish. Palpi whitish-yellowish, alike in both sexes. Antennæ white ringed with fuscous, basal joint simple. Thorax whitish, more or less suffused with yellow-ochreous. Abdomen in ♂ dark grey, in ♀ ochreous-whitish. Legs ochreous-whitish, posterior tibiae and basal joint of tarsi clothed with long rough whitish scales mixed with fuscous, tibiae with median and apical tufts tipped with black. Forewings elongate, narrow, costa slightly arched, apex round-pointed, termen extremely obliquely rounded; 5 absent, 7 to apex; in ♂ ochreous-yellow, in ♀ white more or less suffused with ochreous-yellow, especially on margins; a small deep yellow basal patch, in ♂ containing a large tuft of raised scales; broad deep ochreous-yellow or yellow-brown fasciae before middle and about  $\frac{3}{4}$ , confluent on dorsum; apex deep yellow or yellow-brown: cilia pale yellowish, towards tornus more or less infuscated. Hindwings with 3 present in ♂, 6 to apex; in ♂ dark grey, with submedian streak thinly scaled and yellowish-tinged, cilia grey; in ♀ whitish, cilia yellow-whitish.

Khasi Hills, from June to September; twelve specimens.

*Tingentera*, Walk.

I believe this generic name should be adopted for the genus which I have hitherto called *Tipha*, Walk.

*Tingentera ecliptica*, n. sp.

♂. 17 mm. Head and thorax shining bronze. Palpi dark metallic leaden-grey, mixed with yellowish towards base, second joint broadly dilated with dense scales above and beneath and internally excavated so as to be spoonshaped, terminal joint concealed. Antennæ dark grey with whitish median band, basal joint with slight anterior scale-projection. Abdomen pale shining grey, anal tuft whitish-ochreous. Legs orange-yellowish, anterior femora and tibiae dark grey, middle tibiae with dark grey apical spot, posterior tibiae and three basal joints of tarsi with rough projecting scales above. Forewings elongate, posteriorly dilated, costa moderately arched, apex rounded, termen obliquely rounded; lower margin of cell approximated to dorsum, 2 widely remote, 3 and 4 stalked from angle, 7 and 8 stalked, 8 to apex; dark purplish-fuscous, posteriorly broadly suffused with metallic-bronze; a deep fiery orange band occupying basal  $\frac{2}{3}$  of wing except a very small basal patch, posterior edge concave, emitting a narrow subdorsal projection to beyond middle; in middle

of this band is a small leaden-metallic spot : cilia shining bronze. Hindwings with 3 and 4 approximated, 6 and 7 approximated, 7 to apex ; dark fuscous ; rather broad pale orange costal and submedian streaks of modified scales, confluent towards base, latter grooved towards base and enclosing an expansible pencil of long pale orange hairs ; cilia grey.

Kandy, Ceylon, in October ; one specimen (Green).

*Tingentera thoracias*, n. sp.

♂ 18—19 mm. Head and thorax shining bronze, face yellowish. Palpi bluish-lead-metallic, second joint broadly dilated with long rough yellowish scales beneath and short ones above, and internally excavated so as to be spoonshaped, terminal joint concealed. Antennæ dark grey, with whitish median band, basal joint with slight anterior scale-projection. Abdomen light ochreous-yellowish. Legs light yellowish, anterior femora and tibiæ dark metallic grey, middle tibiæ with dark grey apical spot, posterior tibiæ and three basal joints of tarsi rough-scaled above. Forewings elongate, posteriorly dilated, costa moderately arched, apex rounded, termen obliquely rounded ; lower margin of cell approximated to dorsum, 2 remote, 3 and 4 connate from angle, 7 and 8 stalked, 8 to apex, 9 connate with 7 ; purplish-fuscous, posterior half suffused with pale metallic golden-bronze ; an orange band occupying basal third of wing except a very small dark metallic bluish-lead basal patch, posterior edge strongly concave, produced along costa as a slender streak almost to apex ; a light blue-lead-metallic spot in middle of this band, and its posterior edge margined in disc with a blue-lead-metallic streak ; a small transverse-oval orange spot in disc at  $\frac{2}{3}$ , sometimes connected with dorsum by a patch of light yellowish suffusion almost confluent dorsally with preceding band : cilia whitish-bronzy-ochreous. Hindwings with 3 and 4 approximated, 6 and 7 approximated, 7 to apex ; whitish-ochreous, with a rather broad pale orange costal streak of modified scales ; a submedian groove containing an expansible pencil of very long pale orange hairs ; cilia whitish-ochreous, slightly purplish-tinged on lower half of termen.

Maskeliya, Ceylon, in February and March ; two specimens (de Mowbray).

*Tingentera philodoxa*, n. sp.

♂ 20 mm. Head violet-bronzy, sides orange, upper part of face bluish-silvery, lower light orange. Palpi orange, with a dark lead-metallic streak on upper half, second joint much dilated with dense long orange scales beneath and short ones above, terminal joint concealed. Antennæ dark fuscous, basal joint simple. Thorax dark fuscous, with an orange stripe on each side of back. Abdomen dark fuscous, apex yellowish. Legs orange-yellowish, anterior femora and tibiæ dark fuscous streaked with lead-metallic, middle tibiæ with base and apex dark lead-fuscous, tarsi whitish, posterior tibiæ rough-scaled, tarsi whitish banded with dark fuscous. Forewings elongate, very narrow, costa posteriorly moderately arched, apex obtuse, termen very obliquely rounded ; lower margin of cell approximated to dorsum, 2 from before middle, 3 and 4 connate from angle, 7 and 8 stalked, 7 to termen orange







posteriorly mixed with dark purplish-fuscous suffusion; a narrow dark blue-leaden-metallic streak from base of costa to disc at  $\frac{1}{3}$ , thence bent downwards and irregularly thickened to dorsum before tornus; a dark purplish-fuscous streak along dorsum from near base, containing a leaden-metallic streak, running into this posteriorly; a triangular suffused dark purplish-fuscous patch in disc beyond  $\frac{2}{3}$ , confluent beneath with these streaks; termen suffused with deep bronzy-purple: cilia dark purplish-bronze. Hindwings with cell very short, 3 and 4 stalked, 5 bent near origin, 6 and 7 stalked, 6 to termen; blackish-fuscous; cilia dark grey.

Maskeliya, Ceylon, in April; one specimen (Pole).

*Tingentera conotoma*, n. sp.

♂ ♀. 14—17 mm. Head dark shining purple-bronze. Palpi alike in both sexes, ochreous-yellow. Antennæ grey, basal joint simple, yellowish. Thorax orange, large humeral blotches and a posterior spot dark shining leaden-grey. Abdomen in ♂ ochreous-yellowish, in ♀ dark grey. Legs orange-yellowish, spotted with grey suffusion, posterior tibiæ and basal joint of tarsi rough-haired above. Forewings elongate, very narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; 2 remote, 3 and 4 connate, 7 absent, 8 to costa; orange; a small dark purplish-leaden fuscous basal-patch; two large oval bluish-leaden-metallic spots in disc, first towards costa before middle, second towards dorsum beyond middle; a dark purplish-leaden-fuscous elongate semi-oval blotch extending along dorsum from near basal patch to middle; a bronzy patch, anteriorly edged with dark fuscous suffusion, occupying apical  $\frac{2}{5}$  of wing except a narrow streak of ground colour along costa almost to apex, anterior edge acutely indented in middle: cilia bronzy, towards tornus pale greyish-ochreous. Hindwings with 3 and 4 connate, 6 and 7 stalked, 6 to termen; in ♂ whitish-ochreous, posteriorly suffused with light grey, with a submedian groove containing an expansible pencil of very long whitish-yellowish hairs; in ♀ grey; cilia whitish-ochreous, in ♀ greyish-tinged.

Maskeliya, Kandy, Maturatta, Diyatalawa, Ceylon, from January to April, in July and September; eight specimens (Pole, Green, Fletcher).

*Tingentera basanistis*, n. sp.

♂ ♀. 14—17 mm. Head and thorax light ochreous-yellow, shoulders with a dark leaden-fuscous spot. Palpi yellowish, in ♂ with second joint dark leaden-metallic-grey except on edges, dilated with projecting scales above and beneath and internally excavated so as to be spoonshaped, terminal joint obsolete. Antennæ pale ochreous-yellowish. Abdomen whitish-ochreous, in ♀ greyish-tinged posteriorly. Legs ochreous-yellowish, posterior tibiæ smooth, banded with dark fuscous and leaden-metallic. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; 2 remote, 3 and 4 approximated from angle 7 absent, 8 to costa; orange, paler towards costa; markings dark-metallic-leaden-grey; a narrow basal spot; a streak along fold from near base to near middle; a streak in disc from about  $\frac{1}{3}$  to  $\frac{2}{3}$ ; a small dorsal spot before middle; apical third of wing more

or less broadly streaked with leaden-grey between veins, variable in extent: cilia pale ochreous-yellowish. Hindwings with 3 and 4 connate, 6 and 7 stalked, 6 to termen; in ♂ whitish-ochreous, costa suffused with grey, with submedian groove and expansible pencil of long whitish-ochreous hairs from base lying beneath it; in ♀ grey; cilia whitish-ochreous.

Maskeliya, Ceylon, in June, from September to November, and in January; six specimens (Pole, de Mowbray).

*Tingentera ephestris*, n. sp.

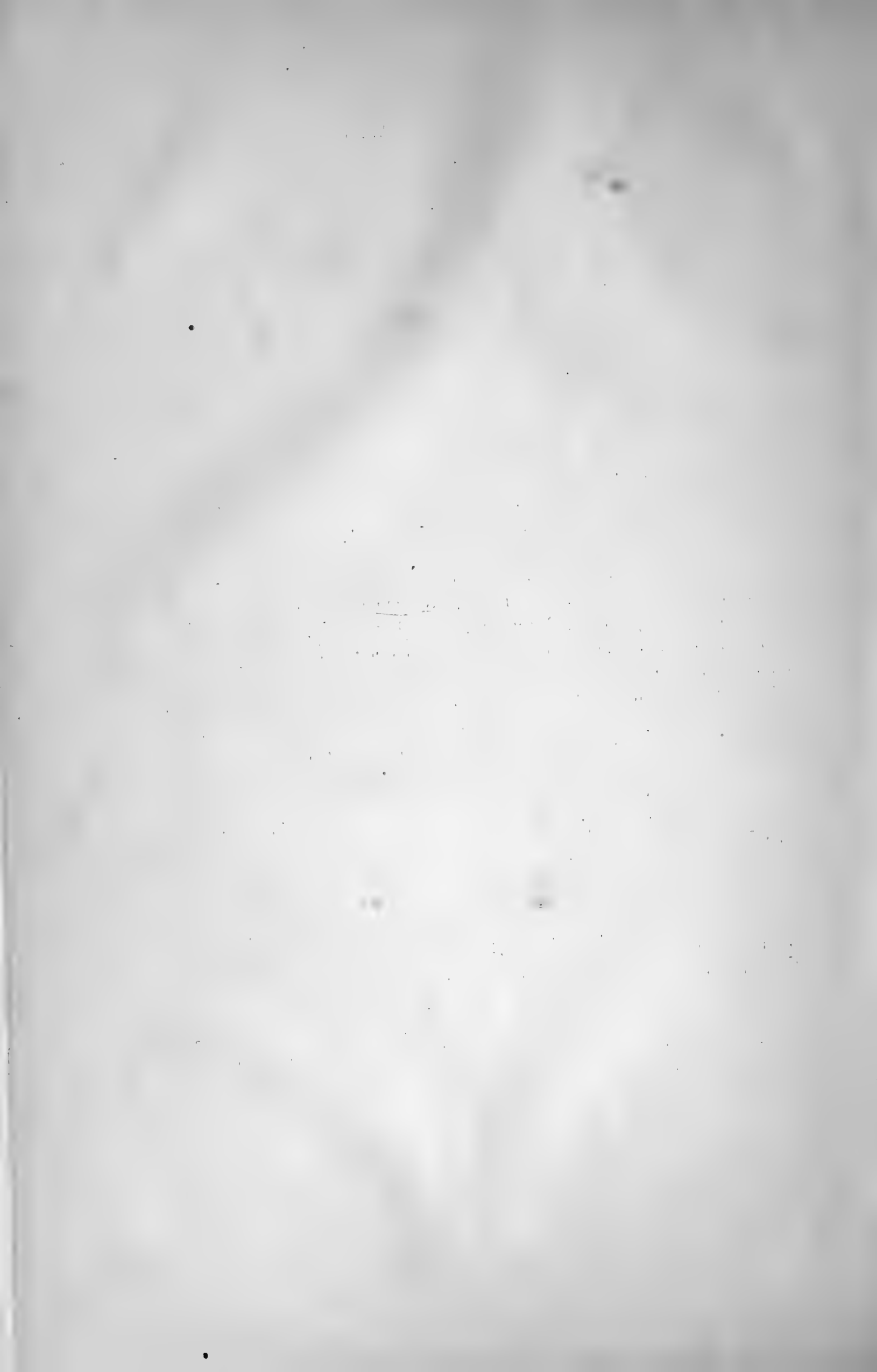
♂. 16—18 mm. Head, palpi, and antennæ ochreous-yellow, face paler; second joint of palpi dilated with rough scales towards apex above and beneath, with a dark grey spot internally, terminal joint very short, projecting. Thorax ochreous-yellow spotted with dark fuscous. Abdomen whitish-ochreous tinged with grey. Legs yellowish, spotted with dark grey, posterior tibiæ above with expansible yellow median and apical scales tipped with black. Forewings elongate, narrow, costa gently arched, apex tolerably pointed, termen very obliquely rounded; 4 and 5 stalked, 7 and 8 stalked, 7 to costa; orange; a blackish dot on base of costa; a fascia near base composed of two irregular dark fuscous lines mixed with leaden-metallic coincident at extremities; a similar irregular transverse line at  $\frac{1}{4}$ , closely followed by a moderate dark fuscous fascia, narrowed on costa and dilated on dorsum; a round dark fuscous dot mixed with leaden-metallic in middle of disc; a moderate inwards-curved fascia of fuscous suffusion from about  $\frac{3}{4}$  of costa to tornus, marked with a strongly inwards-oblique leaden-metallic streak from costa, a dot below middle, and a longitudinal mark on tornus; three similar longitudinal leaden-metallic marks on termen, and one on costa before apex, more or less surrounded with fuscous suffusion: cilia fuscous, basal half orange except towards tornus. Hindwings with 3 and 4 connate, 6 and 7 stalked, 6 to termen; rather dark grey; a small whitish-ochreous patch at tornus, above which is a hyaline groove containing a pencil of whitish-ochreous hairs; cilia grey.

Maskeliya, Ceylon, in February; two specimens (Pole).

*Tingentera molybdantha*, n. sp.

♂. 14 mm. Head dark bronzy-fuscous, face and side tufts yellowish-tinged. Palpi ochreous-yellowish mixed with dark grey, second joint broadly dilated with long projecting ochreous-yellow scales beneath, terminal joint minute, concealed. Antennæ dark fuscous, basal joint with slight anterior scale-projection. Thorax dark bronzy-fuscous. (Abdomen broken.) Legs dark fuscous, ringed with ochreous-yellowish, all femora suffused with metallic grey, posterior tibiæ with bright leaden-metallic bands before and beyond middle, with expanded scales at origin of spurs. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded; 2 remote, 3 and 4 connate, 7 and 8 stalked, 7 to costa; dark fuscous sprinkled with black, with scattered ochreous hair-scales; thick bluish-lead-metallic subcostal and narrower submedian streaks from base to  $\frac{1}{3}$ ; an almost straight double antemedian fascia, first half narrow, yellow-ochreous, edged posteriorly with





dark fuscous, second half broader, bright bluish-lead-metallic; some irregular lead-metallic spots in disc about  $\frac{3}{4}$  and round posterior third of costa and termen, round apex confluent into a streak: cilia rather dark fuscous, towards base mixed with ochreous. Hindwings with 3 and 4 connate, 6 and 7 stalked, 6 to termen; dark fuscous; a short subdorsal groove from base, containing an expansible pencil of whitish-ochreous hairs; cilia rather dark fuscous.

Pattipola (6,200 feet), Ceylon, in September; one specimen (Fletcher).

*Tingentera meryntis*, n. sp.

♂ ♀. 17—19 mm. Head light yellowish, crown suffused with prismatic bronzy-fuscous except on sides. Palpi alike in both sexes, ochreous-yellow, anterior edge of terminal joint dark fuscous. Antennæ yellowish, ringed and on apical half suffused with fuscous, in ♂ above basal joint with a short streak of shining fuscous inwardly projecting scales above. Thorax shining bronzy-fuscous. Abdomen fuscous, apex suffused with ochreous-yellow. Legs ochreous-yellow banded with dark fuscous, posterior tibiæ clothed with fine loose hairs. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; 2 remote, 7 and 8 stalked, 7 to termen; bronzy-fuscous with bluish-lead reflections; basal third irregularly streaked longitudinally with yellowish, with dark shining purplish-fuscous costal and purple-blackish subcostal streaks, and lines of blackish scales between the yellowish streaks; a slender oblique pale yellowish median fascia, yellower posteriorly; posterior half of wing streaked with ochreous-yellowish on veins, interspaces shining lead-metallic: cilia pale yellowish, outer half light shining bronzy-fuscous. Hindwings with 3 and 4 connate, 6 and 7 stalked, 6 to termen; grey, in ♂ broadly suffused with whitish-ochreous-yellowish in disc, with submedian groove containing expansible pencil of long pale yellowish hairs; cilia whitish-ochreous-yellowish.

Nilgiri Hills (6,000 feet), in May; nine specimens (Andrewes).

*Autosticha*, Meyr.

I have recognised that this genus, based on a Hawaiian species, is identical with *Epicania*, Meyr, and the latter name is therefore superseded. I have described three species from Ceylon, and if I have correctly identified *Gelechia affixella*, Walk., 632, and *Gelechia strenuella*, Walk., 632, they also belong to this genus, but the condition of the original types leaves some uncertainty. I now add eleven more; but it seems desirable to repeat that considerable care is requisite in identifying the more obscure and similar species. The larvæ of several are known, and all feed in the same way in galleries on lichens.

*Autosticha aureolata*, n. sp.

♂. 14—15 mm. Head orange, centre of crown suffused with fuscous. Palpi orange-yellowish, anterior edge suffused with dark fuscous throughout. Antennæ dark fuscous, with whorls of long cilia (3). Thorax purplish-fuscous irrorated with dark fuscous, sides of posterior extremity yellowish. Abdomen yellowish-fuscous, segmental margins darker fuscous. Forewings elongate, costa gently arched, apex obtuse, termen nearly straight, oblique; purplish-fuscous

irrorated with dark fuscous, more or less mixed with ochreous-brownish ; astigmata very indistinct, dark fuscous, plical almost beneath first discal ; cilia fuscous, base irrorated with dark fuscous. Hindwings dark grey ; cilia grey.

Maskeliya, Ceylon, in December and May ; two specimens (Pole). The long antennal ciliations are a peculiar feature, but the other structure is quite as usual.

*Autosticha binaria*, n. sp.

♂. 13 mm. Head orange, centre of crown suffused with fuscous. Palpi orange-yellowish, anterior edge of terminal joint dark fuscous. Antennæ dark fuscous, simple. Thorax dark fuscous, apex of patagia and two posterior marks dull orange. Abdomen dark fuscous, basal hair-tufts orange. Forewings elongate, costa slightly arched, apex obtuse, termen slightly rounded, oblique ; purplish-fuscous suffusedly irrorated with dark fuscous : cilia fuscous mixed with dark fuscous. Hindwings blackish ; cilia dark fuscous.

Maskeliya, Ceylon, in April ; one specimen (Green). Extremely like the preceding, but the antennal difference is conclusive.

*Autosticha naulychna*, n. sp.

♂ ♀. 15—16 mm. Head and thorax orange-yellow. Palpi deep yellow, apex of second joint with indistinct fuscous ring. Antennæ yellowish ringed with dark fuscous. Abdomen dark grey. Forewings elongate, costa gently arched, apex obtuse, termen slightly rounded, oblique ; rather dark purplish-grey ; an orange-yellow basal patch, outer edge running from  $\frac{1}{3}$  of costa to  $\frac{1}{3}$  of dorsum, extreme costal edge dark fuscous ; a small round yellow-whitish spot in disc at  $\frac{2}{3}$  : cilia purplish-grey. Hindwings and cilia rather dark grey.

Newera Eliya and Pattipola, Ceylon, in October ; two specimens (Alston, Pole).

*Autosticha calceata*, n. sp.

♂ ♀. 11—15 mm. Head white, more or less sprinkled with grey. Palpi white, lower half and a subapical ring of second joint, and two rings of terminal joint fuscous irrorated with black. Antennæ grey. Thorax white, more or less sprinkled with fuscous, with a few black specks. Abdomen whitish sprinkled with pale fuscous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen very obliquely rounded ; white, sometimes partially fuscous-tinged, more or less sprinkled with fuscous and a few blackish scales ; small blackish spots on costa at base,  $\frac{1}{4}$ , and middle, and an almost marginal series extending round posterior part of costa and termen to dorsum before tornus ; stigmata large, blackish, plical obliquely beyond first discal ; additional blackish dots beneath costa near base, and between median costal and second discal stigma : cilia pale whitish-ochreous, base with a few blackish specks. Hindwings pale grey ; cilia ochreous-whitish.

Maskeliya, Ceylon, in January, April, and June ; three specimens (Pole).

*Autosticha pelava*, n. sp.

♂. 10—11 mm. Head and thorax deep ochreous-yellow, shoulders and a dot on each side of posterior, extremity of thorax black. Palpi ochreous-yellow,

Autosticha nanlychna, Hgn, Wgt. Ge, ms. Jan 182, p. 257, t. 5 f. 104 (1926)

Antosticha asparta, Mey, Wirt. Ge. m. fasc 189, p. 257, t. 5 f. 103 (1926)



second joint more or less irrorated with blackish, with a black subapical ring, terminal joint with a black median band. Antennæ fuscous, obscurely paler-ringed. Abdomen grey, apex ochreous-whitish. Forewings elongate, narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; deep ochreous-yellow, with a few scattered black scales; small blackish dots at base of costa and dorsum; elongate blackish spots on costa about  $\frac{1}{5}$  and middle; stigmata large, blackish, plical rather obliquely before first discal, preceded by more or less black suffusion on fold; an almost marginal row of blackish dots round posterior part of costa and termen to dorsum before tornus: cilia ochreous-yellow, basal half with a few blackish specks. Hindwings grey; cilia pale grey.

Maskeliya, Ceylon, in March and April; three specimens (Pole).

*Autosticha aspasta*, n. sp.

♂ ♀. 14—16 mm. Head and thorax deep ochreous-yellow. Palpi ochreous-yellow, a subapical ring of second joint and median band of terminal joint dark fuscous. Antennæ ochreous-yellow spotted with fuscous. Abdomen greyish-ochreous, margins of segments grey, apex whitish-ochreous. Forewings elongate, costa moderately arched, apex round-pointed, termen faintly sinuate, rather strongly oblique; clear deep ochreous-yellow; blackish dots on base of costa and dorsum; stigmata large, black, plical rather obliquely before first discal; an almost marginal row of large black dots along posterior third of costa and termen to dorsum before tornus: cilia ochreous-yellow. Hindwings grey; cilia light grey, round apex tinged with yellow-whitish on outer half.

Maskeliya, Ceylon, in August; two specimens (de Mowbray, Pole).

*Autosticha demetrias*, n. sp.

♂ ♀. 13—16 mm. Head and thorax ochreous-yellow or yellow-ochreous, sometimes tinged with fuscous or sprinkled with dark fuscous above. Palpi ochreous-yellowish, second joint more or less suffused with dark fuscous, sometimes on subapical ring only, terminal joint with dark fuscous median band. Antennæ yellowish ringed with fuscous. Abdomen grey, segmental margins whitish-ochreous. Forewings elongate, costa moderately arched, apex obtuse, termen faintly sinuate, oblique; deep ochreous-yellow or yellow-ochreous, with some scattered blackish scales, sometimes considerably mixed and suffused with brown; a blackish dot on base of costa; stigmata moderate, blackish, plical somewhat obliquely before first discal; a short rather inwardly oblique blackish streak from dorsum beneath second discal; an almost marginal row of blackish dots, sometimes rather large, along posterior half of costa and termen: cilia ochreous-yellow, sometimes with some dark fuscous specks on basal half. Hindwings grey, varying in intensity; cilia whitish-grey, sometimes yellowish-tinged, with darker subbasal shade.

Maskeliya, Ceylon, from October to April; twelve specimens (Pole, Alston)

*Autosticha protypa*, n. sp.

♂ ♀. 17—20 mm. Head and thorax varying from deep ochreous-yellowish to brownish. Palpi ochreous-yellowish, second joint more or less irrorated and

suffused with dark fuscous, terminal joint with anterior edge or a median band more or less dark fuscous, variable in development. Antennæ yellow-ochreous ringed with fuscous. Abdomen ochreous, sides and segmental margins greyish. Forewings elongate, costa gently arched, apex obtuse, termen slightly rounded, oblique; deep yellow-ochreous or light ochreous-brownish, sometimes sprinkled with dark fuscous; a blackish dot on base of costa; stigmata rather small, blackish, plical almost beneath first discal; a short inwardly oblique streak of fuscous suffusion from dorsum just beyond second discal; an almost marginal row of rather small blackish dots along posterior half of costa and termen to dorsum before tornus: cilia ochreous-yellowish, basal half deep ochreous-yellow, sometimes sprinkled with dark fuscous specks. Hindwings grey, variable in intensity, darker in ♀; cilia whitish-yellowish with two faint greyish shades.

Maskeliya, Peradeniya, and Maturatta, Ceylon, in September and from January to April (Pole, Green). Larva feeding in galleries of silk and refuse on lichens on mossy rocks (Green).

*Autosticha tetrapeda*, n. sp.

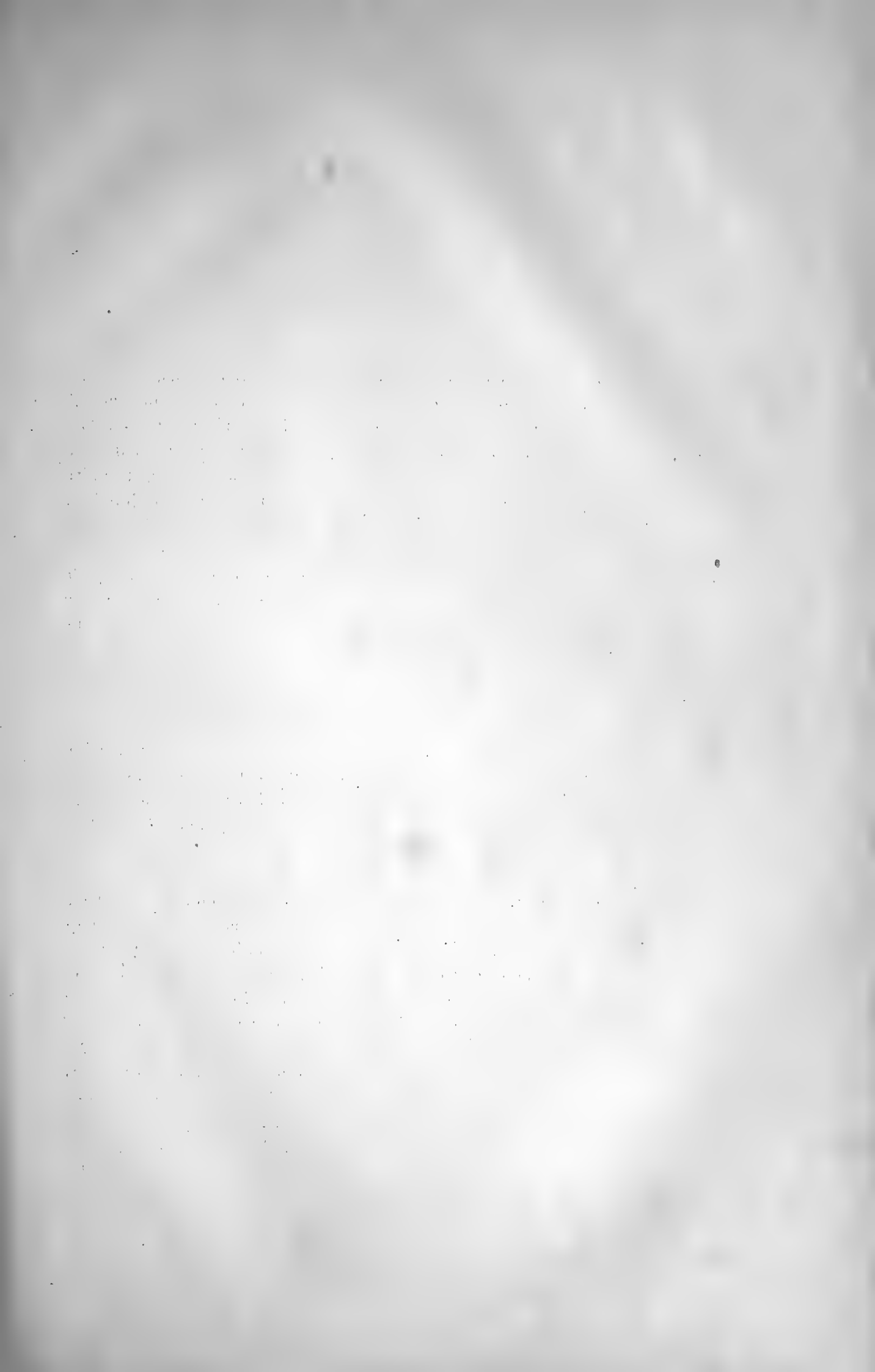
♂. 13 mm. Head and thorax pale brownish-ochreous. Palpi whitish-ochreous, second joint and middle of terminal joint tinged with brownish. Antennæ whitish-ochreous ringed with fuscous, towards apex suffused with dark fuscous. Abdomen whitish-ochreous. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded; pale brownish-ochreous, sprinkled with fuscous; blackish dots on base of costa and dorsum; stigmata large, blackish, plical beneath first discal; a similar blackish spot on dorsum beneath second discal; an almost marginal row of blackish dots along posterior part of costa and termen: cilia whitish-ochreous, basal half sprinkled with fuscous. Hindwings light grey, paler and thinly scaled towards base; cilia whitish-ochreous.

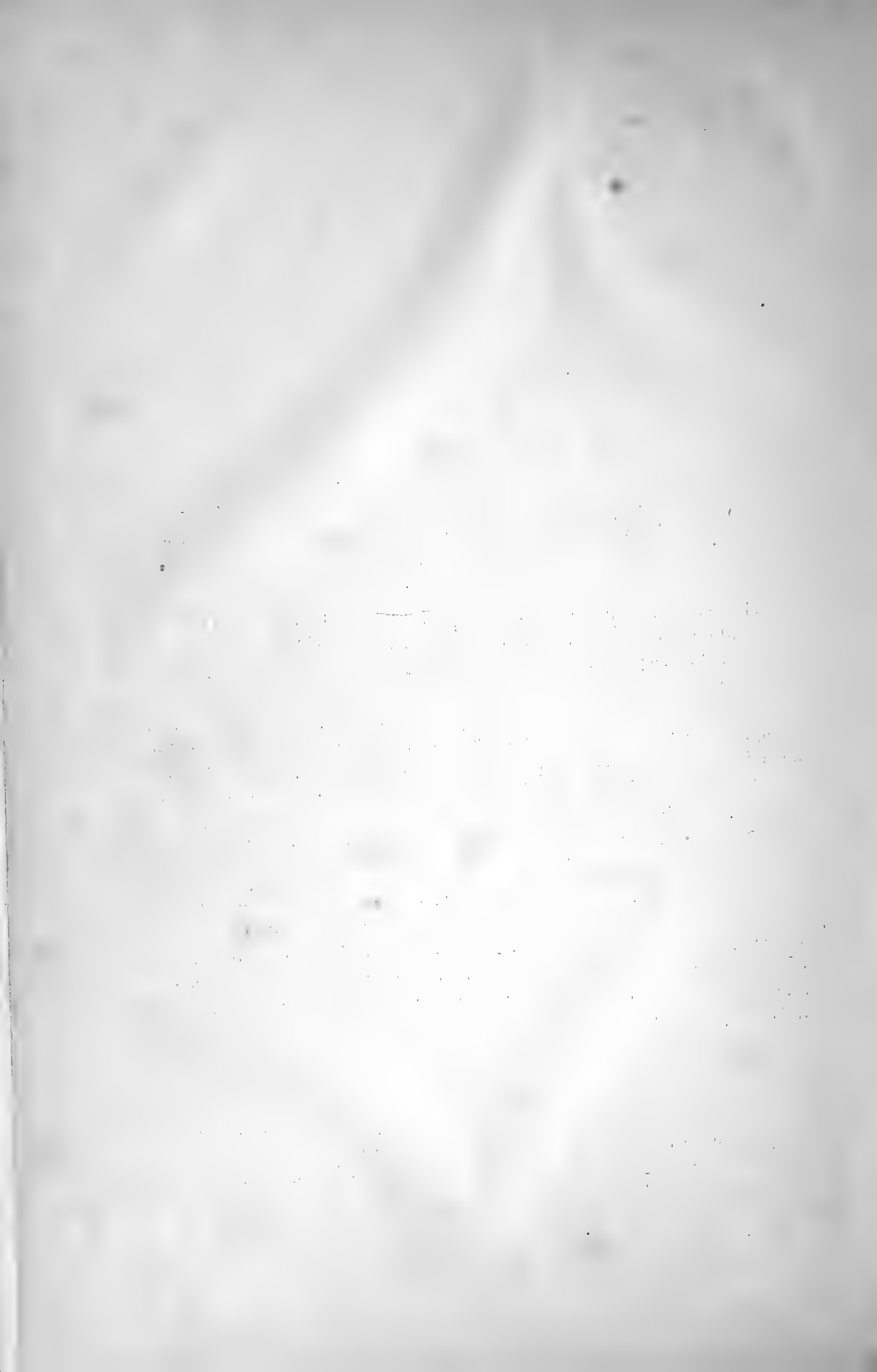
Palni Hills; one specimen (Campbell).

*Autosticha demotica*, n. sp.

♂ ♀. 13-18 mm. Head and thorax light fuscous. Palpi fuscous, apex of second joint ochreous-whitish, terminal joint as long as second, ochreous-whitish, more or less suffusedly banded with fuscous in middle. Antennæ whitish-ochreous obscurely ringed with fuscous. Abdomen light greyish-ochreous. Forewings elongate, costa moderately arched, apex obtuse, termen obliquely rounded; light fuscous or greyish-ochreous; a dark fuscous dot on base of costa; stigmata very small, dark fuscous, discal stigmata approximated, separated by  $\frac{1}{5}$  of wing, plical beneath first discal; an almost marginal series of indistinct dark fuscous dots along posterior part of costa and tornus: cilia whitish-ochreous. Hindwings grey; cilia pale ochreous-greyish.

Peradeniya, Madulsima, and Ambulangoda, Ceylon, in February, April, June, and August; five specimens (Green, Vaughan, Pole). Very similar to *A. strenuella*, but broader-winged, and discal stigmata obviously closer together.





*Autosticha phaulodes*, n. sp.

♂ ♀. 12—15 mm. Head and thorax brownish-ochreous sprinkled with dark fuscous. Palpi whitish-ochreous, second joint irrorated with dark fuscous, terminal joint as long as second, with dark fuscous median band. Antennæ fuscous, obscurely pale-ringed. Abdomen fuscous, apex whitish-ochreous. Forewings elongate, costa gently arched, apex obtuse, termen slightly rounded, oblique; brownish-ochreous, irrorated with fuscous and dark fuscous; stigmata moderate or large, dark fuscous, plical somewhat before first discal; a small prætornal spot of dark fuscous suffusion; an almost marginal series of dark fuscous dots along posterior portion of costa and termen: cilia very pale greyish-ochreous, basal half light brownish-ochreous, with some basal dots and a median line of scattered dark fuscous specks. Hindwings grey; cilia ochreous-grey-whitish.

Madulsima, Ceylon, in April and May; nine specimens (Vaughan). Hitherto confused with *chernētis*, and included under it in my description: smaller than *chernētis*, forewings narrower and termen more oblique, yet broader and less oblique than in *authæma*; duller and more uniformly coloured than either, with plical stigma rather before first discal instead of beneath it: basal half of cilia not yellowish-tinged as in both these.

*Autosticha chernetis*, Meyr.

As indicated above, my description of this species includes *phaulodes* as well. I restrict the name to the species bred by Mr. Green from larvæ found at Peradeniya, with habits as described. The description as published only needs to be altered in the following particulars, viz.:—

♂ ♀. 16—17 mm. Forewings with discal stigmata large, plical beneath first discal. Bred in February and March.

*Apethistis*, n. g.

Head with appressed scales, side-tufts somewhat raised; ocelli absent; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ serrulate, shortly ciliated, basal joint moderate, without pecten. Labial palpi long, recurved, second joint with appressed scales, terminal joint nearly or quite as long as second, slender, acute. Maxillary palpi rudimentary. Posterior tibiæ clothed with rough scales. Forewings with 1b furcate, 2 and 3 stalked from angle, 7 and 8 stalked, 7 to termen, 11 from middle. Hindwings 1, trapezoidal, termen sinuate, cilia  $\frac{3}{4}$ —1; 3 and 4 connate, 5 approximated, 6 and 7 stalked.

Type *A. metoeca*, Meyr. Closely allied to the preceding genus, from which it only differs in the presence of vein 8 of forewings. To this genus is also referable *Gelechia alienella*, Walk. 634.

*Apethistis carphodes*, n. sp.

♂ ♀. 15—16 mm. Head pale ochreous-yellowish, sides deeper. Palpi light ochreous-yellowish, second joint sprinkled and lower half suffused with fuscous. Antennæ light yellowish, obscurely ringed with fuscous. Thorax ochreous-yellowish, sprinkled with fuscous. Abdomen light ochreous-yellowish. Forewings elongate, costa moderately arched, apex obtuse, termen sinuate, oblique;

whitish-ochreous-yellowish, irregularly sprinkled with deeper ochreous-yellow scales tipped with dark fuscous : blackish dots at base of costa and dorsum, and a short blackish dash beneath costa near base ; stigmata blackish, plical rather obliquely before first discal, both moderate, second discal large, round ; patches of fuscous suffusion irrorated with blackish towards costa about  $\frac{3}{4}$  and beneath second discal stigma, varying much in development ; a blackish dot on dorsum before tornus ; an almost marginal series of undefined blackish dots along posterior part of costa and termen, not reaching tornus : cilia whitish-ochreous-yellowish, deeper on basal half, sometimes sprinkled with fuscous. Hindwings grey ; cilia whitish-yellowish, in ♀ greyish-tinged, with grey subbasal shade.

Khasi Hills, from July to September ; eleven specimens.

*Apethistis metoeca*, n. sp.

♂ ♀. 14—16 mm. Head ochreous-whitish sprinkled with dark fuscous, centre of crown tinged with fuscous. Palpi ochreous-whitish, somewhat sprinkled with dark fuscous, second joint suffused with dark fuscous except apex. Antennæ light fuscous. Thorax fuscous, paler-sprinkled. Abdomen fuscous, segmental margins whitish-ochreous. Forewings elongate, rather narrow, costa moderately arched, apex round-pointed, termen somewhat sinuate, rather strongly oblique ; fuscous, irregularly sprinkled with paler and dark fuscous, appearing grey ; costa anteriorly suffusedly irrorated with dark fuscous, with a short dark fuscous dash beneath costa near base ; stigmata moderate, dark fuscous, plical obliquely before first discal ; a streak of fuscous suffusion irrorated with dark fuscous from  $\frac{4}{5}$  of costa to above second discal stigma ; a spot of dark fuscous suffusion on dorsum before tornus ; an almost marginal series of undefined dark fuscous dots along posterior fourth of costa and termen : cilia pale greyish-ochreous, somewhat sprinkled with fuscous. Hindwings grey ; cilia light grey.

Maskeliya, Ceylon, from January to August ; twelve specimens (Pole). Very like *alienella*, but is a grey species, whilst *alienella* is brownish-ochreous in general colouring.







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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

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### VII.

(Continued from page 460 of this Volume.)

*Eucosmidae* (= EPIBLEMIDÆ.

*Eucosma trophiodes*, n. sp.

♂ ♀. 16-23 mm. Head and thorax light greyish-ochreous, variably mixed with grey. Palpi moderately long, porrected, second joint strongly dilated with projecting scales above and beneath, terminal joint short. Abdomen in ♂ ochreous-whitish, base of segments blackish, with an expansible genital tuft of whitish-ochreous and black hairs, in ♀ greyish. Posterior tibiæ slightly rough-scaled. Forewings elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen sinuate, somewhat oblique; in ♂ whitish-ochreous, sometimes suffused with brownish-ochreous, costa spotted with dull green, with a longer very oblique mark from middle, with a basal fuscous patch whose edge runs from  $\frac{1}{5}$  of costa to  $\frac{2}{3}$  of dorsum, suffused with pale ochreous towards costa and mixed with green towards dorsum, and sometimes with a black mark in disc beyond middle; in ♀ ochreous-brown mostly suffused with grey and green towards costal and basal areas, and sprinkled with black, usually with a spot of whitish-ochreous suffusion towards termen in middle, apex sometimes suffused with whitish; three black dots near termen below middle, and sometimes other scattered small black dots above these; cilia ochreous, sometimes partially spotted with dark fuscous. Hindwings in ♂ with a dorsal fold filled with dense rough whitish-ochreous flocculent scales and hairs; grey, darker posteriorly; cilia whitish or pale grey, with darker subbasal line.

Maskeliya, Madulsima, Diyatalawa, Hakgala, Patipola, Newera Eliya, Ceylon (Pole, Green, Fletcher); Nilgiris (Andrewes); Coorg (Newcome); Khasis; from March to May, and August to November; twenty-five specimens.

## TORTRICIDÆ.

*Capua melissa*, n. sp.

♂ ♀. 14-17 mm. Head, palpi, thorax, and abdomen light yellowish-ochreous, abdomen dorsally suffused with grey. Forewings elongate, rather dilated posteriorly, costa anteriorly moderately arched, apex obtuse, termen sinuate, somewhat oblique, costal fold in ♂ moderate, reaching from base to near middle; whitish-ochreous or pale yellowish-ochreous, with scattered deeper ochreous strigulae, which are greyish near termen; basal patch hardly indicated, outer edge angulated below middle; central fascia yellow-brown, moderate on upper half, narrower and posteriorly suffused on lower half; costal patch yellow-brown, flattened-triangular, its apex connected by a more or less marked striga with termen below middle; cilia light ochreous-yellowish. Hindwings grey-whitish, faintly strigulated with grey, apex tinged with whitish-ochreous; cilia whitish-ochreous, with a faint grey subbasal shade.

Khasis, in March, June, and September; five specimens.

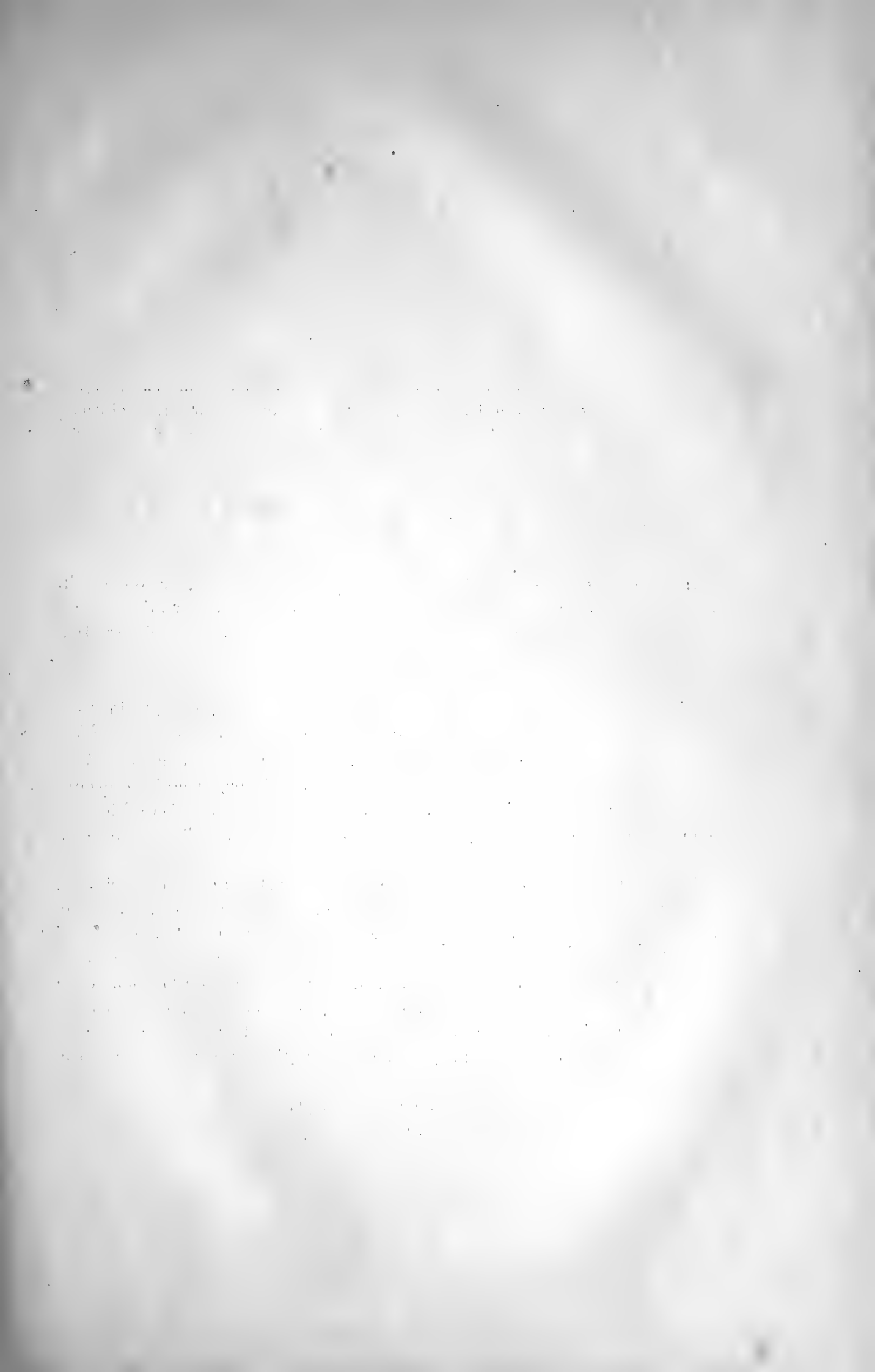
*Capua melanatma*, n. sp.

♂ ♀. 12-15 mm. Head and palpi light yellowish-ochreous. Thorax whitish-ochreous more or less irrorated with grey. Abdomen grey, segmental margins ochreous-whitish. Forewings rather elongate (shorter than in *melissa*), costa anteriorly moderately arched, apex obtuse, termen sinuate, rather oblique, costal fold in ♂ moderate, reaching from base to  $\frac{2}{5}$ ; whitish-ochreous, with a few scattered ochreous strigulae sprinkled with fuscous; basal patch little marked on costa and dorsum mixed with ochreous and dark fuscous, outer edge sometimes indicated by an ochreous stria, curved or bent below middle; central fascia moderately broad throughout, ochreous mixed with dark leaden-grey and blackish, posterior edge prominently dilated above tornus; costal patch fascia-like, reaching half across wing, dilated towards costa, ochreous mixed with dark leaden-grey and blackish: cilia whitish-ochreous. Hindwings light grey, somewhat strigulated with darker, posteriorly sometimes slightly tinged with whitish-ochreous; cilia whitish-ochreous, with a faint grey shade.

Khasis, in June and September; fourteen specimens.

*Cacacia eâpatris*, n. sp.

♂. 20 mm. Head and thorax deep red-brown, thorax posteriorly pale brownish. Palpi short, ascending, deep ferruginous. Abdomen pale ochreous. Forewings suboblong, costa anteriorly moderately arched, posteriorly slightly sinuate, apex obtuse, termen somewhat sinuate beneath apex, vertical, rounded beneath, costal fold strong, extending from base to near  $\frac{2}{5}$ ; red-brown, with a strong purplish-slaty gloss; a patch of pale ochreous somewhat raised scales beneath costal fold, partially edged beneath with deep red-brown; central fascia deep red-brown suffused with blackish above and below middle, very narrow on costa, much dilated downwards, becoming obsolete towards dorsum, posterior edge connected in middle with apex of triangular deep red-brown costal patch; a patch of pale ochreous suffusion towards tornus, above which is an elongate brown spot in middle; a dark brown mark at apex of wing: cilia deep red-





brown with a slaty gloss at apex, becoming whitish-ochreous towards tornus. Hindwings grey, suffused with pale yellow in disc and towards costa, costa itself suffused with whitish; cilia grey, suffused with pale yellowish on dorsum and lower half of termen.

Wellawaya, Ceylon, in November (Green); one specimen. Allied to *C. epicyrta*, but forewings obviously broader anteriorly, and apex of hindwings grey, not yellow.

*Cacæcia solida*, n. sp.

♂. 19-20 mm. Head and thorax brown or reddish-brown. Palpi moderate, ascending, fuscous. Abdomen fuscous, anal tuft brownish-ochreous. Forewings suboblong, costa anteriorly moderately arched, posteriorly sinuate, apex obtuse, termen rather sinuate beneath apex, vertical, rounded beneath, costal fold strong, extending from base to beyond  $\frac{2}{3}$ ; fuscous, sometimes reddish-tinged; basal area suffused with dark purplish-fuscous; markings deep brown a transverse blotch from dorsum forming posterior edge of basal patch, reaching half across wing; central fascia ill-defined, entire, very narrow on costa, much dilated downwards, posterior edge with an undefined projection in middle; costal patch extended as a wedge-shaped projection to termen above tornus; a dark purplish-fuscous mark along upper part of termen: cilia deep brown, towards tornus whitish-ochreous. Hindwings grey, costa very obscurely suffused with whitish-ochreous; cilia ochreous-whitish, partially suffused with grey.

Darjiling; two specimens.

*Cacæcia cæmentosa*, n. sp.

♂. 15 mm., ♀ 19-20 mm. Head and thorax whitish-ochreous or pale brownish-ochreous, patagia in ♂ dark fuscous. Palpi moderately long, porrected, whitish-ochreous, externally suffused with dark fuscous. Antennæ in ♂ moderately biciliated. Abdomen pale greyish, anal tuft whitish-ochreous. Forewings suboblong, costa in ♂ moderately and evenly arched, in ♀ straighter posteriorly, apex obtuse, termen straight, rather oblique, costal fold in ♂ moderate, extending from base to middle; whitish-ochreous; basal fourth of costa in ♂ suffused with dark fuscous, sometimes mixed with ferruginous; several ferruginous or fuscous strigulæ mixed with dark fuscous about edge of basal patch and towards apex and termen; a broad central fascia considerably dilated dorsally, and connected costal patch in ♂ formed of ferruginous-brown strigulæ mixed with dark leaden-grey, in ♀ dark ashy-fuscous edged with blackish-fuscous and partially ferruginous-tinged; in one ♂ these markings are merged in a general suffusion of dark fuscous irroration except towards costa anteriorly and base: cilia pale yellow-ochreous or whitish-ochreous, sometimes somewhat mixed with dark fuscous. Hindwings pale grey, sometimes marbled with darker; cilia pale whitish-ochreous, with faint grey line.

Khasis, in April and June; six specimens.

*Cacæcia isozona*, n. sp.

♂. 13 mm. Head, palpi, and thorax pale yellowish-ochreous, patagia mixed with dark fuscous, palpi moderately long, porrected. Antennæ moderately

biciliated. Abdomen grey, anal tuft pale ochreous. Forewings suboblong, costa anteriorly moderately arched, posteriorly straight, apex obtuse, termen straight, somewhat oblique, costal fold strong, with projecting scales towards middle, extending from base to middle; whitish-ochreous, with scattered strigulae of deeper ochreous, sprinkled with dark fuscous; basal fourth of costa suffused with dark fuscous; a small dark fuscous spot on dorsum at  $\frac{1}{4}$ ; central fascia dark fuscous mixed with deep ochreous on margins and edged with some black scales anteriorly, moderately and evenly broad; costal patch dark fuscous mixed with brownish-ochreous: cilia whitish-ochreous. Hindwings grey; cilia whitish-ochreous with a grey shade.

Khasis, in June; one specimen. Superficially very like *Capua melanatma*.

*Cacæcia operosa*, n. sp.

♂ ♀. 11-14 mm. Head and thorax light brown. Palpi moderate, porrected light ochreous, externally mixed with dark fuscous. Antennæ in ♂ shortly ciliated. Abdomen fuscous, anal tuft of ♂ whitish-ochreous mixed with fuscous. Forewings suboblong, costa in ♂ bent before middle, nearly straight posteriorly, in ♀ tolerably evenly arched, apex obtuse, termen nearly straight, rather oblique, costal fold in ♂ strong, extending from base to near middle; light brown or brownish-ochreous, sometimes slightly reddish-tinged, obscurely strigulated with darker, sometimes sprinkled or strigulated with blackish; central fascia dark fuscous, more or less mixed with deep ferruginous and black, narrow on upper half, dilated near dorsum and followed on lower half by an undefined cloudy darker suffusion; costal patch flattened-triangular, dark fuscous, mixed with blackish; usually a spot or striga of deep ferruginous and blackish scales towards termen above tornus: cilia pale ochreous, beneath tornus fuscous. Hindwings and cilia grey.

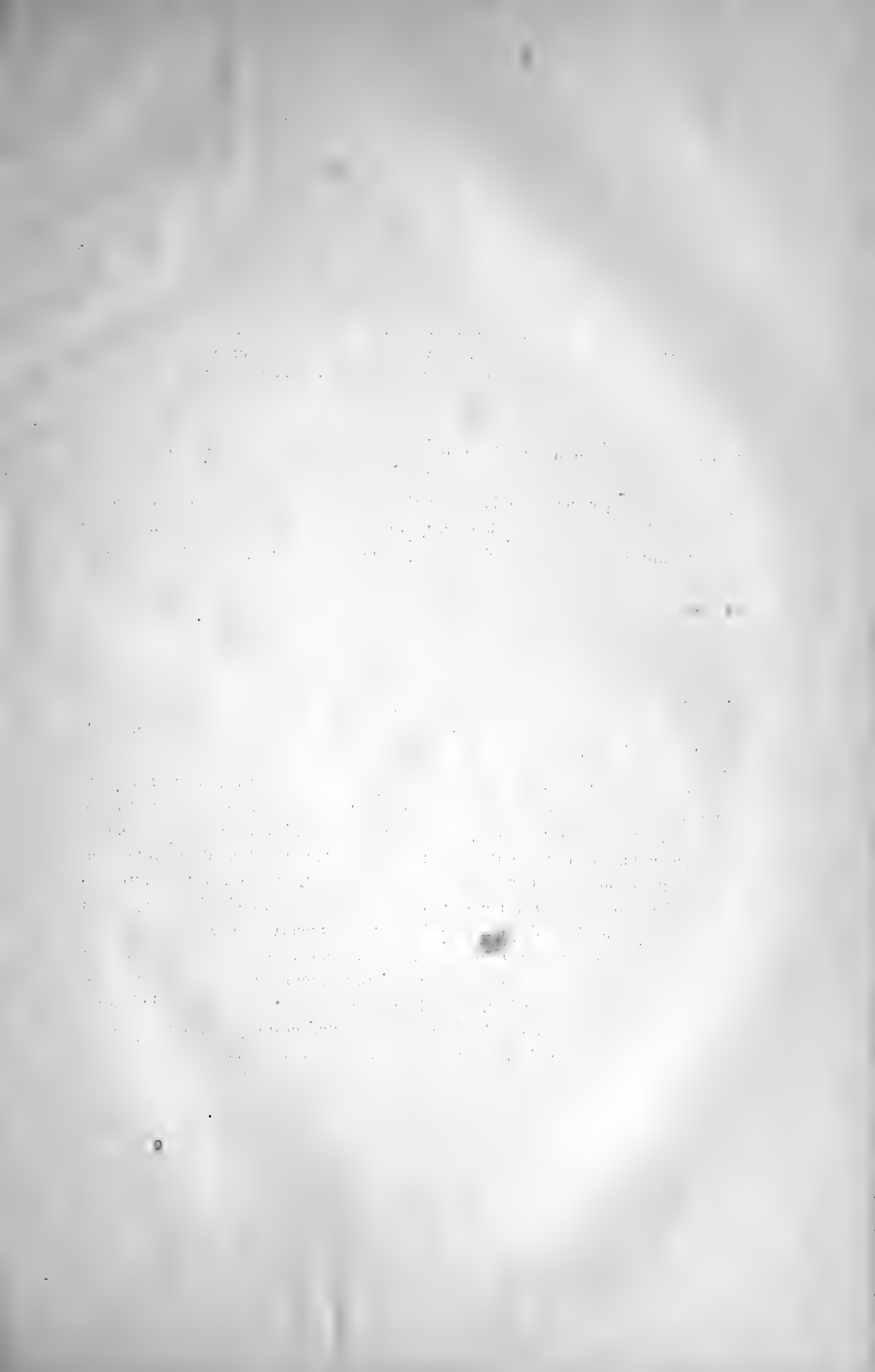
Maskeliya, Madulsima, Diyatalawa, Ceylon (Pole, Vaughan, Fletcher, de Mowbray); Nilgiris (Andrewes); in August, October, and from January to May; twenty-five specimens.

*Cacæcia translucida*, n. sp.

♂. 13 mm. Head, palpi, and thorax pale brownish-ochreous much mixed with black, palpi moderate, porrected. Antennæ moderately biciliated with fascicles. Abdomen dark fuscous. Forewings suboblong, costa anteriorly moderately arched, posteriorly almost straight, apex obtuse, termen rather obliquely rounded, costal fold narrow, extending from base to beyond  $\frac{1}{3}$ ; pale brownish-ochreous, irregularly mixed with blackish, especially towards base; central fascia and entire area beyond it except a costal spot beyond middle ferruginous-brown mixed with fuscous and dark fuscous: cilia brown mixed with dark fuscous, towards tornus mixed with whitish-ochreous. Hindwings white, irrorated with dark fuscous towards base, costa, and dorsum; a dark fuscous terminal band, broader towards apex, its anterior edge irregular; cilia fuscous-whitish, with dark fuscous basal line.

Kashmir, 8,000 feet, in June (Nurse); one specimen.

*Dicellitis*, n. g.







Palpi curved, ascending, second joint dilated with rather rough scales, terminal joint rather short, obtuse. Thorax crested. Forewings with 3 and 4 stalked 8 and 9 out of 7, 7 to termen. Hindwings with 3 and 4 stalked, 5 rather approximated, 6 and 7 stalked.

*Dicellitis nigrifula*, n. sp.

♀. 15-17 mm. Head dark fuscous. Palpi grey. Thorax pale brownish-ochreous, crest blackish-fuscous. Abdomen light grey. Forewings suboblong, costa anteriorly moderately, posteriorly gently arched, apex obtuse, termen subsinuate, somewhat oblique; pale yellowish-ochreous, suffusedly strigulated with light brownish; a dark fuscous spot on dorsum at  $\frac{1}{4}$ ; central fascia brownish, ill-defined except on costal edge where it is dark fuscous and moderately broad interrupted above middle, moderately broad beneath and dilated towards dorsum; costal patch and a triangular spot towards termen above tornus dark fuscous mixed with black and leaden-grey: cilia pale yellowish-ochreous. Hindwings grey; cilia pale greyish-ochreous with a grey shade.

N. Coorg, 3,500 feet, in August and October (Newcome); two specimens.

*Epagoge invalidana*, Walk. (*Tortrix invalidana*, Walk., XXVIII, 327.)

♂ ♀. 15-19 mm. Head and thorax brownish-ochreous. Palpi moderate, porrected, ochreous-whitish irrorated with fuscous. Abdomen ochreous-whitish, sometimes sprinkled with grey. Forewings suboblong, costa anteriorly strongly arched, posteriorly almost straight, apex obtuse, termen subsinuate, nearly vertical; in ♂ brownish or pale brownish-ochreous strigulated with fuscous, in ♀ whitish-ochreous, usually more or less tinged or suffused with pale brownish, sometimes sprinkled with brown dots, usually with a few black specks, in one specimen suffusedly irrorated with fuscous and dark slaty-fuscous; markings in ♂ rather dark fuscous, in ♀ ochreous-brownish or fuscous, variable and ill-defined, central fascia broad, narrowed on costal third, but in ♀ usually interrupted or broadly obsolete in disc, costal patch flattened-triangular, these sometimes represented in ♀ by a cloudy dark suffusion extending along dorsum and posterior  $\frac{2}{3}$  of costa; a more or less developed row of small black almost marginal dots before termen: cilia whitish-ochreous, tips suffused with fuscous or dark fuscous except on apex and tornus. Hindwings ochreous-whitish, more ochreous-tinged towards apex, towards dorsum and lower half of termen suffused with light grey; several fuscous strigulae or small spots towards apex; cilia whitish-yellowish, on lower half of termen or in ♂ throughout with a grey shade.

Newera Eliya, Maskeliya, Madulsima, Kandy, Ceylon (Pole, Green, Alston, Vaughan); Coorg (Newcome); Khasis; practically throughout the year; twenty specimens. Its variability in tint and marking make it rather a puzzling species but the forms with suffused costal and dorsal streaks are characteristic.

*Epagoge psammocyma*, n. sp.

♂. 22 mm. Head, thorax and abdomen whitish-ochreous. Palpi rather long, obliquely porrected, whitish-ochreous, externally sprinkled with fuscous. Forewings suboblong, costa anteriorly strongly arched, posteriorly nearly straight, apex obtuse, termen sinuate, little oblique; whitish-ochreous, strigulated

throughout with fuscous; central fascia towards costa narrow, fuscous, breast broad but only indicated by ill-defined limiting lines of fuscous suffusion, partially lost in the strigulation; costal patch fuscous: cilia pale whitish-ochreous with traces of brownish bars. Hindwings ochreous-whitish, posteriorly with faint greyish strigulae; cilia whitish.

Palni Hills, 6,000 feet (Campbell); two specimens.

*Epagoge harmonia*, n. sp.

♂ ♀. 23-30 mm. Head and thorax deep ferruginous, posterior half of thorax lighter ochreous, face beneath a projecting tuft of scales ochreous-whitish. Palpi rather long, porrected, deep ferruginous. Abdomen whitish-ochreous. Forewings suboblong, in ♂ dilated posteriorly, costa anteriorly strongly posteriorly slightly arched, apex obtuse, termen sinuate, almost vertical; pale ochreous, suffusedly strigulated with ferruginous-brown, more closely and suffusedly in ♀; markings deep ferruginous sometimes strigulated with grey; base of costa shortly suffused with deep ferruginous; central fascia moderate and well-marked on costal third, becoming obsolete beneath; costal patch well marked, posteriorly suffused and sometimes extended to apex: cilia pale ochreous, with a deep ferruginous shade becoming obsolete towards tornus. Hindwings and cilia pale whitish-yellowish, dorsum sometimes faintly greyish-tinged.

Sikkim, Darjiling, Khasis, from April to August; eleven specimens.

*Epagoge prochyta*, n. sp.

♂ ♀. 11-12 mm. Head, palpi, and thorax reddish-ochreous, palpi moderate, ascending. Abdomen grey. Forewings suboblong, broadest before middle, costa anteriorly strongly arched, posteriorly nearly straight, apex obtuse, termen nearly straight, little oblique; deep ochreous, suffusedly strigulated with brown-reddish, costa usually more or less strigulated with blackish; markings deep ferruginous; a more or less extensive suffused dorsal patch towards base; central fascia reduced to a small well-marked spot on costa and a large undefined suffused patch on dorsum before tornus; costal patch well-defined, elongate-triangular, its apex resting on termen below middle: cilia pale ochreous. Hindwings dark grey; cilia grey, sometimes whitish-suffused.

Khasis, in June and September; six specimens.

*Epagoge pantherina*, n. sp.

♂. 12 mm. Head orange. Palpi rather slender, ascending, yellow-ochreous, becoming grey towards base. Antennae fasciculate-ciliated. Thorax and abdomen dark indigo-fuscous. Forewings oblong, costa much arched near base, otherwise nearly straight, apex obtuse, termen slightly rounded, rather oblique; 3 remote from angle; bright orange, strewn with irregular leaden-metallic spots; markings blackish-fuscous, also spotted irregularly with leaden-metallic; a rather narrow basal fascia; central fascia broad on costa, much dilated on lower  $\frac{2}{3}$  so as to extend beyond tornus and almost coalesce with costal patch; costal patch broad, fascia-like, almost reaching middle of termen: cilia orange, beneath tornus dark grey. Hindwings and cilia dark fuscous.





N. Coorg, 3,500 feet, in August (Newcome); one specimen.

*Epagoge revoluta*, n. sp.

♀. 21 mm. Head and thorax ochreous-brownish, face mixed with dark fuscous. Palpi moderate, porrected, brownish-ochreous suffusedly irrorated with dark fuscous. Forewings oblong, costa anteriorly very strongly arched posteriorly nearly straight, apex obtuse, termen subsinuate, nearly vertical; 3 remote from angle; light brown, strigulated with dark brown, especially on margins; markings reddish-fuscous mixed with dark grey; central fascia narrow, mostly obsolete in disc, rather broader towards dorsum, costal patch flattened-triangular, edged anteriorly by a row of black strigulae extended to termen below middle, and other black strigulae towards apex and before termen, apical area tinged with reddish-fuscous: cilia light ochreous, with some grey dots. Hindwings pale ochreous with a few grey strigulae towards termen, dorsal half pale grey; cilia pale ochreous, with a grey line.

Khasis, in March; one specimen.

*Tortrix crocomis*, n. sp.

♂. 16 mm. Head yellow. Palpi moderate, porrected, yellow, towards base fuscous, second joint largely expanded with scales towards apex. Antennae simple. Thorax dark fuscous, anterior margin broadly yellow. Abdomen grey, anal tuft yellowish. Forewings elongate, costa strongly and evenly arched, apex round-pointed, termen faintly sinuate, oblique; rather dark fuscous; an elongate-trapezoidal yellow patch extending along costa from base to  $\frac{2}{5}$ , broadest posteriorly, costal edge dark fuscous at base; a subtriangular yellow spot on dorsum at  $\frac{3}{4}$ , reaching half across wing: cilia fuscous. Hindwings and cilia grey.

Palni Hills, 6,000 feet (Campbell); one specimen.

*Tortrix liquefacta*, n. sp.

♂ ♀. 12 mm. Head and palpi ochreous-yellow, palpi moderate, porrected, second joint much expanded with scales, sprinkled with dark fuscous towards base. Thorax whitish-ochreous, anterior margin yellow-ochreous. Abdomen whitish-ochreous sprinkled with grey. Forewings elongate, posteriorly dilated, costa gently arched, apex round-pointed, termen sinuate, oblique; whitish-ochreous, with about seven irregular transverse partially interrupted ochreous-yellow striae; margins marked with scattered black strigulae; basal fifth of costa suffused with dark grey; a subtriangular blackish-grey spot on dorsum near base; central fascia leaden-grey marked with black, extending from costa to lower angle of cell, hardly indicated below this; costal patch small, leaden-grey marked with black: cilia ochreous-yellowish. Hindwings in ♂ pale whitish-ochreous, dorsal edge greyish, in ♀ very pale greyish, obscurely strigulated with darker; cilia whitish-ochreous.

Khasis, in July and November; two specimens.

*Tortrix insulata*, n. sp.

♂ 14-16 mm., ♀ 16-18 mm. Head, palpi, and thorax yellow-ochreous, palpi moderate, porrected, second joint much expanded with scales. Abdomen

pale greyish, anal tuft whitish-ochreous. Forewings suboblong, more elongate in ♀, costa anteriorly moderately arched, posteriorly nearly straight, especially in ♀, apex obtuse, termen faintly sinuate, oblique; yellow-ochreous; in ♂ a blackish dot towards dorsum at  $\frac{1}{3}$ , indicating edge of basal patch; central fascia represented in ♂ by costal, submedian, and dorsal blackish-grey spots, in ♀ by small dorsal spot only; costal patch in ♂ small, blackish-grey, in ♀ absent: cilia pale ochreous-yellowish. Hindwings ochreous-whitish, dorsal half slightly greyish-tinged; cilia ochreous-whitish.

Simla, in July; six specimens.

*Schænotenes*, n. g.

Antennæ in ♂ biciliated with long fascicles. Palpi rather long, porrected, second joint with rough scales above towards apex, terminal joint moderate. Forewings in ♂ without costal fold; 1.c bent up and connected with 2 near origin, 3-5 approximated from angle, 7 to termen, cell rather narrow and short, lower parting-vein strongly marked. Hindwings with 3 and 4 connate, 5 approximated, 6 and 7 short-stalked.

Type *S. synchora*.

*Schænotenes synchora*, n. sp.

♂. 16 mm. Head and thorax white. Palpi grey, internally white. Abdomen ochreous-grey-whitish. Forewings suboblong, costa anteriorly moderately, posteriorly slightly arched, apex obtuse, termen nearly straight, somewhat oblique; white, margins marked with fuscous strigulae; a fuscous basal patch marked with dark fuscous, darkest towards costa, outer edge nearly vertical; central fascia represented by a small fuscous spot marked with dark fuscous on costa, whence proceed two or three curved series of small fuscous strigulae to dorsum, between which is some slight fuscous suffusion on upper half; costal patch flattened-triangular, fuscous mixed with dark fuscous; two series of small fuscous strigulae before termen: cilia white, with a series of pale fuscous spots before middle. Hindwings and cilia whitish.

Khasis, in July; one specimen.

*Schænotenes semifulva*, n. sp.

♀. 12-13 mm. Head and thorax ferruginous-ochreous. Palpi ochreous mixed with dark fuscous, towards base white beneath. Abdomen fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen sinuate, rather oblique; rather dark fuscous, marbled with dark leaden-grey, veins lined with dark fuscous; basal area occupied by a large pale ochreous patch suffusedly mixed with ferruginous, outer edge running from before  $\frac{2}{5}$  of costa to  $\frac{2}{5}$  of dorsum, slightly curved; several whitish dots on costa posteriorly; in one specimen small suffused ochreous spots beneath costa at  $\frac{2}{3}$  and above tornus: cilia rather dark fuscous. Hindwings and cilia fuscous.

Khasis, in October; three specimens.

*Homalernis*, n. g.

Antennæ in ♂ shortly ciliated. Palpi moderate, porrected, second joint much expanded with scales towards apex, terminal joint rather short. Forewings







with slightly raised scales, in ♂ without costal fold; 1c approximated to 2, 3 and 4 approximated, 7 to termen. Hindwings with 3 and 4 connate, 5-7 tolerably parallel.

*Homalernis semaphora*, n. sp.

♂ ♀. 12 mm. Head and thorax white. Palpi white, second joint grey externally except towards apex. Abdomen grey-whitish. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen nearly straight, very oblique; white, with dots of slightly raised scales faintly tinged with grey or yellowish; some black dots along costa and termen; a triangular blackish spot on middle of costa, reaching about  $\frac{1}{3}$  across wing; a small black spot on costa at  $\frac{3}{4}$ , whence proceeds a curved ochreous line dotted with grey to termen above tornus, and two enlarged black dots on costa towards apex; a black dot in disc at  $\frac{2}{3}$ : cilia white. Hindwings pale grey; cilia whitish.

Khasis, in June; two specimens.

*Pternozyga*, n. g.

Antennæ in ♂ serrulate, shortly ciliated. Palpi very long, porrected, second joint expanded with scales above and beneath, terminal rather short. Thorax crested. Forewings with large dorsal tuft of projecting scales beyond middle, in ♂ without costal fold; 1c bent and approximated to 2 near origin, 3-5 closely approximated at base, 7 and 8 stalked, 7 to termen, 9 closely approximated to 8 towards base, lower parting-vein strongly marked. Hindwings with 3 and 4 connate, 5 rather approximated, 6 and 7 closely approximated towards base.

*Pternozyga haeretica*, n. sp.

♂. 16-17 mm. Head and thorax pale greyish-ochreous, thoracic crest mixed with dark fuscous. Palpi pale ochreous irrorated with fuscous. Abdomen pale greyish-ochreous tinged with fuscous. Forewings elongate posteriorly dilated, costa moderately and evenly arched, apex obtuse, termen sinuate, vertical; light yellowish-ochreous, sometimes with scattered blackish scales tending to form irregular strigulae; basal third much glossed or suffused with silvery-whitish; basal patch sometimes separated from central fascia by a group of whitish striae; a dark fuscous patch occupying whole area beneath a line drawn from dorsum near base to apex or just beneath apex of wing, crossed by two irregular bluish-lead-metallic whitish edged marks from middle of dorsum; a silvery-whitish striga from  $\frac{2}{3}$  of costa to termen above middle, broader and sometimes furcate towards costa, and a short similar mark near termen below middle; a series of small bluish-lead-metallic, sometimes partly confluent spots just before termen, apical one surrounded with ferruginous or reddish suffusion: cilia grey with two dark grey shades, becoming pale ochreous round apex. Hindwings grey, darker-strigulated, towards base whitish-tinged; cilia grey-whitish, with a grey shade.

Palni Hills, 6,000 feet (Campbell); Nilgiris, 6,000 feet (Andrewes); in May two specimens.

*Protopterna*, n. g.

Antennæ in ♂ dentate, fasciculate-ciliated. Palpi moderately long, porrected, second joint expanded with scales towards apex, terminal short, thick. Thorax with strong crest. Forewings with dorsal tuft of projecting scales beyond middle, in ♂ without costal fold; 1c bent up towards origin of 2, 3 and 4 closely approximated, 7 and 8 separate, 7 to termen, lower parting-vein strongly developed. Hindwings with 3 and 4 connate, 5 rather approximated, 6 and 7 somewhat approximated towards base.

*Protopterna chalybias*, n. sp.

♂ ♀. 10-12 mm. Head and thorax dark bronzy, thoracic crest blackish, sometimes margined on each side with an ochreous-white spot. Palpi rather dark ochreous-fuscous, beneath white. Abdomen dark fuscous, beneath whitish-ochreous. Forewings subtriangular, costa moderately arched, apex obtuse, termen somewhat rounded, rather oblique; blackish-fuscous, basal area sometimes ochreous or brownish more or less mixed with blackish; four transverse series of blue-lead-metallic finely black-edged spots or marks, first near base with an enlarged spot on basal portion of costa, two near together before middle rising from whitish costal strigulæ, and one before termen; a patch of ferruginous-ochreous suffusion on posterior  $\frac{2}{3}$  of costa, marked with four small ochreous-white costal spots, of which the first originates an oblique blue-lead-metallic black-edged elongate mark: cilia ochreous-white, with a black basal line, and blackish-grey patches at apex, middle of termen, and tornus. Hindwings grey, thinly scaled, apex and termen suffused with dark fuscous; cilia pale grey, with dark fuscous subbasal line.

Coorg (Newcome); Khasis; from September to November, seven specimens.

*Tymbarcha*, n. g.

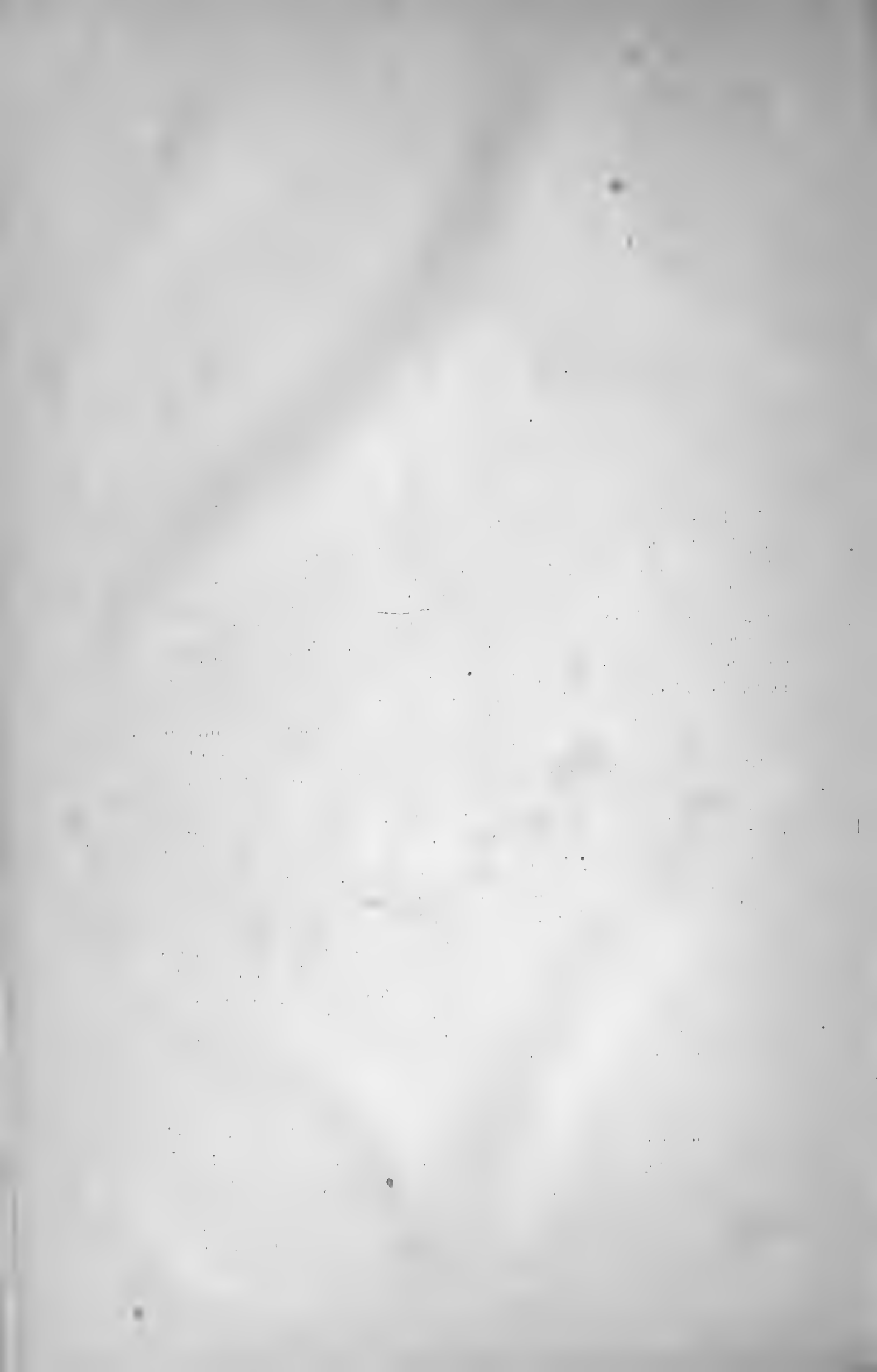
Antennæ in ♂ minutely ciliated. Palpi moderate, porrected, second joint expanded with scales above towards apex, terminal joint short. Forewings with costa angularly bent and prominent in middle, surface with slight tufts of scales, in ♂ without costal fold; 3 and 4 stalked, 5 approximated, 7 and 8 stalked, 7 to termen. Hindwings with 3 and 4 stalked, 5 approximated, 6 and 7 closely approximated towards base.

*Tymbarcha cerinopa*, n. sp.

♂. 13 mm. Head, palpi, thorax and abdomen pale whitish-ochreous. Forewings elongate, costa abruptly bent in middle, so that the wing is much widest at this point and narrows rapidly to either end, ciliated on and beyond prominence to apex, apex obtuse, termen sinuate, short, nearly vertical; whitish-ochreous, veins more ochreous, strewn with small tufts of scales finely sprinkled with blackish, tending to be arranged in transverse series; basal patch, a narrow central fascia starting from a small whitish spot on costa, and a streak along posterior part of costa and termen suffusedly glistening silvery-whitish: cilia ochreous-whitish, with a deep ochreous shade, at tornus suffused with deeper ochreous and more fuscous towards tips. Hindwings pale whitish-grey-ochreous, cilia ochreous-whitish.

Khasis; one specimen.





*Argyrotoxa*, Stph.

Antennæ in ♂ minutely ciliated. Palpi moderately long, porrected, second joint triangularly expanded with scales, terminal joint short. Forewings with tufts of raised scales on surface, in ♂ without costal fold; 3-5 approximated, 7 to termen. Hindwings with 3 and 4 connate or stalked, 5 approximated, 6 and 7 closely approximated towards base.

Type *A. bergmanniana*, L. I find it desirable to reconstitute this genus (which had been abandoned by myself and others), to include those species which differ from *Tortrix* by the possession of scale-tufts on the surface of forewings, and from *Oxygrapha* by the terminal ending of vein 7; in other characters the species appear to be quite intermediate. To this genus the European *forskuleana*, L. and *bifasciana*, Hb. belong.

*Argyrotoxa glaucomis*, n. sp.

♂ ♀. 16-18 mm. Head light ochreous. Palpi pale ochreous irrorated with dark fuscous. Thorax greyish or brownish-ochreous, sometimes whitish-mixed. Abdomen grey, apex whitish-ochreous. Forewings suboblong, costa strongly arched throughout and somewhat roughened with scales posteriorly, apex round-pointed, termen sinuate, rather oblique; dark fuscous suffused with dull olive-greenish, irregularly and suffusedly striated transversely with leaden-metallic; a large very variable oval blotch occupying basal  $\frac{2}{3}$  of costa and reaching more than half across wing, dark brown, or dark indigo-fuscous, or white more or less marked with dark fuscous, sometimes nearly obsolete, often margined posteriorly by a small conspicuous white costal spot; in one specimen this white spot is extended as an irregular transverse streak to dorsum; sometimes instead of the blotch there is a round black spot in disc about  $\frac{1}{3}$ ; a large tuft of scales in middle of disc, and another on submedian fold beyond middle: cilia fuscous, base ochreous-tinged. Hindwings and cilia grey.

Khasis, in June and July; twenty-five specimens.

*Argyrotoxa elæarcha*, n. sp.

♂ ♀. 16-17 mm. Head and thorax ochreous-whitish, patagia whitish-ochreous. Palpi ochreous irrorated with fuscous, internally whitish. Abdomen grey. Forewings elongate-oblong, costa strongly arched near base, thereafter nearly straight, apex round-pointed, termen sinuate, somewhat oblique; dull olive-greenish, irregularly marked and striated with glistening leaden-grey-whitish; a patch of leaden-grey scales mixed with blackish on base of costa, followed by a glistening grey-whitish patch; dorsum from  $\frac{1}{4}$  to  $\frac{3}{4}$  suffused with reddish-ochreous; several tufts of scales on dorsal half-anteriorly, a large tuft tipped with black in disc at  $\frac{3}{5}$ , preceded by a dark reddish-fuscous mark, and a transverse ridge tipped with black towards apex; tornal area mixed with crimson-fuscous, with a well-marked oblique silvery-whitish streak from tornus: cilia ochreous with a suffused fuscous-crimson shade and apical patch, on tornus grey. Hindwings and cilia grey.

Khasis; two specimens.

*Argyrotoxa chionocentra*, n. sp.

♂. 15 mm. Head, palpi, and thorax fuscous, lower part of face and palpi internally whitish. Abdomen grey, apex whitish-ochreous. Forewings oblong, costa much arched near base, thence almost straight, apex round-pointed, termen sinuate, hardly oblique; reddish-fuscous, with several irregular transverse purplish-leadens glossy streaks, and between these several transverse series of very small grey tufts tipped with black; a small snow-white spot in disc at  $\frac{3}{4}$ , nearly preceded by a larger tuft, and an elongate white dot obliquely beneath and before this: cilia reddish-fuscous, apical half whitish-ochreous on termen except towards tornus. Hindwings ochreous-whitish, dorsal half suffused with light grey, apex and termen narrowly suffused with darker grey, cilia pale whitish-ochreous, with a grey shade.

Khasis, in July; one specimen.

*Eboda obstinata*, n. sp.

♀. 13-14 mm. Head and thorax ochreous-fuscous sprinkled with blackish. Palpi brownish-ochreous sprinkled with dark fuscous. Abdomen grey. Forewings elongate-oblong, costa abruptly arched near base, thence nearly straight, apex rounded-obtuse, termen slightly rounded, somewhat oblique; brownish-ochreous; markings deep ferruginous suffusedly mixed with dark fuscous and a few black scales; basal patch with outer edge oblique, sometimes nearly obsolete dorsally, sometimes extended as a broad dark fuscous dorsal suffusion to coalesce with central fascia; central fascia moderately broad, broadly confluent in middle with large suffused costal patch; a black and ferruginous striga extends from costal patch to tornus, and another round apex and upper part of termen: cilia whitish-ochreous. Hindwings fuscous; cilia whitish-ochreous with a fuscous shade.

Puttalam, Ceylon, in November (Pole); two specimens. Vein 7 of forewings terminates about the apex, but both in this species and *smaragdina* the apex is so obtusely rounded off as not to be exactly definable, therefore the termination of 7 should be treated as indefinite.

*Oxygrapha rapax*, n. sp.

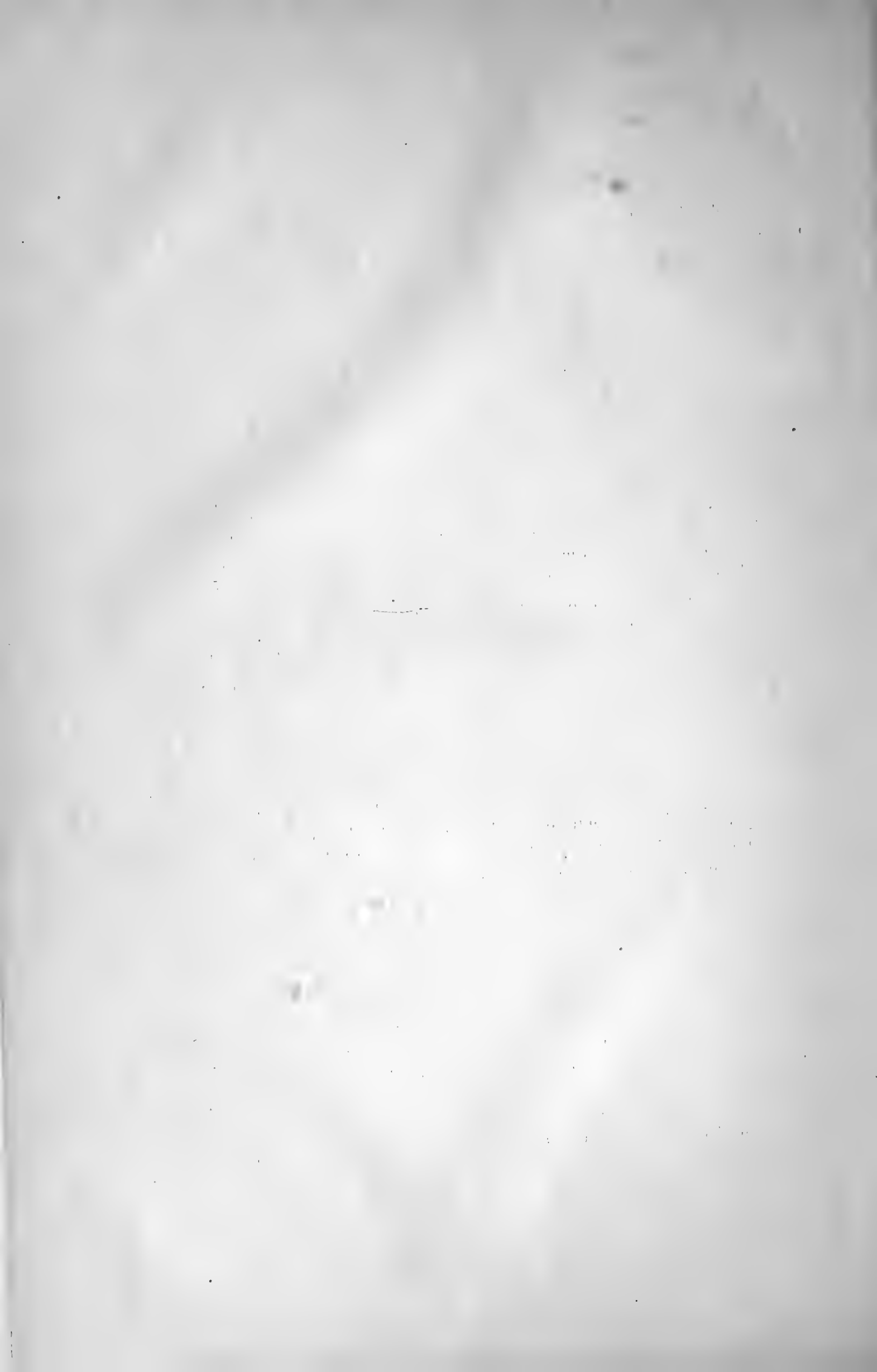
♂ ♀. 17-19 mm. Head, palpi, and thorax fuscous. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex pointed, termen sinuate, oblique, fuscous mixed with whitish-fuscous, and transversely striated with ferruginous mixed with dark fuscous and blackish; a basal patch especially mixed with blackish, extending to  $\frac{1}{3}$  of wing, marked with a pale yellowish dot towards costa near base, and a large ridge of scales on its outer edge: cilia fuscous. Hindwings very elongate-trapezoidal, fuscous; cilia fuscous.

Maskeliya and Maturatta, Ceylon, in June, September and October (Pole, de Mowbray); three specimens. The narrowest-winged species of the genus known to me.

*Oxygrapha halidora*, n. sp.

♂ ♀. 12-15 mm. Head grey. Palpi dark grey irrorated with white. Thorax whitish-greenish mixed with dark grey. Abdomen pale ochreous irrorated with dark grey. Forewings elongate, narrower in ♀, costa gently







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arched, bent at  $\frac{1}{4}$ , apex round-pointed, termen sinuate, oblique; light brownish coarsely and irregularly strigulated with black; based  $\frac{3}{8}$  more or less wholly suffused with light greenish, mixed with olive-green, edge of basal patch indicated by a black striga; median area towards costa and dorsum more or less suffused with slaty-purplish; posterior area transversely streaked with dark ferruginous-brown: cilia light brownish suffusedly irrorated with blackish. Hindwings fuscous or rather dark fuscous, sometimes ochreous-tinged; cilia light fuscous or ochreous-fuscous.

Patipola and Maskeliya, Ceylon (Green, Pole, Alston); Khasis; in February, and from May to September, nine specimens.

*Oxygrapha curiosa*, n. sp.

♀. 17 mm. Head pale grey sprinkled with darker and whitish. Palpi dark grey irrorated with whitish. Thorax pale grey mixed with black, shoulders brown. Abdomen dark grey. Forewings moderate, rather dilated posteriorly, costa strongly arched, apex pointed, termen sinuate, oblique; rather dark violet-grey, partially brownish-tinged and sprinkled with whitish, with some irregularly arranged black raised scales; several irregular black strigæ from costa about  $\frac{1}{3}$ , and in disc in middle and at  $\frac{3}{4}$ ; large tufts of scales towards dorsum before and beyond middle; an irregular prismatic purple-blue blotch beneath disc at  $\frac{2}{3}$ ; an 8-shaped tornal spot outlined with black, upper half filled with brownish and lower with white; an evenly broad ferruginous-brown streak from beyond  $\frac{2}{3}$  of costa to below middle of termen, edged with some black scales; a ferruginous-brown streak along apical part of costa, posteriorly triangularly dilated and edged on termen with blackish: cilia pale brownish with dark brown antemedian shade, and posterior dark fuscous patches at apex, middle, and tornus. Hindwings dark grey, lighter towards base; cilia whitish-grey, with fuscous subbasal shade.

Khasis, in October; one specimen.

*Oxygrapha porpacias*, n. sp.

♂ ♀. 16-20 mm. Head and thorax grey. Palpi whitish, irrorated with grey and black except towards base. Abdomen grey. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen sinuate, rather oblique; ochreous-whitish, finely and suffusedly irrorated with grey, and strigulated with brown and dark grey, with a few black scales; three black dots longitudinally placed just above tornus, first usually minute, second elongate, third terminal: cilia whitish with rows of fuscous points, basal half with indistinct fuscous bars tipped with dark fuscous, a tornal patch mixed with dark grey and blackish. Hindwings rather dark fuscous, darker posteriorly; cilia rather dark fuscous.

Puttalam, Maskeliya, Peradeniya, and Gampola, Ceylon (Pole, Green, Alston); Muoklek, Siam; in June and from October to February, nine specimens.

XYLORYCTIDÆ.

*Metathrinca*, n. g.

Head with appressed scales, sidetufts spreading; ocelli present; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ bipectinated, apex simple. Labial palpi long

recurved, second joint with appressed scales, terminal joint rather shorter, acute. Maxillary palpi rudimentary. Posterior tibiae clothed with long hairs. Forewings with 2 from  $\frac{5}{6}$  or angle, seldom stalked with 3, 4 absent, 5 approximated, 7 and 8 stalked, 7 to costa, 9 absent, 10 and 11 remote. Hindwings somewhat over 1, ovate, cilia  $\frac{1}{2}$ ; 3 and 4 stalked, 5 somewhat approximated, 6 and 7 remote, diverging.

Type *M. ancistrias*, Meyr. Formerly treated as a section of *Ptochoryctis*, but the discovery of a second species makes it desirable to give it generic rank.

*Metathrinca ophiura*, n. sp.

♂. 13-15 mm. Head fuscous, face prismatic-white except on margins. Palpi whitish, second joint infuscated towards base, terminal joint anteriorly suffused with dark fuscous. Antennae blackish, pectinations 6. Thorax white, posterior extremity with a blackish spot. Abdomen white, segments banded with ferruginous-reddish. Forewings elongate, moderate, costa strongly arched, apex obtuse, termen slightly rounded, oblique; 2 and 3 closely approximated towards base or stalked; shining white; an irregular moderate pale greyish-silvery partially brownish-suffused fascia extending round apical fourth of costa and upper half of termen, thence suddenly curved inwards and terminating on dorsum before tornus, edged with blackish on costal portion and round apical margin, and suffusedly blackish-edged towards dorsum, anterior edge in middle emitting a cloudy fuscous streak-like projection: cilia white, at apex with a black median vertical mark, beneath this with two fuscous transverse bars. Hindwings whitish; cilia white.

Muskeliya, Puttalam, Eppawela, Wellawaya, and Galle, Ceylon, in April, May, September and December (Alston, Pole, Green, Fletcher); six specimens. Exceedingly like *ancistrias*, but much smaller (my smallest *ancistrias* is 19 mm., the small Puttalam insect referred to in my description being really *ophiura*), and best distinguished by the neuration; in *ancistrias* vein 2 of forewings rises from  $\frac{5}{6}$  of cell, fairly remote from 3, whilst in *ophiura* 2 and 3 are closely approximated, rising from angle of cell, or even stalked.

*Linoclostis*, n. g.

Head with appressed scales, sidetufts spreading; ocelli present; tongue, short. Antennae  $\frac{3}{4}$ , in ♂ bipectinated, apex simple. Labial palpi long, recurved, second joint with appressed scales, terminal joint much shorter, acute. Maxillary palpi rudimentary. Posterior tibiae clothed with long hairs. Forewings with vein 2 from  $\frac{3}{4}$  of cell, 3 and 4 stalked from angle, 5 closely approximated at base, 6 absent, 7 and 8 stalked, 7 to termen, 9 absent, 10 and 11 remote. Hindwings somewhat over 1, ovate-trapezoidal, cilia  $\frac{2}{3}$ ; 3 and 4 short-stalked, 5 parallel, 6 and 7 remote, diverging.

*Linoclostis gonatias*, n. sp.

♀. 23 mm. Head and thorax white, lower part of face infuscated. Palpi fuscous. Antennae dark grey. Abdomen ochreous-grey-whitish. Forewings elongate, somewhat dilated posteriorly, costa moderately arched, apex obtuse, termen slightly rounded, oblique; shining white; costal edge dark fuscous

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The Java ♂ described as L. breckinlossa, hegn, Extr. h. II 54 (1917)

Prochorys, hegn = Amorboea.

Hermogenes, 2. In hegn's collection (1925), H. aliferella, 2, which  
hegn. has from Khasis, is the only India species in Hermogenes.  
All the others here described were placed in Epichorys, which  
hegn now regards as distinct. Tr 24. XII. 27

It does not follow; Zeller's fig. shows 7 + 8 separate.

towards base ; a slender fuscous subterminal line from  $\frac{3}{4}$  of costa to tornus, almost right-angled in middle ; a slender ochreous-brownish line along apical sixth of costa, cilia beginning abruptly at its origin : cilia white, with a fine dark fuscous line at  $\frac{1}{4}$ , on outer half with a light brownish patch at apex and two spots below this. Hindwings grey-whitish ; cilia white.

Khasis, in June ; one specimen. A ♂ from Java, almost certainly of the same species, has palpi white, antennæ black, lateral margins of face pale brownish, expanse 17 mm.

*Amorbæa*, n. g.

Head with appressed scales, sidetufts somewhat spreading ; ocelli absent ; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ filiform, minutely ciliated. Labial palpi very long, recurved, slender, second joint with appressed scales, terminal joint nearly as long, acute. Maxillary palpi rudimentary. Posterior tibiæ clothed with long hairs. Forewings with vein 2 from  $\frac{3}{4}$  of cell, 3 and 4 stalked, 5 approximated 7 and 8 stalked, 7 to apex or just beneath, 9 absent, 10 and 11 remote. Hindwings over 1, ovate-trapezoidal, cilia  $\frac{1}{3}$  ; 3 and 4 connate, 5 parallel, 6 and 7 remote, diverging.

Type *A. hepatica*.

*Amorbæa hepatica*, n. sp.

♂ ♀. 22-26 mm. Head light ochreous-orange. Palpi ochreous-yellowish, toward base somewhat infuscated. Antennæ whitish-ochreous. Thorax brownish-ochreous suffused with prismatic purple-grey, especially in ♂. Abdomen ochreous-yellowish. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded ; purple-brownish-ochreous, more purplish towards base ; costal edge finely yellowish : cilia brownish-ochreous. Hindwings and cilia ochreous-yellowish, with a slight fuscous tinge.

Bombay (Young) ; two specimens.

*Amorbæa alma*, n. sp.

♀. 24 mm. Head light ochreous-orange, face paler. Palpi ochreous-yellowish, base infuscated. Antennæ pale yellowish spotted with brownish. Thorax light yellow-ochreous. Abdomen ochreous-yellow. Forewings elongate, costa gently arched, apex obtuse, termen obliquely rounded ; light yellow-ochreous : cilia light yellow-ochreous. Hindwings and cilia light ochreous-yellowish.

Coorg, 3500 feet, in June (Newcome) ; one specimen.

*Hermogenes*, Zell.

I am now disposed to treat *Epichostis*, Meyr. as a synonym of this genus, which was founded by Zeller on one Indian species, *aliferella*. To this genus is also referable the species described by me as *Chaliniastis metrodelta*. I now add eight additional species. The most important variations of structure are that vein 7 of forewings may terminate in costa, apex, or termen, but usually close to the apex, which tends to be indefinite in position, and that veins 7 and 9 are sometimes stalked, as in Zeller's figure, but are much more usually separate ; in all the species, including *aliferella*, they appear to be normally separate, though not invariably, with the exception of *melanocona*, in which they are usually but

not constantly stalked. The rough hairscales on the anterior tibiae and tarsi and the posterior tarsi of *aliferella*, are not found in the other species, but do not seem to justify generic separation.

*Hermogenes leucorma*, n. sp.

♂ ♀. 20-22 mm. Head and thorax rather dark brown. Palpi whitish-ochreous, second joint with lower  $\frac{3}{4}$  and a subapical ring brown, terminal joint with base and anterior edge dark fuscous. Antennae pale ochreous more or less mixed with fuscous. Abdomen fuscous, anal tuft yellowish. Forewings elongate, rather narrow, posteriorly dilated, costa slightly arched, apex obtuse, termen nearly straight, somewhat oblique; 7 to apex; rather dark ochreous-brown; stigmata dark fuscous, first sometimes connected with dorsum by an undefined oblique triangular patch of dark fuscous suffusion; a few whitish scales towards costa and dorsum about middle; a subterminal series of seven cloudy white marks, central and dorsal rather elongated inwards, and a terminal series of six similar marks: cilia pale ochreous, with two rather indistinct fuscous shades. Hindwings grey or dark grey; cilia pale greyish-ochreous becoming grey towards dorsum, with a dark grey subbasal shade.

Khasis, in July; four specimens.

*Hermogenes stelota*, n. sp.

♂. 17 mm. Head ferruginous-brown. Palpi ferruginous-yellow, towards base slightly infuscated. Antennae dark fuscous. Thorax dark fuscous, shoulders suffused with ferruginous-brown. Abdomen dark fuscous, anal tuft yellowish. Forewings elongate, narrow towards base, posteriorly dilated, costa slightly arched, apex obtuse, termen almost straight, somewhat oblique; 7 to just below apex; rather dark fuscous, with faint purplish tinge; costal edge and costal extremities of veins ferruginous-ochreous except towards base; a short subcostal ferruginous streak from base; two narrow blackish fasciae edged with ferruginous, first about  $\frac{2}{3}$ , slightly oblique, almost reaching dorsum but not nearly costa, second about  $\frac{2}{3}$ , direct, reaching dorsum but not costa; some black scales indicating a curved subterminal line; a blackish terminal line: cilia ochreous, towards tips paler and fuscous-tinged. Hindwings fuscous; cilia pale ochreous with three fuscous shades.

Khasis; one specimen.

*Hermogenes tympanias*, n. sp.

♂ ♀. 18-23 mm. Head whitish-ochreous, more or less yellowish-tinged, in ♀ suffused with fuscous except on sides. Palpi whitish-ochreous, more or less yellowish-tinged, lower  $\frac{2}{3}$  of second joint fuscous, extreme base of terminal joint fuscous in ♀. Antennae pale ochreous-yellowish, indistinctly spotted with fuscous. Thorax in ♂ light brownish-ochreous, in ♀ fuscous, margins more or less yellow. Abdomen whitish-ochreous suffused with fuscous. Forewings elongate, narrow, posteriorly dilated, costa slightly arched, faintly sinuate in middle, apex obtuse, termen straight, slightly oblique; rather light fuscous, somewhat deeper in ♀; costal edge except towards base, and veins towards costa more or less streaked with ferruginous-yellow, and costal area in ♂ variably







suffused with light ochreous-yellowish; two large sharply marked black dorsal blotches, edged with pale yellowish, first rounded-triangular, extending on dorsum from base to near  $\frac{2}{3}$  and reaching more than half across wing, second irregular-trapezoidal, reaching  $\frac{3}{4}$  across wing and extending in disc from before middle to  $\frac{5}{6}$ , but more or less considerably narrowed towards dorsum, posterior edge obtusely prominent in middle of wing; an interrupted black terminal line: cilia brownish-ochreous, with a fuscous shade. Hindwings in ♂ grey, in ♀ dark grey; cilia in ♂ yellowish with a light fuscous shade, in ♀ grey.

Khasis, from June to September; fifteen specimens. Allied to *elephantias*, but larger, and readily distinguishable by the contraction of the second blotch towards dorsum.

*Hermogenes melanocona*, n. sp.

♂. 13-17 mm. Head ochreous-yellowish, sometimes centrally fuscous-tinged. Palpi ochreous-whitish, second joint with basal  $\frac{3}{4}$  yellowish-fuscous and a subapical ring dark fuscous. Antennæ ochreous-yellowish ringed with fuscous. Thorax light violet-fuscous. Abdomen grey, apex whitish-ochreous. Forewings elongate, rather narrow, somewhat dilated posteriorly, costa slightly arched, apex obtuse, termen slightly sinuate, somewhat oblique; 7 and 9 usually stalked (in seven specimens out of eight), 7 to costa; light violet-fuscous, costa suffused with pale ochreous except towards apex; a variable transverse or subtriangular blackish blotch on dorsum before middle, edged with whitish-yellow, reaching nearly  $\frac{3}{4}$  across wing; second discal stigma black, moderate, edged with whitish-ochreous; a transverse streak of blackish suffusion from  $\frac{5}{6}$  of costa to before tornus, becoming obsolete dorsally, curved inwards on upper half; an interrupted blackish terminal line: cilia pale ochreous, sometimes with a fuscous shade. Hindwings pale grey; cilia whitish-ochreous, on dorsum greyish-tinged.

Maskeliya, Ceylon, from August to January (Pole, de Mowbray); eight specimens.

*Hermogenes barathrias*, n. sp.

♂ ♀. 13-17 mm. Head and thorax dark purplish-fuscous, with a ferruginous streak above eyes, face pale ochreous. Palpi pale yellowish, second joint with basal  $\frac{3}{4}$  and a subapical ring dark fuscous, base of terminal joint dark fuscous. Antennæ and abdomen dark fuscous. Forewings elongate, rather narrow, posteriorly dilated, costa gently arched towards extremities, apex obtuse, termen almost straight, somewhat oblique; 7 to costa; dark purplish-fuscous; extreme costal edge pale yellowish in ♂ except towards extremities; markings blackish, with slight ferruginous tinge, obscurely edged with ochreous-whitish; a variable transverse or subtriangular blotch from dorsum before middle, reaching  $\frac{3}{4}$  across wing; second discal stigma rather large; a rather narrow straight subterminal fascia, anterior edge curved inwards on upper half, posterior edge not pale-margined; a blackish terminal line: cilia purplish-fuscous, basal third darker, tips ochreous-whitish. Hindwings and cilia dark grey.

Patipola, Newera Eliya and Maskeliya, Ceylon, in November and from March to May (Alston, Pole); eight specimens.

*Hermogenes dicremna*, n. sp.

♂ ♀. 16-19 mm. Head and thorax brown, face whitish-ochreous. Palpi whitish-ochreous, second joint with lower  $\frac{3}{4}$  and an indistinct subapical ring brownish, terminal joint with base and anterior edge dark fuscous. Antennæ dark fuscous. Abdomen in ♂ whitish-ochreous, in ♀ fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen almost straight, rather oblique; 7 to costa; violet-brownish, variable in depth, sometimes mixed with pale ochreous-yellowish towards costa; costal edge ochreous-yellowish; sometimes a brown basal patch more or less indicated, obsolete towards costa; a dark ferruginous-brown variable transverse blotch on middle of dorsum, sometimes narrowed upwards, reaching about  $\frac{3}{4}$  across wing, anterior edge nearly vertical and edged first with dark fuscous and then with whitish; second discal stigma dark fuscous, partially whitish-edged; a narrow transverse dark ferruginous-brown subterminal fascia, sinuate inwards and strongest on upper half, attenuated dorsally, more or less yellowish-edged anteriorly; an interrupted blackish terminal line: cilia pale ochreous with one or two fuscous or dark fuscous shades, base sometimes yellowish. Hindwings in ♂ whitish-grey, in ♀ grey; cilia whitish-ochreous, sometimes yellowish-tinged, round apex with one or two faint fuscous lines.

Maskeliya, Ceylon, in July and from October to March (Pole); sixteen specimens.

*Hermogenes antigama*, n. sp.

♂ ♀. 18-22 mm. Head yellow-ochreous, in ♀ brownish-tinged. Palpi whitish-ochreous, second joint with basal  $\frac{3}{4}$  and a subapical ring more or less fuscous. Antennæ pale yellowish ringed with fuscous. Thorax fuscous. Abdomen in ♂ whitish-ochreous, in ♀ rather dark fuscous mixed with yellowish on sides. Forewings elongate, posteriorly dilated, costa gently arched towards extremities, apex obtuse, termen slightly sinuate, rather oblique; 7 to costa (in one wing of ♀ stalked with 9); in ♂ ochreous-yellowish, more or less irrorated with fuscous except towards costa, in ♀ rather dark violet-fuscous, towards costa suffused with whitish-ochreous, costal edge ochreous-yellow; an irregular inwardly oblique wedge-shaped dark fuscous blotch from dorsum beyond middle, reaching  $\frac{2}{3}$  across wings, in one ♂ reduced to a small dorsal spot, apex persistent as blackish first discal stigma; second discal stigma also black; an irregular narrow subterminal fascia of dark fuscous suffusion, curved inwards on upper half; an interrupted blackish terminal line: cilia whitish-ochreous, with two more or less distinct fuscous shades, Hindwings in ♂ ochreous-whitish, in ♀ rather dark grey; cilia in ♂ ochreous-whitish, in ♀ whitish-ochreous with two fuscous shades.

Palni Hills, 6,000 feet (Campbell); three specimens. Very similar to *dicremna*, but differs by the yellowish antennæ ringed with fuscous, termen of





forewings somewhat more sinuate and oblique, forewings in ♂ yellower and hindwings whiter, head yellower, dorsal blotch narrower and inwardly oblique instead of having anterior edge vertical, first dorsal stigma distinct.

*Hermogenes cryphæa*, n. sp.

♀. 18-19 mm. Head ochreous-yellow, sides of face dark brown. Palpi light ochreous-yellowish, lower  $\frac{3}{4}$  of second joint dark fuscous. Antennæ dark fuscous. Thorax dark fuscous. Abdomen fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen nearly straight, somewhat oblique; 7 to costa; purplish-fuscous irrorated with dark fuscous; extreme costal edge yellowish posteriorly; discal stigmata cloudy, dark fuscous, first connected with dorsum beyond middle by an oblique fascia-like patch of dark fuscous suffusion; faint traces of a curved darker subterminal streak: cilia whitish-ochreous with two dark fuscous shades. Hindwings fuscous; cilia whitish-ochreous, with two fuscous shades.

Khasis; three specimens.

*Amphitrias*, n. g.

Head with loosely appressed hairs, side tufts spreading; ocelli absent; tongue developed. Antennæ  $\frac{3}{4}$ , in ♂ with long ciliations (4). Labial palpi very long, recurved, second joint thickened with somewhat projecting scales beneath, terminal joint as long as second, acute. Maxillary palpi rudimentary. Posterior tibiæ clothed with rough hairs. Forewings with veins 2 and 3 approximated from angle, 4 absent, 7 and 8 stalked, 7 to termen, 11 from middle. Hindwings somewhat over 1, oblong-ovate, cilia  $\frac{1}{2}$ ; 4 absent, 5 approximated to 3, 6 and 7 stalked.

*Amphitrias cynica*, n. sp.

♂ ♀. 17-21 mm. Head, thorax, and abdomen ochreous-whitish. Palpi white second joint fuscous except towards apex. Antennæ in ♂ grey, in ♀ whitish. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen slightly sinuate, oblique; ochreous-whitish; usually some scattered irregular pale fuscous irroration or suffusion, especially beyond cell and towards tornus; discal stigmata dark fuscous; a row of blackish marginal dots round apex and termen: cilia ochreous-whitish. Hindwings and cilia ochreous-whitish.

Patipola and Maskeliya, Ceylon, from February to May (Alston, Pole); six specimens.

*Epimactis talantias*, n. sp.

♂ ♀. 14-19 mm. Head white, side tufts drawn into a central tuft. Palpi white, lower half of second joint infuscated, extreme tip of terminal joint blackish. Antennæ grey. Thorax white, finely sprinkled with pale ochreous. Abdomen pale whitish-ochreous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen obliquely rounded; white, in ♂ thinly, in ♀ more closely irrorated with fine fuscous or pale fuscous specks; stigmata black, plical obliquely beyond first discal; a row of black dots immediately before margin round apical portion of costa and termen to tornus: cilia white, with a few fuscous specks. Hindwings grey-whitish, apex slightly greyer; cilia whitish.

Matale and Kandy, Ceylon, in August, November, December, and March (Pole); six specimens.

*Odites*, Wals.

I think it best to sink *Myriopleura* and *Trichernis* as synonyms of this genus, the distinctive characters appearing unsatisfactory in the light of increased material. Ten additional species are now described.

*Odites practoria*, n. sp.

♂ ♀. 15-18 mm. Head, thorax, and abdomen whitish-ochreous. Palpi ochreous-whitish, lower  $\frac{2}{3}$  of second joint fuscous, base of terminal joint dark fuscous. Antennæ grey, ciliations in ♂ 3. Forewings elongate, moderate, costa gently arched, apex round-pointed, termen sinuate, oblique; 2 from  $\frac{5}{6}$ ; whitish-ochreous, more or less sprinkled with fuscous and a few black scales; a black basal dot in middle, and base of costa black; a black dot beneath costa at  $\frac{1}{4}$ ; stigmata small, black, plical obliquely beyond first discal; a triangular blackish spot on costa before middle; three small spots of dark fuscous suffusion on costa posteriorly, from first of which proceeds an angulated or strongly curved series of small spots of dark fuscous irroration to dorsum before tornus; a terminal series of black dots: cilia whitish-ochreous, with a fuscous line. Hindwings ochreous-whitish, in ♀ slightly tinged with grey; cilia pale whitish-ochreous sometimes with a faint grey line.

Khasis, in June and September; seven specimens.

*Odites glaphyra*, n. sp.

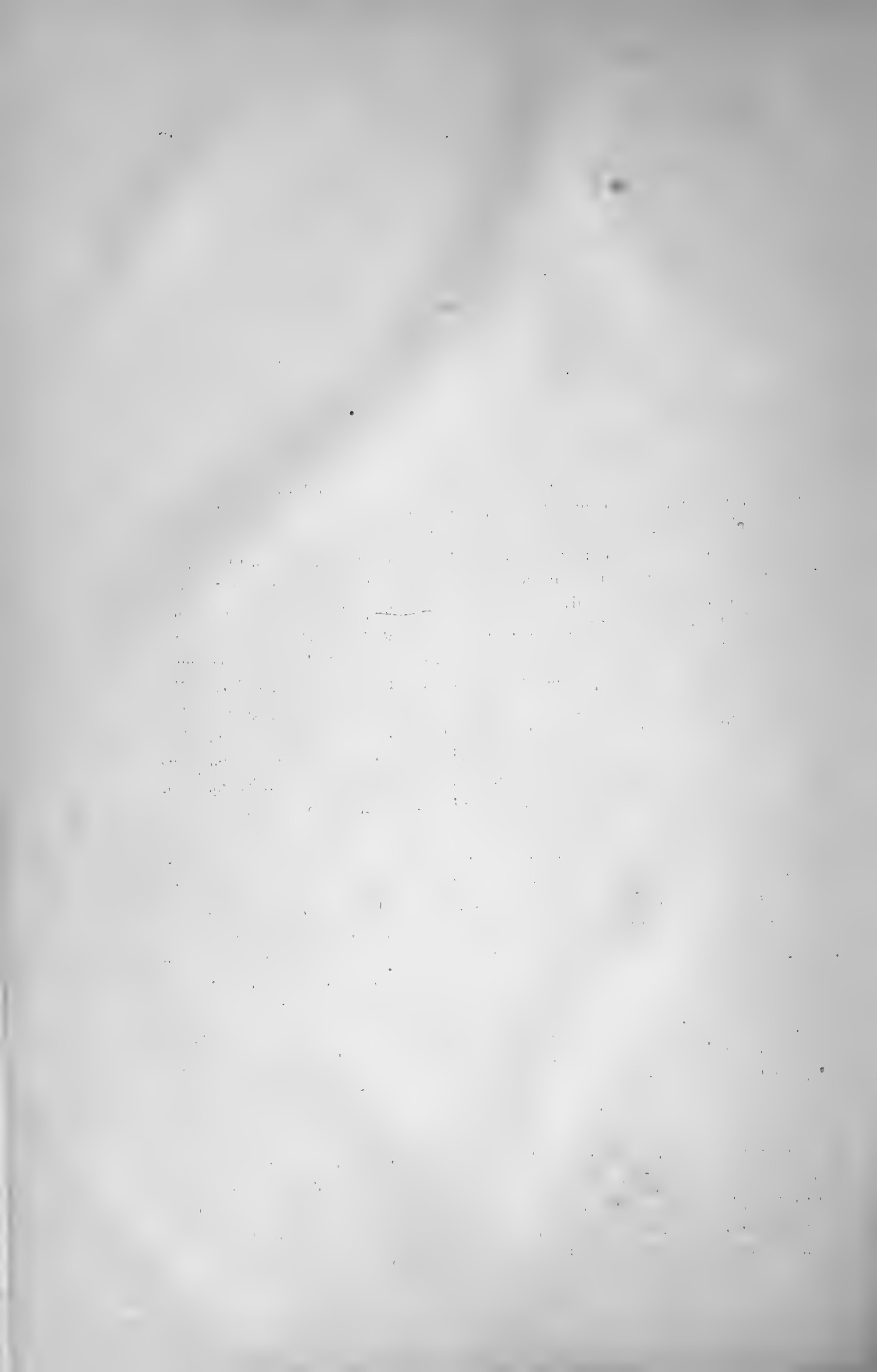
♂. 26 mm. Head whitish-ochreous, sides of face brownish. (Palpi broken.) Antennæ pale brownish-ochreous, ciliations 3. Thorax pale brownish-ochreous. Abdomen whitish-ochreous. Forewings elongate, rather narrowed towards base, costa gently arched, apex round-pointed, termen sinuate, oblique; 2 from  $\frac{5}{6}$ ; pale brownish ochreous, with some scattered dark fuscous specks; extreme costal edge blackish towards base; stigmata small, blackish, plical obliquely beyond first discal; an angulated subterminal series of indistinct dark fuscous dots, terminating in a cloudy dark fuscous prætornal spot; a terminal series of blackish dots: cilia pale brownish-ochreous. Hindwings ochreous-whitish; cilia whitish-ochreous.

Sikkim, in March; one specimen.

*Odites aspasta*, n. sp.

♂ ♀. 23-24 mm. Head yellow-ochreous, sides of face dark fuscous. Palpi light ochreous-yellowish, lower  $\frac{2}{3}$  of second joint dark fuscous. Antennæ grey, yellowish beneath and towards base, ciliations in ♂ hardly 2. Thorax yellowish-ochreous, tinged or sprinkled with fuscous. Abdomen whitish-ochreous. Forewings elongate, narrowed towards base, costa gently arched, apex obtuse, termen straight, rather oblique; 2 from near angle; light yellow-ochreous, sometimes partially finely sprinkled with light fuscous; sometimes a small black dot beneath costa at  $\frac{1}{4}$ ; stigmata blackish, discal rather large, plical minute, obliquely beyond first discal; an angulated subterminal series of small undefined spots of blackish irroration; a terminal series of black dots: cilia







whitish-ochreous. Hindwings whitish-grey, with indications of dark terminal dots; cilia in ♂ light grey, base whitish, in ♀ ochreous-whitish with a grey line.

Khasis, in May and September; three specimens.

*Odites agraula*, n. sp.

♂. 19-22 mm. Head, antennæ, thorax, and abdomen whitish-ochreous antennal ciliations 3. Palpi pale whitish-ochreous, second joint fuscous except towards apex. Forewings elongate, moderate, somewhat dilated posteriorly, costal edge gently arched, apex obtuse, termen hardly sinuate, rather oblique; 2 almost from angle; whitish-ochreous, costal edge yellowish-tinged; a black dot beneath costa near base, and base of costa more or less suffused with dark fuscous; discal stigmata black, first followed by a minute black dot obliquely above it, second transversely double, upper tending to form a short inwardly oblique mark; plical stigma indicated by a few blackish scales on fold midway between discal; a patch of fuscous suffusion on costa in middle, and another before apex; sometimes indications of a fascia of fuscous irroration from central costal patch to tornus; a terminal series of undefined dark fuscous dots; cilia ochreous-whitish, basal half yellowish-tinged. Hindwings and cilia ochreous-whitish, cilia yellower-tinged.

Palni Hills, 6,000 feet (Campbell); four specimens.

*Odites eriopa*, n. sp.

♂ ♀. 16—18 mm. Head, thorax, and abdomen whitish-ochreous, thorax in ♀ fuscous-tinged. Palpi ochreous-whitish, lower  $\frac{2}{3}$  of second joint dark fuscous, extreme base and apex of terminal joint dark fuscous. Antennæ in ♂ whitish-ochreous, in ♀ fuscous, ciliations in ♂ 3. Forewings elongate, moderate, costa gently arched, apex obtuse, termen hardly sinuate, rather oblique; 2 from  $\frac{5}{6}$ ; whitish-ochreous, in ♂ sprinkled with fuscous, in ♀ suffused with a pale pinkish-fuscous tinge and irrorated with dark fuscous; costal edge suffused with ochreous-yellowish; discal stigmata rather large, round, black; cilia pale yellowish, sometimes with an indistinct fuscous line. Hindwings ochreous-whitish, in ♂ slightly greyish on margins, in ♀ tinged with light grey throughout; cilia whitish-yellowish, in ♀ greyish-tinged.

Khasis, in July and August; six specimens.

*Odites centrias*, Meyr. (T.E.C. 1894)

Described from Burma, but common in India and Ceylon; the description may be enlarged in the following particulars: ♂ ♀, 14—19 mm.; forewings often almost whitish, veins usually more or less distinctly lined with fuscous, most strongly in palest specimens; characteristic black dot on origin of veins 4 and 5 always conspicuous. Occurs in Khasis, Nilgiris, Coorg, Bombay; Haputale, Maskeliya, Diyatalawa, and Madulsima, Ceylon; from April to December.

*Odites gomphias*, n. sp.

♂ ♀. 15—23 mm. Head and palpi ochreous-whitish, second joint of palpi more or less infuscated except towards apex, terminal joint posteriorly clothed

in ♂ throughout, in ♀ towards middle with loose expansible hairscales. Antennæ and abdomen whitish-ochreous, antennal ciliations in ♂ 5. Forewings elongate, costa moderately arched, apex obtuse, termen slightly sinuate, little oblique; 2 from angle; ochreous-whitish; an oblique black interrupted line in disc marking end of cell; undefined streaks of ochreous or fuscous suffusion round upper and posterior margins of cell, beneath costa posteriorly, from discal mark to middle of termen (sometimes double), and an oblique streak from dorsum towards base; a blackish mark on costal edge before apex, and one on middle of termen: cilia pale whitish-ochreous, more or less marked with fuscous opposite black marginal marks. Hindwings and cilia ochreous-whitish.

Maskeliya, Maturatta, Puttalam, and Eppawela, Ceylon; in March, September and November (Pole, Green, de Mowbray); five specimens.

*Odites encarsia*, n. sp.

♂. 16—17 mm. Head ochreous-whitish. Palpi whitish, lower half of second joint fuscous. Antennæ pale ochreous, ciliations very short ( $\frac{1}{2}$ ). Thorax and abdomen whitish-ochreous. Forewings elongate, costa moderately arched, apex obtuse, termen nearly straight, rather oblique; 2 from angle; whitish-ochreous, some veins indistinctly streaked with pale yellow-ochreous; an oblique patch of pale brownish suffusion from dorsum near base to fold; an oblique blackish linear mark crossing end of cell, followed by some brownish suffusion tending to extend itself along veins: cilia whitish-ochreous. Hindwings and cilia ochreous-whitish.

N. Coorg, 3,500 feet, in May (Newcome); two specimens. Much like the preceding, but structurally distinct.

*Odites orthometra*, n. sp.

♂ ♀. 16—18 mm. Head and thorax whitish-ochreous, in ♀ suffused with pale brownish-ochreous. Palpi ochreous-whitish, lower  $\frac{2}{3}$  of second joint fuscous, extreme base of terminal joint dark fuscous. Antennæ grey, beneath and towards base whitish-ochreous, ciliations in ♂ 2. Abdomen greyish. Forewings elongate, rather narrowed towards base, costa slightly arched, apex obtuse, termen nearly straight, rather oblique; 2 from  $\frac{2}{3}$ ; whitish-ochreous, in ♀ tinged with brownish-ochreous and irrorated with brownish; stigmata blackish, first discal rather large, plical obliquely beyond first discal; a strongly curved subterminal series of minute black dots, central dot enlarged and conspicuous; a series of minute indistinct blackish dots on posterior part of costa and termen? cilia whitish-yellowish. Hindwings pale grey; cilia pale grey, base whitish-yellowish.

Maskeliya, Ceylon, in April (Pole), one ♂ (type); Khasis in August, one ♀.

*Odites sphendonistis*, n. sp.

♂. 14 mm. Head and thorax whitish-ochreous suffused with light fuscous. Palpi ochreous-whitish, second joint suffused with rather dark fuscous, terminal joint with basal and median undefined dark fuscous rings. Antennæ serrulate ochreous-whitish, basal joint dark fuscous, ciliations minute but distinct ( $\frac{1}{4}$ ). Abdomen greyish-ochreous, segmental margins and anal tuft whitish-ochreous.





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Forewings elongate, posteriorly slightly dilated, costa moderately arched, apex obtuse, termen straight, little oblique; 2 from near angle; light greyish-ochreous suffusedly irrorated with fuscous; a blackish basal dot in middle, and one on base of costa; stigmata rather large, black, plical slightly beyond first discal; a row of blackish dots along posterior part of costa and termen to before tornus: cilia pale greyish-ochreous. Hindwings and cilia grey.

Puttalam, Ceylon, in September (Pole); one specimen.

*Odites misharna*, n. sp. .

♂ ♀. 11—14 mm. Head and thorax light brownish-ochreous. Palpi whitish-ochreous, second joint sometimes somewhat infuscated and with an indistinct fuscous subapical ring, extreme base of terminal joint dark fuscous. Antennæ, pale ochreous, in ♂ serrulate, ciliations hardly perceptible. Abdomen grey apex whitish-ochreous. Forewings elongate, costa gently arched, apex obtuse, termen nearly straight, rather oblique; 2 from near angle; light brownish-ochreous, more or less irrorated finely with brown or fuscous; a black dot on base of costa; stigmata blackish, discal rather near together, plical directly beneath first discal; a row of blackish dots along posterior part of costa and termen to before tornus: cilia light brownish-ochreous, tips paler. Hindwings grey; cilia light grey, with darker basal shade.

Puttalam and Trincomali, Ceylon, from June to September (Pole, Fletcher); five specimens.

*Procometis trochala*, n. sp.

♂ 21 mm., ♀ 35 mm. Head and thorax brownish. Palpi whitish-ochreous, mixed with brownish, second joint loosely haired above, terminal shorter. Antennæ fuscous. Abdomen brownish, segmental margins whitish-ochreous. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen rounded, rather strongly oblique; brown, in ♂ slightly, in ♀ suffusedly sprinkled with dark fuscous, especially in disc and towards termen, costa suffused with dark fuscous, except towards base, more broadly in ♀; discal stigmata obscurely indicated by dark fuscous suffusion, second tending to be transversely double: cilia pale fuscous sprinkled with dark fuscous. Hindwings in ♂ much narrower than in ♀, narrower than forewings, whitish-ochreous slightly tinged with fuscous posteriorly, with ochreous-yellowish costal hair-pencil, cilia very long, at tornus over 1, whitish-ochreous; in ♀ dark fuscous, suffused with whitish towards base, cilia whitish.

Pusa, Bengal, bred in June from larvæ feeding on dried leaves of sugarcane (Maxwell-Lefroy); two specimens. This does not differ essentially from the Australian species of the genus except in the shorter palpi with second joint more thickened with scales and roughened above.

*Acria*, Stph.

This genus, to which my attention was kindly called by Mr. J. Hartley Durrant, supersedes *Amphoritis* Meyr., and the type-species, *A. emarginella* Don., supersedes my *camelodes*. (T. J. XVI. 691)

B. J. 11

*Acria eulectra*, n. sp.

♂. 16 mm. Head ochreous-white. (Palpi broken.) Antennæ whitish ringed with blackish. Thorax fuscous, shoulders ochreous-white. Abdomen yellow-whitish. Forewings elongate, moderate, costa moderately arched, subsinuate in middle, with rough projecting scales on each side of sinuation causing it to appear as an excavation, apex rounded-obtuse, termen rounded, little oblique; ochreous-white; a suffused fuscous patch extending along dorsum from base to  $\frac{2}{3}$ , narrowed posteriorly, obscurely interrupted in middle; a round patch in middle of disc irregularly mixed with fuscous and blackish; undefined dark fuscous costal strigulae on each side of sinuation, second giving rise to an angulated undefined line of dark fuscous and blackish scales ending in a small spot before tornus; some slight brownish suffusion beyond this on lower half; a series of minute dark fuscous dots on posterior part of costa and termen: cilia ochreous-white. Hindwings fuscous, somewhat thinly scaled, suffused with dark fuscous posteriorly; cilia yellow-whitish, with faint traces of a fuscous line.

Khasis, in December; one specimen.

*Acria xanthosaris*, n. sp.

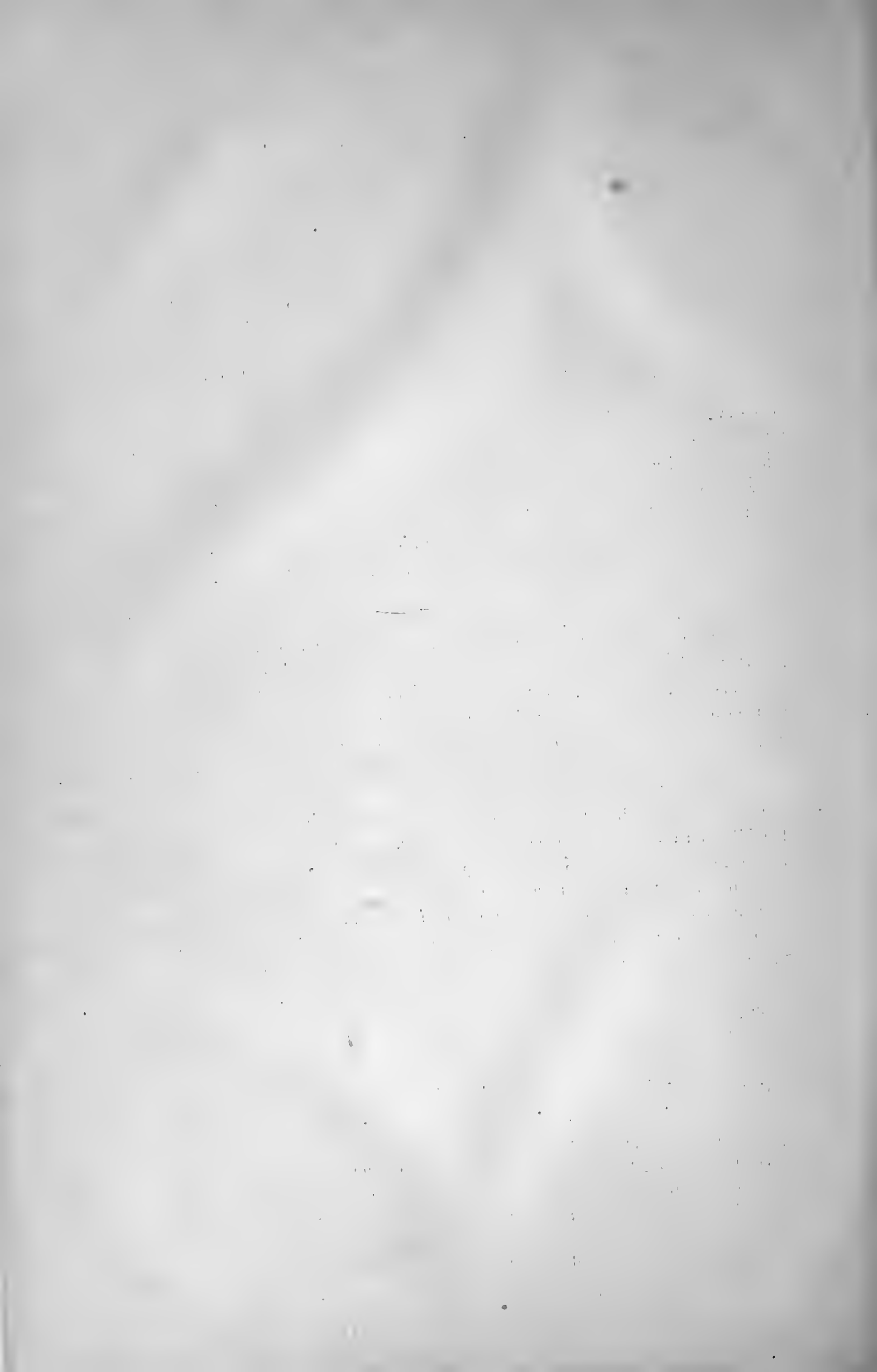
♂. 16-18 mm. Head whitish, crown tinged or suffused with light fuscous. Palpi white, second joint with upper longitudinal half suffused with light fuscous, terminal joint with fuscous supramedian ring. Antennæ dark fuscous. Thorax reddish-fuscous. Abdomen golden-yellow. Forewings elongate, moderate, costa moderately arched, subsinuate in middle, with rough projecting scales on each side of sinuation causing it to appear as an excavation, apex obtuse, termen slightly rounded, somewhat oblique; pale reddish-grey irrorated with reddish-fuscous; a cloudy dark grey spot on dorsum at  $\frac{1}{4}$ ; cloudy dark grey marks on costa at  $\frac{1}{5}$  and before and after sinuation; stigmata minute, dark fuscous, inconspicuous, plical rather obliquely beyond first discal; an indistinct angulated dark grey line from beyond costal sinuation to before tornus; a series of dark grey dots on posterior part of costa and termen: cilia ochreous-whitish tinged with reddish, basal half reddish-grey bounded by a dark grey shade. Hindwings fuscous, rather darker posteriorly; cilia whitish-fuscous, on dorsum paler and sometimes yellowish-tinged; undersurface with a subcostal pecten of pale yellowish hairs from base to near middle.

Khasis, in December; two specimens. Specially distinguished by the yellow pecten of hindwings.

*Acria ceramitis*, n. sp.

♂ ♀. 16-19 mm. Head and thorax fuscous, face whitish. Palpi white, second joint sprinkled with grey except on projecting scales, terminal joint with dark grey supramedian ring. Antennæ grey. Abdomen light fuscous, in ♂ tinged with yellow-ochreous. Forewings formed as in *xanthosaris*; fuscous or grey, usually partially tinged with reddish; costal edge in sinuation usually more or less reddish-ochreous; stigmata minute, dark fuscous, often obsolete, plical somewhat beyond first discal; an angulated subterminal series of indistinct dark fuscous cloudy dots, often obsolete: cilia greyish-ochreous tinged







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with reddish, basal third dark grey. Hindwings fuscous, sometimes ochreous-tinged, darker towards apex ; cilia whitish-fuscous.

Palni Hills (Campbell) ; Khasis, in June ; seven specimens. I have also four specimens from Maturatta, Peradeniya, Maskeliya and Haputale, Ceylon, in February, and from June to September (Pole, Green, Alston), which are probably the same species, but differ in being usually darker-coloured, forewings sometimes dark fuscous with slight purplish tinge, hindwings dark fuscous, sometimes with coppery tinge, head, palpi, and part of costa and cilia of forewings more or less conspicuously yellowish-tinged. I do not find any reliable distinction.

*Æolanthès* Meyr. (25. VII. 739)

Vein 9 of forewings is sometimes stalked with 7 ; this character occurs exceptionally in *callidora*, but is normal in some of the following species. In hindwings 6 and 7 are sometimes approximated only.

*Æolanthès dicræa*, n. sp.

♂. 20-22 mm. Head and thorax whitish-yellowish mixed with ferruginous-ochreous. Palpi yellow-whitish, second joint except apex, and a median band of terminal joint ferruginous-yellow irrorated with dark fuscous. Antennæ and abdomen whitish-ochreous. Forewings suboblong, costa anteriorly moderately, posteriorly slightly arched, roughened with projecting scales before middle, apex obtuse, termen slightly rounded, rather oblique ; 8 and 9 out of 7 ; white, towards costa irregularly suffused with pale yellowish ; basal third of costa ferruginous-yellow ; a ferruginous subcostal dash before middle ; an elongate patch of yellow suffusion in middle of disc ; a reddish-brown dorsal patch extending from base to near tornus, and reaching nearly half across wing, containing a triangular dark reddish-brown dorsal spot at  $\frac{3}{4}$ , partially whitish-edged ; a ferruginous-yellow suffusion along posterior half of costa, with a black mark beneath it near apex ; veins 5 and 6 marked with reddish-brown lines becoming blackish posteriorly, vein 4 less distinctly lined with brownish ; between veins 5-7 two light ferruginous-brown streaks, sometimes partially yellowish-suffused, between 4 and 5 a yellowish streak, and on tornus a deep yellow elongate patch ; a fine blackish line along termen : cilia whitish-yellowish, on costa yellow-ferruginous. Hindwings grey, apex sometimes suffused with whitish-yellowish ; cilia whitish-yellowish, suffused with light grey except round apex.

Khasis, in November and April ; two specimens.

*Æolanthès siphonias*, n. sp.

♂ ♀. 22-29 mm. Head and thorax pale ochreous mixed with brownish, face whitish. Palpi whitish, second joint except apex, and a median band of terminal joint yellowish, irrorated with ferruginous-brown. Antennæ whitish-ochreous. Abdomen whitish-yellowish, in ♀ greyish-suffused. Forewings formed as in *dicræa* ; 8 and 9 out of 7 ; whitish ; a fine oblique ferruginous line from  $\frac{1}{3}$  of costa to upper margin of cell ; a ferruginous line beneath posterior half of costa ; posterior margin of cell and veins 3-9 marked with

fine ferruginous-brown lines ; a ferruginous-brown patch along dorsum from base, terminating in a triangular spot before tornus, of which first half is dark ferruginous-brown edged anteriorly with whitish and posteriorly with black second half dark fuscous ; a fine blackish terminal line : cilia yellow-whitish, sometimes with one or two faint ferruginous lines. Hindwings in ♂ pale ochreous-yellowish, dorsal half suffused with pale greyish, in ♀ light grey ; cilia yellow-whitish, in ♂ greyish-tinged.

Simla, in July ; nine specimens. A ♂ from Koni, Burma, in October (Manders), has base of forewings tinged with bright ferruginous, disc yellowish-tinged, subcostal ferruginous line obsolete, posterior margin of cell marked with a curved dark ferruginous mark enclosing a fine white lunule, and followed by an ovate pale yellow spot indistinctly edged posteriorly with ferruginous whence the dark veins originate, hindwings yellower and greyish towards base only, abdomen yellower ; it seems to be certainly only a local form of the same species.

*Æolanthès lychnidias*, n. sp.

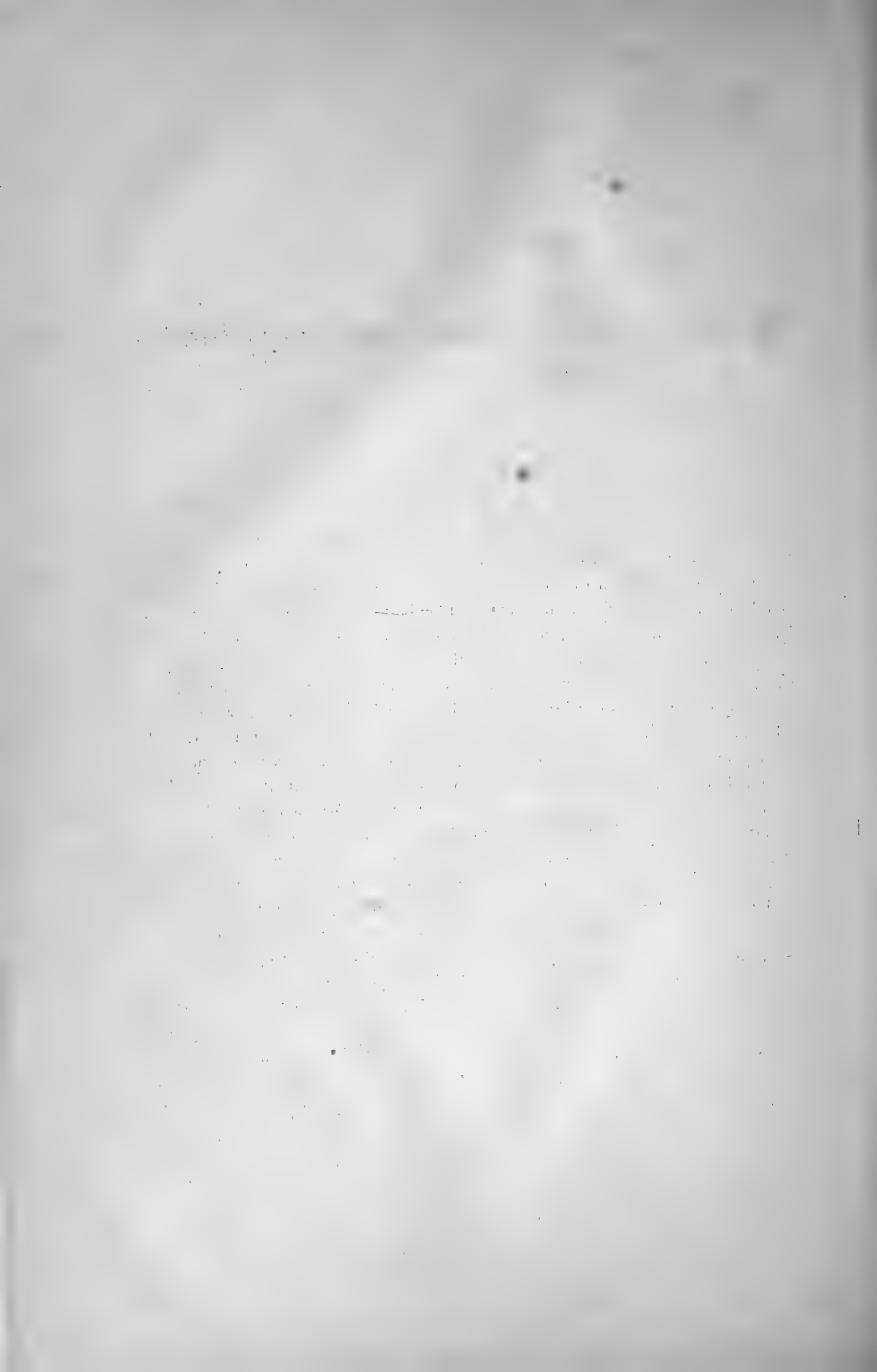
♂. 22mm. Head and thorax pale ochreous, somewhat mixed with dark fuscous. Palpi rosy-whitish, second joint mixed with dark fuscous, terminal joint with dark fuscous basal and supramedian rings. Antennæ fuscous. Abdomen light ochreous-yellowish. Forewings oblong, costa gently arched, with rough projecting scales before middle, apex rounded, termen rounded, little oblique ; 9 separate ; pale whitish-yellowish ; basal area mixed with brown, with an orange tuft near base in middle, and a larger brown tuft mixed with dark fuscous near dorsum ; beyond this a broad undefined fascia of blackish and whitish irroration from  $\frac{1}{3}$  of costa to middle of dorsum, costal projecting scales mixed with pale rosy ; a subovate white spot in disc beyond middle outlined with black irroration and centred with a yellow spot ; beyond this a trapezoidal patch of whitish and black irroration, of which one angle rests on costa beyond middle and one projects strongly towards apex ; apical area beyond this ferruginous-brown, including a white apical spot produced along termen, its anterior edge rosy-tinged ; a tornal patch of ground-colour partially tinged with pale rosy : cilia whitish-yellowish, basal half on termen rosy-tinged and sprinkled with black, on tornus ferruginous-yellow. Hindwings and cilia pale yellowish ; 6 and 7 closely approximated towards base.

Palni Hills, in November (Campbell) ; one specimen,

*Æolanthès euryatma*, n. sp.

♂. 17 mm. Head and thorax bronzy-fuscous, patagia dark purplish-fuscous. Palpi bronzy-fuscous irrorated with dark fuscous. Antennæ dark fuscous. Abdomen yellow-ochreous, tinged with grey towards apex. Forewings oblong, costa anteriorly moderately, posteriorly slightly arched, scales at  $\frac{2}{5}$  slightly roughened, apex obtuse, termen slightly rounded, rather oblique ; 9 separate ; white, mixed towards termen with light grey and towards tornus with pale ochreous-yellowish ; two dark fuscous patches mixed with deep indigo-purplish and blackish ; first basal, extending on costa to beyond  $\frac{1}{3}$  and on dorsum to  $\frac{3}{4}$ , outer edge prominent at  $\frac{3}{4}$  from costa ; second subtriangular

This Koni ♂ described as Adiantum meniscias, n. sp., Meyer, Ent. Koni. II  
196-197 (Dec. 1910)



extending on costa from middle to near apex, its apex almost connected with prominence of first ; an interrupted dark fuscous terminal line : cilia whitish-yellowish, more whitish at apex and tornus. Hindwings with 6 and 7 approximated towards base ; pale yellowish, towards dorsum greyish-tinged ; cilia pale yellowish.

Khasis, in July ; one specimen.

BLASTOBASIDÆ.

Through an oversight in my last paper a species was described under the name of *pulverea* as belonging to the genus *Blastobasis* ; it is really referable to the genus *Hypatima*, like the species which follows it.

(*To be continued.*)









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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA

BY

E. MEYRICK, B.A., F.R.S., F.Z.S.

## VIII.

(Continued from page 638 of this Volume.)

## ELACHISTIDÆ.

(See B.T. XIV)

I have now satisfied myself that the family *Elachistidæ* as hitherto understood is heterogeneous in origin, and propose to restrict it to those forms which have long recurved sickle-shaped palpi, similar to those of the *Gelechiadæ* and *Ecophoridæ*, to which they are really akin. The following genus is particularly interesting as furnishing, in my judgment, a good connecting link between the *Ecophoridæ* and *Elaschistidæ*, though properly referable to the latter family.

*Promalactis*, n. g.

Head with appressed scales; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ moderately (1) strongly (4) ciliated, basal joint elongate, with fugitive pecten. Labial palpi long or very long, recurved, second joint beneath with tolerably appressed or rather rough scales, terminal joint nearly or quite as long as second, slender, acute. Maxillary palpi rudimentary. Posterior tibiæ clothed with hairs above. Forewings with 1b shortly furcate, 7 and 8 stalked, 7 to costa, 11 from middle of cell. Hindwings under 1, elongate-lanceolate or sometimes linear-lanceolate, cilia 2-4; 2-7 separate, 3 considerably before angle of cell, 6 and 7 somewhat divergent, or rarely 6 absent (*thiasitis*).

Type *P. holozona*. To this genus belong also *isopselia*, Meyr., and *semantris*, Meyr., wrongly attributed to *Epicallima*, and I now describe twelve other species. They are handsome insects, orange with white or metallic markings.

*Promalactis callimetalla*, n. sp.

♀. 13 mm. Head dark shining bronze. Palpi very long, orange yellow, terminal joint black, tip whitish. Antennæ black ringed with white, apical

fourth white except extreme tip. Thorax shining yellow, Abdomen dark fuscous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen very obliquely rounded; bright deep yellow; five bright violet-golden-metallic narrow fasciæ edged with black, first basal, second at  $\frac{1}{4}$ , dilated towards costa, third median, approximated and connected with second on dorsum, space between these deep orange except towards costa, fourth from  $\frac{2}{3}$  of costa to before tornus, irregular, connected in middle with third by a slender blackish bar, above which the space between them is deep orange except towards costa, fifth terminal, broadest towards apex, space between this and fourth deep orange on tornus: cilia pale orange, base deep orange, above terminal fascia and on tornus grey. Hindwings lanceolate, grey irrorated with dark fuscous, appearing dark grey; cilia dark grey.

Palni hills (Campbell); one specimen.

*Promalactis thiasitis*, n. sp.

♂ ♀. 8—9 mm. Head and thorax bronzy-ochreous-orange, forehead broadly white. Palpi moderately long, ochreous, second joint black towards apex, terminal joint white with black apical band. Antennæ white ringed with dark fuscous, ciliations in ♂ 1. Abdomen grey, anal tuft whitish-ochreous. Forewings elongate-lanceolate; ochreous-orange; markings white, edged with scattered black scales; a slender almost basal-oblique transverse streak; a narrow streak from beneath costa at  $\frac{1}{4}$  to dorsum before middle; a rather narrow somewhat angulated fascia at  $\frac{2}{3}$ , interrupted in middle; a moderate apical spot: cilia ochreous tinged with grey, greyer towards tornus, with scattered black specks. Hindwings with vein 6 absent, cilia 4; grey with a slight brassy tinge, thinly scaled and pellucid towards base; cilia light grey.

N. Coorg, 3,500 feet (Newcome); Madulsima, Ceylon (Pole, Fletcher); in May and June, four specimens. This species may ultimately require generic separation on the neurulation of hindwings, but as it is otherwise nearly allied to the rest, I do not think it necessary at present.

*Promalactis synclina*, n. sp.

♂ ♀. 9—10 mm. Head bronzy, face pale shining bronze, forehead broadly white. Palpi long, deep ochreous, terminal joint white mixed with black. Antennæ white ringed with black, ciliations in ♂ 1. Thorax deep yellow-ochreous. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex pointed, termen extremely obliquely rounded; light shining orange, basal area up to first line deep yellow-ochreous; a moderate white line from  $\frac{1}{4}$  of costa to beyond middle of dorsum, edged anteriorly with black irroration; a fascia of black irroration from  $\frac{2}{3}$  of costa to tornus, triangularly dilated dorsally, followed on costa by a small white spot; an apical patch of black irroration; cilia yellow, towards base sprinkled with black, on tornus grey. Hindwings grey, thinly scaled at base; cilia grey.

Nilgiris, 3,500 feet (Andrews); N. Coorg, 3,500 feet (Newcome); in May and June, two specimens. Very like *parazeucta*, but forewings more pointed and



Promelasia haliclysta

Hindwings narrower, first line black-margined anteriorly instead of posteriorly.

*Promalactis parazeucta*, n. sp.

♀. 11—14 mm. Head dark fuscous, face yellowish, forehead broadly yellow-whitish. Palpi very long, yellow-ochreous or fulvous, terminal joint black sprinkled with white. Antennæ white ringed with black. Thorax deep yellow-ochreous. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex round pointed, termen very obliquely rounded; bright deep yellow-ochreous; two white lines, first edged posteriorly and second anteriorly with black irroration, first from  $\frac{1}{4}$  of costa to beyond middle of dorsum, second from  $\frac{2}{3}$  of costa to  $\frac{3}{4}$  of dorsum, dilated towards costa, angulated and interrupted in middle, the angle connected by a streak of blackish irroration with tornus; space included between these lines suffused with brown; an apical patch of blackish irroration: cilia yellow, towards base deeper with scattered black scales, on tornus grey. Hindwings rather dark grey; cilia grey.

Nilgiris, 6,000 feet (Andrews); N. Coorg, 3,500 feet (Newoome); from March to May, seven specimens.

*Promalactis halicysta*, n. sp.

♂. 15—16 mm. Head white, sides of face light ochreous. Palpi very long, white, second joint with rather rough projecting scales beneath, lower half brownish-ochreous sprinkled with blackish, terminal joint sprinkled with black. Antennæ white ringed with blackish, ciliations 2. Thorax ochreous-yellow, sometimes centrally suffused with white. Abdomen grey, apex whitish-ochreous. Forewings elongate, narrow, costa gently arched, apex acute, termen extremely obliquely rounded; ochreous-yellow; a fine white oblique transverse line almost at base, not reaching costa, edged anteriorly with blackish irroration; a fine white line from before  $\frac{1}{4}$  of costa to about middle of dorsum, edged posteriorly with blackish irroration, connected on dorsum, by a white streak edged above or sometimes wholly suffused with black irroration, with a slender white streak partially irrorated with blackish from dorsum beyond middle to  $\frac{2}{5}$  of disc, where it meets an inwardly oblique streak of dark fuscous suffusion from tornus; some dark fuscous irroration along termen: cilia ochreous-yellow. Hindwings grey, thinly scaled and pellucid towards base; cilia pale grey, becoming very pale yellowish at base.

Palni Hills, 6,000 feet (Campbell), two specimens.

*Promalactis crenopa*, n. sp.

♀. 14 mm. Head bronzy fuscous, face pale shining bronze, forehead broadly white. Palpi very long, fulvous, second joint infuscated above, terminal joint blackish, base and apex white. Antennæ white ringed with black. Thorax shining orange-bronze. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex round pointed, termen very obliquely rounded; deep orange; a short white streak near base of dorsum; a white streak from beneath costa at  $\frac{1}{4}$  to before middle of dorsum, edged with a few black scales on both sides; a white transverse spot from costa before  $\frac{2}{3}$ , edged irregularly

with black irroration, and an oblique white black edged streak from dorsum at  $\frac{3}{4}$ , united in disc by black irroration so as to form an irregularly angulated fascia; the two streaks are connected along dorsum by a strong streak of black-irroration; a small apical patch of black irroration, extended as a slender irregular streak along termen to tornus, including a white dot on middle of termen: cilia orange, on tornus dark grey. Hindwings dark grey, cilia grey.

Palni Hills, 6,000 feet (Campbell); one specimen.

*Promalactis amphiropa*, n. sp.

♀. 11 mm. Head and thorax orange-bronze, face pale orange, forehead broadly shining white. Palpi very long, fulvous-orange, terminal joint suffused with dark fuscous. Antennæ white ringed with black. Abdomen grey. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; deep orange; markings silvery-white, finely edged with black irroration; a slender almost basal oblique transverse streak, not reaching costa; a slender somewhat curved fascia from beneath costa at  $\frac{1}{4}$  to  $\frac{2}{5}$  of dorsum; a slender very oblique curved streak from dorsum beyond middle, its apex almost reaching apex of a short erect streak from tornus; a transverse spot from costa beyond middle; an irregular streak along termen from above tornus to apex, broader upwards: cilia bronzy-orange, on tornus grey. Hindwings grey; cilia light grey.

Khasi Hills, in September; one specimen.

*Promalactis holozona*, n. sp.

♂ ♀. 12—13 mm. Head bronzy, back of crown bronzy-orange, forehead and lower part of face suffused with whitish. Palpi very long, ochreous-orange, terminal joint suffused with dark fuscous. Antennæ white ringed with black, ciliations in ♂ 1. Thorax bronzy-orange. Abdomen dark grey, apex ochreous-yellowish. Forewings elongate, narrow, costa slightly arched, apex obtuse, termen very obliquely rounded; shining orange; four slender silvery-white fasciæ, more or less strongly edged with black suffusion, first oblique, almost basal, not reaching costa, second from before  $\frac{1}{3}$  of costa to middle of dorsum, third from before  $\frac{2}{3}$  of costa to tornus, dilated on costa, sending a fine branch from below middle to dorsum at  $\frac{3}{4}$ , fourth terminal, from apex to tornus: cilia orange, beneath tornus and on a costal patch before apex grey. Hindwings rather dark bronzy-grey; cilia grey.

N. Coorg, 3,500 feet (Newcome); in August, three specimens.

*Promalactis clinometra*, n. sp.

♂ ♀. 11—12 mm. Head orange-bronze, face mixed with pale silvery-bluish, anterior half of crown white. Palpi very long, whitish, externally irrorated with blackish. Antennæ white, ringed with blackish, ciliations in ♂ 1. Thorax bronzy-orange. Abdomen brownish-ochreous. Forewings elongate-lanceolate, bronzy-orange; markings shining white, edged with blackish irroration; a slender fascia almost at base, not reaching costa; a slender transverse fascia before  $\frac{1}{3}$ , reaching from dorsum  $\frac{2}{3}$  across wing; a slender straight fascia from dorsum before tornus to  $\frac{2}{3}$  of costa, interrupted in middle, dilated and not



malacensis isodora-



marginated towards costa; a small apical spot: cilia bronzy-ochreous, towards tornus greyer, with some black specks. Hindwings in ♂ grey, in ♀ dark grey, rather thinly scaled towards base, in ♂ with oval transparent patch beneath cell near base; cilia grey.

Ceylon, probably at low level (Pole); two specimens.

*Promalactis isidora*, n. sp.

♂. 9 mm. Head shining bronzy-grey sprinkled with whitish. Palpi long blackish. Antennæ black ringed with white ciliations 1. Thorax shining, orange-bronze. Abdomen light grey, apex whitish-ochreous. Forewings elongate, very narrow, costa slightly arched, apex acute, termen faintly sinuate, extremely oblique; orange-bronze, becoming orange-fulvous towards apex; markings shining white, edged with black; median and subdorsal dots almost at base; three short slender oblique streaks from dorsum; three small irregular marks above fold before these respectively; an oblique mark beneath costa before middle; an oblique mark from costa beyond middle, and a small spot beyond and beneath apex of this; a dot on dorsum before tornus; a moderately large blackish spot on costa about  $\frac{3}{4}$ ; a rather elongate apical spot, and another on termen above tornus: cilia light ochreous, basal half orange-fulvous. Hindwings grey; cilia light grey.

Khasi Hills, in March; one specimen.

*Promalactis epistacta*, n. sp.

♂ ♀. 12-14 mm. Head bronzy-ochreous. Palpi very long, bronzy-orange, terminal joint more or less suffused with blackish, tip white. Antennæ white ringed with black, ciliations in ♂ 1. Thorax shining orange-bronze. Abdomen dark grey. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen very obliquely rounded; ochreous-orange, dorsal area and a patch on middle of costa suffused with ferruginous; markings silvery-white, suffusedly edged with black irroration; two dots transversely placed almost at base; a subdorsal series of three short oblique marks; a longitudinal dash in disc near base; two small round spots above fold, second beneath middle; a dot on dorsum before tornus, connected by blackish suffusion with second of these; a small spot on middle of costa, and another beneath and rather beyond it; a small spot at apex, one on termen above tornus, a dot between these, and another on costa before apex, a small spot of blackish scales on costa at  $\frac{3}{4}$ : cilia ochreous-yellowish, basal third ochreous-orange, beneath tornus grey. Hindwings and cilia grey.

Khasi Hills, in September; nine specimens.

*Promalactis spintheritis*, n. sp.

♂ ♀. 14-15 mm. Head and thorax bronze. Palpi very long, fulvous, terminal joint more or less suffused with blackish, tip white. Antennæ white ridged with black, ciliations in ♂ 4. Abdomen dark grey. Forewings elongate, narrow, costa gently arched, apex pointed, termen extremely obliquely rounded; orange-ochreous, almost wholly suffused with deep ferruginous; markings shining violet-white, edged with black; median and subdorsal dots almost at

base ; a fine longitudinal dash in disc near base ; three fine oblique streaks from dorsum to fold, first united with a reverse-oblique streak in disc to form an acute angle ; a dot on dorsum before tornus ; a small oblique spot on middle of costa, beneath which is sometimes a dot in disc ; three elongate marks along termen, third apical and largest ; cilia light yellow-ochreous, basal half ferruginous-fulvous. Hindwings and cilia dark grey.

Khasi Hills, in October ; ten specimens.

#### GRACILARIADÆ.

In a recent paper (Proc. Linn. Soc. N. S. Wales, 1907, pp. 47—68) I recast the classification of *Gracilaria* and its immediate allies, and I now give an arrangement of the Indian species on the same system.

##### *Lithocolletis triarcha*, n. sp.

♀. 5 mm. Head bronzy-ochreous mixed with white, face white. Palpi white ; maxillary palpi minute, distinct, porrected. Antennæ whitish spotted with dark grey. Thorax bronzy-ochreous, with a rather broad white median transverse bar. Abdomen grey, beneath whitish-ochreous. Legs white, banded with dark fuscous irroration. Forewings lanceolate ; bronzy-ochreous ; an extremely short white median basal streak, edged with black beneath, three narrow rather inwards-oblique white fasciæ, finely edged with black irroration anteriorly, and with a few black scales in disc posteriorly, very slightly angulated near costa ; from third fascia above middle proceeds a fine white downwards-curved streak to costa just before apex, edged beneath with black irroration : cilia bronzy-ochreous, above apex with a white patch, on upper part of termen irrorated with black towards base, towards tornus pale grey. Hindwings pale grey ; cilia whitish-grey.

Pusa, Bengal ; one specimen, bred in August from cotton (*Gossypium*) (Maxwell Lefroy.)

##### *Epicephala*, Meyr.

The rough head is not always a well-marked character, the hairs of the crown being sometimes loosely appressed. The straight palpi are a good character, in all species except *flagellata*, in which they are somewhat curved. The species are closely allied and often similar.

##### *Epicephala chalybacma*, n. sp.

♂. 9 mm. Head ochreous-whitish mixed with grey. Palpi whitish, second joint externally with a dark fuscous median longitudinal line. Antennæ whitish-grey. Thorax grey. Abdomen dark grey, beneath ochreous-whitish with lateral series of oblique dark fuscous lines. Legs ochreous-whitish, anterior and middle pairs longitudinally lined with blackish, posterior tarsi obliquely banded with dark fuscous. Forewings very narrowly elongate, short-pointed, apex obtuse ; grey, veins more or less distinctly marked with fine black sines ; two indistinct oblique lines of dark fuscous scales from costa at  $\frac{1}{2}$  and  $\frac{3}{4}$  and a slender very oblique streak from tornus indicated by blackish margins ; a rather oblique transverse bluish-silvery-metallic line near before apex, edged with dark fuscous ; blackish antecapical and apical spots on costa beyond this :





cilia dark grey, round apex whitish with two black lines, inner metallic-bluish at apex. Hindwings dark fuscous; cilia dark grey.

Peradeniya, Ceylon, in September (Green); one specimen.

*Epicephala exetastis*, n. sp.

♂. 14 mm. Head whitish. Palpi whitish, mixed with dark fuscous externally. Antennæ grey. Thorax whitish, sides fuscous. Abdomen grey, apex whitish-ochreous, beneath whitish with oblique dark fuscous rings. Legs whitish, ringed with blackish-grey. Forewings very narrowly elongate, moderately pointed, apex round-pointed; light fuscous irrorated with dark fuscous; a slender whitish streak along dorsum from base to tornus; an oblique whitish streak from beyond middle of this, and two parallel oblique whitish streaks from tornus, not reaching half across wing; short oblique whitish strigulae from costa before and beyond middle, and five whitish cloudy dots or marks on costa between these and metallic line; some suffused whitish irroration in disc beneath these; a nearly straight transverse silvery-metallic line at  $\frac{7}{8}$ , apical are a brownish-ochreous, edged beneath by a whitish wedge shaped mark reaching apex and above by a shorter similar mark, between these anteriorly is a transverse spot of blackish suffusion: cilia grey, round apex whitish with a fine black subbasal line, edged anteriorly with silvery-metallic at apex, and a posterior blackish apical hook. Hindwings and cilia grey.

Maskeliya, Ceylon, in July (Pole); one specimen.

*Epicephala frenata*, n. sp.

♂ ♀. 9-10 mm. Head white. Palpi dark fuscous, white towards base and apex. Antennæ grey. Thorax fuscous with white central stripe. Abdomen grey, beneath ochreous-whitish with lateral series of oblique grey lines, apex ochreous-whitish. Legs whitish spotted with dark grey. Forewings very narrowly elongate, short-pointed, apex round-pointed; rather dark fuscous; a white streak along dorsum from base to middle of termen, attenuated posteriorly, upper edge emitting a short oblique streak before middle of wing, and a pair of longer oblique streaks from tornus reaching half across wing, before which the streak itself is cut by a fine inwards-oblique line of ground colour; three usually very short oblique white streaks from costa before and beyond middle and at  $\frac{3}{4}$ , sometimes reduced to dots, second sometimes longer; a bent silvery-metallic transverse line at  $\frac{5}{8}$ , area preceding this more or less irrorated with whitish and blackish; apical area ochreous-fuscous with a spot of dark fuscous suffusion anteriorly, edged beneath by a wedge-shaped white mark, and above by a shorter similar mark not reaching apex: cilia grey, round apex white with a fine black subbasal line, at apex with a dark fuscous bar. Hindwings rather dark grey; cilia grey.

Puttalam and Ambulangoda, Ceylon, in November, February, and March (Pole, Fletcher); nine specimens. Near *albistriatella*, Turn., from Queensland (hitherto placed in *Acrocercops* on account of the smoother head, but by the palpi properly an *Epicephala*), but differs by presence of the median branch of dorsal streak, and less developed costal streaks.

*Epicephala flagellata*, n. sp.

♀. 9 mm. Head white. Palpi somewhat curved, white, second joint suffused with grey except towards base. Antennæ grey. Thorax white, shoulders brownish. Abdomen grey, beneath whitish with lateral series of oblique fuscous stripes, anteriorly darker. Legs white ringed with blackish-grey, anterior pair suffused with dark grey. Forewings very narrowly elongate, short-pointed, obtuse; light ochreous-brown; a rather narrow white streak along dorsum from base to tornus; moderate oblique white streaks from costa before and beyond middle, reaching nearly half across wing; two strongly curved parallel transverse fine white lines about  $\frac{4}{5}$ , preceded on lower half by an oblique white streak; beyond these are white costal and terminal marks not reaching apex, and a small black central dot before apex: cilia grey, round apex white with two fine black lines, at apex with a bar of blackish irroration. Hindwings and cilia grey.

Peradeniya, Ceylon, in March (Green); one specimen. Also similar to *Albistriatella*, which however has the first curved posterior line represented by two straight streaks placed at an acute angle.

*Epicephala trigonophora*, Turn.

(*Ornix trigonophora*, Turn., Trans. Roy. Soc. S. Austr. 1900, 21.)

Maskeliya, Ceylon, in August (Alston); one specimen. Comparing this with my single Queensland specimen, I am unable to find any distinction.

*Epicephala albifrons*, Stt.

(*Ornix albifrons*, Stt., Trans. Ent. Soc. Lond. V. (n. s.), 122.)

N. Coorg., 3,500 feet, in March (Newcome); one specimen, which seems to be identical specifically with Stainton's example from Calcutta.

*Epicephala stauropa*, n. sp.

♂. 10 mm. Head white. Palpi white, externally mixed with fuscous. Antennæ dark grey, obscurely pale-ringed. Thorax white, shoulders fuscous. Abdomen grey, beneath whitish with lateral series of oblique fuscous stripes. Legs white banded with blackish, posterior tibiæ greyish. Forewings very narrowly elongate, moderately pointed, apex round-pointed; pale fuscous irrorated throughout with dark fuscous; three moderately broad oblique white streaks from dorsum reaching half across wing, first extended along dorsum to base, its apex irregularly expanded, third slightly curved and followed closely by a parallel white line; three short oblique wedgeshaped white streaks from costa before and beyond middle, and at  $\frac{3}{4}$ ; beneath the two last of these are short blackish marks; a curved transverse silvery-metallic line at  $\frac{4}{5}$ ; apical area beyond this fulvous, edged beneath by a white mark, and including a central cross-shaped black dot; a small silvery-metallic apical dot: cilia grey, round apex white with a black subbasal line. Hindwings grey; cilia pale grey tinged with ochreous.

Khasi Hills, in September; one specimen.

*Epicephala calasiris*, n. sp.

♀. 10 mm. Head white. Palpi white, externally mostly dark fuscous except towards base. Antennæ dark grey, obscurely pale-ringed. Thorax dark,

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fuscous. Abdomen dark fuscous, beneath ochreous with oblique dark fuscous bands. Legs white banded with blackish, posterior tibiae greyish. Forewings very narrowly elongate, short-pointed, apex round-pointed; dark fuscous; a moderate white streak along basal  $\frac{2}{3}$  of dorsum, a moderate oblique white streak from dorsum beyond middle, not reaching half across wing; some interrupted white marks representing a double oblique streak from tornus; three moderate oblique white streaks from costa before and beyond middle, and at  $\frac{3}{4}$ , reaching  $\frac{1}{3}$  across wing, first shortly produced along costa towards base; a somewhat oblique transverse leaden-metallic line at  $\frac{4}{5}$ , narrowly edged with white anteriorly and followed at extremities by small white spots; apical area suffused with fulvous-ochreous with a small black central spot: cilia grey, round apex white with two blackish lines. Hindwings dark grey; cilia grey.

Khasi Hills, in September; one specimen.

*Phrixosceles*, n. g.

Head smooth; tongue developed. Antennae over 1, filiform, simple, basal joint moderately elongate, without pecten. Labial palpi long, curved, slender, smooth-scaled, terminal joint rather shorter than second, pointed. Maxillary palpi short, slender, filiform, porrected. Middle and posterior tibiae and two or three joints of tarsi above with rough projecting bristly scales. Forewings with lower fork of vein 1b obsolete, 2 and 3 obsolete towards origin, 4 and 5 connate, 7 to costa, 8 absent, 11 from near base. Hindwings  $\frac{1}{2}$ , linear, cilia 6; 2-7 separate, 6 and 7 closely approximated.

Type *P. trochosticha*. Differs from *Acrocercops* in having the middle tibiae and two or more joints of both middle and posterior tarsi bristly, whereas in that genus only the posterior tibiae and first joint of tarsi are so.

*Phrixosceles literaria*, n. sp.

♂. 8 mm. Head, palpi, and thorax white. Antennae white, finely dotted with dark fuscous. (Abdomen broken.) Legs white spotted with blackish. Forewings very narrowly elongate, parallel-sided, short-pointed; white; five irregular blackish spots on anterior  $\frac{2}{3}$  of costa, first two small and connected with dorsum by fine fuscous lines, others longer and reaching more than half across wing; three rather oblique blackish marks from dorsum about middle, reaching half across wing, central one longer; two small blackish spots on costa beyond middle, and a fine oblique strigula from dorsum opposite; a blackish ring in disc at  $\frac{3}{4}$ ; a fine transverse blackish line midway between this and apex, preceded by a short oblique dorsal strigula; a small brownish apical spot finely edged anteriorly with black: cilia white, beneath tornus greyish, round apex with base brownish edged by some blackish specks. Hindwings rather dark grey; cilia light grey.

Maskeliya, Ceylon, in January (Pole); one specimen.

*Phrixosceles campsigrapha*, n. sp.

♂. 9 mm. Head, palpi, and antennae white. Thorax white, shoulders yellowish. (Abdomen broken.) Legs white, banded with ochreous-yellowish.

Forewings very narrowly elongate-lanceolate, very long pointed; white; four pairs of fine transverse dark grey lines edged with yellowish, first three pairs on anterior half of wing, third pair sinuate-angulated in middle, hardly oblique, entire, fourth beyond middle, oblique, filled up with ochreous-yellowish; beyond this the wing is pale yellow, with two white longitudinal subsinuate lines edged with blackish irrorations, and a short white dorsal streak beyond fourth fascia: cilia whitish-ochreous, towards tornus greyish, round apex with a blackish median line. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in February (Pole); one specimen. Very like *P. trochosticha*, but antennæ wholly white, third fascia of forewings less oblique and sinuate-angulated instead of straight, an additional white dorsal streak beyond fourth fascia and legs banded with yellow instead of blackish.

*Phrixosceles trochosticha*, n. sp.

♂ ♀. 7-9 mm. Head and thorax whitish. Palpi white, second joint with a dark grey apical dot, and sometimes a few other grey scales towards base. Antennæ white, more or less distinctly spotted with grey. Abdomen light grey, beneath whitish. Legs white banded with blackish. Forewings very narrowly elongate-lanceolate, very long-pointed; white, often yellowish-tinged; four pairs of oblique transverse ochreous-yellow lines irrorated with black, first three pairs on anterior half of wing, third generally obsolescent towards dorsum, fourth beyond middle, more oblique, in one specimen strongly marked with black; beyond this the wing is ochreous-yellowish with two fine white longitudinal subsinuate lines edged with black irroration, sometimes terminated by a blackish apical dot or mark: cilia whitish, towards tornus greyish, round apex with base ochreous yellow and a black median line. Hindwings and cilia grey.

Khasi Hills, in March; six specimens.

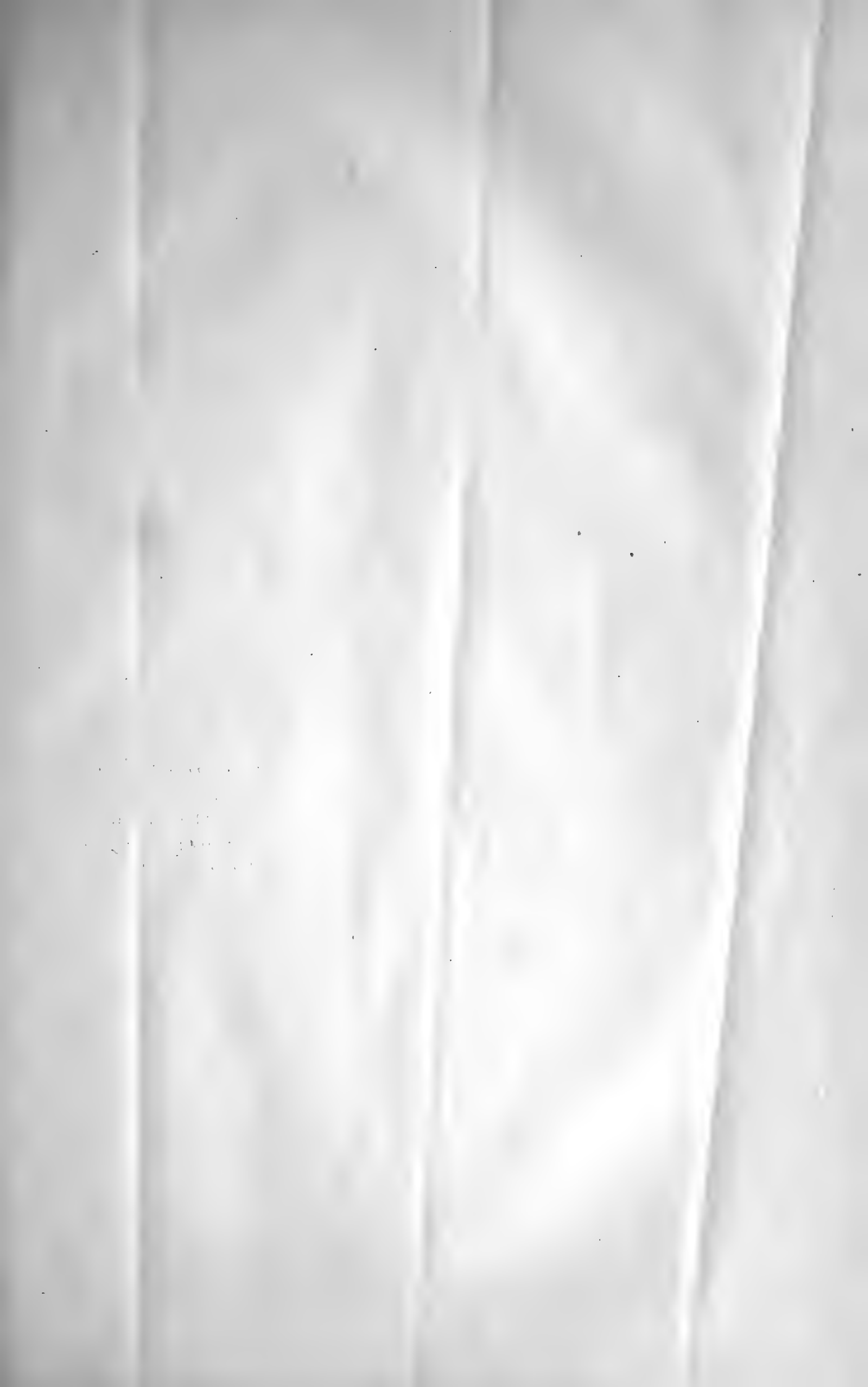
*Phrixosceles hydrocosma*, n. sp.

♀. 9 mm. Head, thorax, and antennæ whitish. Palpi white, second joint with oblique blackish-grey subapical band. Abdomen grey, beneath white with lateral series of oblique grey stripes, last two segments laterally suffused with grey. Legs white, posterior tarsi ringed with blackish. Forewings very narrowly elongate, gradually narrowed posteriorly, apex obtuse; whitish, on dorsal half tinged with pale yellowish; markings ferruginous-ochreous; a series of short indistinct transverse strigulae along costa; a series of oblique irregular strigulae above dorsum and termen, tending to be connected into an irregular waved streak; a median fascia of two parallel curved oblique striæ from dorsum not reaching costa; a roundish ochreous apical spot: cilia white, beneath tornus grey, round apex with a blackish subbasal and fuscous median line. Hindwings and cilia grey.

Khasi Hills, in November; one specimen.

*Acrocercops*, Wallgr.

Lord Walsingham has correctly pointed out that this is a prior name for *Conopomorpha*, Meyr. (B.J. VII. 746)





*Acrocercops stricta*, n. sp.

♂. 6 mm. Head whitish, lower part of face grey. Labial palpi rather short, expanded with loose scales, white, second and terminal joints with black basal bands. Maxillary palpi expanded with loose scales, white banded with black. Antennæ dark grey, beneath whitish. Thorax blackish. Abdomen dark fuscous, beneath sharply banded with white. Legs white banded with blackish. Forewings narrowly lanceolate; grey closely irrorated with blackish; a small whitish spot on costa towards base; slender slightly oblique white fasciæ at  $\frac{1}{2}$  and beyond middle, each with two or three separate black scales in disc; two approximated opposite pairs of small ill-defined whitish costal and dorsal spots posteriorly; an undefined white apical dot: cilia dark grey, beneath apex with a short subbasal dash of whitish suffusion. Hindwings dark grey; cilia grey.

Maskeliya, Ceylon, in July (Pole); one specimen. The expanded maxillary palpi are exceptional.

*Acrocercops urbana*, n. sp.

♀. 9 mm. Head white. Palpi white, second joint with two dark grey rings, apical scales somewhat projecting, terminal joint with traces of a grey median ring. Antennæ light greyish, white towards base. Thorax white, anteriorly mixed with blackish. Abdomen grey, beneath white with median and apical black bands. Legs white ringed with black. Forewings very narrow-lanceolate; white; four rather oblique parallel fasciæ; first almost basal, light yellow-brownish, very undefined, second broad, blackish, third moderate, light brownish, becoming black on costa, fourth narrow, light brownish, mixed with black on costa; between each pair of these fasciæ is a series of three small black dots, costal, discal, and dorsal; a blackish apical patch, preceded by a slender oblique pale brownish streak, and some scattered blackish scales: cilia whitish-ochreous, round apex greyish with a black postmedian line, at apex with a white basal spot followed by blackish. Hindwings grey; cilia light grey.

Khasi Hills, in October; one specimen.

*Acrocercops ordinatella*, Meyr.

(*Gracilaria ordinatella*, Meyr., Proc. Linn. Soc. N. S. Wales, 1880, 145.)

Peradeniya, Ceylon, in June (Green); one specimen, exactly similar to my Australian examples.

*Acrocercops quadrifasciata*, Stt.

(*Gracilaria quadrifasciata*, Stt., Trans. Ent. Soc. Lond., (3rd Ser.), 295, pl. x, 5.)

Very close to the preceding and following species, but apparently distinct; I have not obtained specimens.

*Acrocercops geologica*, n. sp.

♂ ♀. 6-7 mm. Head shining white. Palpi white, second joint with an ochreous-grey ring, terminal joint with three faint ochreous rings. Antennæ white, faintly ringed with ochreous. Thorax whitish-ochreous. Abdomen whitish. Legs white, faintly ringed with ochreous, middle tibiae with grey

apical band. Forewings very narrowly elongate-lanceolate; pale shining ochreous; five moderate rather oblique white fasciæ, very faintly edged with fuscous, and each marked with three fuscous dots or strigulæ, costal, discal, and dorsal, first fascia near base; a sixth white fuscous-edged fascia close before apex, contracted on termen: cilia pale grey mixed with whitish on termen, round apex dark fuscous towards base, with a white subbasal dot at apex. Hindwings rather dark grey; cilia pale grey.

Maskeliya, Ceylon, in February (Pole); two specimens.

*Acrocercops nitidula*, Stt.

(*Gracilaria nitidula*, Stt., Trans. Ent. Soc. Lond., i. (3rd Ser.), 299, pl. x, 9.)

I do not possess this species.

*Acrocercops terminaliæ*, Stt.

(*Gracilaria terminaliæ*, Stt., Trans. Ent. Soc. Lond., i. (3rd Ser.), 298, pl. x, 8.)

Apparently allied to *cathedræa*, but I do not possess it. I note here that *Gracilaria falcatella*, Stt., Trans. Ent. Soc. V. (n. ser.), 121, does not belong to this group at all, but to the *Elachistidæ*.

*Acrocercops cathedræa*, n. sp.

♂. 8 mm. Head and thorax white. Palpi white, second joint with dark fuscous apical band. Antennæ grey, towards base white. Abdomen grey beneath white with dark fuscous rings. Legs white, banded with dark fuscous. Forewings very narrow, elongate-lanceolate; light ochreous-brown; five white fasciæ finely edged with black, first moderate, basal, enclosing a small spot of ground colour on costa, second rather broad, narrower on costa, outer edge angulated near dorsum, third beyond middle, moderate, oblique, abruptly dilated below middle so that posterior edge forms a quadrate dorsal expansion, fourth slender, oblique, more or less narrowly interrupted in middle, fifth anteapical, moderately broad, oblique, rather irregular: cilia pale greyish white on basal half at apex and on lower extremity of fifth fascia, with two incomplete black lines. Hindwings rather dark grey; cilia light grey.

Khasi Hills, in September and October; three specimens.

*Acrocercops ortholocha*, n. sp.

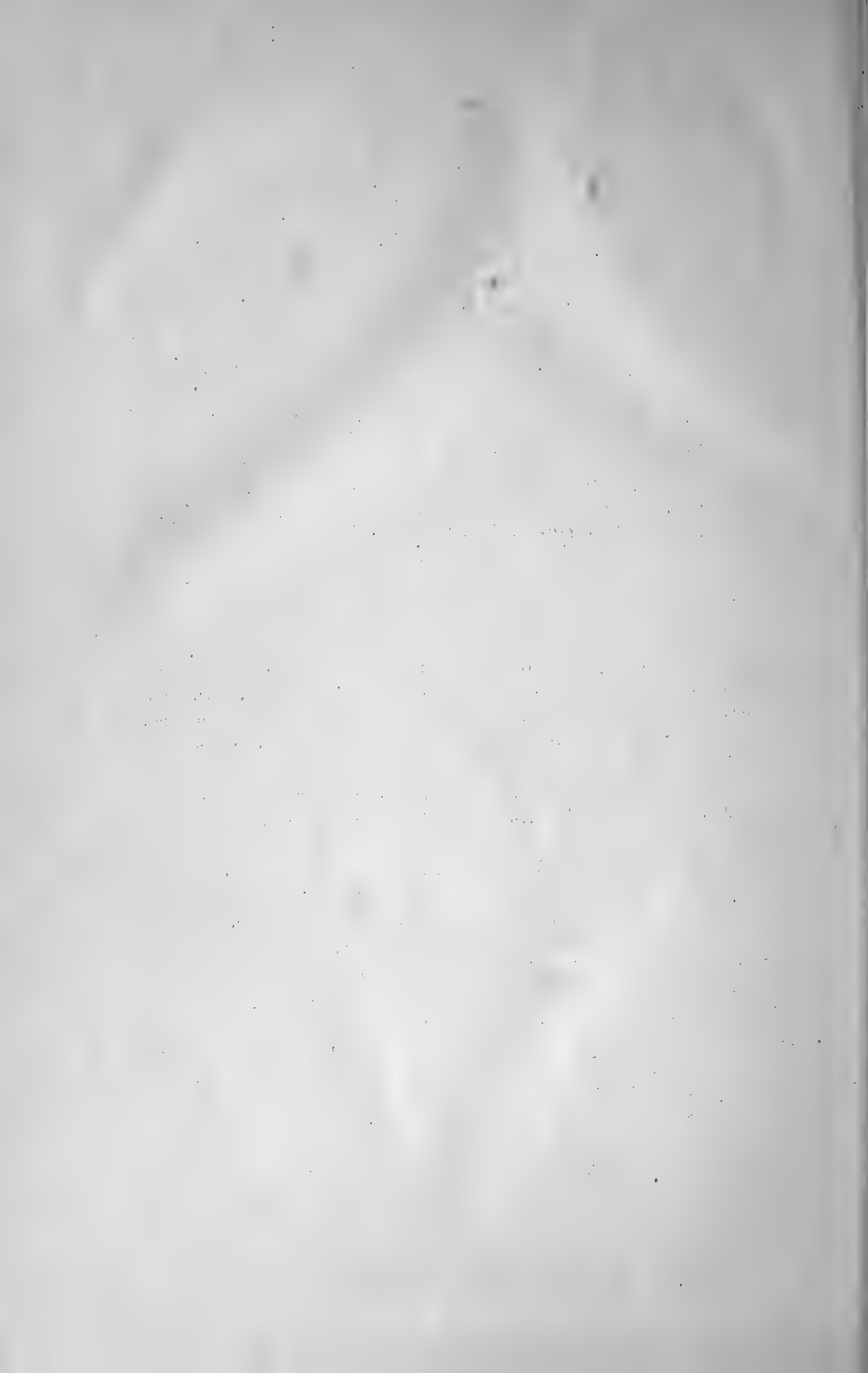
♀. 8-9 mm. Head and thorax shining white. Palpi white, second joint with grey apical band. Antennæ pale greyish, becoming white towards base. Abdomen pale grey, beneath white with grey rings. Legs white ringed with grey. Forewings very narrow, slightly widest near base, short-pointed; rather light yellowish-brown; four shining white fasciæ edged with black, slightly narrowed towards costa, first narrow, basal, other three moderately broad, fourth at  $\frac{4}{5}$ , not black-edged posteriorly, apical area black on costal half, including a white anteapical strigula from costa and a white apical dot: cilia pale greyish-ochreous, round apex whitish with a black basal line. Hindwings light grey; cilia pale greyish-ochreous.

Khasi Hills, in October; two specimens.

*Acrocercops triplaca*, n. sp.

♂. 12 mm. Head shining white. Palpi white, upper edge of second joint

*Anatrachyntis falcinella* (Comptosyridae)





dark fuscous. Antennæ white, suffusedly spotted with grey. Thorax brown. Abdomen grey, beneath white ringed with dark fuscous. Legs white, banded with dark fuscous. Forewings very narrowly elongate, short-pointed, obtuse; rather dark brown; three shining white fasciæ, first towards base, broad, broadest on dorsum, second median, moderate, dilated towards dorsum, third towards apex, rather narrow, anteriorly rather convex, preceded by blackish suffusion; beyond this is a blackish longitudinal spot, terminated by a white apical dot: cilia brownish, with some whitish suffusion on lower extremity of third fascia, and a postmedian dark fuscous shade round apex. Hindwings and cilia grey.

Khasi Hills, in June; one specimen.

*Acrocercops triacris*, n. sp.

♂. 8 mm. Head white. Palpi white, second joint with grey apical band, terminal joint suffused with grey anteriorly. Antennæ grey. Thorax white sides bronzy. Abdomen grey, beneath white with grey rings, apical tuft whitish-ochreous, at apex white. Legs white banded with grey. Forewings linear-lanceolate, acute; golden-bronze; markings shining white, strongly blackish-edged; a triangular blotch on dorsum before middle, not quite reaching costa; two fasciæ, broad on dorsum and strongly narrowed to costa, first at  $\frac{3}{5}$ , second anteapical, not dark-margined posteriorly; between these is a slender oblique streak from costa, reaching more than half across wing; apical area beyond second fascia ochreous-yellow, apex itself black: cilia pale bronzy-greyish, at apex with base white followed by a fragment of a black line. Hindwings grey, cilia pale bronzy-greyish.

Maskeliya, Ceylon, in May (Pole); one specimen.

*Acrocercops orbifera*, n. sp.

♂ ♀. 13 mm. Head and thorax shining whitish (partly defaced). Palpi whitish, second joint with blackish apical band, terminal joint blackish above and beneath except towards base and apex. Basal joint of antennæ whitish above, dark fuscous beneath (rest broken). Abdomen fuscous, beneath silvery-white with slender fuscous rings. Legs white banded with dark fuscous. Forewings very narrow, slightly widest near base, apex long-pointed; shining golden-bronze, base of dorsum narrowly white; three shining yellowish-white fasciæ edged with black, very broad on dorsum and strongly narrowed towards costa, at about  $\frac{1}{3}$ ,  $\frac{2}{3}$ , and before apex respectively; between second and third a whitish black-edged strigula on costa, apex beyond third fascia black except a white apical dot: cilia grey, at apex with a black basal line. Hindwing rather dark grey; cilia grey.

Palni Hills, 6,000 feet (Campbell); two specimens.

*Acrocercops resplendens*, Stt.

(*Gracilaria resplendens*, Stt., Trans. Ent. Soc. Lond., i, (3rd ser., 294, pl. x, 4).

Khasi Hills, in October and November, received in plenty. Before the anteapical blotch of forewings are two whitish dark-edged dots transversely placed; these are omitted by Stainton both in his description and figure, but are always present, and are plainly visible in the type-specimen.

*Acrocercops chrysargyra*, n. sp.

♀. 9 mm. Head silvery-white, lower part of face brassy, back of crown golden-bronze. Palpi white. Antennæ grey. Thorax orange-bronze, posterior half of patagia white. Abdomen greyish-ochreous, beneath white, with lateral series of oblique fuscous bars. Legs white banded with blackish. Forewings elongate-lanceolate; bright golden-orange; four somewhat rounded-triangular silvery-white black-edged dorsal blotches, reaching about  $\frac{2}{3}$  across wing, tipped with violet, their posterior margins raised into a transverse ridge; a slender shining violet-silvery streak along basal third of costa, thence deflected almost to reach apex of second dorsal blotch. Latter portion black-edged; a shining pale violet black-edged dash above disc between second and third blotches, and another between third and fourth; violet black-edged dots on costa opposite third and fourth blotches; a silvery-white spot on costa just before apex, edged beneath with black: cilia grey, round apex bronzy-fulvous, at costal termination dark grey preceded by white. Hindwings dark grey; cilia grey.

Khasi Hills, in October; one specimen. A splendid insect; the maxillary palpi are shorter than usual, the bristles of posterior tibiæ longer; the ridge of raised scales on forewings are a peculiar character.

*Acrocercops tetracrena*, n. sp.

♀. 9 mm. Head white. Palpi white, second joint dark grey above and at apex, with scales angularly projecting beneath at apex, terminal joint with grey suffused submedian ring. Antennæ grey. Thorax bronzy-brown, with white central stripe. Abdomen grey, beneath white. Legs white, banded with blackish-grey. Forewing very narrowly elongate-lanceolate; bronzy-brown; four semioval white black-edged dorsal spots, not reaching half across wing, first and fourth smallest, first extended dorsally towards base; a fine white transverse strigula just before apex, surrounded with dark fuscous suffusion, dilated on costa: cilia fuscous, at apex with a black subbasal line followed by whitish suffusion. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in October (Pole); one specimen.

*Acrocercops castellata*, n. sp.

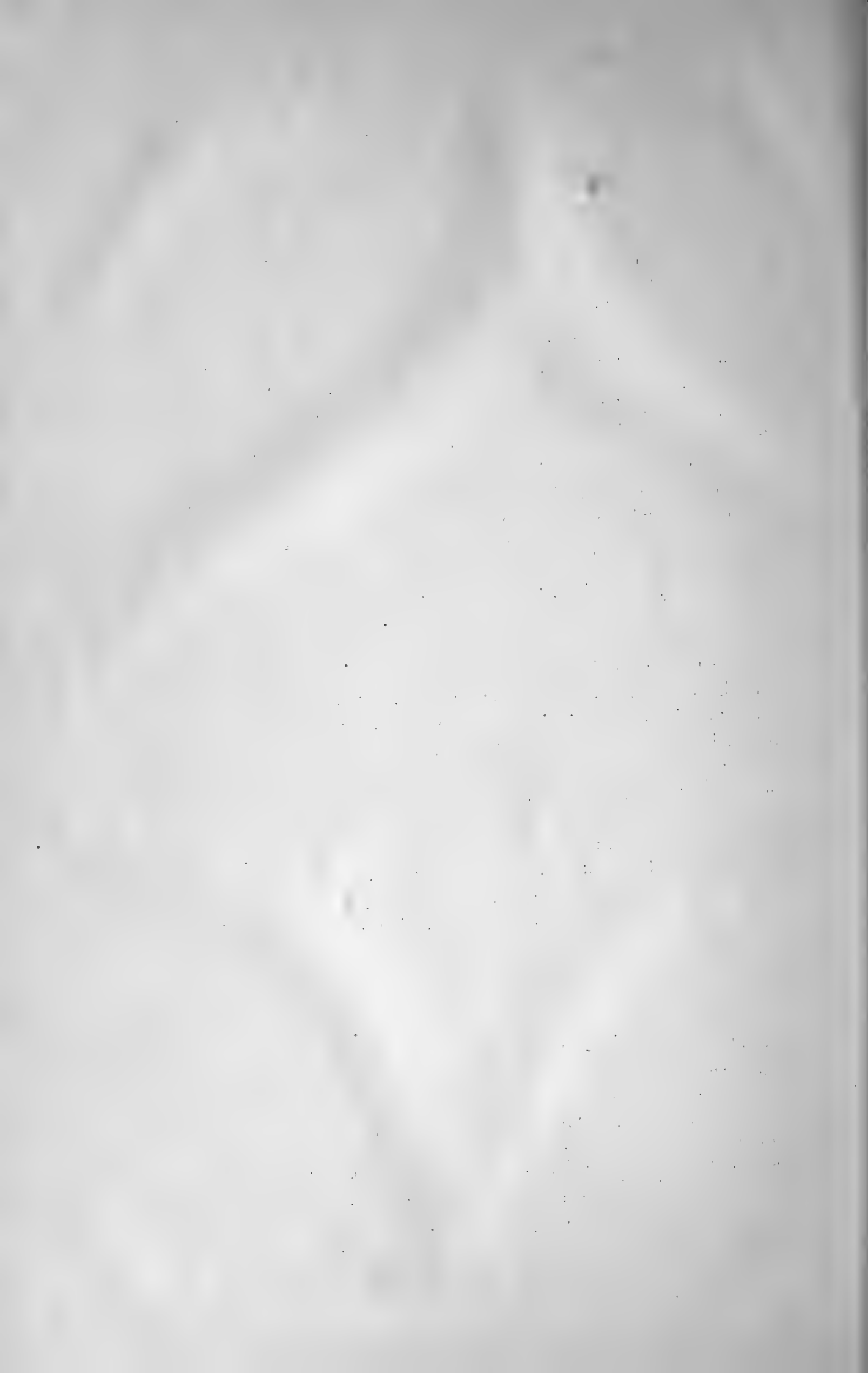
♂. 10 mm. Head white. Palpi white, second joint grey towards apex. Antennæ grey, basal joint whitish, beneath dark fuscous. Thorax white, sides bronzy-fuscous. Abdomen grey, beneath white. Legs white, banded with blackish. Forewings very narrowly elongate-lanceolate; ochreous-brown, darker and bronzy-tinged on costal half; three silvery-white black-edged somewhat rounded triangular dorsal blotches, reaching more than half across wing, first about  $\frac{1}{3}$ , irregularly extended along dorsum almost to base, second beyond middle, third towards apex; a white mark on apical portion of costa edged anteriorly by an oblique black strigula: cilia light brownish, towards tornus greyer. Hindwings rather dark grey; cilia light grey.

Maskeliya, Ceylon, in February (Pole); one specimen.

*Acrocercops tricyma*, n. sp.

♂ ♀. 7—9 mm. Head white. Palpi white, second joint dark fuscous above





Nov. 15, 1908.]

*Indian Micro-lepidoptera.*

towards apex. Antennæ grey, in front whitish, basal joint white, beneath black. Thorax white, sides bronzy. Abdomen dark fuscous, beneath ochreous-whitish. Legs blackish ringed with white, tarsi white, posterior pair spotted with grey. Forewings narrowly elongate-lanceolate; ochreous-bronze; a broad shining white dorsal streak from base, its upper edge from  $\frac{1}{4}$  to beyond tornus forming three strong rounded-triangular black-edged prominences, reaching  $\frac{2}{3}$  across wing, the concavities between these almost reaching dorsum; a white black-edged dot on costa at  $\frac{3}{4}$ ; a fine white black-edged oblique transverse streak before apex: cilia white, towards tornus grey, beneath apex with a bar of dark grey suffusion, above apex with three dark fuscous strigulae, before first of these bronzy. Hindwings rather dark grey; cilia grey.

Khasi Hills, in November; Pusa, Bengal, bred in April from larvæ mining leaves of *Blumea lacera* (Lefroy); four specimens.

*Acrocercops isodelta*, n. sp.

♀. 8 mm. Head white, face fuscous-tinged. Palpi white, second joint with upper edge and an apical band blackish, terminal joint with blackish submedian ring. Antennæ grey, in front whitish, basal joint white, beneath blackish. Thorax white, sides bronzy-fuscous. Abdomen grey, beneath white. Legs white, banded with dark fuscous and blackish. Forewings narrowly elongate-lanceolate, bronzy-fuscous; a moderately broad ochreous-white dorsal streak from base, between  $\frac{1}{4}$  and  $\frac{2}{3}$  forming three broad triangular black-edged blotches whose tips almost or quite coalesce with white black-edged dots on costa, the angular indentations between these almost reaching dorsum; a fine white black-edged oblique transverse streak before apex: cilia whitish, beneath tornus greyish, beneath apex with a bronzy bar, above apex with three dark fuscous strigulae, before first of these bronzy. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in January (Pole); one specimen.

*Acrocercops lyrica* n. sp.

♂. 8 mm. Head shining white. Palpi white, second joint with two dark grey bands, apex of terminal joint dark grey. Antennæ grey. Thorax white, sides bronzy-fuscous. Abdomen grey, anal tuft white, beneath white with lateral series of oblique grey stripes. Legs white, banded with dark grey. Forewings very narrowly lanceolate, gradually narrowed from near base; bronzy fuscous, becoming bronzy-ochreous on dorsal half; a silvery-white stripe along dorsum from base to tornus, its apex rather dilated into an irregular spot; a silvery white elongate patch along termen from above tornus almost to apex, its anterior extremity emitting a projection which extends  $\frac{3}{4}$  across wing; above this patch beneath costa is a sinuate black longitudinal line terminating in a transverse black apical mark: cilia white, towards tornus greyish, above apex with a black median line, beneath apex with a blackish bar. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in March (Pole); one specimen.

*Acrocercops gemoniella*, Stt.(*Gracilaria gemoniella*, Stt., Trans. Ent. Soc. Lond. i (3rd sers.), 297, pl. x, 6.)

Maskeliya, Ceylon, in March and April (Pole); N. Coorg. 3,500 feet, in October (Newcome). None of my specimens show the anterior prominence of the dorsal streak mentioned by Stainton, but otherwise they agree precisely, and I am unable to regard them as distinct.

*Acrocercops argyraspis*, n. sp.

♂. 8 mm. Head white. Palpi white, lined with blackish. Antennæ whitish-grey. Thorax shining white, sides ochreous-bronze. (Abdomen broken.) Legs white, banded with dark fuscous. Forewings very narrowly elongate-lanceolate; ochreous-bronze; a moderate silvery-white stripe along dorsum from base to tornus, a bright silvery-white apical blotch occupying more than  $\frac{1}{4}$  of wing, narrowed towards costa, anterior edge rounded and edged with dark fuscous suffusion, enclosing a subtransverse black apical mark: cilia white, at apex with a blackish median line, towards tornus grey. Hindwings dark grey; cilia grey.

Khasi Hills, in March; two specimens.

*Acrocercops galeopa*, n. sp.

♀. 10—11 mm. Head ochreous-whitish. Palpi whitish, apex of second joint sometimes with a grey dot. Antennæ whitish, faintly dotted with grey. Thorax whitish, sides pale ochreous. Abdomen pale greyish-ochreous, beneath ochreous-whitish. Legs whitish, indistinctly banded with grey. Forewings very narrowly elongate, moderately pointed, apex slenderly produced, acute ochreous-whitish, towards base more ochreous-tinged; a moderate undefined pale ochreous spot on costa before middle, and another on dorsum beyond middle, almost connected into an oblique fascia; apical third of wing almost wholly occupied by an ochreous-brown patch composed of several confluent spots, sometimes with an undefined transverse bar of dark fuscous irroration at  $\frac{3}{4}$ : cilia whitish-ochreous. Hindwings grey; cilia pale greyish-ochreous.

Khasi Hills, from July to September; three specimens.

*Acrocercops ochronephela*, n. sp.

♂. 9—10 mm. Head shining whitish-ochreous, face more whitish. Palpi whitish. Antennæ whitish, spotted with grey. Thorax ochreous. Abdomen grey, beneath whitish. Legs white, banded with dark fuscous. Forewings very narrowly elongate-lanceolate; yellow-ochreous, deeper and sometimes brownish-tinged posteriorly; two slender cloudy undefined whitish-ochreous transverse fasciæ at about  $\frac{2}{5}$  and  $\frac{4}{5}$ : cilia pale ochreous, above apex ochreous-whitish. Hindwings rather dark grey; cilia grey.

Khasi Hills, in December and March; three specimens.

*Acrocercops sauropis*, n. sp.

♂. 9 mm. Head ochreous-whitish. Palpi white, terminal joint sometimes spotted with grey. Antennæ greyish. Thorax light greyish-bronze. Abdomen greyish, beneath white with lateral series of oblique fuscous stripes. Legs white, spotted with grey and blackish. Forewings very narrowly elongate,







gradually narrowed, apex rounded-pointed; light red-brownish, somewhat mixed with shining grey, a fine oblique white stria from  $\frac{3}{4}$  of costa to tornus, edged posteriorly in middle by several black scales; a white dot on costa near apex, partially blackish edged; a small round black apical spot: cilia grey, round apex brownish, beneath apex with a blackish hook, above apex with a white spot. Hindwings dark grey; cilia grey.

Khasi Hills, in October; two specimens.

*Acrocercops telearcha*, n. sp.

♂ ♀. 11-14 mm. Head shining ochreous-white. Palpi white, second joint with blackish-grey apical band, terminal joint with anterior edge blackish towards apex. Antennæ dark grey. Thorax ochreous-white, sides dark bronzy-fuscous. Abdomen rather dark grey, beneath obliquely banded with white. Legs dark grey, ringed with white. Forewings very narrowly elongate, short-pointed, apex obtuse; dark bronzy-fuscous; a yellow-whitish streak along dorsum from base to tornus, upper edge twice sinuate upwards, and enlarged into a round spot at apex; an elongate-oval whitish spot beneath costa at  $\frac{2}{5}$ ; from six to eight fine oblique white strigulae from posterior half of costa, variable in number and length, last transverse and cutting off a small black apical spot; two white dots on termen, lower larger: cilia grey, round apex dark fuscous, white at base above apex and on a bar beneath apex. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in January, June, and October (Pole); three specimens.

*Acrocercops mantica*, n. sp.

♂. 10 mm. Head yellow-whitish, sides of crown yellowish, face white with a blackish median bar. Palpi white, second joint dark grey except towards base, with tuft of projecting scales beneath. Antennæ white, pale greyish above. Thorax white, with yellow-ochreous spot on shoulders and small black posterior spot. (Abdomen broken.) Legs white, banded with ochreous-yellowish and ringed with dark grey. Forewings very narrowly elongate-lanceolate, acute; bright deep ochreous-yellow; costal edge blackish; base of dorsum white; three white discal blotches, first moderate, subtriangular, blackish-edged, before  $\frac{1}{4}$ , second elongate, extending from  $\frac{1}{4}$  to  $\frac{3}{5}$ , sometimes connected with first, third very elongate, extending from just beyond second to costa near apex; a slender inwardly oblique blackish streak from middle of costa to junction of first two blotches, preceded by a white costal dot; a fine white very oblique strigula from  $\frac{2}{3}$  of costa running into third blotch near apex, space between this and third blotch black, extended as a blackish streak between second and third blotches; a short white strigula along costa running into apex of third blotch, space between this and preceding strigula black; a white apical mark: cilia whitish-ochreous, towards tornus greyish, basal third yellow-ochreous, at apex with two blackish hooks. Hindwings and cilia grey.

Khasi Hills, in November; two specimens.

*Acrocercops cornicina*, n. sp.

♀. 9 mm. Head shining whitish-ochreous, face beneath a dark grey bar whitish. Palpi white, second joint blackish towards apex, beneath with a short

tuft of projecting scales. Antennæ greyish, beneath white. Thorax pale ochreous. Abdomen dark grey, beneath whitish becoming ochreous-tinged posteriorly, with lateral series of oblique dark grey stripes meeting beneath. Legs yellow-whitish, ringed with blackish. Forewings very narrowly elongate, parallel-sided, moderately pointed; bronzy-ochreous; marking silvery white, strongly edged with black; a rather broad fascia, followed by a second more oblique fascia united with it dorsally; a moderate inwardly oblique fascia from middle of costa, not reaching dorsum, posteriorly produced along costa as a short fine twice interrupted line; a rather broad very oblique fascia from dorsum before tornus to about  $\frac{1}{2}$  of costa, bifurcate on costal half, furcation filled with black; white apical and præapical costal dots: cilia whitish, basal third yellow-ochreous, above apex ochreous-whitish, with a black apical hook, towards tornus greyish. Hindwings and cilia grey.

Khasi Hills, in March; one specimen.

*Acrocercops macroplaca*, n. sp.

♂. 11 mm. Head metallic-shining whitish-ochreous, face more whitish, lower part mixed with grey. Palpi white, second joint black except towards base, beneath with tuft of long projecting mixed black and whitish scales. Antennæ whitish, dotted with grey. Thorax ochreous-whitish, mixed with dark fuscous. (Abdomen broken.) Legs whitish, banded with yellowish and ringed with blackish. Forewings very narrowly elongate, gradually pointed acute; brownish, towards costa anteriorly suffused with rather dark fuscous elsewhere towards costa yellowish-tinged; costal edge dark fuscous; an irregular narrow ochreous-white blackish-edged inwardly oblique fascia at  $\frac{1}{4}$ , narrowest towards costa; an elongate white black-edged spot along costa before middle, and a smaller similar one beyond middle; an elongate ochreous-whitish black-edged spot on fold at  $\frac{2}{3}$ ; an irregular elongate ochreous-whitish, black-edged mark in middle of disc, connected with anterior extremity of first costal spot; a rather thick whitish-ochreous black-edged streak rising from dorsum before tornus, then bent and continued to apex, becoming white posteriorly; a fine whitish line running from second costal spot beneath costa into this streak near apex: cilia greyish, round apex ochreous-whitish, towards base ochreous-yellowish, beneath apex with two blackish hooks. Hindwings and cilia grey.

Khasi Hills, in November; one specimen.

*Acrocercops melanoplecta*, n. sp.

♂ ♀. 9—10 mm. Head yellow-whitish. Palpi white, second joint with upper edge blackish, and beneath with rather long projecting scales towards apex mixed with blackish. Antennæ whitish spotted with grey. Thorax pale whitish-yellowish. Abdomen whitish-ochreous tinged with grey, beneath white with lateral series of oblique grey lines. Legs white, banded with pale ochreous and indistinctly ringed with blackish, apex of anterior and middle tibiae banded with black. Forewings very narrowly elongate-lanceolate, apex long-pointed, acute; yellowish-white, with scattered yellow-ochreous scales and





transverse strigulae; an elongate black spot along costa about  $\frac{1}{4}$ ; a very oblique triangular yellow-ochreous spot from costa about  $\frac{2}{3}$ , sometimes marked with a black dot; an elongate yellow-ochreous spot along apical portion of costa, marked anteriorly with a black dot: cilia yellow-whitish, at apex with two or three dark grey hooks. Hindwings and cilia grey or pale grey.

Khasi Hills, in October and March; seven specimens.

*Acrocercops plocamis*, n. sp.

♂. 10 mm. Head ochreous-whitish, face white. Palpi dark fuscous second joint white at base and apex, with tuft of projecting scales beneath, terminal joint white with two dark fuscous bands. Antennae dark fuscous, slenderly ringed with whitish. Thorax bronzy-ochreous, sprinkled with dark fuscous. (Abdomen broken.) Legs blackish, banded with white. Forewings very narrowly elongate, moderately pointed, acute; whitish-ochreous mostly suffused with ochreous-brownish; an undefined streak of black suffusion along costa; four narrow white transverse streaks edged with dark fuscous, first and second at  $\frac{1}{6}$  and  $\frac{1}{3}$ , slightly curved, direct, third median, obliquely curved, fourth at  $\frac{4}{5}$ , similar; beyond third is an outwardly oblique white dark-edged strigula from costa, and an oblique white mark below middle; on anterior half of wing are two or three dark fuscous striae parallel with and intermediate between the white streaks; a curved transverse silvery metallic dark-edged line before apex: cilia whitish, with blackish subbasal and median lines round apex, beneath tornus greyish. Hindwings dark grey; cilia grey.

Maskeliya, Ceylon, in April (Pole); one specimen.

*Acrocercops convoluta*, n. sp.

♂ ♀. 9–10 mm. Head whitish-ochreous mixed with grey, face white. Palpi ochreous-fuscous, second joint white at apex, with tuft of loose projecting scales beneath, terminal joint white with two dark fuscous rings. Antennae ochreous-whitish suffusedly ringed with dark fuscous. Thorax ochreous-whitish irrorated with ochreous and dark fuscous. Abdomen grey, beneath white, with lateral series of oblique dark fuscous streaks. Legs dark ochreous-fuscous ringed with white, bristles of posterior tibiae very short. Forewings very narrowly elongate, parallel-sided, short-pointed, apex obtuse; whitish-ochreous, with numerous strong dark fuscous transverse striae, angulated above middle, at first slightly, more acutely posteriorly; the coalescence of these tends to form a dark fuscous fascia before middle, and two pairs of oblique dark fuscous costal and dorsal spots posteriorly; alternating with these are oblique white costal and dorsal strigulae, variable and irregular, sometimes meeting, last dorsal long and curved; a curved oblique silvery transverse stria towards apex, beyond which is a white dot on costa; apex longitudinally brownish-ochreous, suffused with dark fuscous anteriorly; cilia grey, round apex grey-whitish with a black subbasal line and dark grey median line. Hindwings dark grey; cilia grey.

Maskeliya, Ceylon, in January, February, May, September, and October (Pole); eight specimens.

*Acrocercops strophala*, n. sp.

♀. 10—11 mm. Head whitish, crown mixed with light grey. Palpi fuscous mixed with blackish, second joint with tuft of loose projecting scales beneath, terminal joint white, anterior edge black except towards base. Antennæ dark grey. Thorax whitish mixed with dark fuscous. Abdomen grey-whitish, beneath white with lateral series of oblique dark fuscous streaks. Legs dark grey ringed with whitish. Forewings very narrowly elongate, parallel sided, short-pointed, apex obtuse; dark fuscous sprinkled with whitish, with four pairs or triplets of white transverse lines separated by black lines, first to somewhat sinuate-angulated, third more angulated, fourth anteapical, evenly curved; apical spot dark fuscous, costal and terminal edges finely white: cilia light fuscous, round apex whitish-suffused with dark fuscous subbasal shade and median line, beneath apex with black basal line. Hindwings grey; cilia light fuscous.

Maskeliya, Ceylon, in February: (Pole): Khasi Hills, in October; three specimens. Much like *convoluta*, but distinguished by different marking of terminal joint of palpi, and evenly curved anteapical white (not silvery) double lines.

*Acrocercops patricia*, n. sp.

♂ ♀. 13 mm. Head ochreous-whitish. Palpi bronzy mixed with dark fuscous, second joint with apex white, beneath with tuft of long projecting scales, terminal joint white with two oblique dark fuscous rings. Antennæ whitish suffusedly spotted with grey. Thorax whitish mixed with grey and dark fuscous. Abdomen grey, beneath white with lateral series of oblique dark fuscous stripes. Legs blackish, ringed with white. Forewings very narrowly elongate, parallel-sided, short-pointed, apex obtuse; ochreous-bronze, mixed with dark grey, especially towards margins; dorsal half suffused with whitish from base to  $\frac{1}{3}$ ; some undefined whitish striæ from costa about  $\frac{2}{3}$ ; three oblique black spots on posterior half of costa, separated by two angulated transverse fasciæ of three white striæ each, separated by dark fuscous lines, some of which are black on costa; beyond last black spot an angulated pair of white transverse striæ separated by a violet blackish line; apical area dark bronzy, with a small conspicuous white triangular spot on costa before apex: cilia grey, mixed with whitish, round apex with blackish subbasal shade and median line. Hindwings blackish grey; cilia grey.

Khasi Hills, in October; two specimens. Separable from the two preceding by the white costal anteapical spot.

*Acrocercops orientalis*, Stt.

*Coriscium orientale*, Stt., Trans. Ent. Soc. Lond. iii (n. ser.) 301.

Khasi Hills, in March. Recognisable by the two violet posterior striæ.

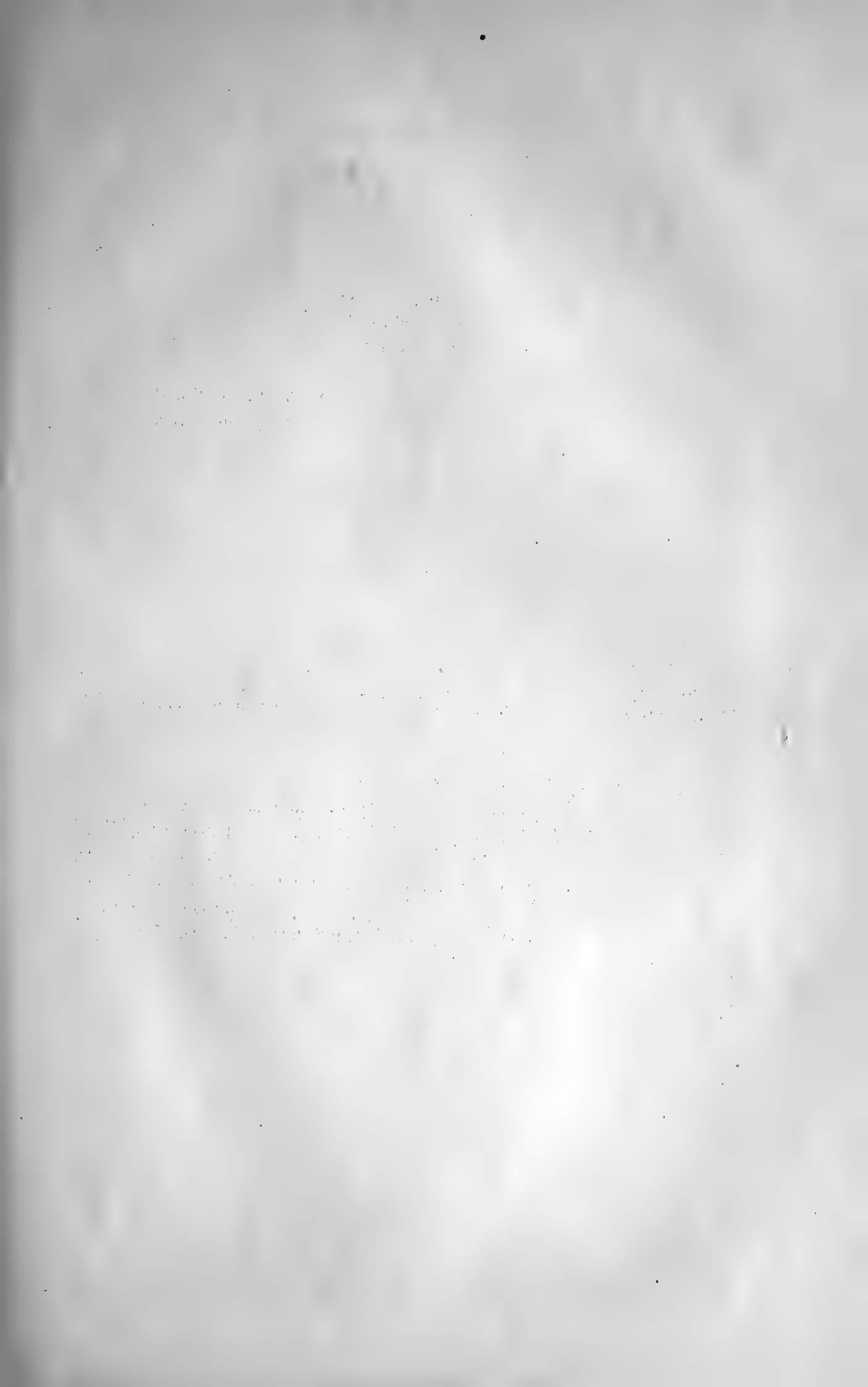
*Acrocercops ustulatella*, Stt.

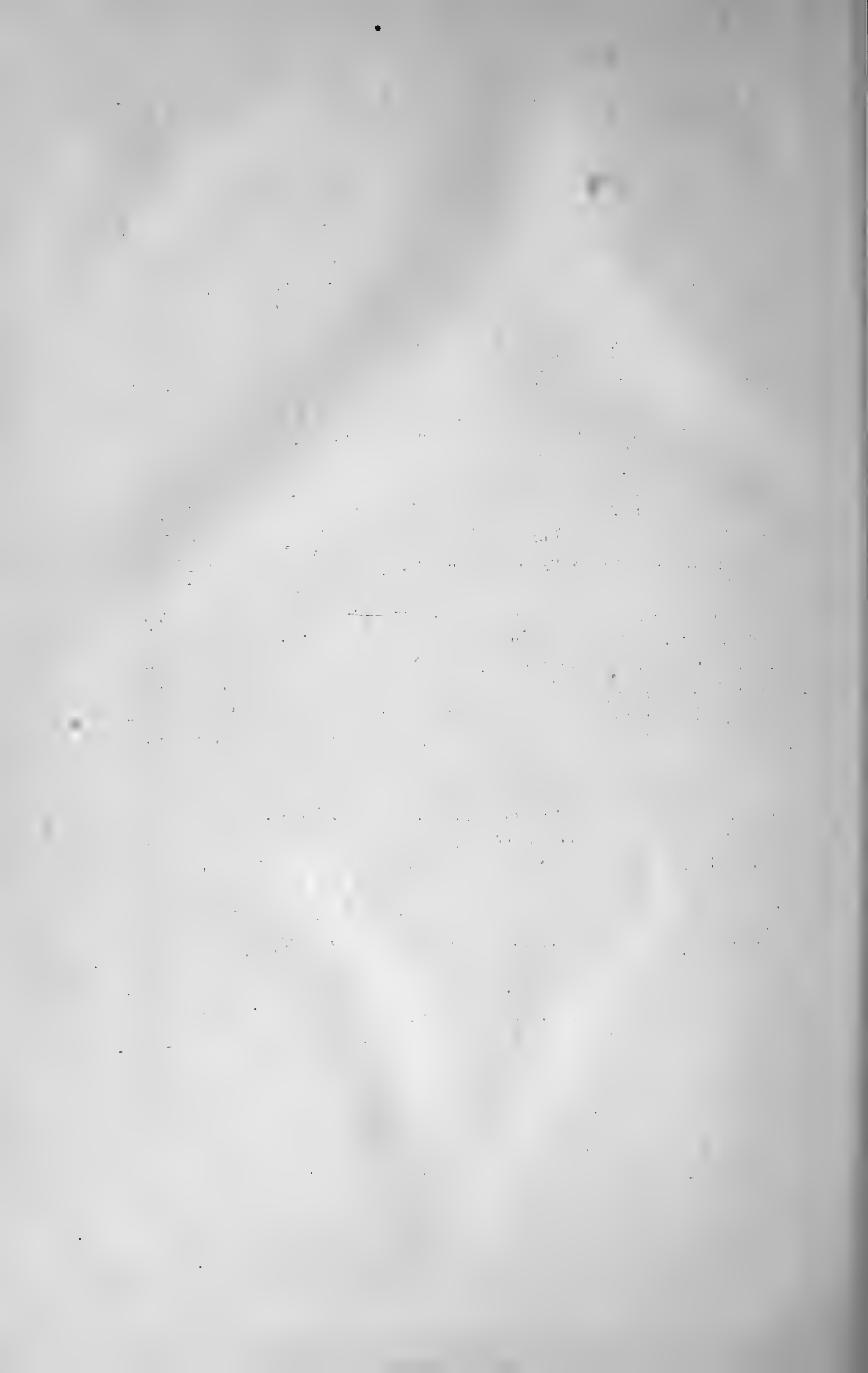
(*Gracilaria ustulatella*, Stt., Trans. Ent. Soc. Lond., v. (n. ser.), 121; *Conopomorpha isochorda*, Meyer., Journ. Bomb. N. H. Soc., XVII, 746.)

I have identified this from the type.

*Cyphosticha acrolitha*, n. sp.

♀. 2 mm. Head, thorax, and abdomen white, Palpi white, with subapical







ring on second joint, and two rings on terminal joint of dark fuscous irroration. Antennæ white, faintly ringed with pale fuscous. Legs white, banded with pale ochreous, first joint of anterior and middle tarsi with black apical band, middle tibiae dilated with long spatulate scales. Forewings very narrowly elongate-lanceolate; white; five moderate slightly oblique pale ochreous-yellowish fasciæ, sometimes fuscous-sprinkled, first basal, indistinct, third before middle, broadest; between the fasciæ are two or three yellowish strigulæ; a black transverse spot in disc at  $\frac{2}{3}$ , and another from costa close beyond it; some fine blackish irroration beyond these: cilia pale ochreous, towards tornus greyish-tinged, outer half paler and sprinkled with fuscous irroration. Hindwings rather dark grey; cilia pale grey.

Maskeliya, Ceylon, in March, June, and September (Pole); three specimens.

*Macarostola leucochorda*, n. sp.

♀. 9 mm. Head white. Palpi white, second joint smooth-scaled, with upper edge dark grey, terminal joint longer than second, with anterior edge blackish. Antennæ dark fuscous, beneath white. Thorax dark bronzy grey, posterior extremity white. Abdomen grey, beneath ochreous-whitish. Legs white, banded with grey and blackish. Forewings very narrowly elongate parallel-sided, moderately pointed; dark bronzy-grey; an evenly broad snow-white streak along dorsum from base almost to apex, its upper edge narrowly incised about middle of termen, its extremity dilated into a triangular projection, edged above by a short black anteriorly white margined costal mark close before apex of wing; three fine longitudinal white lines from about  $\frac{1}{3}$  to opposite incision of dorsal streak, uppermost costal, second curved up to costa anteriorly, lowest obsolescent anteriorly: cilia grey, white at base round apex and on a small spot below apex, at apex with a blackish hook. Hindwings rather dark grey; cilia grey.

N. Coorg, 3,500 feet, in June (Newcome); one specimen.

*Macarostola capnias*, n. sp.

♂ ♀. 6 mm. Head and thorax shining grey. Palpi whitish, second joint with black apical band, terminal joint shorter than second, blackish with white supramedian band. Antennæ dark grey. Abdomen rather dark grey, beneath whitish. Legs whitish, lined and banded with blackish. Forewings narrowly elongate-lanceolate, acute; rather dark ashy-grey, with a slight purplish tinge; apical area suffused with ochreous; a fine oblique transverse whitish line at  $\frac{2}{3}$ ; two pairs of whitish strigulæ on costa towards apex, last marginating a small round black apical spot: cilia grey, beneath apex with a patch of ochreous suffusion, round apex with two blackish lines. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in March (Pole); two specimens.

*Macarostola perisphena*, Meyr.

(*Gracilaria perisphena*, Meyr., Journ. Bomb. N. H. Soc., XVI, 613.)

I have this also from Diyatalawa, Ceylon, and the Nilgiri Hills, in May and August.

*Macarostola paradisica*, n. sp.

♂. 11 mm. Head ochreous-whitish, back of crown and sides of face crimson-pink. Palpi smooth-scaled, crimson-pink, terminal joint longer than second, whitish. Antennæ whitish-ochreous. Thorax whitish, anteriorly crimson-pink. Abdomen light grey, beneath white with lateral series of oblique grey lines edged posteriorly with ochreous-yellowish. Legs white, partially suffused with yellowish, and ringed with blackish-grey. Forewings very narrowly elongate, parallel-sided, short pointed, apex obtuse; light crimson; base narrowly pale yellowish; a moderate subquadrate yellow spot on dorsum towards base; two elongate yellow spots on dorsum before and beyond middle of wing, touching above so as to enclose a small crimson spot on dorsum; a pale yellowish streak from costa at  $\frac{1}{4}$ , at first transverse, angulated in disc and continued longitudinally to  $\frac{1}{2}$ ; an oblique pale yellowish streak from costa before middle, reaching nearly half across wing; a longitudinal pale yellowish mark in disc at  $\frac{2}{3}$ ; an elongate yellow spot along termen beyond tornus; a transverse black mark near apex, edged anteriorly towards costa with yellow suffusion: cilia grey, round apex yellowish, base on upper part of termen crimson. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in October (Pole); one specimen.

*Macarostola hieranthes*, Meyr.

(*Coriscium hieranthes*, Meyr., Journ. Bomb. N. H. Soc., XVII, 745.)

In this species the second joint of palpi is shortly tufted beneath, as is implied by the reference to the genus *coriscium*, which I have now suppressed.

*Macarostola thriambica*, Meyr.

(*Gracilaria thriambica*, Meyr., Journ. Bomb. N. H. Soc., XVII, 745.)

Second joint of palpi smooth-scaled.

*Macarostola coccinea*, Wals.

(*Gracilaria coccinea*, Wals., Swinh. Cat. Het., ii, 576.)

I do not possess this, but it is probably referable here.

*Macarostola callischema*, n. sp.

♂. 9 mm. Head yellow-whitish, sides of face crimson. Palpi smooth-scaled, crimson, terminal joint longer than second, whitish. Antennæ ochreous-whitish. Thorax crimson, posteriorly pale yellowish. Abdomen pale grey, towards apex yellow-whitish, beneath white, with lateral series of oblique grey lines edged posteriorly with whitish-yellowish. Legs whitish ringed with blackish grey, anterior femora crimson-tinged. Forewings very narrowly elongate, parallel-sided, short-pointed; crimson-red; markings pale whitish-yellowish, becoming yellow towards dorsum; three rather oblique rounded-triangular dorsal spots reaching more than half across wing, apex of third produced posteriorly as a longitudinal streak in disc; between first and second is a subdorsal dot; an elongate anteriorly dilated spot beneath costa before middle and a sinuate streak beneath central portion of costa, anteriorly resting on costa and almost meeting preceding spot; minute costal dots at  $\frac{1}{2}$ ,  $\frac{2}{3}$ , and beyond  $\frac{3}{4}$ ; a narrow oblique anteapical fascia, rather dilated towards





termen : cilia grey, round apex yellowish with base crimson. Hindwings rather dark grey ; cilia grey.

Khasi Hills, in September ; one specimen.

*Macarostola tegulata*, n. sp.

♂. 10 mm. Head whitish, sides of face crimson-pink, crown partially yellow-suffused, collar crimson-pink. Palpi smooth-scaled, crimson-pink, terminal joint and apex of second white, terminal longer than second. Antennæ ochreous-whitish. Thorax crimson, posteriorly yellow with a crimson spot. Abdomen dark grey, beneath whitish with lateral series of oblique dark grey lines. Legs white, tarsi spotted with blackish, anterior and middle femora crimson, anterior and middle tibiæ banded with crimson. Forewings very narrowly elongate, parallel-sided, rather short-pointed, apex round-pointed ; crimson, small yellow spots on costa and dorsum near base, and two others longitudinally placed beneath costa ; three broad-triangular yellow dorsal spots, hardly reaching half across wing ; strong oblique yellow streaks from costa at  $\frac{1}{4}$  and  $\frac{1}{2}$ , second reaching more than half across wing, between these a small yellow subcostal spot ; beyond the second are five similar approximated yellow or yellow-whitish streaks diminishing in length posteriorly, last extremely short, separated by a few black scales ; apical area suffused with brownish-ochreous, on termen greyish-tinged ; a minute black apical dot : cilia crimson, towards tornus grey, round apex marked with yellowish, and with a black median spot opposite apex. Hindwings rather dark grey ; cilia grey.

Khasi Hills, in July ; one specimen.

*Gracilaria octopunctata*, Turn.

(*Gracilaria octopunctata*, Turn., Trans. Roy. Soc. S. Austr. 1894, 123.)

Pusa, Bengal (Lefroy) ; Khasi Hills ; N. Coorg, 3,500 feet (Newcome) ; in August and September. Also occurs in Australia.

*Gracilaria parasticta*, n. sp.

♀. 15 mm. Head ochreous-whitish, face pale-ochreous mixed with brownish. Palpi pale ochreous mostly suffused with fuscous. Antennæ greyish-ochreous suffusedly ringed with dark fuscous. Thorax brown, with a broad whitish dorsal stripe. (Abdomen broken.) Anterior and middle femora and tibiæ suffused with dark fuscous, tarsi whitish, posterior legs pale ochreous sprinkled with dark fuscous. Forewings very narrowly elongate, rather long-pointed, acute ; rather deep ochreous-brown, with some fine scattered dark fuscous scales ; a narrow ill-defined pale ochreous streak along dorsum from base to tornus ; plical and first discal stigmata large, dark fuscous, plical rather obliquely before first discal : cilia brown, on upper portion of termen with outer half paler and irrorated with blackish, towards tornus grey. Hindwings rather dark grey, cilia grey.

Khasi Hills, in February ; one specimen.

*Gracilaria argalea*, n. sp.

♂. 9—10 mm. Head and thorax grey, face paler or whitish. Palpi whitish, second joint sprinkled with blackish-grey towards apex, terminal joint with base

and a subapical band blackish. Antennæ grey, obscurely pale-ringed. Abdomen grey, beneath whitish. Anterior and middle femora and tibiæ blackish, tarsi white, posterior tibiæ greyish, tarsi white ringed with black. Forewings very narrowly elongate, moderately pointed, apex round pointed; dark purple-fuscous irregularly irrorated throughout with whitish, most distinctly spotted on middle of costa: cilia grey, round apex with several dark-fuscous lines. Hindwings rather dark grey; cilia grey.

Maskeliya, Ceylon, in January (Pole); Khasi Hills, in August; two specimens.

*Gracilaria syrphetias*, Meyr.

(*Gracilaria syrphetias*, Meyr. Journ. Bombay N. H. Soc. XVII, 984.)

Also from Dodanduwa and Nuwara Eliya, Ceylon, in April and September (Fletcher); some specimens reaching 17 mm. in expanse.

*Gracilaria prismatica*, Meyr.

(*Gracilaria prismatica*, Meyr., Journ. Bombay N. H. Soc. XVII, 983.)

Also taken in January.

*Gracilaria chalcanthes*, Meyr.

(*Gracilaria chalcanthes*, Meyr., Trans. Ent. Soc., Lond., 1894, 25.)

Hiterto only from Burma.

*Gracilaria isochrysa*, n. sp.

♀. 14 mm. Head shining coppery-bronze, face silvery-white. Palpi whitish, second joint with a few blackish scales, apex of terminal joint blackish. Antennæ whitish, ringed with grey. Thorax shining coppery-bronze. Abdomen dark grey, beneath yellow-whitish. Legs whitish (anterior pair broken), middle femora and tibiæ reddish-coppery, redder beneath, posterior tibiæ infuscated above. Forewings very narrowly elongate, gradually narrowed posteriorly, pointed, apex acute; coppery-reddish, with dark fuscous strigulae suffused with deep shining blue; a broad bright brassy-yellow costal streak from near base to apex, covering rather more than half the wing: cilia grey, beneath apex reddish towards base, on costa pale yellow. Hindwings and cilia rather dark grey.

Khasi Hills, in June; one specimen.

*Gracilaria zachrysa*, Meyr.

(*Gracilaria zachrysa*, Meyr., Journ. Bombay N. H. Soc. XVII, 983.)

Also in November.

*Gracilaria euryptera*, n. sp.

♀. 15 mm. Head violet-fuscous, face and forehead pale yellowish. Palpi moderate, light yellowish. Antennæ dark grey, ringed with whitish. Thorax dark violet-fuscous. Abdomen dark grey, beneath light yellow. Legs pale yellowish, anterior and middle femora and tibiæ and apical half of posterior femora dark violet-fuscous, posterior tibiæ suffused with violet fuscous. Forewings elongate, narrow, moderately pointed; deep fuscous-purple; a broad triangular yellow patch extending over central third of costa, its apex reaching dorsum: cilia fuscous, round apex irrorated with blackish towards tips. Hindwings dark grey; cilia grey.



Cracilaria Soyella, Van Der. = alrotherme, Meyer



Pattipola, Ceylon, in May (Alston); one specimen. Broader-winged than any species of the genus known to me; the wings are relatively twice as broad as in *G. theivora*, its nearest ally.

*Gracilaria theivora*, Wals.

(*Gracilaria theivora*, Wals., Ind. Mus. Not. ii, 49.)

Maskeliya and Madulsima, Ceylon, from April to January, common (Pole Green).

*Gracilaria megulotis*, n. sp.

♂ ♀. 10—12 mm. Head pale ochreous or greyish-ochreous, sometimes brownish-tinged on crown, scales of forehead somewhat overhanging. Palpi ochreous irrorated with dark-fuscous. Antennæ dark grey, obscurely pale-ringed, basal joint-clothed in front with large projecting tuft of ochreous and dark fuscous scales. Thorax brownish-ochreous tinged with violet. Abdomen dark fuscous, beneath yellow. Anterior and middle femora and tibiæ violet-ochreous irrorated with blackish, tarsi white banded with yellow-ochreous, posterior legs ochreous, tibiæ tinged with violet-fuscous. Forewings very narrowly elongate, moderately pointed; apex round-pointed; shining violet-ochreous, more or less strigulated finely with fuscous; a triangular costal patch more or less suffused with pale yellowish towards costa, its sides indicated by series of small black raised scale tufts, anterior only partially extending on costa from  $\frac{2}{7}$  to  $\frac{4}{7}$ , and reaching dorsum, where its apex forms a small scale-projection; two or three other small scattered black scale tufts, and two or three scattered black scales on dorsal margin in cilia; posterior area of costa more or less widely suffused with pale yellowish; a transverse bar of deep purple suffusion before apex: cilia pale ochreous irrorated with dark fuscous, sometimes suffused with bright fulvous towards base, towards tornus grey. Hindwings and cilia dark grey.

Khasi Hills, in March; four specimens. Specially characterised by the large basal tuft of antennæ.

*Gracilaria acrotherma*, n. sp.

♂ ♀. 8—12 mm. Head brownish, face whitish-ochreous. Palpi ochreous-whitish, tip sometimes dark fuscous. Antennæ grey. Thorax brownish. Abdomen dark grey, beneath whitish-ochreous. Anterior and middle femora and tibiæ dark purple-fuscous mixed with blackish, tarsi whitish, posterior legs whitish-ochreous. Forewings very narrowly elongate, moderately pointed, acute; ochreous-brownish tinged with violet, paler and more yellowish-tinged towards costa posteriorly; about eight minute black dots on costa from about  $\frac{1}{3}$  to  $\frac{2}{3}$ ; a few black specks in middle of disc; an undefined patch of dark fuscous irroration towards apex, sometimes extended as a cloudy streak to middle of disc: cilia grey, round apex with several blackish lines. Hindwings dark grey; cilia grey.

Colombo, four specimens bred in October, from larvæ mining leaves of *Cajanus indicus* (Green); Hakgala, Ceylon, two specimens bred in March and April from larvæ on *Atylosia Candollei*, drawing together terminal leaves to

form a chamber (Green). The two food-plants are closely related, *Leguminosæ*; the apparent difference in habits is curious, but the two sets of specimens seem exactly alike in characters, except that the *Atylosia*-feeders are larger.

*Gracilaria dogmatica*, n. sp.

♂ ♀. 7—9 mm. Head and thorax light ochreous-brown, with two broad metallic-grey longitudinal streaks, scales of crown projecting between antennæ, face white. Palpi white, terminal joint thickened with scales towards apex. Antennæ grey obscurely ringed with whitish. Abdomen grey, with a dark shining grey lateral stripe, beneath pale yellow. Legs densely scaled, ochreous-white, anterior and middle femora and tibiæ blackish, posterior tibiæ more or less infuscated above. Forewings very narrowly elongate, moderately pointed, acute; light ochreous-brown, suffused with yellow-ochreous on margins posteriorly; three small groups of blackish scales on dorsum; a broad whitish-yellowish triangular patch extending over central third of costa, and reaching  $\frac{3}{4}$  across wing, edged with a few blackish scales; some undefined dark-fuscous suffusion towards apex: cilia grey, round apex with basal third yellow-ochreous, rest with several rows of black points. Hindwings dark grey; cilia grey.

Trincomali, Puttalam, Ambulangoda, Galle, Hambantota, Peradeniya, and Diyatalawa, Ceylon, from September to November, February to April, and in June (Pole, Fletcher, Green); eight specimens.

*Gracilaria oxydelta*, n. sp.

♀. 8 mm. Head, thorax, and abdomen rather dark violet-fuscous, face pale yellowish. Palpi ochreous-whitish, irregularly irrorated with blackish, terminal joint thickened with scales shortly projecting beneath towards apex. Antennæ dark fuscous ringed with whitish. Anterior and middle legs dark violet-fuscous, tarsi white except at tips, posterior legs ochreous-whitish irrorated with dark fuscous. Forewings very narrowly elongate, short-pointed, dorsum with four rather broad scale-projections; violet-fuscous irrorated with dark fuscous; a clear pale yellow narrow or moderately broad triangular patch, resting on costa before middle, nearly reaching dorsum, edged with a few black scales, its costal margin marked with two minute black dots; some undefined spots of ochreous-brownish suffusion towards apex: cilia fuscous, round apex brownish with several rows of black points. Hindwings rather dark grey; cilia grey.

N. Coorg, 3,500 feet, in May (Newcome); two specimens.

*Gracilaria hemiconis*, Meyr.

(*Antiolopha hemiconis*, Meyr., Trans. Ent. Soc. Lond., (1894, 25.)

I have suppressed the genus *Antiolopha*, finding the scaling of the palpi an unreliable character in this group.

*Gracilaria metadoxa*, n. sp.

♂ ♀. 10—11 mm. Head yellowish-white, scales of crown projecting over forehead. Palpi yellow-whitish, more or less sprinkled with grey, second joint with scales projecting beneath at apex, terminal joint thickened with scales forming a small subapical projection in front. Antennæ yellow-whitish ringed





Nov. 15, 1908.]

*Indian Micro-lepidoptera.*

with grey. Thorax ochreous-whitish, shoulders brownish-tinged. Abdomen whitish-ochreous, more or less suffused with grey above. Legs ochreous-whitish, anterior and middle femora and tibiæ infuscated and spotted with dark grey, posterior pair more or less irrorated with fuscous. Forewings very narrowly elongate, rather short-pointed, apex obtuse; dorsum with three strong raised scale-projections; light violet-brown, sometimes partially irrorated with darker brown; dorsal scale-projections mixed with blackish; base of dorsum narrowly pale yellowish; a slender oblique pale yellowish streak from costa at  $\frac{1}{4}$ , nearly reaching dorsum, edged anteriorly with yellow-brown suffusion; a triangular patch extending over central fifth of costa outlined first with a pale yellowish streak partially edged externally on posterior margin with blackish and then with yellow-brown suffusion, reaching  $\frac{3}{4}$  across wing; a pale yellowish dot in disc at  $\frac{2}{3}$ ; a pale yellowish streak from  $\frac{1}{2}$  of costa to tornus, sometimes interrupted into three small spots; a small blackish dot towards apex, above and below which are pale yellowish dots on margin: cilia whitish-ochreous, with two or three rows of blackish-grey points, beneath tornus grey. Hindwings and cilia grey.

Khasi Hills, in October and November; ten specimens.

*Gracilaria auricilla*, Stt.

(*Gracilaria auricilla*, Stt., Trans. Ent. Soc. Lond., v. (n. ser.), 120.)

I have not obtained this species.

## APPENDIX.

The species described (very inadequately) by Nietner under the name of *Gracilaria coffeifoliella* does not seem to belong to the *Gracilaria* group at all, but I have not succeeded in identifying it. The larva is said to be common as a leaf-miner on coffee; perhaps some collector could search specially for it.

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the same as the first.

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[From the JOURNAL OF THE BOMBAY NATURAL HISTORY SOCIETY,  
August 15, 1909.]

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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

E. MEYRICK, B.A., F.R.S., F.Z.S.

IX.

(Continued from page 832 of Volume XVIII.)

### COSMOPTERYGIDÆ.

I have now broken up the family *Elachistidæ* as formerly constituted, and the family *Cosmopterygidæ* includes those genera with long sickle-shaped palpi and veins 7 and 8 of the forewings stalked, 7 terminating in costa, such as *Cosmopteryx*, *Stigmatophora*, and *Limnæcia*; in my last paper I termed this restricted group *Elachistidæ*, but now find that *Elachista* is referable elsewhere.

*Zaratha* Walk.

A genus of a few tropical species, having the antennæ much longer than forewings.

*Zaratha prosarista*, n. sp.

♂. 16-18 mm. Head grey with indigo-blue reflections, face bluish-silvery-white. Palpi whitish, anterior edge of terminal joint dark fuscous. Antennæ dark fuscous, becoming yellowish on sides and whitish beneath. Thorax dark grey, shoulders suffused with ochreous, beneath pearly white. Abdomen bronzy-ochreous, suffusedly irrorated with dark fuscous, beneath white, anal tuft ochreous, on sides white. Forewings linear, acute; dark fuscous, slightly purplish-tinged; a white streak along costa from base to  $\frac{2}{3}$ , suffused with yellowish towards base, leaving extreme costal edge dark fuscous towards base; lower edge of this streak at  $\frac{1}{3}$  with a projection followed by an indentation and almost confluent with a suffused yellow-whitish spot on dorsum rather beyond it; a slender yellowish streak along fold throughout; a silvery-blue-metallic line above this throughout, extended along termen to apex, where it meets a silvery-blue-metallic subcostal line from  $\frac{2}{3}$  to apex; an ochreous-yellow streak along lower margin of costal streak from indentation onwards extended between the two blue lines to near apex: cilia rather dark fuscous tinged with purplish, on apical third of costa white more or less wholly suffused

with ochreous-yellow. Hindwings dark fuscous ; an irregular elongate hyaline basal patch, divided into three spots by dark fuscous margins of cell ; cilia dark fuscous.

Khasis, from October to March ; nine specimens.

*Zaratha dicellias*, n. sp.

♀. 20-21 mm. Head prismatic bronzy-fuscous, sides of crown light ochreous-yellow. Palpi ochreous-yellowish, anterior edge of terminal joint dark fuscous. Antennæ fuscous, beneath yellowish. Thorax dark bronzy-fuscous with an ochreous-yellowish stripe on each side of back, beneath pearly white. Abdomen rather dark fuscous, beneath whitish-irrorated, and with broad whitish segmental bands. Forewings linear, acute ; dark fuscous, slightly purplish-tinged ; a light ochreous-yellowish streak along fold from base to middle, thence sinuate upwards, becoming thicker and proceeding close beneath costa to apex, from its lower edge beyond middle sending an equally thick branch to middle of termen, slenderly connected with upper branch on termen ; between the two branches is a fine silvery-blue-metallic line : cilia dark fuscous tinged with purplish, on costa yellowish at base. Hindwings dark fuscous, obscurely subhyaline towards base in and beneath cell ; cilia dark fuscous.

Khasis, in August ; two specimens.

*Cosmopteryx*, Hb.

The species of this genus, notwithstanding their distinct and beautiful colouring, are very closely allied together, and require careful observation to perceive their distinctive characters. Twenty species are here recorded and to assist determination a tabulation of these is given ; but it must be remembered that other closely allied forms doubtless exist ; the only other Indian species described is *asiatica* Stt., which I have not included as I do not yet possess a specimen, though I have examined the type and consider it distinct from all these ; the two other species doubtfully referred by Stainton to *Cosmopteryx* do not belong to the genus.

- |    |  |                    |
|----|--|--------------------|
| 1. | Forewings with orange subcostal streak from base ... | <i>anadoxa</i> .   |
|    | „ without such streak ... ..                         | 2                  |
| 2. | Forewings with golden-metallic costal streak to-     |                    |
|    | wards apex ... ..                                    | <i>panopla</i> .   |
|    | „ without such streak ... ..                         | 3                  |
| 3. | Median line reaching band ... ..                     | 4                  |
|    | „ not „ „ ... ..                                     | 6                  |
| 4. | Subdorsal line reaching base ... ..                  | 5                  |
|    | „ not „ „ ... ..                                     | <i>hamifera</i> .  |
| 5. | Forewings with costal edge white towards base ...    | <i>ingeniosa</i> . |
|    | „ „ not „ „ ... ..                                   | <i>artifica</i> .  |
| 6. | Forewings ochreous-bronzy ... ..                     | <i>latifica</i> .  |
|    | „ dark fuscous or blackish ... ..                    | 7                  |
| 7. | Transverse band yellow ... ..                        | 8                  |
|    | „ „ orange ... ..                                    | 10                 |





8.	Median line very nearly reaching base	...	...	9
	"    not nearly reaching base	...	...	<i>manipularis.</i>
9.	Abdomen orange	...	...	<i>aculeata.</i>
	"    bronzy-grey	...	...	<i>spiculata.</i>
10.	Apical joint of antennæ blackish	...	...	11
	"    "    white	...	...	12
11.	Apical white line nearly complete	..	...	<i>mimetis.</i>
	"    "    reduced to a very short dash	...	...	<i>erethista.</i>
12.	Posterior metallic fascia entire	...	...	<i>holophracta.</i>
	"    "    interrupted	..	...	13
13.	Median white line reaching base	...	...	14
	"    "    not reaching base	...	...	15
14.	Subcostal and median lines confluent posteriorly	...	...	<i>vexillaris.</i>
	"    "    separate	...	...	<i>licnura.</i>
15.	Postmedian band bright orange	...	...	16
	"    "    dull fuscous-orange	...	...	<i>cyclopæa.</i>
16.	Median white line long	...	...	<i>paltophanes.</i>
	"    "    very short	...	...	17
17.	Costal edge shortly white before band	...	...	<i>basilisca.</i>
	"    not    "	...	...	18
18.	Forewings with short metallic anteapical dash	...	...	19
	"    without such dash	...	...	<i>artemidora.</i>
19.	Forewings with white apical dot in cilia	...	...	<i>catharacma.</i>
	"    without such dot	...	...	<i>belouacma.</i>

*Cosmopteryx anadoxa*, n. sp.

♀. 10 mm. Head bronzy-fuscous, with fine whitish lines above eyes, face paler. Palpi whitish lined with blackish. Antennæ blackish lined with white on basal half, apical six joints white except partially beneath, then about eight joints white with black tips. Thorax bronzy-fuscous. Abdomen rather dark fuscous, sides coppery-golden towards base. Posterior tibiæ blackish, with white median and apical rings and a silvery-metallic ring between them. Forewings very narrowly lanceolate, widest near base, apex very slenderly long-produced, caudate; bronzy-fuscous; a rather broad orange streak immediately beneath costa from base to  $\frac{1}{4}$ , its base golden-metallic; a violet-golden-metallic streak from costa at  $\frac{1}{5}$ , curving round apex of orange streak and extended obliquely across wing to beyond fold but not reaching dorsum; costal area between this and next fascia blackish as far as fold; a violet-golden-metallic vertical fascia in middle, edged with blackish posteriorly, and a slightly oblique violet-golden-metallic fascia beyond  $\frac{2}{3}$ , strongly blackish-edged anteriorly, space between these suffused with dull orange towards costa; from middle of last fascia an orange-yellowish sinuate line extends to apex: cilia dark fuscous with a white costal spot on posterior fascia. Hindwings and cilia dark fuscous.

Nilgiris, 3,500 feet, in May (Andrewes); one specimen.

*Cosmopteryx panopla*, n. sp.

♂. 9 mm. Head dark shining bronze, face lighter, with pale golden-metallic lines above eyes. Palpi dark fuscous, terminal joint suffused with whitish except towards base. Antennæ dark fuscous, with two or three scattered whitish rings towards apex (one antenna has some broad whitish suffusion below middle, perhaps an abnormality, as the other does not show it). Thorax dark shining bronze (defaced). Abdomen dark fuscous, on sides bright brassy-metallic. Posterior tibiæ blackish, with silvery-white median, subapical, and apical rings. Forewings very narrowly lanceolate, apex narrowly long-produced, caudate; blackish; two broad partially confluent golden-metallic longitudinal streaks occupying nearly all basal area, upper extending to near  $\frac{1}{3}$ , lower to  $\frac{2}{5}$ ; a vertical violet-golden-metallic fascia slightly before middle, near beyond which is a subtriangular orange patch on costa; an erect transverse violet-golden-metallic spot on dorsum at  $\frac{3}{5}$ , whence proceeds a golden-metallic sinuate line to apex; a golden-metallic costal streak extending from close beyond orange patch half way to apex: cilia bronzy-blackish. Hindwings and cilia dark fuscous.

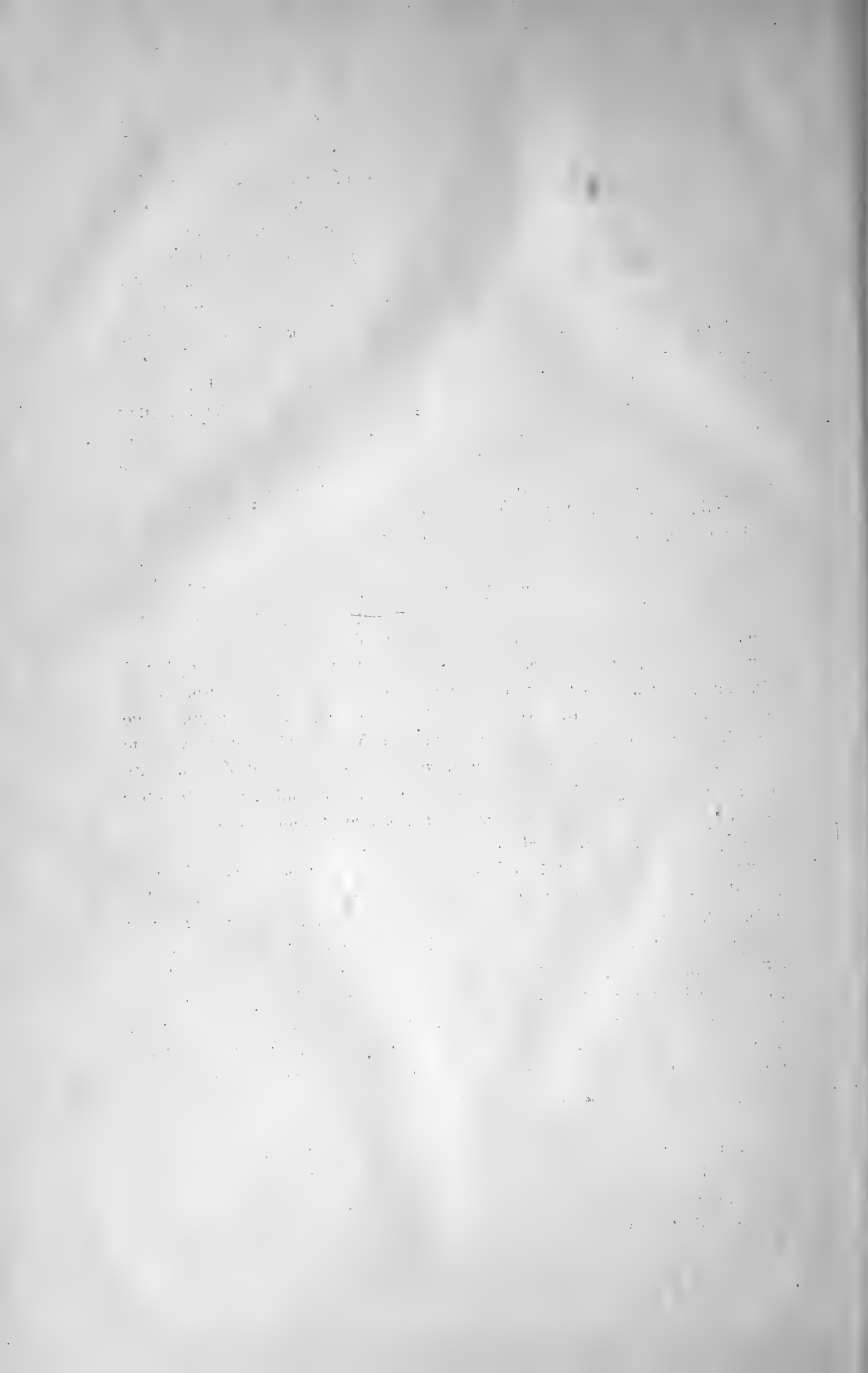
Hakgala, Ceylon, in April (Green); one specimen.

*Cosmopteryx cyclopæa*, n. sp.

♂. 8 mm. Head dark shining bronze, crown with three fine white lines, face light bronze. Palpi white lined with black. Antennæ blackish, dotted and towards base lined with white, four apical joints white, then five blackish, one white, one blackish, one white. Thorax dark bronzy-fuscous, with three fine silvery-white lines. Abdomen rather dark bronzy-fuscous, apex whitish-ochreous. Posterior tibiæ blackish, with silvery-white median and apical rings, and a silvery-metallic ring between these. Forewings very narrowly lanceolate, somewhat wider near base, apex slenderly long-produced, caudate; blackish; dorsal edge silvery-white towards base; three fine silvery lines before  $\frac{1}{4}$ , subcostal longest but not nearly reaching base, median intermediate in length, subdorsal very short, posterior extremities of all three equidistant from base; a broad dull fuscous-orange postmedian band, suffused with darker fuscous on costa and dorsum, anteriorly margined by a vertical violet-golden-metallic fascia, and posteriorly by two vertical-transverse violet-golden-metallic spots edged anteriorly by a few black scales, lower wholly anterior and not meeting upper if produced, the fuscous-orange colour projecting beneath but not beyond upper; a fine silvery-metallic dash midway between this and apex, and a short shining white line in apical cilia marked also on under surface: cilia otherwise dark fuscous, with a white costal spot on posterior margin of band. Hindwings and cilia dark grey.

N. Coorg, 3,500 feet, in February (Newcome); one specimen. This is the species which seems to approach nearest to *asiatica* Stt., from which however it is separated by the peculiar fuscous-orange band, and the metallic antecapical line not running into the apex; the arrangement of the metallic lines in the basal area is also characteristic.







*Cosmopteryx erethista*, n. sp.

♂ ♀. 8-9 mm. Head dark shining bronze, with a white line above each eye, face bronzy-whitish. Palpi whitish lined with blackish. Antennæ blackish, towards base lined with whitish, fourth and tenth joints whitish. Thorax dark shining bronze, with three fine white lines. Abdomen dark fuscous. Posterior tibiæ black with white median and apical rings. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate; blackish; dorsal edge white towards base; a transverse series of three very short silvery-white dashes about  $\frac{1}{3}$ , subcostal rather oblique and somewhat anterior to the other two; a broad orange postmedian transverse band irregularly sprinkled or mixed with blackish, edged by two strong violet-golden-metallic fasciæ, anterior vertical, blackish-edged posteriorly, posterior slightly oblique, blackish-edged anteriorly; a very short white dash midway between band and apex; a small white spot in apical cilia, marked also on undersurface: cilia blackish, with a white costal spot on posterior fascia. Hindwings and cilia dark fuscous.

Khasis, in November; two specimens. Characterised by the absence of the usual white apical band of antennæ, black admixture of the orange band, entire posterior metallic fascia, and very short basal streaks.

*Cosmopteryx holophracta*, n. sp.

♂ ♀. 10-11 mm. Head dark bronze, with a white line above each eye, face silvery. Palpi white lined with blackish. Antennæ black, dotted and lined with white, three apical joints white, then five black, one white, one black, one white. Thorax dark bronze, with three fine white lines. Abdomen dark fuscous. Posterior tibiæ black with white median and apical rings, and a silvery ring between these. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate; blackish; dorsal edge silvery-white towards base; a short fine silvery subcostal dash about  $\frac{1}{3}$ ; a very fine silvery-white median line from base to about  $\frac{1}{3}$ ; a short fine silvery-white dash beneath posterior portion of this; a broad orange postmedian transverse band, edged anteriorly by a vertical violet-golden-metallic fascia black-edged posteriorly, and posteriorly by a rather oblique violet-golden-metallic fascia black-edged anteriorly; a pale violet-golden-metallic streak extending from before middle of apical area to apex; a small white spot in apical cilia, marked also on undersurface: cilia blackish-grey, with a costal white spot on posterior fascia. Hindwings and cilia dark fuscous.

Khasis, in May and August; two specimens. Distinguished from all the orange-banded species of the region by the combination of white arex of antennæ and entire posterior fascia.

*Cosmopteryx licnura*, n. sp.

♂ ♀. 9-11 mm. Head dark bronze, with a white line above each eye, face silvery. Palpi white lined with blackish. Antennæ black, dotted and lined with white, three apical joints white, then five black, one white, one black, two white. Thorax dark bronze, with three fine white lines. Abdomen dark fuscous, in ♂ with very large whitish-ochreous anal valves, as long as thorax.

Posterior tibiae black with white median and apical rings, and a silvery ring between these. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate; blackish; dorsal edge silvery-white towards base; three fine white lines on basal area, subcostal from base to  $\frac{1}{4}$ , rather oblique, median from base to  $\frac{1}{3}$ , subdorsal rather shorter than half median, ending equally with it; a broad orange postmedian transverse band, margined anteriorly by a vertical violet-golden-metallic fascia followed above middle by a black dot, and posteriorly by an oblique violet-golden-metallic fascia preceded by a few black scales and interrupted above middle by a short linear orange projection; a very short white dash midway between band and apex; a white dash in apical cilia, marked also on undersurface: cilia dark fuscous, with a white costal spot on posterior fascia. Hindwings and cilia dark fuscous.

Khasis, from May to September; ten specimens. Differs from all others by the exceptionally enlarged anal valves of ♂, which are not conspicuous in any other species; distinguished also from all the nearly allied species by the combination of median line reaching base, and apical line reduced to a short white dash.

*Cosmopteryx artemidora*, n. sp.

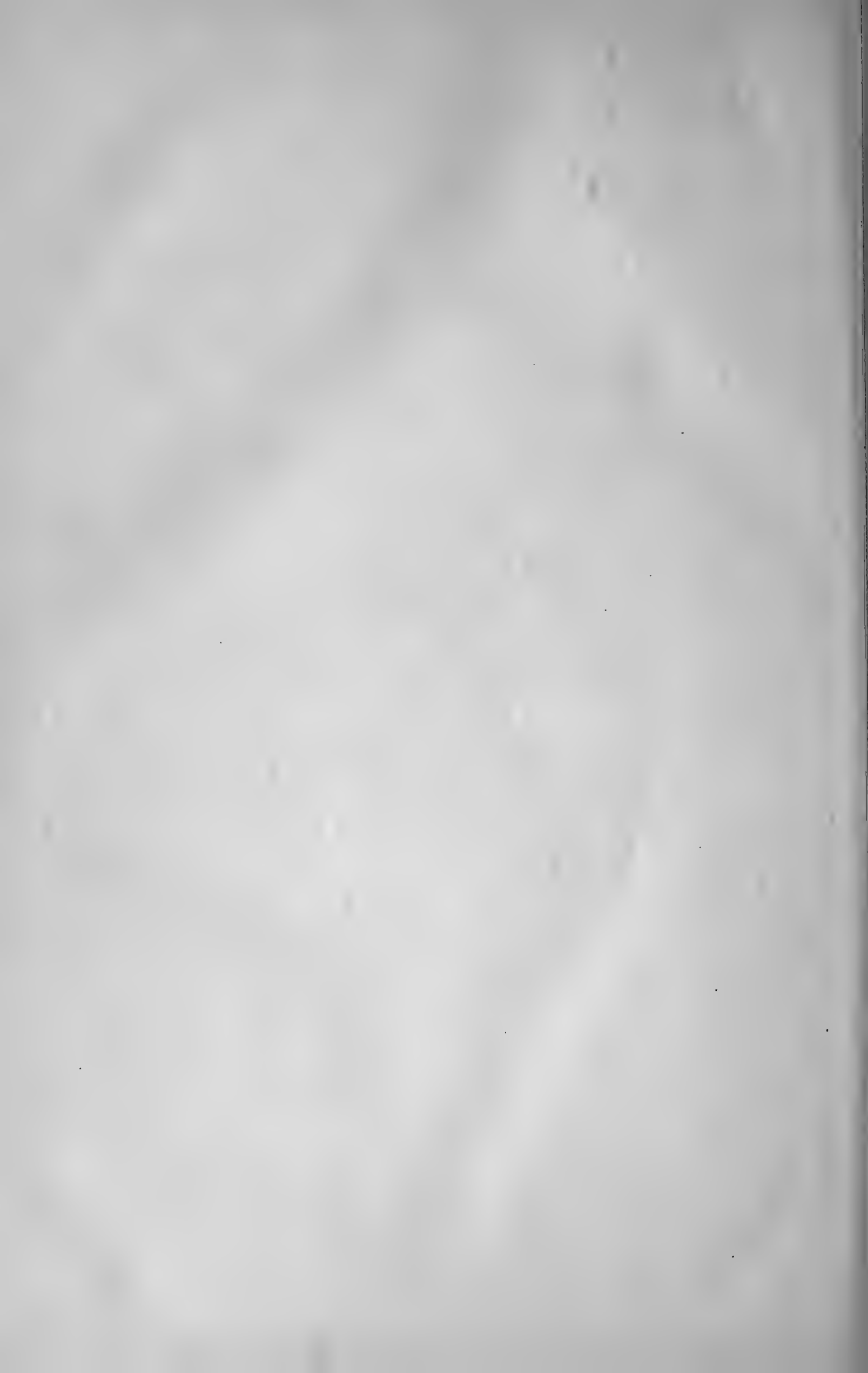
♂. 8—9 mm. Head dark shining bronze, crown with three fine violet-white lines, face silvery. Palpi white lined with black. Antennæ blackish, lined with white, four apical joints white, then five black, one white, one black, two white. Thorax dark shining bronze, with three fine violet-white lines. Abdomen bronzy-fuscous, dorsally tinged with orange, apex whitish-ochreous. Posterior tibiae blackish, with white median and apical rings, and a silvery ring between these. Forewings narrowly lanceolate, apex narrowly long-produced, caudate; blackish; dorsal edge white towards base; a short fine oblique white subcostal line before  $\frac{1}{4}$ , and very short fine white median and subdorsal dashes beneath its posterior extremity; a broad orange transverse postmedian band, margined anteriorly by an almost vertical violet-golden-metallic fascia followed above middle by a black dot, and posteriorly by two violet-golden-metallic slightly oblique spots, edged anteriorly with a few black scales, lower considerably anterior but placed so that it would touch upper if produced, orange colour projecting between but not beyond these; a short snow-white line in apical cilia, marked also on undersurface: cilia dark fuscous, with a white costal spot on posterior edge of band. Hindwings and cilia dark fuscous.

N. Coorg, 3,500 feet, in October and November (Newcome); two specimens. Distinguished by the entire absence of the apical line, except in cilia.

*Cosmopteryx catharacma*, n. sp.

♂ ♀. 7—8 mm. Head dark shining bronze, crown with three fine white lines, face pale bronzy. Palpi white lined with black. Antennæ blackish, dotted and towards base lined with white, four apical joints white, then five blackish, one white, one blackish, one white. Thorax dark shining bronze, with three fine white lines. Abdomen bronzy-fuscous, dorsally suffused with





orange. Posterior tibiae black with white median and apical rings, and a silvery wrongly divided metallic ring between these. Forewings very narrowly lanceolate, apex narrowly long-produced, caudate; dark bronzy-fuscous; dorsal edge silvery-white near base; a transverse series of three very short silvery-white dashes before  $\frac{1}{4}$ , subcostal oblique; a broad orange transverse postmedian band, margined anteriorly by a vertical violet-golden-metallic fascia, and posteriorly by two violet-golden-metallic transverse spots edged anteriorly with a few black scales, lower spot wholly anterior to upper, so that if produced it would cross wing without touching it, between these an irregular projection of the orange colour extends round lower spot to dorsum; a short silvery-metallic dash midway between band and apex: cilia dark fuscous, with a snow-white dot at apex, marked also on undersurface, and a white costal spot on posterior margin of band. Hindwings dark fuscous; cilia rather dark fuscous.

Peradeniya, Ceylon, from December to March (Green); nine specimens. Specially characterized by the snow-white dot in apical cilia, instead of the spot or line shown by allied species.

*Cosmopteryx belonacma*, n. sp.

♂. 9—10 mm. Head dark shining bronze, crown with three fine white lines, face lighter bronze. Palpi white, lined with black. Antennae blackish, dotted and towards base lined with white, four apical joints white, then five blackish, one white, one blackish, one white. Thorax dark shining bronze, with three fine white lines. Abdomen bronzy-fuscous, dorsally partially suffused with orange. Posterior tibiae black with white median and apical rings, and a silvery-metallic ring between these. Forewings narrowly lanceolate, widest near base, apex narrowly long-produced; blackish; dorsal edge white near base; a transverse series of three short white dashes not reaching  $\frac{1}{4}$ , subcostal rather oblique, longest, subdorsal shortest; a broad orange transverse postmedian band, margined anteriorly by a vertical violet-golden-metallic fascia and posteriorly by two violet-golden-metallic vertical-transverse spots edged anteriorly with black, lower spot wholly anterior to upper and not meeting it if produced; between these a short acute-triangular orange projection not reaching beyond upper spot; a short pale violet-golden-metallic dash midway between this and apex, and another at apex, with a white dash in apical cilia: cilia dark fuscous, with a costal white spot on posterior edge of band. Hindwings dark fuscous; cilia rather dark fuscous.

Khasis, from March to May; three specimens. Larger than *catharacma* with the subcostal line longer, the orange colour not surrounding lower metallic spot, a metallic dash in apex, and a white dash in cilia instead of the dot.

*Cosmopteryx basilisca*, n. sp.

♂. 8 mm. Head dark shining bronze, crown with three fine white lines, face lighter bronze. Palpi white lined with black. Antennae blackish, dotted and towards base lined with white, four apical joints white, then five blackish, one white, one blackish, two white. Thorax dark bronze, with three fine white

lines. Abdomen bronzy-fuscout, dorsally tinged with orange, apex whitish. Posterior tibiae blackish, with white median and apical and silvery subapical rings. Forewings narrowly lanceolate, apex narrowly long-produced; dark fuscous; dorsal edge white towards base; a transverse series of three short white dashes before  $\frac{1}{4}$ , subcostal rather oblique, subdorsal shortest; costal edge white for a short space before band; a broad orange transverse postmedian band margined anteriorly by a vertical violet-golden-metallic fascia, and posteriorly by two violet-golden-metallic vertical-transverse spots, lower spot wholly anterior to upper; between these a short fine orange line runs to termen, and from close beyond this a fine silvery-white line to apex: cilia dark fuscous, with a white costal spot on posterior margin of band. Hindwings dark fuscous; cilia rather dark fuscous.

Puttalam, Ceylon, in November (Pole); one specimen. Amongst the orange banded species with lower metallic spot wholly anterior to upper it is characterised by the arrangement of the white basal streaks, the white costal edge before band, and the almost entire white apical line.

*Cosmopteryx paltophanes*, n. sp.

♂. 11 mm. Head dark bronzy-fuscous, crown with three fine white lines, face pale bronzy. Palpi white lined with black. Antennae blackish, towards base lined with white, four apical joints white, then five blackish, one white one blackish, one white. Thorax dark fuscous, with three fine silvery-white lines. (Abdomen broken.) Posterior tibiae blackish, with white median and apical rings, and a silvery-metallic ring between these. Forewings narrowly lanceolate, apex slenderly long-produced, caudate; blackish-fuscous; dorsal edge silvery-white towards base; a silvery subcostal somewhat oblique line from base to beyond  $\frac{1}{4}$ ; a silvery median line from near base to beyond  $\frac{1}{3}$ ; a silvery subdorsal line extending rather beyond median but not nearly reaching base; a broad orange postmedian transverse band, anteriorly edged by a slightly oblique pale golden-metallic fascia followed by a few black scales and above middle by a large black dot, and posteriorly by two pale golden-metallic spots edged with black anteriorly, lower larger and somewhat anterior, between these a rather long and broad orange projection extends to termen, and is continued as a white streak along termen to apex: cilia rather dark fuscous, on costa with a whitish spot on posterior edge of band. Hindwings dark fuscous; cilia rather dark fuscous.

Khasis, in August; one specimen. Differs from the similar group by the long median line, which however does not reach base.

*Cosmopteryx mimetis*, Meyr.

(*Cosmopteryx mimetis*, Meyr., Proc. Linn. Soc. N. S. Wales, 1897, 339.)

♂ ♀. 8-10 mm. Antennae with one or two apical joints blackish, then two white, four or five blackish, one white, one blackish, one white. Abdomen dark bronzy-fuscous, sometimes orange-tinged. Forewings dark fuscous; a white oblique subcostal line from base to  $\frac{1}{4}$ , and short white median and subdorsal lines, widely remote from base and band; costal edge shortly white before

1. The first part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (1)$$

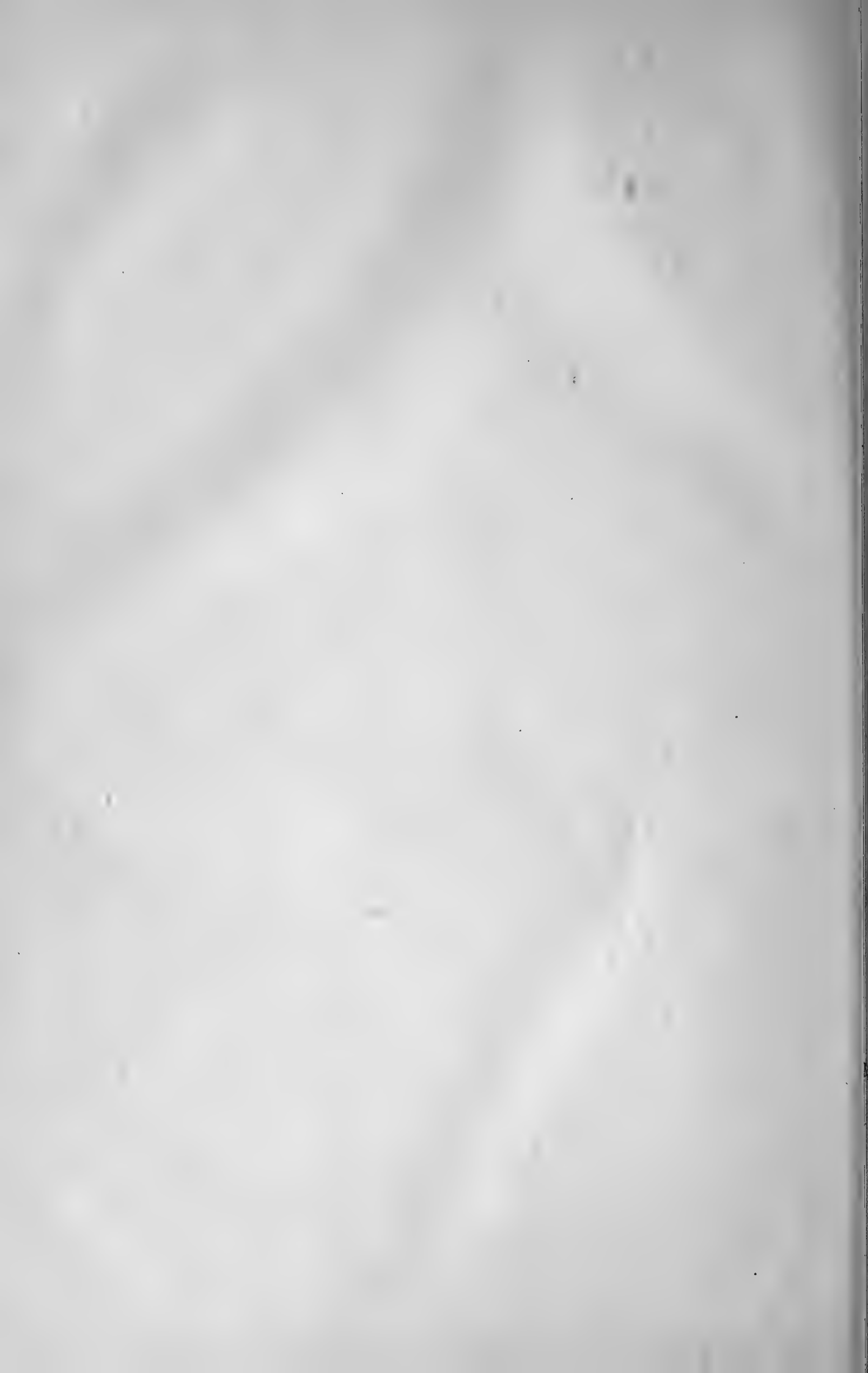
where  $x$  is a real number. It is shown that the function  $f(x)$  is continuous and differentiable on the whole real axis.

2. In the second part of the paper, we consider the function  $f(x)$  defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (2)$$

where  $x$  is a real number. It is shown that the function  $f(x)$  is continuous and differentiable on the whole real axis.

3. In the third part of the paper, we consider the function  $f(x)$  defined by the equation





band ; a broad postmedian orange band narrowed downwards, margined by pale golden-metallic fasciæ, first followed by a black dot above middle, second edged anteriorly with some blackish scales and interrupted above middle by an orange projection, whence proceeds a more or less slightly interrupted white line to apex, sometimes partially marked with yellow. Hindwings dark fuscous.

Maskeliya and Puttalam, Ceylon, in October, and from January to April (Pole, Green); Nilgiris (Andrewes); also from Kuching, Borneo (Hewitt); described from Eastern Australia, and I have specimens from New Guinea. I have briefly redescribed this species for convenience of comparison ; it is at once known from its nearest allies by the dark apical joint of antennæ. A similar Australian species, *C. macrula*, Meyr., which also has the dark tip, has longer white median and subdorsal lines, and orange abdomen.

*Cosmopteryx vecillaris*, n. sp.

♂. 10 mm. Head dark fuscous, crown with three fine white lines, face bronzy-whitish. Palpi white lined with black. Antennæ dark fuscous, towards base lined with white, four apical segments white, then five dark, one white, one dark, two white. Thorax dark fuscous, with three fine white lines. Abdomen dark grey, dorsally mixed with orange-ochreous suffusion. Posterior tibiæ blackish with white median, anteapical and apical rings. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate ; blackish ; dorsal edge white towards base ; an oblique white subcostal line from near base, and a silvery-white median line from base, confluent posteriorly and nearly reaching  $\frac{7}{8}$  ; a white subdorsal line from near base to slightly beyond them ; costal edge white for a short space before band ; a broad orange transverse band somewhat beyond middle, narrowed downwards, anteriorly margined by a slightly oblique pale golden-metallic fascia followed by a black dot above middle, and posteriorly by two golden-metallic spots edged anteriorly with two or three black scales, lower rather anterior ; between these is a short narrow orange projection, whence a sinuate white line extends to apex : cilia dark fuscous, with a white costal spot on posterior edge of band. Hindwings dark fuscous ; cilia rather dark fuscous.

Khasis, in October ; one specimen. Specially distinguished by the peculiar disposition of the anterior lines.

*Cosmopteryx latifica*, n. sp.

♂ ♀. 7-10 mm. Head bronzy, crown with three fine white lines, face shining whitish. Palpi whitish lined with blackish. Antennæ blackish, towards base lined with whitish, three apical joints white, then five blackish, then one or two white. Thorax bronzy with three fine white lines. Abdomen ochreous, in ♀ infuscated, apex whitish. Posterior tibiæ white, above greyish-ochreous except at middle and apex. Forewings very narrowly lanceolate, apex very slenderly long-produced, caudate ; ochreous-bronzy ; costal edge white from near base to  $\frac{2}{3}$  ; dorsal edge white towards base ; a fine white subcostal slightly oblique line from base to  $\frac{1}{3}$  ; a fine white median line from base to near band ; a short fine white subdorsal dash beneath posterior extremity of this ;

a moderate orange transverse band slightly beyond middle, anterior edge marked with two round golden-metallic spots, upper followed by a large black dot, lower slightly posterior, band posteriorly margined by two golden-metallic spots preceded by a few black scales, upper small, lower large, hardly anterior, between these a suffused elongate orange-yellow projection extends to termen and is continued as a white line along termen to apex: cilia bronzy-whitish, on costa white. Hindwings grey; cilia bronzy-whitish.

Diyatalawa, Ceylon (Fletcher); Nilgiris, 3,500 feet (Andrewes); from July to September, seven specimens. Distinct by the ochreous-bronzy ground colour, white costal edge and cilia, and white suffusion of tibiae.

*Cosmopteryx manipularis*, n. sp.

♂ ♀. 10 mm. Head dark fuscous, crown with three fine white lines, face whitish. Palpi white lined with blackish. Antennae blackish lined with white, three apical joints white, then five blackish, one white, one blackish, one white, three white with fine apical blackish rings, several white. Thorax dark fuscous, with three fine white lines. Abdomen orange, sides and segmental margins fuscous, two apical segments fuscous, margins whitish. Posterior tibiae blackish with white median and apical rings, and a silvery ring near apex. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate; dark fuscous; dorsal edge white towards base; a fine white somewhat oblique subcostal line from base to  $\frac{1}{4}$ ; a fine white median line not nearly reaching base or band; a fine white subdorsal line from beneath apex of subcostal to rather near band; costal edge white for a short distance before band; a broad ochreous-yellow transverse band beyond middle, anterior edge marked with two pale golden-metallic spots, upper followed by a black dot, lower larger and somewhat posterior, posterior edge marked with two pale golden-metallic spots preceded by some dark fuscous scales, lower larger, hardly anterior, from between these a sinuate yellow streak becoming white on posterior half extends along termen to apex: cilia fuscous, on costa whitish towards posterior edge of band. Hindwings dark grey; cilia fuscous.

Maskeliya, Ceylon, in May (de Mowbray); N. Coorg, 3,500 feet, in October and November (Newcome); three specimens. This and the two next species have the band yellow, not orange, margined on each side with two golden-metallic spots; *C. manipularis* is the smallest of the three, and is distinguished by the median line not nearly reaching base.

*Cosmopteryx aculeata*, n. sp.

♂ ♀. 12-13 mm. Head rather dark bronzy-fuscous, crown with three fine white lines, face bronzy-whitish. Palpi white lined with dark fuscous. Antennae blackish lined with white, four apical joints white, then five blackish, one white, one blackish, two white. Thorax rather dark bronzy-fuscous, with three fine white lines. Abdomen light orange, sides and segmental margins pale shining fuscous, last two segments pale fuscous with whitish margins. Posterior tibiae dark fuscous with white median, antepical, and apical rings. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate;



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rather dark bronzy-fuscous; dorsal edge white towards base; a fine white somewhat oblique subcostal line from base to  $\frac{1}{3}$ ; a fine white median line from very near base to near band; a fine white subdorsal line from beneath apex of subcostal to very near band; costal edge white for a short space before band; a broad yellow transverse band beyond middle, narrowed downwards, anterior edge marked with two pale golden-metallic spots, upper followed by a black dot, lower posterior, posterior edge marked with two pale golden-metallic spots preceded by a few black scales, lower larger and slightly anterior, oblique, from between these a sinuate white line, yellow at base, extends along termen to apex: cilia fuscous, on costa whitish on edge of band. Hindwings dark grey cilia fuscous.

Maskeliya, Ceylon (Pole); Khasis; Fort Stedman, Burma (Manders); from July to November, and in March; eight specimens. *C. pallifasciella*, Snell, bred from sugarcane in Java, should be nearly allied to this (it is unknown to me), but apparently considerably smaller, with the median line not so long, the metallic anterior margin of band practically entire, and the lower of the two posterior spots slightly beyond the upper (according to the figure).

*Cosmopteryx spiculata*, n. sp.

♂. 11 mm. Head rather dark bronzy-fuscous, with a fine white line on each side of crown, face bronzy-whitish. Palpi white lined with blackish. Antennæ blackish lined with white, three apical joints white, then three blackish, one black, one white, one black. Thorax rather dark bronzy-fuscous, with three very fine white lines. Abdomen pale bronzy-grey, scutellum and sides silvery-shining, apex whitish. Posterior tibiæ dark fuscous with white median, anteapical, and apical rings. Forewings very narrowly lanceolate, apex slenderly long-produced, caudate; rather dark bronzy-fuscous; dorsal edge white towards base; a very fine white somewhat oblique subcostal line from base to  $\frac{1}{4}$ ; a very fine white median line from very near base to  $\frac{1}{3}$ ; a very fine white subdorsal line from beyond apex of subcostal to rather near band; costal edge white for some distance before band; a broad yellow transverse band beyond middle narrowed downwards, anterior edge marked with two pale golden-metallic spots, upper followed by a black dot, lower posterior, posterior edge marked with two pale golden-metallic spots preceded by a few blackish scales, lower larger and slightly anterior, oblique, from between these a sinuate yellow line becoming white on posterior half extends along termen to apex: cilia whitish-fuscous tinged with ochreous, on costa whitish on edge of band. Hindwings grey; cilia pale bronzy-grey.

Maskeliya, Ceylon, in July (Pole); one specimen. Very like *aculeata*, but distinguished by the differently coloured abdomen, the extreme fineness of the antemedian lines (finer than in any other species), which are also shorter posteriorly, the yellower apical streak, and lighter grey hindwings.

*Cosmopteryx hamifera*, n. sp.

♂. 8 mm. Head rather dark bronzy-fuscous, with a fine white line above each eye, face whitish. Palpi whitish lined with dark fuscous. Antennæ dark fuscous lined with white towards base, three apical joints white, then two dark

fuscous, one white. Thorax rather dark bronzy-fuscous, patagia whitish except shoulders. Abdomen pale ochreous suffused with fuscous, apex whitish. Posterior tibiæ dark, fuscous, with white median, anteapical, and apical rings. Forewings narrowly lanceolate, apex long-produced, caudate; rather dark fuscous; costal edge white from near base to  $\frac{3}{4}$ ; a fine white subcostal line from base to  $\frac{1}{4}$ ; a white median line from base to band; a white subdorsal line from  $\frac{1}{4}$  to band, where it joins apex of median; a broad light yellow transverse band extending from middle of wing to  $\frac{4}{5}$ , anterior edge marked with two rounded pale golden-metallic spots, upper followed by a well-marked black dot, lower directly beneath upper, band crossed beyond its middle by a transverse silvery-whitish fascia; a silvery-whitish streak from band along termen to apex: cilia pale whitish-bronzy, on costa white. Hindwings grey; cilia pale whitish-bronzy.

Ceylon (probably low country); one specimen.

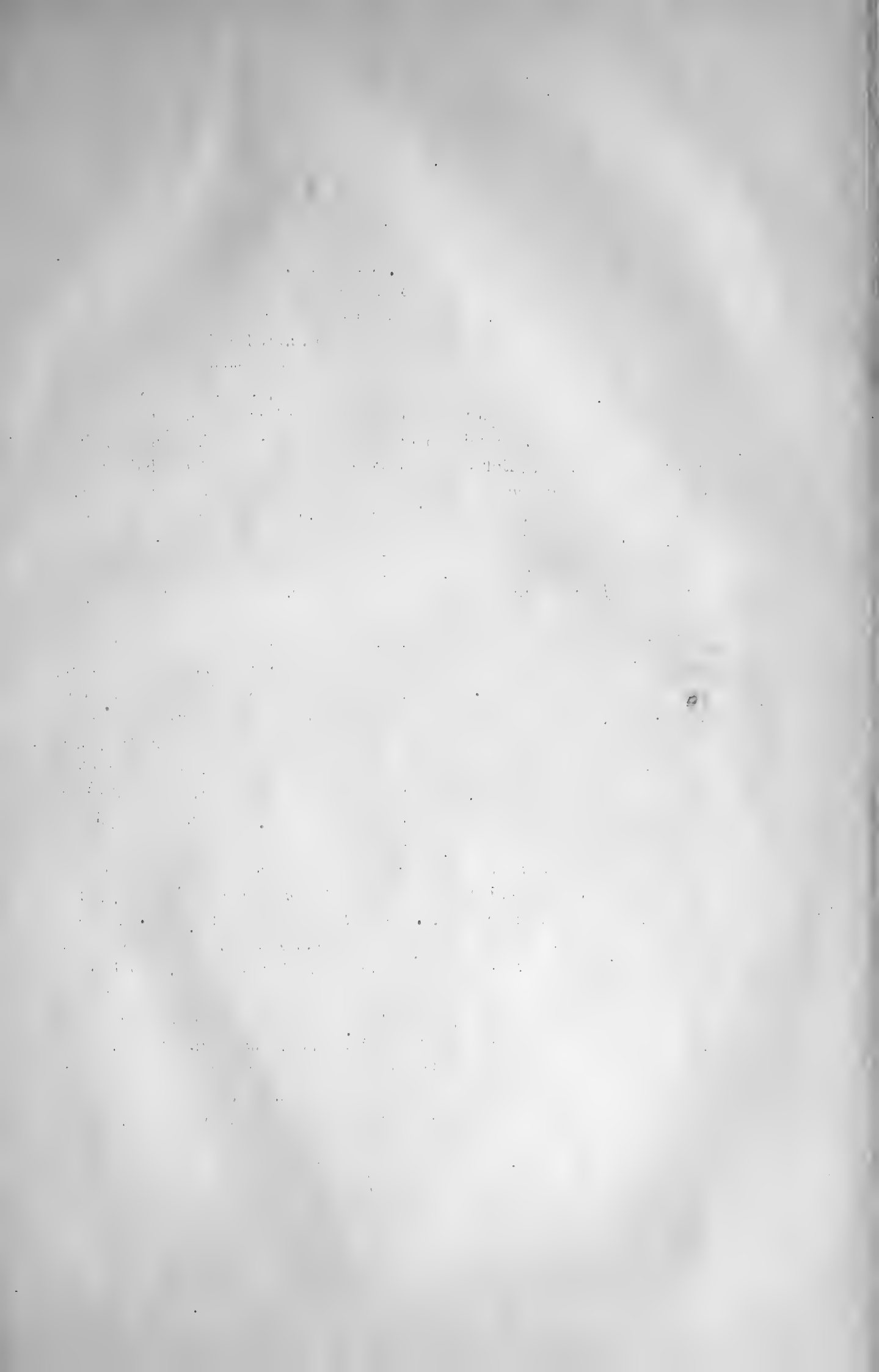
*Cosmopteryx artificia*, n. sp.

♂. 8 mm. Head dark bronzy-fuscous, with a fine white line above each eye, face bronzy-whitish. Palpi white lined with blackish. Antennæ whitish lined with dark fuscous towards base, four apical joints whitish, then five dark fuscous, one white, one dark. Thorax blackish, patagia each with two white lines. Abdomen ochreous-orange dorsally, sides and last two segments fuscous-whitish. Posterior tibiæ dark fuscous, with white median, anteapical, and apical rings. Forewings narrowly lanceolate, apex very slenderly long-produced, caudate; blackish-fuscous; costal edge white from base to band; a fine white slightly oblique subcostal line from base to near  $\frac{1}{3}$ ; fine white lines above and below fold from base to band; a broad light ochreous-yellow transverse band extending from before middle to  $\frac{3}{4}$ , anterior edge marked with two pale golden-metallic almost confluent spots followed by black dots, lower rather posterior, the band divided into two by a transverse undefined pale golden-metallic fascia beyond its middle; a white sinuate line along termen from band to apex: cilia pale whitish-bronzy, on costa becoming white anteriorly. Hindwings pale bronzy-grey, more whitish towards base; cilia pale whitish-bronzy.

Diyatalawa, Ceylon, in August (Fletcher); one specimen.

*Cosmopteryx ingeniosa*, n. sp.

♂ ♀. 12-13 mm. Head dark shining bronze, with a fine white line above each eye, face whitish. Palpi white lined with dark fuscous. Antennæ whitish towards base lined with dark fuscous, three apical joints white, then five dark fuscous, one white, five white with dark fuscous apical rings. Thorax dark brown, patagia white except shoulders. Abdomen whitish-ochreous, dorsally orange except on segmental margins. Posterior tibiæ dark fuscous, with white median, anteapical, and apical rings. Forewings narrowly lanceolate, apex very slenderly long-produced, caudate; rather dark bronzy-fuscous; costal edge white throughout; a fine white line out of this near base, continued obliquely beneath costa to near band; white median and subdorsal lines running from base to band, between these a very fine pale yellowish line of







equal length; a broad yellow transverse band slightly beyond middle, anterior edge marked with two round golden-metallic spots, upper followed by a black dot, lower slightly posterior, band edged posteriorly by a golden-metallic transverse line, interrupted in middle, beyond which however a triangular yellow projection extends and is continued as a strong white sinuate line to apex: cilia whitish-ochreous tinged with fuscous. Hindwings grey; cilia whitish-ochreous tinged with fuscous.

Khasis, in September; four specimens.

*Persicoptila chiasta*, n. sp.

♂. 16 mm. Head whitish with a fuscous mark on each side of crown, face white. Palpi white, extreme apex of second joint grey, terminal joint with two fine indistinct grey rings. Antennæ ochreous-whitish, beneath dotted with dark fuscous. Thorax light fuscous, with margins of patagia and a dorsal line white. Abdomen light ochreous-yellowish, towards apex white, on sides marked with blackish, beneath white. Posterior legs white banded with pale greyish-ochreous, tibiae with very large expanded brush of light crimson-rosy scales mixed with dark fuscous. Forewings very narrowly lanceolate, widest near base and gradually narrowed to acute apex; fuscous suffused with dull crimson; a narrow very oblique white facia beyond middle, and a transverse rather inwards-oblique white line near apex, space between these pale brownish faintly tinged with crimson, in disc at  $\frac{2}{3}$  with two or three dark fuscous scales surrounded by indistinct white suffusion; apical area darker fuscous, with a white apical dot; cilia pale brownish, with some scattered black points near base, at apex with a dark fuscous median line followed by a whitish spot. Hindwings rather dark grey; cilia pale ochreous.

Ohiya, Ceylon, 6,000 feet, in August (Fletcher); one specimen.

#### ETHMIADAE.

I accept the suggestion of Mr. A. Busck that this is a good and distinct family, separable from its nearest allies by the origin of vein 5 of hindwings, which is associated in direction with 6 and 7 instead of with 3 and 4. The two following genera are certainly referable to it, they differ from *Echmia* in having 7 and 8 of forewings separate, but agree in all essential characters.

*Aetherastis*, n. g.

Head with appressed scales; ocelli small; tongue developed. Antennæ  $\frac{3}{5}$ , basal joint large, with strong pecten of dense scales. Labial palpi moderate, ascending, slender, second joint loosely scaled, terminal joint shorter than second, pointed. Maxillary palpi very short, loosely scaled, appressed to tongue. Posterior tibiae clothed with long rough hairs. Forewings with 2 from  $\frac{5}{6}$ , 3 and 4 long-stalked, 5 approximated, 7 to costa, 10 from near end of cell, 11 absent. Hindwings 1, elongate-ovate, cilia  $\frac{1}{2}$ ; 3 and 4 stalked, 5-7 somewhat approximated towards base.

Allied to *Comocritis*, from which it differs by the stalking of 3 and 4 of forewings, and absence of vein 11.

*Aetherastis uranias*, n. sp.

♀. 28 mm. Head, palpi, and antennæ ochreous white. Thorax ochreous white, with four black spots arranged in a diamond on back, and two others on patagia. Abdomen whitish ochreous. Forewings elongate, moderate, costa moderately arched, apex rounded-obtuse, termen obliquely rounded; white closely speckled with black and suffused with bright pale blue except along costal edge and at base; black basal dots on costa and in middle; two small round black spots near base, viz., median and subdorsal, and three others near beyond these, viz., subcostal, median, and subdorsal: cilia blue white, basal third light ochreous yellow. Hindwings pale grey tinged with whitish; cilia as in forewings.

Peradeniya, Ceylon, in March (Green); one specimen. A curious insect of exceptional colouring.

*Comocritis thespias*, n. sp.

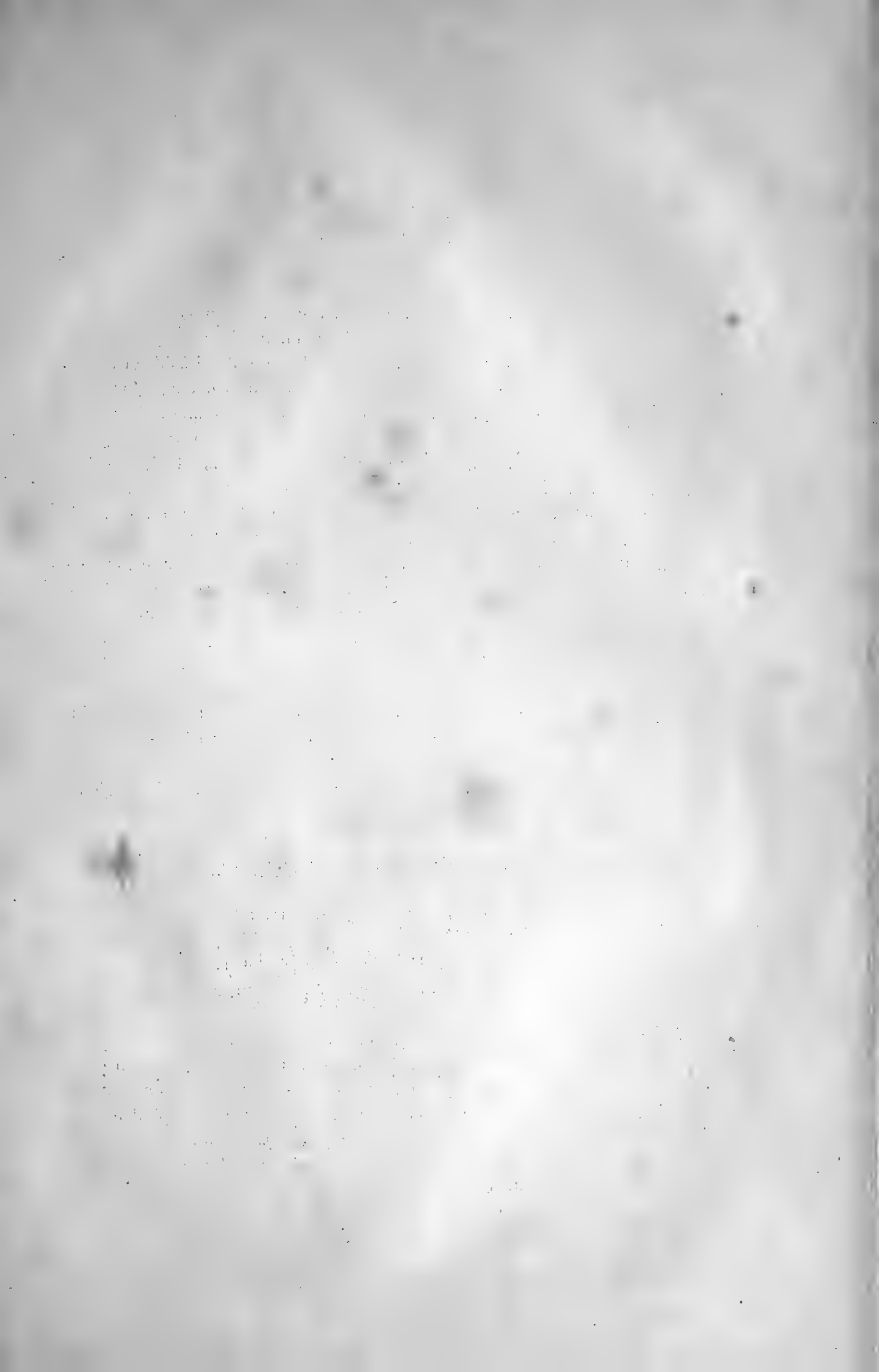
♂. 34 mm. Head, palpi, and thorax white. Antennæ whitish-ochreous. Abdomen pale grey, anal tuft whitish. Forewings elongate, costa moderately arched, apex obtuse, termen obliquely rounded; pale greyish ochreous; a white basal fascia, leaving a small spot of ground colour on base of costa; a small white dorsal spot close beyond fascia; a thick white streak along costa from fascia to  $\frac{3}{5}$ ; an oblong yellow-ochreous patch extending through lower part of disc almost from basal fascia, terminated by a crescentic white mark in disc at  $\frac{2}{3}$ , and a quadrate white tornal spot connected with it, ground colour above and below this patch suffused with black irroration; an irregular white streak from  $\frac{1}{5}$  of costa to middle of termen, with a projection inwards from near upper extremity, space between this and preceding white markings suffused with black and irrorated with white; apical area yellow-ochreous tinged with fuscous: cilia white. Hindwings dark grey; cilia grey, at apex with a white patch.

Kandy, Ceylon, in October (Green); one specimen. Very similar to *C. olympia*, but easily distinguished by the ochreous apex of forewings, absence of black lines on veins in ochreous discal patch, and other details.

#### PLUTELLIDAE.

*Phycodes taouopa*, n. sp.

♀. 20 mm. Head dark fuscous, face brilliant deep prismatic green-blue. Palpi white, towards apex black. Antennæ dark purple fuscous. Thorax dark bronzy fuscous, beneath pearly white. Abdomen dark fuscous, beneath with broad pearl white bands attenuated laterally. Forewings elongate, rather narrow, posteriorly dilated, costa slightly arched, apex obtuse, termen hardly rounded, somewhat oblique; 6 and 7 stalked; dark bronzy fuscous; basal area slightly sprinkled with whitish; a blackish fuscous transverse line at  $\frac{2}{5}$  terminating in a semi-circular dorsal blotch, edged anteriorly by a streak of white irroration, and posteriorly by a broad fascia of white irroration, indistinctly double and narrowed towards costa; a small white mark on costa at  $\frac{3}{5}$ , whence an undefined streak of whitish irroration proceeds outwards beneath costa and again inwards to disc at  $\frac{2}{3}$  and thence to



and Sipentella, Rebel, Deutsch. Kais. Akad. Wiss. Wien. LXXI (ii) 85-90, t. 1 f 14 (1907)

82 (Soustra) = Chalcocoma, Rey 1909.

[Herichthys Cuv. Glyph p. 33 (1913) → WGS Gen Ins for 164, p. 18, t. 1 f 1 (1914)]

has mixed up his Chalcocoma with mesopotamica, Rebel (Ins XXIV  
11-12, t. 1 f 5 (1910)) for hordin. II

dorsum before tornus: cilia dark fuscous, with a few whitish specks. Hindwings blackish fuscous; an ochreous yellow streak beneath vein 1*b*. from base to beyond middle; an elongate ochreous yellow blotch in disc above middle, extending from  $\frac{1}{4}$  to  $\frac{2}{3}$ ; cilia pale yellowish with a blackish basal line, at apex suffused with dark fuscous.

Khasis, in October; one specimen. This distinct species differs from the rest of the genus in the stalking of veins 6 and 7 of forewings, but is so obviously allied in all other characters that it is unnecessary to separate it generically; moreover in one example of *P. chionardis* these two veins are connected in middle in one wing, showing variability in this direction.

*Phycodes chionardis*, n. sp.

♂ ♀. 17-18 mm. Head dark shining bronzy fuscous with violet reflections, collar and postorbital scales white. Palpi white, terminal joint minute, black. Antennæ dark fuscous. Thorax dark fuscous, scales finely edged with whitish. Abdomen blackish, segmental margins white, beneath much more broadly. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen nearly straight, somewhat oblique; dark purplish fuscous, finely irrorated with white; the coalescence of this irroration seems to form three undefined transverse lines before middle separated by dark lines, and there is a rather large undefined dark costal spot beyond these: cilia deep coppery-purplish. Hindwings blackish fuscous; a narrow white median streak from rather near base to middle, hairs of 1*b* white; cilia white, with a blackish fuscous basal line, round apex tinged with coppery-purplish.

Polgahawela and Rambukkana, Ceylon, in May and June (Alston); one specimen.

*Phycodes chalcocrossa*, n. sp.

♀. 20 mm. Head bright brassy-metallic, back of crown and a line between antennæ dark fuscous, collar whitish. Palpi white, terminal joint very short, black. Antennæ blackish. Thorax fuscous, all scales margined and some centred with whitish. Abdomen fuscous, segmental margins white, beneath much more broadly. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen slightly rounded, somewhat oblique; dark purplish fuscous, on basal area with all scales edged and some streaked with whitish, elsewhere very densely irrorated with whitish, on median area forming fine transverse striæ; a slender dark fuscous transverse fascia at  $\frac{2}{3}$ , only minutely speckled with whitish; two very small dark fuscous spots on costa beyond this, and several more or less marked minute dark strigulae before and between these markings: cilia bright coppery-bronze, above apex whitish. Hindwings blackish-fuscous; a cloudy median streak of whitish suffusion extending from near base to middle; hairs of 1*b* whitish; cilia fuscous with a dark fuscous basalline, outer half white except round apex.

Arabia; three specimens received from Standinger and Bang-Haas, by

whom the species has been distributed erroneously as *minor* Moore, and recorded as such in Standinger's European Catalogue; it is quite distinct from *minor* by the larger size, bright coppery cilia, white streak in hindwings, bright brassy head, and other characters; hence I thought it best to stop the confusion by describing it here, as it may very possibly be found to occur in India also.

*Phycodes cymineuta*, n. sp.

♂. 15 mm. Head and thorax blackish finely irrorated with whitish, face metallic blue-greenish. Palpi white, terminal joint short, black. Antennæ blackish. Abdomen dark grey, beneath white. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen nearly straight, somewhat oblique; dark purplish-fuscous, finely irrorated with white specks, which on anterior half are combined into fine white transverse striæ; the absence of these striæ produces a slender dark transverse fascia at  $\frac{2}{3}$ , four undefined dark dots on costa before this and one beyond it; terminal area with purplish-coppery reflections: cilia fuscous, slightly coppery-tinged, with a few whitish specks near base. Hindwings blackish-fuscous, somewhat lighter towards base; cilia white with a blackish basal line, at apex with a fuscous patch.

Haputale, Ceylon, in June (Alston); one specimen.

*Imma loxopis*, n. sp.

♀. 30 mm. Head orange, crown dark fuscous except on margins. Palpi orange, upper  $\frac{2}{3}$  of second joint anteriorly dark fuscous, terminal joint minute. Antennæ dark fuscous. Thorax dark fuscous, a line on each side of back and margins of patagia orange. Abdomen orange, base of segments broadly blackish. Forewings elongate, moderate, posteriorly dilated, costa gently arched, apex rounded, termen rounded, little oblique; 7 and 8 stalked; dark purplish-fuscous; a narrow irregular orange basal fascia enclosing two small dark fuscous spots; from this fascia rise seven longitudinal yellow-whitish lines on veins and dorsum, reaching mostly to about middle; an oblique transverse rather narrow ochreous-white blotch in disc beyond middle: cilia dark fuscous. Hindwings dark fuscous; a slight orange median dash near base; an orange subdorsal streak from near base to beyond middle; cilia dark fuscous, with a white apical patch.

Khasis, in July; one specimen. Allied to *calestis*, Meyr., from China.

*Iridostoma*, n. g.

Head with appressed scales; ocelli present; tongue developed. Antennæ  $\frac{1}{2}$  basal joint moderate, without pecten. Labial palpi long, recurved second joint somewhat loosely scaled, terminal joint transversely compressed, acute, as long as second. Maxillary palpi obsolete. Middle tibiæ with tufts of long projecting bristles above in middle and at apex, posterior tibiæ with appressed scales slightly roughened above, basal joint of tarsi rough-scaled above. Forewings with 1b furcate, 2 from  $\frac{4}{5}$ , 3 from before angle, 4 from angle, 7 to apex, 11 from middle. Hindwings over 1, ovate, cilia  $\frac{1}{4}$ ; 3 and 4 approximated at base, 5 parallel, 6 and 7 slightly approximated towards base.



1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

which are satisfied by the functions  $u_i$  and  $v_i$  in the domain  $D$ .

2. In the second part we consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions

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7. In the seventh part we consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions

8. In the eighth part we consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions



Allied to *hilarographa*, of which it appears to be a development.

*Iridostoma ichthyopa*, n. sp.

♀. 12 mm. Head dark fuscous, sides of crown and a central line pale yellowish, face grey, becoming whitish beneath. Palpi violet-whitish becoming blue-grey towards apex of second joint, terminal joint dark grey with whitish lateral lines. Antennæ dark fuscous. Thorax dark fuscous, shoulders suffused with yellowish, margins of patagia leaden-grey. Abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen somewhat sinuate, rather oblique; dark fuscous; a narrow ochreous-orange streak along fold from base to  $\frac{2}{5}$ , and a violet dark-edged streak above it extending to middle, margined above by an ochreous-yellow streak, four ochreous-yellow streaks from dorsum terminating in posterior portion of this violet streak, first incurved; two oblique violet streaks from costa at  $\frac{1}{3}$  and  $\frac{1}{2}$  curved at extremities so as to meet in middle of disc, enclosing an ochreous-yellow dot above the loop; two violet lines rising together from a white dot on costa at  $\frac{3}{5}$  and running to dorsum posteriorly, first nearly straight, second strongly curved outwards in disc so as to enclose a space in which are two longitudinal ochreous-yellow marks; a rather curved violet line from a white dot on costa at  $\frac{4}{5}$  to dorsum before tornus; a narrow fulvous-yellow fascia round apex and along termen to tornus, enclosing a series of seven black dots, of which the uppermost is large and subtriangular, the second blue-centred: cilia violet, tips coppery on lower part of termen. Hindwings dark fuscous, cilia whitish-grey, with a dark fuscous basal line, tips pale violet.

Peradeniya, Ceylon, in April (Green); one specimen.

*Hilarographa hermatodes*, n. sp.

♀. 17 mm. Head golden-yellowish. Palpi yellowish, second joint with a fuscous median band. Antennæ fuscous. Thorax bronzy-fuscous, patagia orange-red edged with leaden-grey. Abdomen pale ochreous mixed with fuscous. Forewings elongate, posteriorly dilated, costa slightly arched, apex rounded-obtuse, termen hardly oblique, rather deeply sinuate beneath apex; 7 and 8 separate; very deep reddish-orange; markings dark leaden, costal edge between them yellow; suprmedian, plical, subdorsal, and dorsal streaks from base, all except dorsal terminated in an incurved transverse streak from dorsum before middle, not reaching beyond uppermost, dorsal extended further, base yellowish between them; six streaks from costa, first three rather broad, first from near base, first two abruptly angulated round apex of supra-median streak and continued as incurved lines to near dorsum where they unite, third receiving above middle five similar paralleled lines from dorsum, the first of which is dilated on fold and contains two dots of ground colour, fourth and fifth costal streaks approximated and continued as a single sinuate blackish line to tornus, sixth light blue and recurved to a yellow dot on costa close before apex, inside this loop is a yellow wedgeshaped costal mark; four blackish dots near termen on lower half; a violet-blue mark along termen below middle, its terminal edge finely pale yellow: cilia shining leaden-grey.

with a blackish basal line, and a whitish spot on subapical situation. Hindwings reddish-fulvous suffused with fuscous, with a broad dark fuscous terminal and dorsal band, leaving terminal edge fulvous round apex and upper half of termen; a suffused elongate patch of orange-yellowish in middle of disc; cilia orange-yellowish, with a blackish basal line, round apex infuscated.

Kandy, Ceylon, in May (Green, Alston); two specimens.

*Hilarographa merinthias*, n. sp.

♂. 18-20 mm. Head orange. Palpi light orange, towards base violet-whitish anteriorly. Antennæ dark fuscous, strongly ciliated. Thorax orange-fulvous more or less suffused with fuscous, longitudinally striped with leaden-grey. Abdomen leaden-grey mixed with dark fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex rounded, termen rounded, little oblique, distinctly sinuate beneath apex; 7 and 8 separate; orange-fulvous; bluish-leaden costal, median, subdorsal, and dorsal streaks from base, costal soon leaving costa, all four terminated in a rather oblique blackish streak from  $\frac{1}{3}$  of dorsum reaching  $\frac{3}{4}$  across wing; five oblique leaden-bluish streaks edged with blackish lines and rising from whitish dots on costa between  $\frac{1}{4}$  and apex, reaching about  $\frac{1}{3}$  across wing, second shorter, third very short, but dark margins of both as long as the rest; dorsal area from transverse streak at  $\frac{1}{3}$  to tornus crossed by about eight rather oblique curved variably confluent and anastomosing blackish streaks reaching almost to costal streaks; a small leaden-metallic spot on termen below middle, with large black dots above and below it; a spot of orange-yellow suffusion at apex: cilia rather dark fuscous, with blackish-leaden basal line. Hindwings blackish-fuscous; an elongate-triangular orange-yellow patch in middle of disc, sometimes suffused with ground colour and indistinct.

Khasis; two specimens.

*Hilarographa mechanica*, n. sp.

♂. 18 mm. Head dark bronzy, side tufts and postorbital scales golden-yellowish. Palpi whitish, with strong violet-blue reflections. Antennæ dark fuscous, strongly ciliated. Thorax dark violet-fuscous, with orange yellow lateral stripes. Abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex rounded, termen little oblique, hardly perceptibly sinuate; 7 and 8 separate; orange-fulvous, deeper and brighter towards costa and termen; costal edge dotted with whitish between the dark streaks; six pairs of oblique blackish streaks from costa, reaching  $\frac{1}{3}$  across wing, last five enclosing light grey-blue streaks, sixth less oblique and whitish towards costa, anterior margin of fourth extended as a blackish line, right-angled in middle, to tornus; whole dorsal area from base to this line crossed by twelve curved oblique dark fuscous lines extending almost to costal streaks, and united above so as to form two or three longitudinal lines, fifth and eleventh of the alternating lines of ground colour blue-whitish; lower half of angulated black line edged by five small indistinct fuscous spots suffused with blue, beyond which is a series of three black dots, two upper very small,

# THE HISTORY OF THE CITY OF BOSTON

FROM THE FIRST SETTLEMENT IN 1630  
TO THE PRESENT TIME  
BY  
JOHN B. HENNING

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lowest large; apical margin suffused with yellow; a leaden-blue mark on termen beneath apex, almost connected with tips of fifth and sixth costal streaks, and a leaden-blue line along lower part of termen, its upper extremity bent away and followed by some black scales; cilia violet-fuscous, with a dark fuscous basal line, round apex and at tornus with patches of whitish suffusion, and a whitish spot on subapical mark. Hindwings dark fuscous, with an elongate-triangular ochreous-yellow spot in middle of disc; cilia whitish with dark fuscous basal line.

Khasis, in July; one specimen.

*Hilarographa calathisca*, n. sp.

♀. 10 mm. Head dark bronze, behind eyes light orange-ochreous. Palpi whitish, with strong violet reflections. Antennæ dark fuscous. Thorax dark fuscous, lateral margins light ochreous. Abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa slightly arched, apex rounded, termen rather obliquely rounded; 7 and 8 separate; orange-fulvous; six pairs of oblique blackish streaks from costa crossing  $\frac{2}{3}$  of wing, enclosing light violet-blue streaks rising from small yellow spots, fourth pair without blue streak and with its posterior member reduced to a costal spot, sixth bent to termen beneath apex, enclosed apical spot suffused with yellow; dorsal  $\frac{1}{2}$  from base to near tornus crossed by six oblique blackish streaks, first broad, next two slender, fourth and fifth thick and largely confluent, sixth running into an erect light violet-blue streak from dorsum before tornus, reaching half across wing; a shorter transverse light violet-blue streak from termen above tornus, its lower extremity preceded and upper followed by small black spots: cilia bronzy-grey, partially tinged with coppery-orange, with a blackish basal line, about apex and on a subapical spot whitish-grey. Hindwings dark fuscous; cilia grey with dark fuscous basal line.

Khasis, in May; one specimen.

*Hilarographa citharistis*, n. sp.

♂ ♀. 13-15 mm. Head ochreous-brown. Palpi whitish, with strong violet reflections. Antennæ dark fuscous, in ♂ simple. Thorax and abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex rounded-obtuse, termen rather obliquely rounded, sinuate beneath apex; 7 and 8 separate; orange fulvous; markings light blue strongly edged with black on costal edge whitish and more strongly black-margined; four acutely angulated transverse streaks on anterior half, first two subconfluent, third and fourth connected on angle; three streaks from costa on posterior half, third longer and curved to near apex, from beneath first two a band of irregular variable suffused and anastomosing black marks runs to dorsum beyond middle; two transverse streaks from dorsum before tornus, first reaching half across wing, second shorter; a curved series of four large black dots or small spots beyond these; an upward streak from termen below middle, followed by a large black dot; a short longitudinal subapical mark, white on termen: cilia dark fuscous with a blackish basal line, above apex with a white patch on

which the blackish line is subbasal, on subapical and submedian streaks with whitish spots. Hindwings dark fuscous, sometimes lighter and bronzy-tinged in middle of disc; extreme apex tinged with fulvous; cilia light fuscous, with dark fuscous basal line.

Khasis, from July to September; eleven specimens. The simple ♂ antennæ are exceptional.

*Hilarographa druidica*, n. sp.

♂ ♀. 13-15 mm. Head dark fuscous, orbital margins yellow. Palpi fuscous, towards base anteriorly violet-whitish. Antennæ dark fuscous, in ♂ strongly ciliated. Thorax dark fuscous, with a yellow stripe on each side of back, and a short yellow lateral mark on patagia. Abdomen dark fuscous. Forewings elongate-triangular, costa gently arched, apex rounded, termen rather oblique, sinuate beneath apex; 7 and 8 separate; orange-fulvous; a blackish basal patch, its outer edge sharply angulated above middle, and margined on upper portion by a violet black edged streak becoming yellow on costa, on lower portion by broad yellow streak attenuated at apex and strongly black-edged posteriorly; within this patch are a curved yellow streak from base of costa to disc and thence to near posterior edge above angle and a short yellow mark from costa near base; two oblique violet black-edged streaks starting from white marks on costa before and beyond middle, and connected by three irregularly anastomosing black streaks with dorsum beyond middle; a violet black-edged streak rising from a white dot on costa at  $\frac{3}{4}$ , and curved round to meet an oblique white mark from costa near apex; a violet-golden-metallic transverse streak from dorsum before tornus reaching half across wing and another along lower half of termen, former nearly followed by a fine black line, latter preceded by four small black spots and surmounted by another; a white terminal dot beneath apex; cilia dark coppery-metallic, above apex white with a black basal line, and with a white spot on subapical dot. Hindwings blackish-grey, sometimes paler and slightly bronzy-tinged in middle of disc; cilia pale grey, with a blackish basal line.

Khasis, in May and from August to October; seven specimens. Nearly allied to *H. africana*. Wals from Central Africa.

*Glyphipteryx asterias*, Meyr.

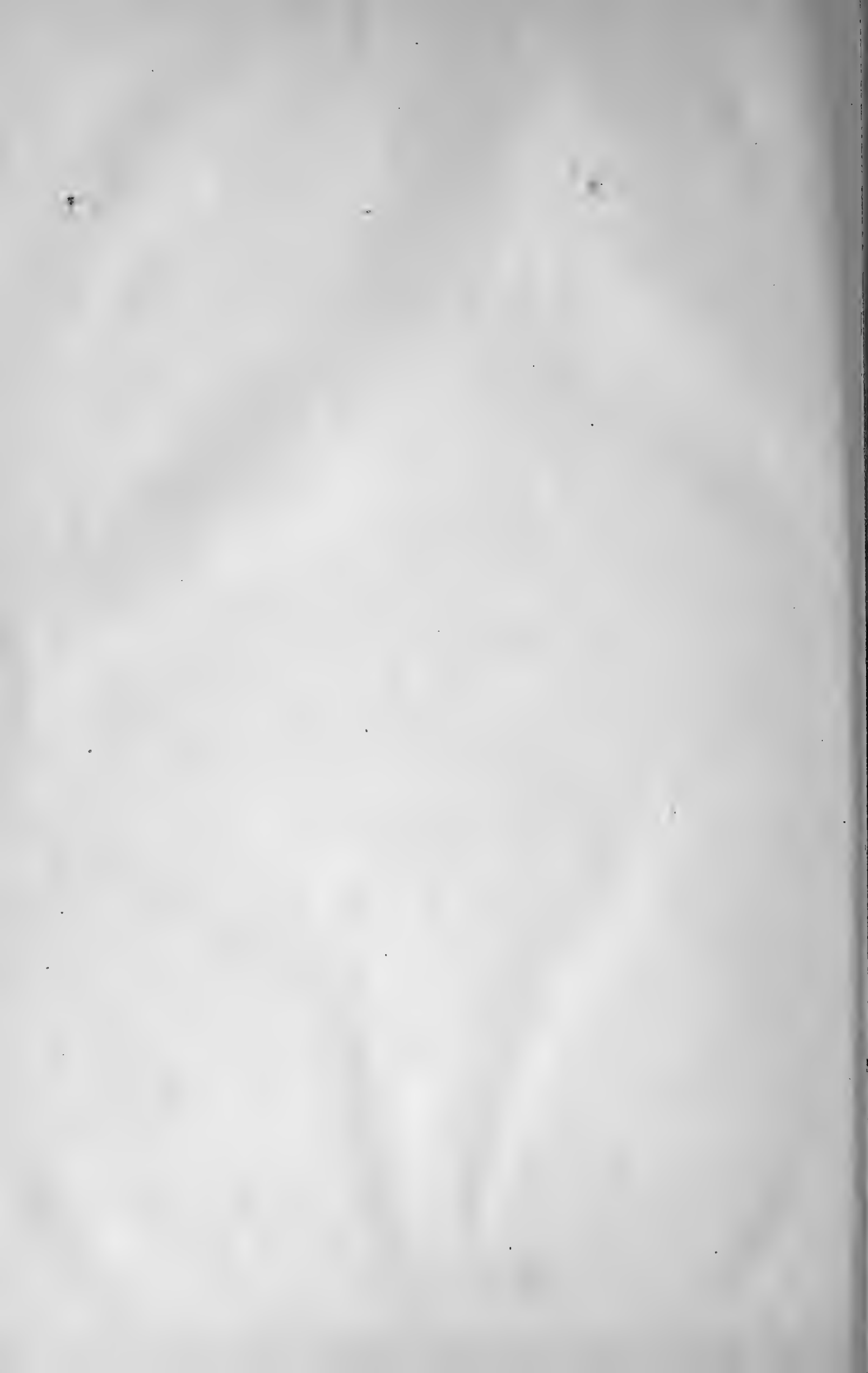
(*Anticrates asterias*, Meyr. Journal Bombay N. H. Soc., XVIII, 154.)

Having obtained additional material, I find this to be a true *Glyphipteryx* having the typical palpi (which were in bad condition in the type), with four oblique white rings; it is however a very distinct form of the genus.

*Glyphipteryx pyrogastra*, n. sp.

♂ ♀. 15-16 mm. Head, antennæ, and thorax purple-blackish, face grey. Palpi black lined with white, terminal joint much longer than second. Abdomen fiery orange towards base purple-blackish. Forewing elongate, narrow at base, posteriorly dilated, costa slightly arched, apex obtuse, termen rather strongly oblique, sinuate-indented beneath apex; 7 and 8 separate; purple-blackish; six blue-lead metallic lines rising from white costal strigulæ, first







at  $\frac{1}{3}$ , short, second at  $\frac{1}{2}$ , oblique, reaching half across wing, third rather curved, running to dorsum near tornus, fourth and fifth short, sixth violet-tinged running to subapical indentation; a violet-metallic sometimes interrupted line almost on termen from beneath this to near tornus, and a dot at tornus: cilia bronzy-whitish with a blackish median line, interrupted with white on subapical indentation. Hindwings dark grey, towards apex blackish-grey; cilia whitish-grey suffused with dark grey towards base.

Khasis, in August and September; two specimens.

*Glyphipteryx hemipempta*, n. sp.

♂ ♀. 7-9 mm. Head and thorax bronzy. Palpi white, with four rings and anterior edge towards apex black. Antennæ fuscous. Abdomen dark fuscous, in ♀ with expansible lateral tuft of scales before apex, and expansible scales at apex. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen somewhat sinuate, oblique; 7 and 8 separate; all scales bronzy-yellowish with dark fuscous bases, appearing to form fine transverse striæ, but becoming bronzy-whitish towards base and on a broad discal patch above tornus; six bluish-lead-metallic streaks rising from whitish marks on costa, first before  $\frac{1}{3}$ , somewhat oblique, reaching half across wing, second and third direct, parallel, running to dorsum, fourth very short, fifth running to subapical indentation, sixth close before apex; three round adjacent black spots on lower part of termen, each containing a golden-metallic dot; veins on pale area above these marked with fine black lines, and some short interneural black dashes posteriorly: cilia whitish, basal third pale bronzy, indented with white beneath apex. Hindwings dark fuscous; cilia pale grey, suffused with dark grey towards base.

N. Coorg, 3,500 feet, in October and April (Newcome); Maskeliya, Ceylon, in January (Pole); seven specimens.

*Glyphipteryx enclitica*, n. sp.

♂ ♀. 10-12 mm. Head, antennæ, and thorax rather dark bronzy-fuscous. Palpi fuscous; internally whitish. Abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen rather deeply sinuate beneath apex, oblique; 7 and 8 separate; golden-ochreous-bronze; straight thick converging violet-metallic streaks, edged with dark fuscous, from costa at  $\frac{1}{4}$  and  $\frac{3}{5}$  to dorsum at  $\frac{1}{2}$  and  $\frac{3}{4}$ , and a similar transverse streak from costa between these not reaching half across wing; an irregular subtriangular black blotch extending along lower portion of termen, its anterior edge excavated, containing about sixteen violet-golden-metallic dots and specks; area between this and costa crossed by fine black lines on veins and less marked blackish interneural lines; a violet-blue-metallic streak from  $\frac{5}{8}$  of costa to subapical sinuation; a white wedge-shaped marked on costa before apex, becoming blue metallic at extremity: cilia bronzy, with a black median line indented with white on subapical sinuation, outer half whitish-grey, above apex fuscous. Hindwings dark fuscous; cilia grey.

N. Coorg, 3,500 feet, in May, August and September (Newcome); four specimens.

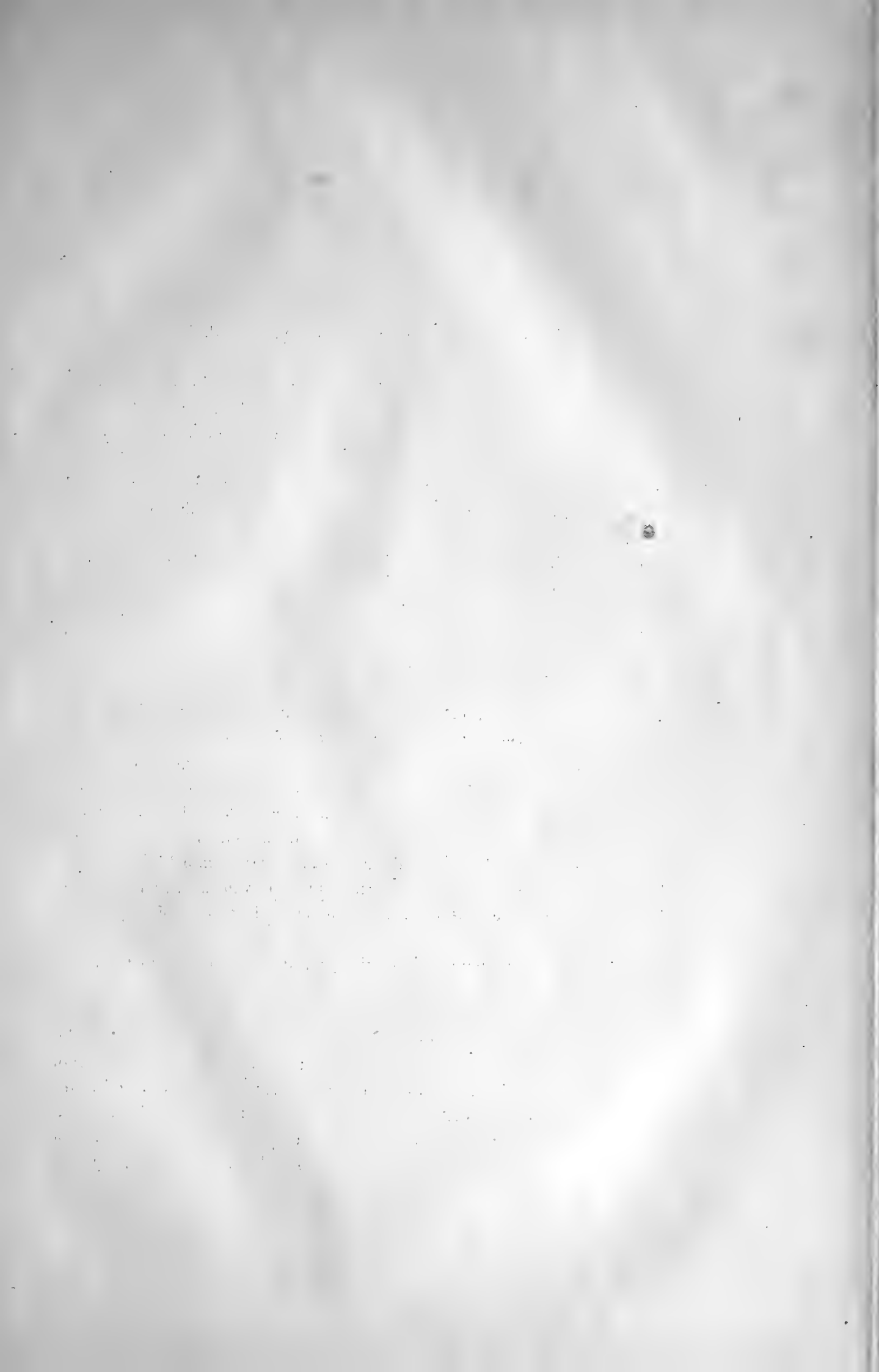
*Glyphipteryx hilarodes*, n. sp.

♀. 10 mm. Head pale ochreous-yellowish with a central bronzy-fuscous stripe, back of crown dark fuscous. Palpi yellowish-white, with a dark fuscous anterior line. Antennæ dark fuscous. Thorax dark fuscous, with a yellow stripe on each side of back. (Abdomen broken.) Forewings elongate-triangular, costa gently arched, apex obtuse, termen slightly sinuate beneath apex, rather oblique; 7 and 8 separate; blackish; two pale yellowish strigulae from costa near base; a narrow direct yellow fascia at  $\frac{1}{5}$ ; an oblique blue-metallic streak from a white dot on costa beyond  $\frac{1}{3}$ , and a violet-metallic streak from dorsum beyond middle, between the extremities of these are two orange dots preceded by a blue-metallic dot and followed by a violet-metallic dot above and below the latter are orange dashes, and beneath the lower of these two orange dots; an angulated violet-metallic streak from a white dot on costa at  $\frac{3}{5}$  to a yellow dot on dorsum at  $\frac{3}{4}$ , interrupted on angle, preceded by an orange streak on upper portion, and closely followed throughout by a curved orange streak becoming orange-fulvous on costal half; apical area beyond this orange-fulvous, marked with three short violet-metallic anteriorly black-edged streaks from white dots on costa, a suffused black apical spot, and a small violet-metallic subapical spot; a short violet-metallic mark before tornus, and a longer erect streak beyond it, between these an indistinct orange-fulvous line connects apical area with tornus: cilia whitish, basal half blackish, indented with whitish beneath apex, with a blackish apical hook. Hindwings with 6 and 7 nearly approximated at base; blackish-fuscous; cilia dark fuscous, towards tips whitish-grey.

Khasis, in October; one specimen. This distinct species apparently shows real relationship with *Hilarographa* but is a true *Glyphipteryx*.

*Glyphipteryx carenota*, n. sp.

♂ ♀. 12-14 mm. Head and antennæ dark bronzy. Palpi whitish-ochreous, anteriorly dark fuscous except towards base. Thorax dark bronzy, with a pale yellow posterior spot. Abdomen dark fuscous, segmental margins partially whitish. Forewings elongate narrow at base, posteriorly dilated, costa slightly arched, apex obtuse, termen sinuate-indented beneath apex, rather strongly oblique; 7 and 8 separate; dark fuscous bronze; an acute-triangular pale ochreous-yellow blotch on dorsum before middle, reaching  $\frac{3}{4}$  across wing; an undefined median band of bronzy-orange suffusion, on which are two direct transverse light blue-metallic streaks from whitish dots on costa before and beyond middle, reaching nearly half across wing, and a longer similar streak from dorsum between them; short similar marks from costa and dorsum near beyond these; an irregular elongate black blotch along termen from indentation to tornus, containing from eight to ten golden-metallic dots; area above this blotch obscurely and suffusedly streaked longitudinally with whitish; a violet-blue-metallic line from a white dot on costa at  $\frac{5}{8}$  to subapical indentation, preceded and followed by more or less bronzy-orange suffusion; a violet-blue-metallic transverse line almost at apex from a white mark on costa: cilia





pale shining bronzy, with a blackish median line indented with white beneath apex, outer half whitish. Hindwings blackish-fuscous; cilia whitish-grey, suffused with dark grey towards base.

Khasis, in May; seven specimens.

*Glyphipteryx synarma*, n. sp.

♂. 12 mm. Differs from *carenota* only as follows: forewings with first costal and dorsal alternating streaks replaced by a straight light blue-metallic entire transverse line, longitudinal whitish streaks more defined.

Khasis, in October; two specimens; not in good order, but the species seems to be certainly distinct.

*Glyphipteryx crotalotis*, n. sp.

♀. 16 mm. Head, antennæ, thorax, and abdomen dark purplish-fuscous. Palpi white, with three black rings and towards apex lined with black, second joint with rough projecting hairs beneath. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen sinuate beneath apex, oblique; 7 and 8 separate; dark fuscous, slightly tinged with bronzy-purplish; a slender direct pearl-white fascia at  $\frac{1}{5}$ ; a slightly oblique pearl-white streak from dorsum beyond middle, reaching fold; six fine short oblique violet-metallic streaks from costa, white on costa, first before middle, third rather longer; violet-metallic dots beneath tips of first and third; a small oblique violet-metallic mark before tornus; two violet-metallic dots before lower portion of termen, one on subapical indentation, and one or two specks in disc before these: cilia fuscous, with a dark fuscous median shade, rather sinuate on subapical indentation. Hindwings blackish, fuscous; cilia fuscous, with dark-fuscous subbasal shade.

Khasis, in July; one specimen.

*Glyphipteryx sclerodes*, n. sp.

♂ ♀. 10-14 mm. Head, antennæ, thorax, and abdomen dark bronzy-fuscous. Palpi white, with four rings and anterior edge towards apex black. Forewings elongate, rather narrow at base, posteriorly dilated, costa slightly arched, apex obtuse, termen somewhat sinuate, rather oblique; 7 and 8 separate; dark fuscous-bronze, veins in disc streaked with blackish; two strong slightly curved white-streaks from dorsum at  $\frac{1}{4}$  and beyond middle, reaching fold; seven fine violet-golden-metallic black-edged lines from costa, becoming white towards costa, first five straight, oblique, first at  $\frac{1}{3}$ , third and fourth longest, reaching about half across wing, sixth and seventh less oblique curved, seventh running to anteapical sinuation; two violet-golden-metallic dots in disc beneath third and fourth; two erect violet-golden-metallic streaks from before and beyond tornus, not reaching half across wing: cilia white, basal third bronzy limited by a black line indented on subapical sinuation, at apex with a black hook. Hindwings dark fuscous; cilia grey, suffused with dark fuscous towards base.

Maskeliya, Patipola, and Horton Plains, Ceylon, in December, January, March, July, and September (Pole, Alston, Fletcher); six specimens. Those

from the higher elevations (the two latter localities) are larger and have the dorsal white streaks rather conspicuously broader than the others.

*Glyphipteryx bicornis*, n. sp.

♂ ♀. 14-16 mm. Head and thorax fuscous. Palpi white with four black rings, and anterior edge black towards apex, second joint with long rough spreading tuft of mixed white and black hairs beneath. Antennæ blackish dotted with white. Abdomen dark fuscous, segmental margins partially whitish. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen sinuate beneath apex, oblique; 7 and 8 separate; rather dark bronzy-fuscous, apical third more or less suffused with yellow-ochreous; two ochreous-white dorsal spots, first at  $\frac{1}{4}$ , narrow, fasciaform, oblique, slightly curved, reaching  $\frac{2}{3}$  across wing, second at  $\frac{2}{3}$ , broader, acute triangular, reaching half across wing, terminated above by an oblique violet-metallic mark; seven oblique white strigulae from costa becoming violet-metallic downwards, first at  $\frac{1}{3}$ , third longer, reaching half across wing, fourth continued as a rather curved more or less interrupted violet-metallic line to dorsum before tornus; a violet-metallic mark on subapical indentation, and two on lower part of termen: cilia bronzy, with a fine blackish median line indented with white, beneath apex, outer half white, with a dark fuscous apical hook. Hindwings blackish-fuscous; cilia pale grey, suffused with dark grey towards base.

Khasis, in March and April; three specimens. Nearly allied to *sclerodes*, but differing by the tufted palpi, as well as details of markings.

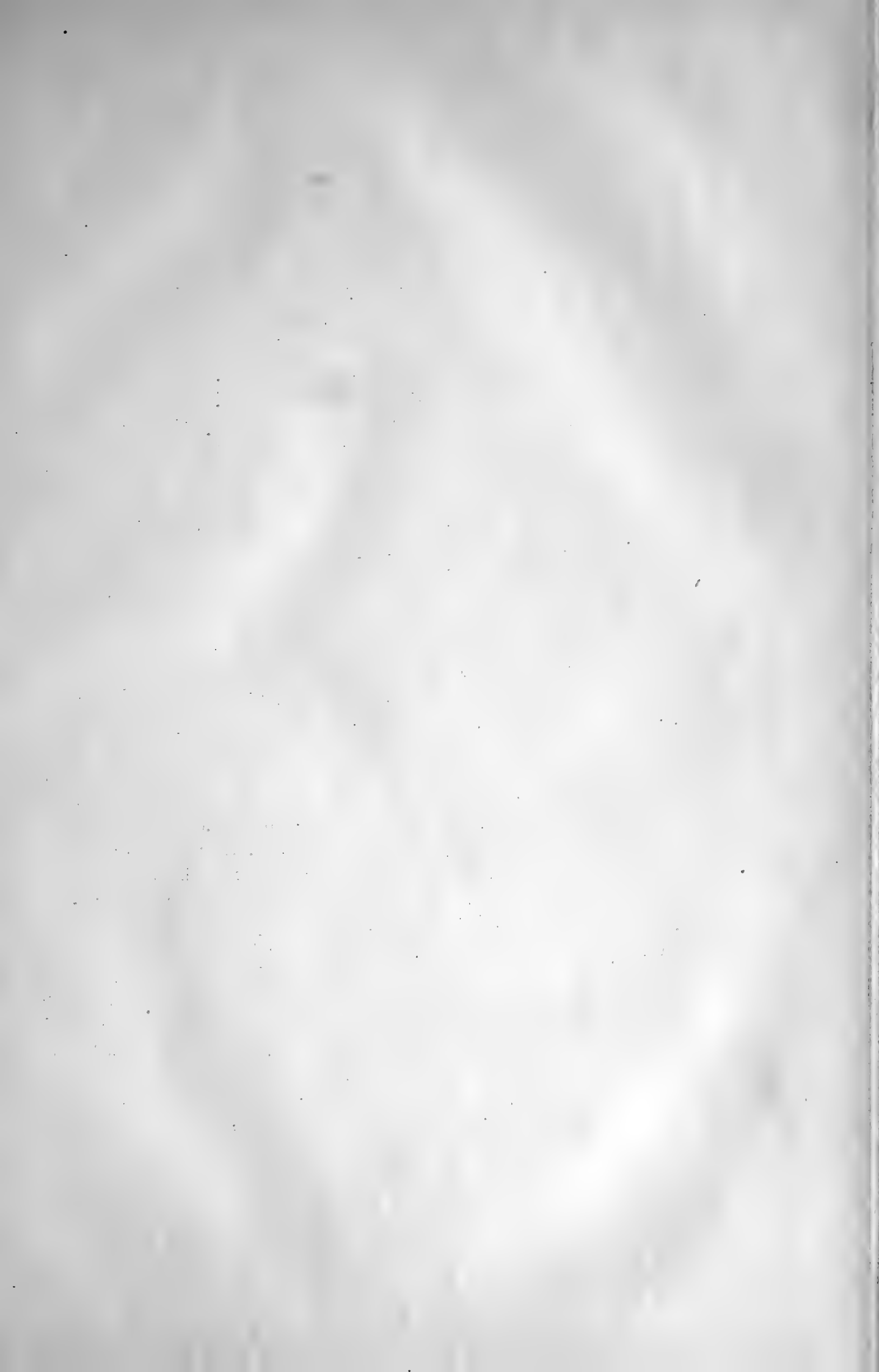
*Glyphipteryx psychopa*, n. sp.

♂ ♀. 6-7 mm. Head, palpi, and thorax white. Antennæ whitish-grey. Abdomen light grey, apex whitish. Forewings elongate, narrow at base, posteriorly dilated, costa gently arched, apex obtuse, termen slightly sinuate, very oblique; 7 and 8 separate; pale bronzy-grey, on posterior half pale bronzy-ochreous; a suffused white streak along dorsum from base to first spot; five costal and two dorsal white wedge-shaped marks edged anteriorly by oblique dark fuscous lines, first costal in middle moderately long, second extended as an irregular streak to termen above tornus, last three short, first dorsal beyond middle, long, curved, sometimes much dilated dorsally, second on tornus, erect, moderate; a small white spot on termen beneath apex; a conspicuous round black apical dot: cilia pale bronzy-ochreous, with a blackish median line indented with white beneath apex, outer half whitish. Hindwings lanceolate, grey; cilia pale ochreous-grey.

Diyatalawa, Ceylon, in July and August (Fletcher); seven specimens.

*Glyphipteryx maschalís*, n. sp.

♂ ♀. 10 mm. Head and palpi white, crown bronzy-tinged. Antennæ grey, base white. Thorax pale ochreous-bronzy, sides of back suffused with white. Abdomen dark grey, segmental margins whitish. Forewings elongate, narrow at base, posteriorly dilated, costa slightly arched, apex obtuse, termen somewhat sinuate, rather strongly oblique; 7 and 8 separate; light bronzy-yellowish; base and costa to first streak suffused with bronzy-fuscous; five



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oblique silvery streaks suffusedly edged with dark fuscous from white spots on costa, first somewhat before middle, reaching half across wing, second somewhat longer, rest short, terminated by a large patch of dark fuscous suffusion resting on termen beneath apex; a dark fuscous patch extending along dorsum from base to præternal spot, cut by a thick curved oblique, white streak from dorsum before middle, broadly edged with dark fuscous reaching more than half across wing, dilated dorsally; a white semi-oval præternal spot, above which the dark fuscous dorsal patch forms a projection; an erect silvery streak from tornus, reaching nearly half across wing, its apex connected by a dark fuscous streak with apex of curved white dorsal streak, and posteriorly with subapical dark patch; two small sometimes confluent bluish-silvery spots on lower part of termen, partially edged with black; a silvery dot on termen beneath apex: cilia whitish-bronzy, with a blackish median line indented with white beneath apex, outer half more whitish, with traces of a blackish apical hook. Hindwing dark fuscous; cilia whitish-fuscous, with a suffused fuscous subbasal shade.

Diyatalawa and Puttalam, Ceylon, in July, August, and November (Fletcher, Pole); three specimens.

*Glyphipteryx rhodanis*, n. sp.

♀. 14-16 mm. Head, antennæ, and thorax bronzy-fuscous. Palpi dark fuscous, with base, three rings, and sides of apex white. Abdomen dark fuscous. Forewings elongate, narrow at base, posteriorly dilated, costa slightly arched, apex obtuse, termen sinuate, rather strongly oblique; 7 and 8 separate; bronzy-fuscous, posterior half ochreous-bronze; markings prismatic golden-metallic, becoming white on costa, finely edged with blackish; six short oblique streaks from costa, first in middle, second longest, reaching half across wing; an upward-oblique streak from fold beneath apex of first costal; erect streaks from before and beyond tornus, not reaching half across wing; in a line between first of these and fourth costal are two small spots in disc, followed by a small spot of blackish suffusion; a small spot on subapical sinuation; a suffused blackish apical spot: cilia bronzy-whitish with a blackish median line indented on subapical sinuation, and with a blackish apical hook. Hindwings dark fuscous; cilia light ochreous, suffused with fuscous towards base.

Khasis, in May; two specimens.

*Glyphipteryx canachodes*, n. sp.

♂. 14 mm. Head blackish-bronze. Palpi white, with four rings and anterior edge towards apex black. Antennæ whitish ringed with blackish. Thorax shining bronze. Abdomen grey, anal tuft grey-whitish. Forewings elongate, rather narrow at base, posteriorly dilated, costa slightly arched, apex obtuse, termen slightly rounded, oblique; 7 and 8 separate; golden-bronze; markings prismatic golden-metallic, on costa whitish; a streak on fold from near base to  $\frac{1}{4}$ ; six streaks from costa, first at  $\frac{1}{3}$ , running to dorsum beyond middle, second and third not reaching middle of wing, fourth slightly curved, running to dorsum

before tornus, fifth reaching half across wing, sixth running almost along termen to tornus; a black mark running from middle of disc obliquely downwards to beyond fourth streak, by which it is interrupted, bearing a small round golden-metallic spot near its anterior extremity: cilia whitish-grey, basal third golden-bronze, with a dark fuscous apical hook. Hindwings grey, lighter towards base; cilia pale greyish-ochreous.

Nilgiris, 3,500 feet, in May (Andrewes); one specimen. This belongs to the group in which there is no subapical indentation in the median line of cilia, and is nearly related to several Australian species.

*Glyphipteryx antidoxa*, n. sp.

♂ ♀. 19-22 mm. Head whitish-ochreous more or less irrorated with dark fuscous. Palpi fuscous-whitish. Antennæ pale greyish-ochreous dotted with dark fuscous. Thorax whitish irrorated with dark fuscous. Abdomen fuscous mixed with dark fuscous, segmental margins whitish. Forewings elongate, rather narrow, slightly dilated posteriorly, costa slightly arched, apex rounded, termen sinuate-indentured beneath apex, rather oblique; 7 and 8 separate; pale whitish-ochreous finely irrorated with black; markings cloudy, whitish; a slender irregular fascia before  $\frac{1}{3}$ , becoming obsolete towards dorsum; a slightly curved median fascia narrow towards costa, broader and sometimes bifid on dorsal half; three converging streaks from costa posteriorly, second often obsolete, uniting with an oblique discal streak near before them, a streak along lower part of termen, and a small spot on tornus in a general cloudy suffusion; two round black terminal dots about apex, and two others below sinuation; cilia whitish, with a black median line, basal half on tornus speckled with blackish, elsewhere appearing dark fuscous in certain lights. Hindwings dark fuscous; cilia whitish-fuscous, suffused with fuscous towards base.

N. Coorg, 3,500 feet (Newcome); Madulsima, Ceylon (Vaughan); in December, and from March to June, six specimens. This is a singular species of novel type.

*Glyphipteryx orymagdis*, n. sp.

♂. 13 mm. Head and Thorax whitish. Palpi whitish, second joint fuscous except at apex, with long projecting tuft of scales beneath. Antennæ grey. Abdomen light greyish-ochreous. Forewings elongate, rather narrow, widest in middle, costa gently arched, apex round-pointed, termen slightly sinuate extremely oblique; 7 and 8 separate; light brownish-ochreous, more infuscated on margins of markings, markings whitish; about seventeen rather short oblique streaks from costa between  $\frac{1}{4}$  and apex; a slender median streak from base to  $\frac{3}{4}$ ; a rather broad dorsal streak from base to tornus, attenuated posteriorly; posterior half of wing longitudinally streaked with whitish between veins, on costal half very confusedly; some blackish scales on upper margin of median streak posteriorly, and on lower margin of interneural streak beyond it: cilia whitish, with a dark fuscous median line edged with brownish-ochreous posteriorly, and a blackish apical hook. Hindwings narrow, pointed, 3 and 4 stalked; grey; cilia whitish-ochreous.

Orthocentrus, 7500 ft.  
Common in December.  
1770





Patipola, Ceylon, in April (Alston); one specimen. Allied to some Australian and New Zealand forms.

#### MICROPTERYGIDÆ.

The interesting species described below is the first member of this primitive family recorded from the Indian region (for Walker's *Micropteryx acutipennis* and *M. unicella* have no real connection with the family, being normal *Tineidæ*), but since the family is characteristic of Europe and New Zealand, I have little doubt that it has been overlooked in India, and will be found to be fairly represented. The species are usually small (the one described below is the largest known), very difficult to see on the wing, and liable to be mistaken for *Trichoptera* (caddis flies), to which in fact they are nearly related. They should be looked for probably in damp but open forests of Conifers at high elevations, especially in the spring.

##### *Neopseustis*, n. g.

Head with short loose hairs; ocelli present; tongue short. Antennæ  $\frac{3}{4}$  filiform, with appressed hairscales, basal joint moderate. Labial palpi moderate, porrected, filiform, with appressed scales. Maxillary palpi long, several-jointed filiform, folded. Abdomen stout, swollen posteriorly. Posterior tibiae with appressed scales, spurs short. Forewings clothed with hairs, but with scattered scales on anterior half; 1b connected with lower margin of cell by bar towards base, 1c weak, appearing to rise from upper end of this bar, parting-vein connected with lower margin of cell by bar towards base (besides the bar forming posterior wall of cell), 2 and 3 stalked from angle of cell, 4 rising from parting-vein, which itself forms cell-wall for a considerable distance beyond the second bar, 5 and 6 stalked from angle made by parting vein, with bar above it, 7 and 8 stalked from upper angle of cell, 7 to apex, 9 out of stalk of 7 and 8 near base, 10 absent, 11 from rather beyond middle of cell, 12 connected with costa by a bar in middle. Hindwings more rounded than forewings posteriorly, clothed with hairs: 1b connected with 1c by bar near base, posterior cell-wall normal in form, 2 remote, 3 from angle, 4 from above angle, 5 and 6 stalked, 7 and 8 stalked from upper angle, 9 out of stalk of 7 and 8 near base, 10 absent, 11 from  $\frac{2}{3}$  of cell, 12 simple.

Slightly more specialised than the European *Eriscrania*, to which it is most related.

##### *Neopseustis calliglauca*, n. sp.

♂. 20 mm. Head pale ochreous, with some dark fuscous hairs. Labial palpi and antennæ light fuscous. Maxillary palpi pale ochreous. Thorax pale brownish-ochreous, with some silvery-white scales. Abdomen light yellow-ochreous, appearing broad and subtruncate posteriorly, with upper and lower lips, upper with sexual organs strongly depressed, lower short. Forewings subovate, moderately broad, costa strongly arched, apex obtuse, termen rounded rather strongly oblique; whitish; a fuscous patch covering anterior portion of wing and extending on costa to near middle and on dorsum to near tornus irregularly marked with blackish-fuscous transverse spots or bars between veins

and thinly strewn with fine scattered violet-silvery-white scales, its outer edge irregular and prominent above middle; small brownish-ochreous spots on dorsum at  $\frac{3}{4}$  and tornus; posterior area of wing strongly tinged with purple on lower half, and with pale green between this and costal area; at oblique irregular spot on costa at  $\frac{3}{5}$ , an elongate mark along apical fourth of costa, a large spot on termen beneath apex, and a smaller one below it light fuscous: (cilia defective.) Hindwings light prismatic-grey, posteriorly strongly purple tinged: cilia whitish-grey (defective).

Khasis, in October; one specimen, taken by a native collector. It is an insect of curious appearance, somewhat recalling small *Arctiadae* of the *Nudaria* or *Chamaita* type.

#### Synonymic Correction.

*Argyroploce mosaica*, Low. Trans. Roy. Soc. S. Austr., XXV, 72.

This supersedes *clydonias*, Meyr., Journ. Bomb. N. H. Soc., XVII, 734; Mr. Lower has recently sent me the type for inspection; described from Queensland as type of a supposed new genus *Temnolopha*.

*Argyroploce poetica*, n. nom.

I propose this name for the species described as *mosaica*, Meyr., Journ. Bomb. N. H. Soc., XVIII, 139, which in consequence of the above change finds its name preoccupied.



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## DESCRIPTIONS OF INDIAN MICRO-LEPIDOPTERA.

BY

E. MEYRICK, B.A., F.R.S., F.Z.S.

X.

EUCOSMIDÆ.

### *Epibactra*, n. g.

Antennæ in ♂ minutely ciliated. Palpi moderately long, porrected, second joint dilated with rough scales above and beneath, terminal joint moderately long, slender. Thorax smooth. Forewings with 7 and 8 stalked. Hindwings with 3 and 4 separate, approximated at base, 5 closely approximated to 4 at base, 6 and 7 stalked.

Closely allied to *Bactra*, especially to the first two species described hereafter from which it only differs essentially by the stalking of veins 7 and 8 of forewings.

### *Epibactra arenosa*, n. sp.

♂. 17-22 mm. Head, palpi, thorax, and abdomen whitish-ochreous, palpi sometimes partially tinged or sprinkled with fuscous. Forewings elongate, rather narrow, posteriorly somewhat dilated, costa gently arched, apex round-pointed, termen sinuate, little oblique; whitish-ochreous, partially tinged or mixed with brownish-ochreous, and with more or less pronounced traces of scattered strigulæ of fine blackish-fuscous irroration; costa marked throughout with short oblique strigulæ of fine blackish-irroration; some undefined brownish-ochreous suffusion towards costa on posterior half, sometimes mixed with fuscous, and an undefined similar spot in disc at  $\frac{3}{5}$ : cilia pale ochreous, tips infuscated on termen. Hindwings fuscous-whitish; cilia whitish-ochreous, with an indistinct fuscous line near base.

Maskeliya, Ceylon, in June and October (Pole); three specimens.

*Bactra*, Stph.

The species of this genus present considerable difficulties, being similar and variable, and close study is necessary to discriminate them. Ten are described here, but I do not find that any Indian specimens can be referred to the European *lanceolana*, Hb., or the African *siccella*, Walk. The form of wing and length of palpi are the most reliable characters, and must be carefully observed, but although the markings are usually vague and inconstant, they do notwithstanding present a distinct type in each species. In addition to those described I possess others of which the material is insufficient for description; and I shall be glad if collectors will pay attention to these obscure insects, and when possible collect good series of them from the same locality, to show the range of variation; any particulars of habit would also be useful. Possibly all may feed on species of rush (*Juncus*).

*Bactra federata*, n. sp.

♂. 20-22 mm. Head, thorax, and abdomen whitish-ochreous. Palpi 4, whitish-ochreous, second joint suffused with fuscous except towards margins. Forewings elongate, hardly dilated, costa moderately arched, apex round-pointed, termen sinuate, rather oblique; whitish-ochreous with scattered fuscous and blackish scales tending to form undefined strigulae; costa marked throughout with short oblique ochreous strigulae irrorated with blackish; an irregular spot of deep ochreous suffusion in disc at  $\frac{1}{3}$ , and a small blackish spot in disc beyond  $\frac{2}{3}$  connected by a whitish streak, whose apex is bent up above second spot; an elongate-triangular patch of ochreous-brown suffusion, more or less irrorated with dark fuscous, extending along costa from before middle to about  $\frac{4}{5}$ ; a fine black terminal line not reaching apex or tornus: cilia whitish-ochreous. Hindwings and cilia whitish.

Maskeliya, Ceylon, in April and August (de Mowbray, Pole); two specimens.

Resembles a strongly marked specimen of *Epibactra arenosa*, but distinguished by structure, and more oblique termen of forewings.

*Bactra sociata*, n. sp.

♂ 17-18 mm., ♀ 21-23 mm. Head, thorax, and abdomen whitish-ochreous. Palpi in ♂ 3, in ♀  $3\frac{1}{2}$ , whitish-ochreous, second joint tinged with fuscous except towards margins. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen sinuate, rather oblique; whitish-ochreous, with indications of scattered fuscous strigulae; costa marked throughout with short oblique deep ochreous strigulae irrorated with blackish; outer edge of basal patch indicated by an indistinct deep ochreous obtusely angulated striga; a white longitudinal streak in disc (obsolete in ♀) from this striga to beyond  $\frac{2}{3}$ , its extremity somewhat bent upwards between two dots of dark fuscous irroration; an elongate-triangular patch of deep ochreous suffusion finely sprinkled with dark fuscous extending along costa from before middle to about  $\frac{4}{5}$ ; an ochreous striga marked with four or five cloudy dots of blackish irroration near before lower part of termen; a fine ochreous terminal line irrorated with black not





reaching apex or tornus; cilia pale ochreous, on termen infuscated towards tips. Hindwings pale whitish-fuscous; cilia whitish-ochreous.

Maskeliya and Kelawewa, Ceylon, in May, July, September, and January (Pole, Alston); four specimens. Very like the preceding, but with shorter palpi, narrower forewings with costa less arched, discal streak terminated between two dots instead of above a spot, the striga before termen, and hindwings tinged with fuscous. These two species are quite distinct in appearance from all those which follow.

*Bactra metriacma*, n. sp.

♂ ♀. 16-19 mm. Head and thorax whitish-ochreous. Palpi  $3\frac{1}{2}$ , ochreous-whitish, with broad oblique band of fuscous suffusion. Abdomen grey. Forewings elongate, rather narrow, posteriorly hardly dilated, costa gently arched, apex tolerably pointed, termen slightly sinuate, rather strongly oblique; light brownish-ochreous, posteriorly ferruginous-tinged, more or less irregularly sprinkled with dark fuscous; costa marked throughout with short strigulae of blackish irroration, alternating with indistinct longer oblique whitish strigulae mixed with leaden-grey; a rather ill-defined white longitudinal streak above middle from base to apex, cut posteriorly by two or three dark veins, edged above by a suffused streak of black irroration towards base, and beneath by a short blackish streak in disc towards middle, terminated by a white projecting tooth from lower edge on transverse vein, and by a line of black irroration between this and apex; beyond cell some dark lines on veins, and more or less whitish suffusion between veins posteriorly; dorsum dotted or marked with blackish: cilia light brownish-ochreous sprinkled with dark fuscous, with rows of whitish points. Hindwings grey; cilia grey-whitish, with grey subbasal line.

Maskeliya, Ceylon, from August to November (Green, Pole); seven specimens. At first sight much like *phenacistis*, but paler and more ochreous, and readily distinguished by the longer palpi, more pointed forewings, and more oblique termen.

*Bactra copidotis*, n. sp.

♂ ♀. 16-20 mm. Head and thorax whitish-ochreous tinged with brownish. Palpi  $2\frac{3}{4}$ , whitish-ochreous, more or less infuscated towards middle, base white beneath. Abdomen pale greyish-ochreous. Forewings elongate, rather narrow, especially in ♀, hardly dilated, costa gently arched, apex round-pointed, termen sinuate, oblique; ferruginous-ochreous; costa with numerous indistinct ochreous-whitish oblique strigulae, alternating with short strigulae of blackish irroration; a very undefined streak of ochreous-whitish suffusion above middle from base to apex, cut by two or three dark veins posteriorly edged beneath throughout with broad more or less marked suffusion of dark fuscous irroration; veins posteriorly beneath this more or less suffused with dark fuscous; dorsum dotted with dark fuscous: cilia ferruginous-ochreous suffusedly irrorated with dark fuscous, and sprinkled with whitish, above apex and on costa white. Hindwings in ♂ grey, in ♀ whitish-grey; cilia grey-whitish with two grey lines.

Gampola, Puttalam, and Maskeliya, Ceylon, in October, November and February (Pole, Green) ; Palni Hills, 6,000 feet (Campbell) ; five specimens. This species has the termen of forewings more distinctly sinuate than any other described, but only moderately oblique.

*Bactra leucogama*, n. sp.

♂ ♀. 13-15 mm. Head, palpi, and thorax whitish-ochreous ; palpi 2. Abdomen ochreous-whitish. Forewings elongate, rather narrow, hardly dilated, costal gently arched, apex obtuse, termen almost straight, oblique ; whitish-ochreous, mixed with silvery-metallic suffusion, which tends to form irregular transverse strigæ ; costa marked with short deep ochreous strigulæ irrorated with blackish, and about seven longer deep ochreous strigulæ ; deep ochreous markings as follows, viz., a spot on suffusion in disc towards base, a transverse spot in disc at  $\frac{1}{3}$ , an irregular or interrupted fascia on dorsal  $\frac{2}{3}$  beyond middle, combined in middle with an irregular sinuate streak running to apex, an oblique triangular prætornal spot, and a slender streak along termen ; dorsum with minute dots of blackish irroration : cilia whitish-ochreous mixed with deeper ochreous. Hindwings in ♂ pale grey, in ♀ whitish ; cilia whitish in ♂ with faint grey subbasal line.

Puttalam, Ceylon, in February and August (Pole) ; four specimens. Recognisable by the pale ochreous colouring, distinct deeper ochreous markings, termen of forewings not sinuate, and white hindwings of ♀ (in ♂ paler grey than usual) ; but I have another apparently distinct undescribed species, in which the ♀ has also white hindwings.

*Bactra honesta*, n. sp.

♂ ♀. 14-16 mm. Head ochreous-whitish. Palpi 2, whitish, with broad median fuscous band. Thorax pale ochreous. Abdomen greyish. Forewings elongate, hardly dilated posteriorly, costa moderately arched, apex tolerably pointed, termen rather sinuate, oblique ; pale ochreous, more or less tinged with ferruginous-brownish, especially towards disc beyond middle, with a few scattered dark fuscous scales ; costa marked with long oblique ochreous-whitish strigulæ more or less tinged with leaden-grey, alternating with very slight short strigulæ of black irroration ; between  $\frac{1}{3}$  and apex the whitish strigulæ are often continued across wing as well-marked angulated striæ, leaving an angulated basal patch and narrow irregular central fascia of ground colour ; generally a more or less marked broad streak of blackish irroration in disc from base to end of cell, sometimes well-defined above and continued to near apex ; often a subcrescentic downwards-curved dark spot in disc at  $\frac{2}{3}$  ; space beyond cell variably mixed with whitish suffusion and irrorated with dark fuscous, with two distinct black interneural lines between veins 6-8, and indications of others, especially often two short black marks between veins 3-5 : cilia pale brownish-ochreous with rows of whitish points, sometimes somewhat sprinkled with dark fuscous, at apex with a more or less marked dark ochreous-brown spot marked with black. Hindwings grey, paler towards base ; cilia ochreous-whitish, with an indistinct grey subbasal line.







Khasis, from June to September ; twenty specimens. Variable, but always without definite white longitudinal streak, though the dark suffusion marking its lower margin is often strongly expressed ; forewings more pointed than usual, as in *Metriacma*, but termen less oblique than in that species, and palpi much shorter.

*Bactra phenacistis*, n. sp.

♂ ♀. 14-19 mm. Head whitish-ochreous, faintly brownish-tinged. Palpi  $2\frac{1}{4}$ , whitish-ochreous, with a more or less wide oblique median bar of dark fuscous suffusion. Thorax pale ochreous, sometimes brownish-tinged, with some dots of dark fuscous irroration. Abdomen whitish fuscous. Forewings elongate rather narrow, slightly dilated posteriorly, costa gently arched, apex obtuse, termen faintly sinuate, oblique ; pale ochreous, more or less tinged or suffused with ferruginous-brown, sometimes mixed or suffusedly strigulated with whitish on dorsal half ; costa with about eight pairs of rather long oblique silvery-whitish strigulae more or less mixed with leaden-grey, alternating with indistinct strigulae of blackish irroration ; a longitudinal whitish streak above middle from base to apex, cut obliquely by one or two dark veins posteriorly, and margined beneath by much blackish suffusion especially on veins, often with a distinct white projection downwards on transverse vein ; veins from cell posteriorly marked by lines of blackish suffusion ; dorsum dotted with black and white ; cilia grey somewhat mixed with ochreous-brownish, with rows of white and blackish points. Hindwings grey, rather darker towards apex ; cilia whitish-grey, with two grey lines.

Maskeliya, Ceylon, from November to May (Pole, de Mowbray, Alston) ; seven specimens.

*Bactra truculenta*, n. sp.

♂. 15-17 mm. Head and thorax pale greyish-ochreous, somewhat mixed with fuscous on sides. Palpi 2, grey-whitish mixed with fuscous. Forewings elongate, rather narrow, posteriorly slightly dilated, costa gently arched, apex obtuse, termen straight, oblique ; whitish-ochreous suffusedly strigulated throughout with fuscous ; costa obliquely strigulated throughout with dark fuscous ; some irregular dark fuscous suffusion beneath middle of disc from about  $\frac{1}{4}$  to  $\frac{3}{4}$  ; a white discal dot at  $\frac{2}{3}$ , preceded and followed by irregular longitudinal black marks ; veins beyond cell marked by fine dark fuscous lines ; two small blackish interneural marks above tornus ; a small subtriangular subapical patch of dark fuscous suffusion, edged above with ochreous-white suffusion ; some black irroration along termen : cilia pale fuscous with rows of whitish points, indistinctly spotted with dark fuscous irroration. Hindwings grey ; cilia whitish grey, with grey subbasal line.

N. Coorg, 3,500 feet, in March (Newcome) ; two specimens.

*Bactra minima*, n. sp.

♂. 8-9 mm. Head and thorax pale whitish-ochreous, slightly tinged with brownish. Palpi  $1\frac{2}{3}$ , ochreous-whitish, with median band of blackish irroration, abdomen pale greyish-ochreous. Forewings elongate, rather narrow, posteriorly

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slightly dilated, costa gently arched, apex obtuse, termen almost straight, oblique; whitish ochreous slightly tinged with brownish, with scattered indistinct dark fuscous strigulae; costa strigulated with blackish; undefined darker spots below middle at  $\frac{1}{3}$  and  $\frac{2}{3}$  indicated by ochreous-fuscous suffusion or dark fuscous irroration; dorsum and termen dotted with blackish irroration: cilia pale whitish-ochreous, towards apex sprinkled with blackish. Hindwings rather light grey; cilia ochreous-whitish, with faint grey subbasal line.

Barberyn Island, Ceylon, in February (Fletcher); two specimens. Easily known by the unusually small size and short palpi.

*Bactra tornastis*, n. sp.

♂ ♀. 14-16 mm. Head and thorax whitish-ochreous, sometimes tinged with brownish. Palpi 2, whitish-ochreous, with broad median band of fuscous suffusion. Abdomen pale grey. Forewings elongate, posteriorly somewhat dilated, costa gently arched, apex obtuse, termen in ♂ gently rounded, in ♀ nearly straight, oblique; whitish-ochreous, more or less generally suffused with ferruginous-brownish, and sprinkled with dark fuscous; costal edge dark fuscous, marked throughout with rather long oblique ochreous-whitish strigulae more or less suffused with leaden-grey; an ochreous-whitish streak above middle from base to apex usually very incompletely defined, and cut posteriorly by dark lines on veins, margined beneath by a very broad dark fuscous suffused streak extending from base to  $\frac{3}{4}$ , with a white dot on transverse vein cutting upper edge of this suffusion, and a wedgeshaped mark of dark fuscous suffusion at apex; veins beyond cell marked with streaks of dark fuscous suffusion; dorsum dotted with dark fuscous suffusion: cilia fuscous, with rows of whitish and dark fuscous points. Hindwings light grey; cilia whitish.

Nawalapita, Ceylon, in January (Pole); Gooty (Campbell); Coorg, 3,500 feet, in October (Newcome); four specimens. The only species which has the termen of forewings rounded in ♂; in all the rest it is straight or sinuate.

*Polychrosis*, Rag.

This is the genus hitherto passing as *Chrosis*, Gn. It differs from *Bactra* by the crested thorax, from *Proschistis* by 6 and 7 of hindwings being connate or stalked, from *Argyroploce* by the separation of 3 and 4 of hindwings. I have described one species, *ephippias*, and now give four more.

*Polychrosis cerata*, n. sp.

♂ ♀. 10-12 mm. Head and thorax pale yellow-ochreous. Palpi with long rough spreading scales, pale ochreous, more or less sprinkled with dark fuscous towards base. Abdomen rather dark grey. Forewings elongate, rather narrow, posteriorly slightly dilated, costa gently arched, apex obtuse, termen little rounded, somewhat oblique; dark fuscous, with purplish-leaden reflections, with the base of all scales fuscous-whitish, forming fine transverse striae; costa with about six oblique blackish fuscous strigulae, and sometimes mixed with yellowish between these; base sometimes mixed with ochreous-yellowish; large oblique irregular ochreous-yellow blotches from dorsum about  $\frac{1}{4}$  and beyond



1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$\begin{cases} \Delta u = f(x, y, z, u, v, w) \\ \Delta v = g(x, y, z, u, v, w) \\ \Delta w = h(x, y, z, u, v, w) \end{cases} \quad (1)$$

where  $\Delta$  is the Laplace operator,  $f, g, h$  are functions of the coordinates  $x, y, z$  and the unknown functions  $u, v, w$ . The functions  $f, g, h$  are assumed to be continuous and to satisfy certain conditions.

2. In the second part of the paper, we consider the case when the functions  $f, g, h$  are linear in the unknown functions  $u, v, w$ . In this case, the system of equations (1) can be written in the form

$$\begin{cases} \Delta u = a_1 u + a_2 v + a_3 w + f_1(x, y, z) \\ \Delta v = b_1 u + b_2 v + b_3 w + f_2(x, y, z) \\ \Delta w = c_1 u + c_2 v + c_3 w + f_3(x, y, z) \end{cases} \quad (2)$$

where  $a_i, b_i, c_i$  are constants and  $f_1, f_2, f_3$  are functions of the coordinates  $x, y, z$ . The functions  $f_1, f_2, f_3$  are assumed to be continuous and to satisfy certain conditions.

3. In the third part of the paper, we consider the case when the functions  $f, g, h$  are quadratic in the unknown functions  $u, v, w$ . In this case, the system of equations (1) can be written in the form

middle, reaching half across wing, sometimes united with smaller less developed or nearly obsolete blotches from costa to form angulated fasciæ; an angulated bluish-leadened striga from  $\frac{1}{4}$  of costa to tornus, its margins sometimes more or less marked with ferruginous-yellowish: cilia fuscous mixed with dark fuscous and sprinkled with fuscous-whitish with a dark fuscous subbasal line. Hindwings fuscous; cilia light fuscous, with a dark fuscous subbasal line.

Diyatalawa, Ceylon (Fletcher); Khasis, in August; nine specimens.

*Polychrosis fallax*, n. sp.

♂ ♀. 15-17 mm. Head pale ochreous. Palpi pale ochreous, second joint with three small dark fuscous spots externally on upper margin, and one on lower margin near apex. Thorax pale brownish-ochreous, irregularly spotted with dark fuscous irroration. Abdomen fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen almost straight, little oblique; pale brownish-ochreous, with scattered strigulæ of ochreous and blackish irroration; basal patch mixed with ochreous and blackish, ill-defined, edge irregular; space between this and central fascia with one or two irregular more or less marked leaden metallic strigæ; central fascia broad throughout, little oblique deep brownish-ochreous or ferruginous-ochreous mixed with leaden-metallic and blackish, more strongly marked with blackish on upper half, appearing to form a blackish costal blotch attached anteriorly to a downwards-curved longitudinal mark in disc; an ochreous streak sprinkled with blackish extending from posterior margin of central fascia near costa to middle of termen, space above and below this marked with irregular leaden-metallic strigæ; costa posteriorly with three small blackish spots whence arise short brownish strigulæ meeting beneath apex: cilia brownish-ochreous mixed with leaden-grey and blackish with a subbasal blackish line, at tornus with a whitish-ochreous patch. Hindwings rather dark fuscous, in ♂ with dorsum clothed with expansible tuft of whitish ochreous hairs; cilia fuscous, with dark fuscous subbasal line, in ♂ becoming whitish-ochreous towards dorsum.

Khasis, from July to September; twelve specimens.

*Polychrosis anceps*, n. sp.

♂ ♀. 12-14 mm. Head and thorax pale ochreous mixed with fuscous. Palpi pale ochreous, indistinctly spotted with fuscous. Abdomen fuscous. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen faintly sinuate, hardly oblique; pale brownish-ochreous, mixed with leaden grey, which tends to form irregular transverse striæ; small blackish spots along costa; basal patch irregularly mixed with brownish and black, outer edge irregular; central fascia brownish, hardly oblique, very undefined towards costa broad and suffusedly mixed with blackish, in middle of disc with a longitudinal down-curved black mark, posterior edge excavated above and below this; an erect elongate-triangular brownish prætornal spot edged by undefined blackish striæ continued upwards as a single stria  $\frac{3}{4}$  across wing; a brownish streak mixed with black from near extremity of this to termen below middle; a small brownish apical spot: cilia fuscous, with blackish subbasal line,

beneath tornus somewhat mixed with whitish-ochreous. Hindwings rather dark fuscous, darker posteriorly; cilia fuscous, with dark fuscous subbasal line.

Puttalam, Ceylon, in April (Pole); two specimens.

*Polychrosis gabina*, n. sp.

♂ ♀. 14-15 mm. Head brown. Palpi brown, paler and ferruginous-tinged towards apex of second joint above. Thorax brown, more or less marked with blackish and sometimes spotted with white, crest suffused with ferruginous. Abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen nearly straight, vertical, rounded beneath; bronzy-brownish, irregularly marked with black; costa black, with pairs of whitish strigulae; anterior half of wing crossed by several irregular leaden-metallic striae, sometimes partially edged with whitish; two oblique leaden-metallic streaks from costa beyond middle more or less united with two very irregular thick partially white-edged leaden-metallic streaks from about tornus, forming margins of ocellus; cilia metallic leaden-grey, with dark fuscous basal line. Hind-wings dark fuscous, more blackish posteriorly; an elongate suffused hyaline patch from base beneath and along lower part of cell; in ♂ whole dorsal area formed into a large separate lobe by a deep incision extending beneath cell nearly to base; cilia grey-whitish, with dark fuscous basal line.

Khasis, from November to March; nine specimens. Veins 3 and 4 of hindwings are more widely remote in ♂ than in ♀, owing to wing-modification.

*Proschistis*, Meyr.

Differs from *Polychrosis* by veins 6 and 7 of hindwings being approximated towards base but separate, from *Argyroplote* by separation of veins 3 and 4 of hindwings. Founded on a single species; I now add three more.

*Proschistis lucifera*, n. sp.

♀. 23 mm. Head, palpi, and thorax fuscous mixed with darker, patagia mixed with yellowish. Abdomen light fuscous. Forewings elongate, posteriorly somewhat dilated, costa gently arched, apex obtuse, termen nearly straight, little oblique; secondary cell moderately broad; fuscous mixed with blackish towards dorsum tinged with greenish on veins; costa suffused with blackish and marked with nine pairs of ochreous whitish strigulae; basal patch mixed with whitish, hardly defined except by a blackish-fuscous dorsal spot at  $\frac{1}{3}$ , and followed by two pairs of very irregular whitish striae; two similar pairs beyond middle, confluent in disc and crossed above middle by a narrow inwards-oblique pale yellow blotch; a pair of whitish striae before termen, becoming double on lower half; some white dots on termen, edged anteriorly by a waved blackish line; cilia fuscous, indistinctly barred with pale yellowish. Hindwings fuscous; cilia light fuscous, sprinkled with whitish towards tips with a darker subbasal line.

Palni Hills (Campbell); one specimen.

*Proschistis agitata*, n. sp.

♂ ♀. 19-21 mm. Head and thorax pale reddish-fuscous mixed with dark



1. The first part of the paper discusses the importance of the study.

2. The second part of the paper discusses the methodology used in the study.

3. The third part of the paper discusses the results of the study. The results show that there is a significant positive correlation between the variables studied. This finding is consistent with previous research in the field. The study also found that the variables studied have a significant impact on the outcome variable. This finding is also consistent with previous research in the field.

4. The fourth part of the paper discusses the conclusions of the study.

5. The fifth part of the paper discusses the implications of the study for future research. The study suggests that further research is needed to explore the relationship between the variables studied in more detail. This research could help to clarify the underlying mechanisms of the relationship and provide more information on the factors that influence the outcome variable.

6. The sixth part of the paper discusses the limitations of the study.

7. The seventh part of the paper discusses the strengths of the study. The study has several strengths, including the use of a large sample size, the use of a rigorous methodology, and the use of a variety of statistical tests. These strengths make the study a valuable contribution to the field. The study also has several limitations, including the use of a cross-sectional design, the use of self-reported data, and the use of a convenience sample. These limitations suggest that the results of the study may not be generalizable to other populations or settings.

8. The eighth part of the paper discusses the conclusions of the study.

9. The ninth part of the paper discusses the implications of the study for future research.



fuscous and whitish. Antennal ciliations in ♂ short. Palpi brownish suffusedly mixed with dark fuscous. Abdomen grey, in ♂ suffused with whitish ochreous towards base. Forewings elongate, posteriorly somewhat dilated, costa gently arched, apex obtuse, termen slightly sinuate, hardly oblique; secondary cell very narrow; fuscous tinged with reddish, and irregularly mixed with white, and strigulated with black; outer edge of basal patch indicated by a small black spot on costa; central fascia formed by blackish suffusion, narrow, irregular, indistinct, below middle forming a more conspicuous very irregular elongate blotch; a rather narrow fascia of blackish suffusion from costa before apex to dorsum before tornus, marked on veins with brown: cilia fuscous mixed with dark fuscous, on tornus sprinkled with whitish. Hindwings fuscous, darker towards apex; cilia fuscous, with dark fuscous subbasal line.

Maskeliya and Patipola, Ceylon, in February and October (Alston, de Mowbray); four specimens. The secondary cell of forewings is in *P. zalenta*, still narrower than in this species, a point not noticed in my description.

*Proschistis invida*, n. sp.

♂ ♀. 14-16 mm. Head light fuscous. Palpi fuscous-whitish, suffusedly spotted with fuscous. Thorax fuscous sprinkled with whitish, and suffusedly spotted with darker fuscous. Abdomen fuscous. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen faintly sinuate, little oblique; ochreous-brownish; costal edge suffused with blackish, and marked with eight or nine pairs of oblique whitish strigulae; basal patch mixed with black and leaden-metallic, outer edge rounded; space between this and central fascia mostly occupied by two irregular leaden-metallic striae edged with whitish; central fascia moderate, mixed with black, posterior edge irregular, with long subcostal and median projections, excavation filled with leaden-metallic; beyond this a thick double partially whitish-edged leaden-metallic stria, separating into two thick branches to enclose an elongate-triangular prætornal spot mixed with black; leaden-metallic lines from last three pairs of costal strigulae converging to a point beneath apex, space between this and preceding stria longitudinally streaked with black suffusion except towards costa: cilia rather dark fuscous, finely sprinkled with whitish points. Hindwings dark fuscous; cilia fuscous, with darker subbasal line.

Khasis, in September; four specimens.

*Asaphistis*, n. g.

Antennae in ♂ strongly fasciculate-ciliated. Palpi moderate, porrected, second joint triangularly rough-scaled, terminal joint short. Forewings with 8 and 9 stalked. Hindwings with 3 and 4 remote, 3 from well before angle, 5 approximated to 4 at base, 6 and 7 approximated towards base. (Thorax probably crested, but damaged.)

Allied to *Proschistis*.

*Asaphistis præceps*, n. sp.

♂. 15-16 mm. Head and palpi fuscous mixed with black. Thorax pale

whitish-ochreous, anterior margin fuscous mixed with black. Abdomen grey. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen faintly sinuate, little oblique; white; basal patch dark fuscous mixed with blackish, somewhat marked with whitish towards dorsum, outer edge irregular, nearly straight, vertical; central fascia represented by a small dark fuscous spot on costa, and a dark fuscous dorsal blotch not reaching half across wing but connected with basal patch by irregular dark fuscous suffusion; some irregular ochreous-fuscous marking in disc beyond middle, and an oval patch of ochreous-fuscous suffusion above tornus; a small dark fuscous costal spot before central fascia and four beyond it, last two absorbed in a triangular dark fuscous apical blotch which extends along termen to below middle, more or less dotted with white on termen: cilia fuscous spotted with dark fuscous and white, at termen with a whitish patch. Hindwings grey; cilia light grey.

Khasis, in September; two specimens.

*Articolla*, Meyr. (B.S. III. 976)

The following species agrees well in structure with the one described.

*Articolla prospera*, n. sp.

♀. 17 mm. Head light brownish-ochreous tinged with fuscous. Palpi dark fuscous, second joint with light ferruginous-ochreous median band, apex of terminal joint pale ochreous. Thorax light brownish-ochreous mixed with dark fuscous. Abdomen dark fuscous. Forewings elongate, posteriorly dilated, costa slightly arched, sinuate in middle, costal cilia prominent beyond sinuation, apex obtuse, termen straight, somewhat oblique; ferruginous brown mixed or reticulated with dark fuscous; costa shortly strigulated with dark fuscous and ochreous-whitish; a moderate very oblique leaden striga from costa at  $\frac{1}{3}$ ; an elongate-triangular blackish costal spot beyond middle; four leaden strigæ from costa posteriorly, first running to termen beneath apex edged beneath with ochreous-whitish, other three short, costa between these ferruginous, apical edge also leaden; a group of four roundish partly confluent whitish-ochreous spots between these markings and tornus, more or less brownish-tinged except on margins, especially the two lower which are mostly filled with ochreous-brown suffusion and leaden-grey irroration: cilia pale brownish-ochreous, with ferruginous basal shade round apex. Hindwings dark fuscous, bases of scales subhyaline, appearing finely striated; cilia pale fuscous, with darker basal shape.

Khasis, in June; one specimen.

*Statherotis*, n. g.

Antennæ in ♂ shortly ciliated. Palpi moderate, porrected, second joint rough-scaled above and beneath. Thorax with posterior crest. Forewings with 8 and 9 stalked. Hindwings with 3 and 4 connate, 5 approximated, 6 and 7 approximated towards base.

*Statherotis decorata*, n. sp.

♂. 18 mm. Head pale greyish-ochreous somewhat mixed with blackish. Palpi whitish-ochreous, suffused with fuscous except towards base and apex.



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Thorax whitish-ochreous, anteriorly tinged with brownish and marked with blackish-grey. Abdomen fuscous, basal third ochreous-yellowish, apex whitish-ochreous. Posterior tibiae beneath with long projecting ochreous scale, forming a broad triangular tuft before middle and grey expansible hair-pencil from base lying on inner side of this. Forewings elongate, moderate, posteriorly dilated, costa gently arched, apex obtuse, termen somewhat sinuate, vertical, rounded beneath; rather dark brown tinged with reddish, mixed with blackish and suffusedly striated with ashy-grey; a large semi-oval ochreous-whitish blotch extending along costa from  $\frac{1}{3}$  to  $\frac{2}{3}$  and reaching nearly half across wing, marked with indistinct pale red-brownish oblique strigulae becoming distinct and blackish on costa, and a light brownish oblique costal spot in middle; and ashy-grey fascia indistinctly edged with whitish from beyond this blotch in disc to  $\frac{3}{4}$  of dorsum, followed by some undefined whitish suffusion towards termen: cilia pale fuscous sprinkled with whitish, with two dark grey shades. Hindwings dark fuscous, with bases of scales subhyaline, appearing finely striated; a large patch of rather thinly strewn modified black hairscales with prismatic green and purple reflections occupying whole of disc from near base to  $\frac{3}{4}$ ; whole dorsal area beneath this yellow-ochreous, towards dorsum clothed with long dense scales and with dorsal cilia elongated, on lower surface with expansible long hairs in a subdorsal groove; cilia as in forewings, becoming ochreous round dorsal patch.

Maskeliya, Ceylon, in April (Pole); one specimen. The special colouring and structures of hindwings will doubtless prove to be confined to the ♂.

*Argyroploce*, Hb.

I agree with Prof. Fernald in adopting this name for the genus previously termed by me *Eucosma*, Hb. (that name being rightly applied otherwise), including also *Platypeplus*, as previously explained. I find further that the stalking of veins 3 and 4 of hindwings cannot be properly used to distinguish *Enarmonia* generically, since in some of the species hereafter described the structure is inconstant within the limits of the same species, and I propose therefore to rely on the thoracic crest to separate the two genera, attributing all those species with well-developed crest to *Argyroploce*; on this view the four Indian species already referred to *Enarmonia* must all be transferred to *Argyroploce*. On this understanding the number of Indian species already described which are attributable to *Argyroploce* is 28, and I now describe 33 more, and have still much additional material.

*Argyroploce lasiandra*, n. sp.

♂. 21 mm. Head, palpi, and thorax rather dark fuscous, palpi porrected. Abdomen light greyish-ochreous, dorsally clothed with dense rough hairs, and with large expansible anal tuft. Posterior tibiae and basal joint of tarsi clothed with dense long rough greyish-ochreous scales above. Forewings moderate, posteriorly dilated, costa gently arched, apex obtuse, termen slightly rounded, oblique; dark grey, strigulated with blackish, tips of scales fuscous-whitish; cilia concolorous. Hindwings reduced, narrower than forewings, dorsal area folded

and clothed with dense long hairs, tornus distorted and tufted with long projecting scales; fuscous, somewhat suffused with light brownish-ochreous in and beneath disc; cilia pale greyish-ochreous, with suffused fuscous subbasal shade.

Trincomali, Ceylon, in November (Green); one specimen.

*Argyroploce tonsoria*, n. sp.

♂. 16 mm. Head, palpi, and thorax pale brownish-ochreous irregularly sprinkled with dark fuscous, palpi subascending. Abdomen grey, apex rosy-tinged. Posterior tibiae and basal joint of tarsi densely tufted above with long expansible whitish hairs. Forewings moderately elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen rounded, little oblique; brownish-ochreous suffused with ochreous-whitish; basal third irregularly mixed with yellow-brown and sprinkled with black; a yellow-brown triangular patch extending on costa from middle to near apex, its apex nearly reaching dorsum beyond middle, much mixed with black posteriorly, costal edge marked with five pairs of white strigulae; a yellow-brown streak along upper part of termen, confluent above with triangular patch, preceded above middle by a triangular spot of blackish suffusion: cilia yellow-brown sprinkled with ochreous-whitish, on upper part of termen indistinctly barred with blackish. Hindwings rather dark fuscous; dorsal area somewhat dilated and clothed with hairs; cilia ochreous-whitish tinged with a brownish subbasal line.

Bentota, Ceylon; one specimen, bred in January from larva feeding in fruit of *Barringtonia racemosa* (Green).

*Argyroploce oedulea*, n. sp.

♂ ♀. 19-20 mm. Head and thorax whitish-ochreous more or less tinged or mixed with red-brownish. Palpi ascending, white, more or less tinged or mixed with red-brownish except towards base, in ♂ very slightly. Abdomen in ♂ dark brown, in ♀ dark grey. Posterior femora and basal half of tibiae in ♂ with long fine expansible white hairs beneath. Forewings elongate, posteriorly, dilated, costa slightly sinuate in middle, rather abruptly arched posteriorly, apex obtuse, termen nearly straight, hardly oblique, rounded beneath; in ♂ brownish-ochreous, in ♀ red-brownish, more or less strewn with scattered black scales; costa spotted and strigulated with black; several black strigulae towards costa before middle; a cloudy streak of whitish-ochreous suffusion running beneath posterior part of costa and before upper portion of termen, marginating an undefined posterior discal patch sometimes irregularly mixed with black and dark leaden, containing a tuft of long raised white and pale brown scales on transverse vein, more elongated in ♂; several minute black dashes in the whitish-ochreous streak towards costa posteriorly; sometimes some short dark blue-leaden marks beneath costa posteriorly and a line almost on apical edge; series of more or less marked black strigulae on and before termen: cilia whitish-ochreous, with two brownish shades and indications of darker bars. Hindwings dark grey; cilia grey-whitish, with dark grey subbasal and light fuscous subapical shades.

THE HISTORY OF THE  
CITY OF BOSTON

FROM THE FIRST SETTLEMENT  
TO THE PRESENT TIME  
BY  
JOHN H. COLEMAN  
OF THE BOSTON PUBLIC LIBRARY

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AT THE  
CITY OF BOSTON  
IN THE  
YEAR OF OUR LORD  
ONE THOUSAND NINE HUNDRED  
AND SEVENTY-NINE

A HISTORY OF THE  
CITY OF BOSTON

BY  
JOHN H. COLEMAN  
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1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

which are satisfied by the functions  $u_i$  and  $v_i$ .

2. In the second part we shall consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$ .

3. In the third part we shall consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions

4. In the fourth part we shall consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions

5. In the fifth part we shall consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions

6. In the sixth part we shall consider the case when the functions  $u_i$  and  $v_i$  are assumed to be continuous in the domain  $D$  and to satisfy the boundary conditions



Kandy and Peradeniya, Ceylon, from July to September (Green); three specimens. Specially characterised by the discal tuft of scales.

*Argyroploce diserta*, n. sp.

♂ ♀. 24-25 mm. Head red-brownish, mixed with dark fuscous and white, lower half of face white. Palpi ascending, brownish mixed with dark fuscous, banded with white. Thorax dark fuscous mixed with white. Abdomen fuscous, and tuft of ♂ whitish-ochreous. Posterior tibiæ clothed with long rough white hairs above and beneath, longer in ♂. Forewings elongate-triangular, costa rather abruptly bent at  $\frac{2}{3}$ , apex obtuse, termen almost straight, nearly vertical, rounded beneath; light reddish-brown, densely mixed and strigulated throughout with blackish; disc irregularly mixed with white on basal half; a transverse series of three roundish leaden-grey spots irregularly edged and connected with white, extending from near costa at  $\frac{2}{3}$  to near tornus; a blue-leaden almost marginal interrupted line round apex and termen: cilia leaden-grey, basal half light brown-reddish, suffusedly barred with blackish. Hindwing dark fuscous; cilia whitish-fuscous, with two dark fuscous shades.

Khasis, in September; two specimens.

*Argyroploce astrosema*, n. sp.

♂ ♀. 20-21 mm. Head and thorax ochreous, upper half of face deep ferruginous, sides of thoracic crest ferruginous. Palpi ascending, ochreous, suffused above with deep ferruginous. Abdomen fuscous, apex in ♂ whitish-ochreous, in ♀ ferruginous-ochreous. Posterior tibiæ clothed with rough scales, in ♂ with expansible ochreous-whitish hair-pencil from base above. Forewings elongate-triangular, costa strongly and evenly arched, apex obtuse, termen in ♂ almost straight, in ♀ somewhat sinuate, vertical, rounded beneath; ochreous, irregularly suffused with ferruginous, with an undefined pale fascia from  $\frac{2}{3}$  of costa to termen above tornus; basal half, posterior fascia, and centre of disc between these strewn irregularly with small bright silvery-leaden-metallic spots or strigulae; a blackish discal dot beyond middle; an apical patch of blackish suffusion, cut by a silvery-blue-metallic streak crossing apex and continued along upper part of termen; white marginal dots above and below apex: cilia light ochreous, on upper half of termen and round apex dark leaden-grey with blackish subbasal line. Hindwings dark fuscous; cilia pale ochreous tinged with reddish, with fuscous subbasal line.

Khasis, in June; two specimens.

*Argyroploce generosa*, n. sp.

♂ ♀. 15-16 mm. Head fuscous, face whitish. Palpi ascending, whitish. Thorax fuscous mixed with white, crest dark brown. Abdomen pale ochreous, in ♀ somewhat infuscated. Posterior tibiæ smooth-scaled. Forewings elongate-triangular, costa moderately and evenly arched, apex obtuse, termen almost straight, hardly oblique, rounded beneath; grey; basal patch suffused with yellow-brown on upper half, marked with a suffused white streak along fold, beneath this somewhat mixed with black and suffused with darker grey, outer edge rather irregular; central fascia rather narrow irregular, yellow-

brown, cut by a strong black bar in middle, and a narrow one beneath this, posterior edge with abrupt projections above and below upper bar; apical area beyond upper half of central fascia and a line connecting it with tornus white, except an irregular grey streak from costa beyond central fascia to tornus, more or less broken, into three spots, a small brown costal spot beyond this, three yellow-brown marks from costa before apex converging to termen beneath apex and suffused together with grey, and an upwards-oblique mark from middle of termen marked with three black spots: cilia grey sprinkled with white, indistinctly barred with yellow brownish, towards tornus suffused with whitish. Hindwings pale yellow-ochreous, infuscated in ♂ towards apex, in ♀ generally; cilia pale yellow-ochreous, with a more or less distinct fuscous shade.

Khasis, in June; three specimens.

*Argyroploce charadræa*, n. sp.

♂ ♀. 18-21 mm. Head dark grey, mixed on crown with white and on forehead with red-brownish. Palpi ascending, reddish-fuscous mixed with dark fuscous. Thorax white mixed with dark fuscous, crest ferruginous-brownish. Abdomen grey, anal tuft in ♂ whitish-ochreous. Posterior tibiae rather densely scaled, in ♂ with whitish-ochreous hair-pencil from base above. Forewings elongate, rather narrow, posteriorly dilated, costa slightly arched, apex obtuse, termen nearly straight, rather oblique; bluish-lead-grey mixed and strigulated with black, anterior area from base to before middle of costa and beyond middle of dorsum much suffused with irregular whitish except along costa, so that the dark colour appears as a coarse strigulation; a white patch occupying apical fourth of wing, its edge extending from  $\frac{3}{4}$  of costa to dorsum before tornus, upper half sending an oblique triangular projection downwards to fold; a small ochreous-brownish mark on costa before apex, and another at apex sometimes containing a black dot; a cloudy grey striga before termen, terminating in a small brownish spot on termen above tornus: cilia grey irrorated with white, with indications of blackish lines, towards tornus wholly whitish. Hindwings grey with a slight bronzy tinge; cilia whitish-grey, with grey subbasal shade.

Maskeliya and Patipola, Ceylon, in April and May (Alston, Pole); three specimens.

*Argyroploce citharistis*, n. sp.

♂ ♀. 11-14 mm. Head brown, sometimes mixed with paler or darker. Palpi porrected, brownish, mixed in middle with dark fuscous, towards base whitish. Thorax brown mixed with dark fuscous, with a transverse median, band of whitish irroration or suffusion. Abdomen fuscous, in ♀ darker. Posterior tibiae with appressed scales. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen almost straight, rather oblique; dark bronzy-fuscous, strigulated with blackish; anterior half crossed by four pairs of irregular blue-lead striae rising from short whitish costal strigulae, two posterior pairs sometimes partially whitish-edged; costa spotted with blackish-



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fuscous between these, and with a larger oblique spot in middle indicating central fascia; an irregular thick blue-leadен transverse stria beyond this, furcate on costa; between this and apical spot two pairs of white striae variably developed, sometimes partially obsolete, sometimes united into a broad white fascia, including a thick irregular blue-leadен mark from tornus reaching half across wing, and a thick upwards-oblique dark fuscous streak from middle of termen; a triangular apical spot of ferruginous-brown scales with dark fuscous tips, preceded by a leadен-metallic streak: cilia leadен-grey with blackish basal line, and indications of blackish bars. Hindwings with 6 and 7 stalked; fuscous, suffused with darker towards termen; cilia light fuscous, with dark fuscous subbasal shade.

N. Coorg, 3,500 feet (Newcome); Khasis; Moulmein, Burma; from June to November and in February; twelve specimens. The stalking of veins 6 and 7 of hindwings is exceptional in the genus, but in all other respects the species seems to belong here.

*Argyroploce palliata*, n. sp.

♂ ♀. 17-18 mm. Head whitish, forehead fuscous or dark grey, with violet reflections. Palpi subascending, fuscous with violet reflections, beneath ochreous-whitish. Thorax whitish, spotted with dark grey. Abdomen light fuscous. Posterior tibiae with appressed scales. Forewings elongate-triangular, costa gently arched, apex obtuse, termen almost straight, somewhat oblique; dark fuscous; a whitish basal patch occupying  $\frac{2}{5}$  of wing, irregularly spotted with grey except towards dorsum posteriorly, outer edge nearly straight or sometimes angularly projecting near costa, vertical; a fascia of irregular leadен-metallic striae beyond middle, angulated near costa, somewhat marked with white towards dorsum; two irregular subconfluent white striae before termen, marked with leadен-metallic streaks on veins, lower portion broken inwards above middle: cilia rather dark fuscous sprinkled with white, towards base whitish barred with fuscous. Hindwings fuscous; cilia fuscous sprinkled with whitish, base pale.

Khasis, in June, September, and October; four specimens.

*Argyroploce corthyntis*, n. sp.

♂ ♀. 19-21 mm. Head and thorax varying from light brownish-ochreous or grey to rather dark fuscous. Palpi porrected grey, suffused with white towards base beneath and on upper edge of second joint. Abdomen light brownish-ochreous, sometimes mixed with dark fuscous. Posterior tibiae rough scaled. Forewings elongate, narrow at base, considerably dilated posteriorly, costa slightly arched, with an abruptly rounded prominence from middle to near apex, apex prominent, round-pointed, termen rather strongly sinuate beneath it, vertical, rounded beneath; pale grey, brownish-ochreous, or whitish-fuscous, sometimes sprinkled with fuscous, or more or less wholly suffused with dark ashy-fuscous; costa shortly strigulated with black and dark brown, tending to form a small semi-oval spot in middle; sometimes some blackish strigulae in disc before middle; apex usually ferruginous-brown marked with dark fuscous,

sometimes preceded by two or three leaden strigulæ ; dorsum sometimes dotted with blackish or whitish ; usually a fine black terminal line : cilia light brownish-ochreous, towards base usually markedly paler or grey-whitish. Hindwings light fuscous-ochreous, towards apex suffused with fuscous, in the darkest specimen mostly suffused with rather dark fuscous : cilia light ochreous, with fuscous subbasal shade.

Patipola and Hakgala, Ceylon, in April and May (Green, Alston, Pole) ; six specimens. Nearly allied to *lichenoides*, Wals., which is the type of the genus *Lipsotelus*, Wals., but I do not regard the peculiar form of forewings, which is the main distinguishing character, as deserving generic separation. In *lichenoides*, which I possess from the Khasi Hills, the costal prominence of forewings does not extend so far towards apex, and the apex is less prominent.

*Argyroploce caryactis*, n. sp.

♂ ♀. 14-15 mm. Head, palpi, and thorax ferruginous or ferruginous-brown, palpi porrected. Abdomen dark fuscous, apex in ♂ grey-whitish, at base in ♂ with an expansible lateral whitish hair-pencil. Posterior tibiæ with appressed scales. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen slightly sinuate, hardly oblique ; bright coppery-ferruginous, the ground colour mostly overlaid by suffused confluent light violet-grey striæ ; a broad undefined streak of dark ferruginous-brown suffusion along dorsum, including in middle an undefined elongate-triangular patch of pale grey strigulation, sometimes sprinkled with blackish : cilia ferruginous-brown, mixed with whitish-ochreous and sometimes pale leaden-grey, towards tips whitish on a subapical patch. Hindwings on basal half dark fuscous, thinly scaled, outer half blackish-fuscous ; in ♂ with dorsal groove clothed with long pale ochreous and whitish hairs ; cilia white, with dark fuscous basal shade.

Khasis, from December to March ; sixteen specimens.

*Argyroploce fibrata*, n. sp.

♂ ♀. 16-18 mm. Head whitish-ochreous, forehead and sides of crown suffused with red-brown. Palpi porrected, pale ochreous sprinkled centrally with reddish-fuscous, beneath whitish. Thorax pale ochreous suffused with red-brown and sprinkled with blackish, patagia suffused with ochreous-whitish towards tips. Abdomen fuscous, anal tuft of ♂ mixed with ochreous-whitish. Posterior tibiæ and first joint of tarsi in ♂ clothed above with dense long expansible whitish hairs. Forewings elongate-triangular, costa moderately arched, apex obtuse, termen nearly straight, somewhat oblique ; red-brown, sprinkled with blackish, tending to form longitudinal streaks on veins, dorsal third especially strongly streaked with black suffusion and more or less mixed with white between the streaks ; extreme costal edge white, with more or less marked pairs of oblique whitish strigulæ, interspaces more or less irrorated with blackish ; oblique bluish leaden strigæ rising from these, with indications of transverse striæ on posterior portion of wing, and transverse streaks marginating ocellus, but all these sometimes almost wholly obsolete : cilia whitish-



Asyoplice fimbriata, Wlm 1900 = metastensis



ochreous suffused with red-brown, more or less barred with blackish irroration. Hindwings dark grey, in ♂ with dorsal fold enclosing an expansible pencil of long blackish hairs becoming yellowish towards base; cilia whitish, with grey subbasal line.

Khasis, in September and October; four specimens.

C— *Argyroploce metactenis*, n. sp.

♂. 19 mm. Head whitish-ochreous, on crown more or less suffused with ferruginous-brown. Palpi subascending, fuscous sprinkled with whitish, beneath and towards base whitish, second joint with median bar and subbasal dot of blackish suffusion. Thorax light brownish, crest suffused with ferruginous. Abdomen rather dark fuscous, anal tuft mixed with whitish-ochreous. Posterior tibiae and tarsi tufted with long expansible ochreous-whitish and grey hairs above. Forewings elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen nearly straight, little oblique; brownish, longitudinally striated and largely suffused with brown-whitish; veins in disc more or less marked with brown-reddish; costa strigulated with reddish-fuscous and black irroration; two or three very oblique dull reddish strigæ beneath costa posteriorly; a transverse mark of dull reddish suffusion with some black irroration on end of cell; a rather broad reddish-fuscous streak mixed with dark fuscous along dorsum throughout, upper edge somewhat prominent before middle and at  $\frac{2}{3}$ ; cilia brown whitish towards tornus tinged with brown-reddish, on middle of termen with three reddish-brown bars sprinkled with blackish. Hindwings dark fuscous, lighter anteriorly; a hyaline lanceolate spot beneath base of cell; a longitudinal pecten of whitish hairs between veins 2 and 3; a dorsal furrow clothed with long expansible tuft of fuscous hairs; cilia whitish, with dark fuscous subbasal line.

Khasis, in October and November; two specimens.

*Argyroploce paragramma*, n. sp.

♀. 19 mm. Head, palpi, and thorax brownish-ochreous; palpi subascending, second joint with a blackish median spot above; thorax partly tinged with grey. Abdomen dark grey. Posterior tibiae rough-scaled. Forewings elongate, moderately broad, rather dilated posteriorly, costa moderately arched, apex obtuse, termen slightly sinuate, hardly oblique; brownish-ochreous, tending to be longitudinally marked with pale or ochreous-whitish lines on veins and some blackish irroration between these; costa strigulated with ochreous-whitish tinged with leaden, with blackish interspaces; three very oblique bluish-leaden strigæ from median third of costa, first two ending above posterior portion of cell, third running almost to termen beneath apex; a leaden-metallic almost marginal striga along lower half of termen: cilia pale ochreous, above middle of termen tinged with brownish, above apex with a blackish spot. Hindwings dark fuscous, lighter anteriorly; cilia ochreous-whitish tinged with grey, with dark fuscous subbasal line.

Pusa, Bengal, bred in September from stem of bamboo (Lefroy); one specimen.

*Argyroploce anaplecta*, n. sp.

♂ ♀. 15-16 mm. Head, palpi, thorax and abdomen dark fuscous; palpi porrected, beneath and towards base white; anal tuft of ♂ whitish. Posterior tibiæ of ♂ clothed above and beneath with dense (probably expansible) white scales. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen straight, vertical; blackish-fuscous, suffusedly striated with purplish-leadén (more purplish in ♀), except a thick streak from  $\frac{1}{4}$  of costa to middle of termen, and another slightly curved from middle of costa to apex; costal extremities of striæ whitish, space between these in ♀ tinged with bronzy-brown towards costa; ocellus filled with ground colour sprinkled with whitish; two or three white specks on termen beneath apex: cilia dark fuscous. Hindwings dark fuscous, in ♂ thinly scaled and subopaque except towards apex; cilia whitish-fuscous, with dark fuscous subbasal shade.

Maskeliya, Ceylon, in February, May and June (Pole, de Mowbray); three specimens.

*Argyroploce cyanura*, n. sp.

♂ ♀. 18-20 mm. Head and thorax dark leadén-fuscous. Palpi porrected, fuscous, suffused with dark fuscous towards apex and on a median bar, ochreous-whitish towards base beneath. Abdomen dark fuscous, in ♂ with dark blue or indigo patch before whitish apex. Posterior tibiæ in ♂ with appressed scales. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen almost straight, nearly vertical; very dark fuscous; basal patch formed of suffused purplish-leadén striæ, outer edge angulated in middle, angle confluent with corner of a similar quadrate dorsal blotch beyond it; seven pairs of whitish costal strigulæ between  $\frac{1}{3}$  and apex, first two giving rise to a whitish streak which soon becomes light brown and is curved round above middle of disc almost to costa at  $\frac{3}{4}$ , enclosed space suffused with light ferruginous-brown and marked with two or three oblique leadén lines; sides of ocellus marked by triangular patches of suffused purplish leadén strigæ; two or three white specks on termen beneath apex: cilia dark fuscous. Hindwings dark fuscous, lighter anteriorly; cilia fuscous, with dark fuscous subbasal shade.

Khasis; Gunong Ijan, Malay Peninsula; in June and September; five specimens.

*Argyroploce aspidias*, n. sp.

♂ ♀. 17-18 mm. Head ochreous-grey, forehead and sides of crown mixed or suffused with dark fuscous, face grey-whitish. Palpi subascending, fuscous suffused with dark fuscous towards apex, ochreous-whitish beneath and towards base. Thorax leadén-grey tinged with rosy and mixed with blackish. Abdomen dark fuscous. Posterior tibiæ in ♂ clothed beneath with large expansible brush of whitish hairs. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen somewhat rounded, little oblique; blackish; basal patch spotted with leadén-metallic, sometimes somewhat mixed with whitish, outer edge oblique; seven pairs of whitish costal strigulæ





between  $\frac{1}{3}$  and apex, first two pairs giving rise to a rather broad ochreous-whitish streak passing above middle of disc and recurved to beneath costa at  $\frac{2}{3}$ , included costal spot more or less mixed with brownish-ochreous; remaining pairs give rise to short fine leaden-metallic strigæ; sides of ocellus marked by triangular patches of leaden-metallic spots; two or three leaden-metallic marks towards termen beneath apex: cilia rather dark fuscous, with darker subbasal shade, base whitish. Hindwings dark fuscous; cilia as in forewings.

Khasis, in August and September; four specimens.

*Argyroploce hyalitis*, n. sp.

♂ ♀. 15-18 mm. Head and thorax dark fuscous irrorated with yellow-ochreous, appearing brownish. Palpi porrected, base whitish-ochreous, second joint grey with yellowish median band, terminal joint rather long, violet-grey. Abdomen dark fuscous, segmental margins bronzy. Posterior tibiæ smooth-scaled. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen rounded, rather oblique; dark fuscous finely irrorated with pale ochreous with indications of darker striæ; costa with about eight pairs of pale strigulæ, those on posterior half more distinct, beyond middle giving rise to two very oblique dark violet-leaden streaks, first reaching  $\frac{1}{3}$  across wing, second to near termen beneath apex; ocellus more or less suffused with ochreous irroration, margined laterally by two dark violet-leaden streaks, and containing a series of about four short black dashes; a pale ochreous almost marginal line crossing apex: cilia fuscous, with a black basal line. Hindwings subhyaline, pale fuscous, with a narrow-lanceolate clear hyaline streak beneath cell, veins blackish-fuscous; a broad suffused blackish-fuscous terminal band; cilia white, basal third blackish.

Khasis, in June and July; sixteen specimens.

*Argyroploce herbosa*, n. sp.

♂ ♀. 13-15 mm. Head and thorax ochreous-whitish, more or less tinged with greenish. Palpi porrected, ochreous-whitish, second joint spotted with blackish. Abdomen dark grey. Posterior tibiæ with appressed scales. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen straight, vertical, rounded beneath; dull yellowish-green; a cloudy whitish line from base beneath submedian fold, sinuate downwards in middle, and continued to middle of termen, dorsal area beneath this more or less striated or suffused with whitish except towards base of dorsum and on a triangular tornal patch representing ocellus, above which are two or three black dashes; costa black obliquely strigulated with white; sometimes an irregular black blotch representing upper third of central fascia, narrow on costa, with an irregular black streak projecting from it posteriorly, and more or less black suffusion preceding it, but these markings are sometimes wholly obsolete; a short whitish longitudinal strigula resting on termen beneath apex; cilia ochreous-whitish, sometimes with a grey subbasal line, and one or two dots of grey suffusion. Hindwings in ♂ beneath thickened along anterior half of

costa with short dense rough scales, longest towards base; dark fuscous, more blackish posteriorly; cilia grey, towards tips whitish, with dark fuscous subbasal line.

Khasis, in June, October, and November; four specimens.

*Argyroploce claviculata*, n. sp.

♂ ♀. 12-14 mm. Head and thorax varying from greyish-ochreous to ferruginous-brown, sometimes mixed with dark fuscous. Palpi porrected whitish, sometimes tinged with ferruginous, variably spotted with dark fuscous. Abdomen dark fuscous. Posterior tibiae with tolerably appressed scales. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen slightly rounded, vertical; varying from ferruginous-brownish to rather dark fuscous; costa black obliquely strigulated with white; costal half of wing from base to central fascia often suffused with blackish, especially in ♂, more or less indistinctly striated transversely with leaden-metallic; dorsal area beneath this sometimes striated with whitish; upper portion of central fascia usually forming a large trapezoidal blackish blotch, narrow on costa, issuing a long irregular projection posteriorly above ocellus, in ♂ often little defined; ocellus narrow, margined anteriorly by two oblique subconfluent thick leaden-metallic streaks, and posteriorly by a broad irregular leaden-metallic streak, and crossed by several longitudinal black dashes, but all these are sometimes very indistinct; an oblique leaden-metallic striga beneath posterior half of costa, in ♂ sometimes obscured with blackish suffusion; a white longitudinal strigula touching termen beneath apex: cilia varying from whitish-ochreous to ferruginous-brownish, with a more or less marked blackish subbasal line, often with two or three patches of blackish suffusion. Hindwings rather dark fuscous, thinly scaled anteriorly, suffused with blackish-fuscous posteriorly; cilia grey, more whitish towards tips, sometimes reddish-tinged round apex, with dark fuscous subbasal line.

Khasis, from December to March; ten specimens.

*Argyroploce acrosema*, n. sp.

♂. 23-24 mm. Head brownish-ochreous, crown suffused with brown or crimson fuscous. Palpi porrected, whitish-ochreous suffused with grey or brownish except towards base. Thorax brown mixed with dark fuscous and ferruginous. Abdomen rather dark fuscous. Posterior tibiae clothed with dense tolerably appressed scales. Forewings elongate, rather dilated posteriorly, costa gently arched, apex obtuse, termen almost straight, somewhat oblique, rounded beneath; light brownish or ochreous-grey strigulated with darker; a blackish blotch extending along costa from base to apex, its lower edge running along fold from base to beyond middle, thence in a straight line to apex, costa marked with pairs of whitish strigulae, in one specimen giving rise to oblique leaden-metallic streaks whose interspaces are red-brown towards costa between  $\frac{1}{4}$  and  $\frac{3}{4}$ ; margins of ocellus indicated by thick leaden-metallic streaks, between which is a quadrate dark fuscous tornal spot; space above ocellus more or less suffused with brownish ochreous or dark red-brown, with a dark fuscous spot







on middle of termen and longitudinal mark before it; a white subtriangular spot or linear mark at apex; a black terminal line: cilia dark leaden grey sometimes mixed with red-brown, with a clear whitish apical patch. Hindwings with 3 and 4 stalked or connate; dorsum clothed with long hairs; dark fuscous; cilia whitish-grey, with fuscous basal shade.

Khasis, in June; two specimens. Allied to the group of *orophias*.

*Argyroploce halantha*, n. sp.

♂ ♀. 16-18 mm. Head brown. Palpi ascending, white, with violet-blue reflections, base dark fuscous. Thorax dark brown mixed with whitish, crest pale ferruginous posteriorly. Abdomen dark fuscous. Anterior tarsi thickened with scales, white ringed with black; posterior tibiae with appressed scales. Forewings elongate, posteriorly slightly dilated, costa gently arched, apex obtuse, termen rather abruptly sinuate, little oblique; 3 much curved, 3-5 approximated posteriorly; brown, irregularly spotted and marked with black, basal, dorsal, and terminal areas more or less mixed with white; a more or less well-marked round white spot on costa beyond  $\frac{1}{3}$ , containing a black costal dot; costa posteriorly black strigulated with white, with a very oblique leaden striga close beneath it from beyond middle; sides of ocellus marked by broad undefined bluish-leadensuffusion; a white longitudinal strigula beneath apex: cilia light red-brownish, with a blackish-grey subbasal line, at apex more or less spotted with blackish-grey. Hindwings dark fuscous, rather thinly scaled, becoming blackish-fuscous posteriorly; cilia grey, with dark fuscous basal line, beneath apex tinged with red-brownish.

Palnis, 6,000 feet (Campbell); Khasis; from August to October, eight specimens.

*Argyroploce tetanota*, n. sp.

♂ ♀. 21-23 mm. Head and thorax brownish sprinkled with whitish-ochreous, forehead darker reddish-brown. Palpi ascending, brownish or reddish-brown, sometimes sprinkled with dark fuscous. Abdomen rather dark fuscous, in ♂ with large median lateral expansible tuft of hairs. (Posterior tibiae in ♂ broken.) Forewings elongate, rather dilated, costa slightly arched, apex obtuse, termen somewhat rounded, rather oblique; dark fuscous more or less sprinkled with ochreous-whitish, appearing irregularly strigulated; two pairs of whitish costal strigulae before middle, three beyond middle, and two single ones towards apex; basal half crossed by irregular suffused subconfluent dark leaden striae; five oblique leaden lines from postmedial costal strigulae uniting near costa to form two broad dark leaden streaks crossing wing to before and beyond tornus; some whitish marking on termen beneath apex and below middle: cilia brownish sprinkled with ochreous-whitish, indistinctly barred, with dark fuscous subbasal line. Hindwing fuscous, with broad terminal band of dark fuscous suffusion; dorsum in ♂ forming a pocket filled with long expansible hairs above; cilia whitish fuscous, with fuscous subbasal line, in ♂ beneath with bright violet reflections.

Khasis, in July; two specimens. Allied to *aprobola*, Meyr.

*Argyroploce rupifera*, n. sp.

♂ ♀. 16-17 mm. Head and thorax pale brownish mixed with fuscous: thorax with indications of angulated transverse bars. Palpi subascending, whitish-ochreous, second joint with two blackish spots near upper edge, and a patch of indigo-blackish suffusion towards apex beneath. Abdomen dark fuscous, anal tuft of ♂ mixed with ochreous-yellowish. Posterior tibiae in ♂ above with a median tuft of expansible ochreous-whitish hairs. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen somewhat sinuate, nearly vertical, rounded beneath; fuscous, sometimes much mixed with leaden, tips of all scales whitish, all markings edged with whitish; costal edge dark fuscous strigulated with white; basal patch indicated by some irregular brown or dark fuscous marks, edge angulated; a dark brown trapezoidal blotch extending on dorsum from  $\frac{2}{5}$  to  $\frac{4}{5}$ , broadest anteriorly, reaching nearly half across wing; a more or less marked semioval brown spot on costa beyond middle, marked posteriorly with an oblique leaden striga; an irregular sinuate fuscous or dark fuscous streak rising in disc before middle and running to termen beneath apex; a triangular patch of leaden striation above posterior portion of dorsal blotch, and another beyond tornus, indicating sides of ocellus: cilia brownish irrorated with ochreous-whitish, especially towards tornus, with a dark fuscous spot above apex, and a patch of dark fuscous suffusion above middle of termen. Hindwings dark fuscous, lighter anteriorly, costal area whitish; cilia grey, becoming whitish towards tips, with dark fuscous subbasal line.

Khasis, from October to December; twelve specimens.

*Argyroploce callichlora*, n. sp.

♂. 18 mm. Head and thorax yellowish-green, thorax crossed by a bar of whitish irroration. Palpi subascending, green, towards base whitish-ochreous. Abdomen dark grey, anal tuft pale ochreous. Posterior tibiae somewhat rough-scaled. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen somewhat sinuate, little oblique; uniform light glossy bluish-grey, markings rather deep green, partially finely edged with white; costal edge white; basal patch represented by spots on costa at base and  $\frac{1}{6}$ , and a triangular blotch on dorsum near base; central fascia slender, curved, edged with black on costa and posteriorly in disc, anterior edge with a diamond-shaped projection downwards from above middle, marked above this with a triangular black spot, before which is a detached spot of green suffusion; a slender curved streak from costa beyond middle to beneath costa at  $\frac{3}{4}$ , marked with black, edged beneath posteriorly by pale yellowish suffusion; a suffused diamond-shaped blotch in disc posteriorly, darker and edged with black on upper anterior edge, discal space between this and two preceding markings suffused with white, with a black strigula in centre; three semioval spots on costa posteriorly, partly edged with black, last followed by a small white spot; some white specks on termen: cilia light greenish, beneath tornus dark grey, at apex with outer half blackish. Hindwings

THEORY OF THE  
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The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its features. The theory of the earth is based on the study of the earth's history and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its features. The theory of the earth is based on the study of the earth's history and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its features.

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1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$ . It is shown that the system has a solution for arbitrary values of the parameters  $\alpha$  and  $\beta$  if and only if the condition  $\alpha + \beta = 1$  is satisfied.

2. In the second part of the paper the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters  $\alpha$  and  $\beta$  is solved. It is shown that the system has a solution for arbitrary values of the parameters  $\alpha$  and  $\beta$  if and only if the condition  $\alpha + \beta = 1$  is satisfied.

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fuscous, towards apex broadly suffused with darker fuscous, costal area broadly whitish; cilia whitish, with dark fuscous subbasal shade.

Khasis, in December; one specimen.

*Argyroploce herbifera*, n. sp.

♂ ♀. 21-22 mm. Head and thorax yellowish-green, thorax sometimes with indistinct whitish bar, sometimes suffused dorsally with ferruginous-yellow (unless these are faded). Palpi subascending, green, base whitish beneath. Abdomen dark grey. Posterior tibiae rough-scaled beneath. Forewings elongate, posteriorly dilated, costa moderately arched, apex obtuse, termen straight, somewhat oblique rounded beneath; purplish-ashy-grey, darker towards costa; markings rather deep yellowish-green; an oblique basal fascia, posterior edge marked with black on upper half; a small black costal spot beyond this; an irregular rather oblique transverse streak at  $\frac{1}{4}$ , much marked with black on upper  $\frac{2}{3}$ , space between this and central fascia suffusedly mixed with white and spotted with black; central fascia narrow, rather irregular, much suffused with black on upper half, anterior edge with a large irregular downward projection from above middle; a large irregular quadrilateral blotch touching tornus and termen and reaching  $\frac{3}{4}$  across wing, more or less strigulated and edged with black, upper anterior side margined by a white V-shaped mark pointing upwards, above which is a suffused green spot; three semioval spots on costa posteriorly more or less suffused with black, separated by pairs of white strigulae; some white and black scales on termen: cilia dull green, irregularly barred with blackish. Hindwings fuscous, rather darker in ♂, suffused with dark fuscous towards apex; cilia light fuscous, with dark fuscous subbasal line.

Khasis, in October; Maskeliya, Ceylon, in May (de Mowbray); four specimens.

*Argyroploce semiculta*, n. sp.

♂ ♀. 21-22 mm. Head dull greenish, face dark fuscous. Palpi ascending, dull greenish, suffused with dark fuscous beneath and towards apex. Thorax dull green, crest suffused with ferruginous-brown. Abdomen dark grey. Posterior tibiae in ♂ rough-scaled beneath and towards base above. Forewings elongate-triangular, costa moderately, in ♂ beyond middle rather strongly arched, apex in ♂ rectangular, in ♀ obtuse; termen in ♂ subsinuate, rather oblique, in ♀ nearly straight, little oblique; light dull green, indistinctly strigulated with dark grey irroration; two large subtriangular dark red-brown blotches mixed with blackish resting on central and apical thirds of costa, reaching  $\frac{3}{4}$  across wing, subconfluent towards costa but including a spot of ground colour more or less marked with white on upper angle of cell; on costal edge of these blotches are several pairs of whitish strigulae, whence proceed in distinct oblique purplish streaks: cilia reddish brown mixed with blackish. Hindwings in ♂ with abrupt rounded prominence in middle of termen, concave above and below this, upper margin of cell above with a ridge of dense scales, dark fuscous, in ♂ paler and thinly scaled towards base and dorsum; cilia whitish-fuscous, with dark fuscous subbasal shade.

1 ♂, Hakgala, Ceylon, in April (Green); 1 ♀, Khasis, in November.

*Argyroploce gyrotis*, n. sp.

♀. 15-17 mm. Head, palpi, and thorax fuscous or brown tinged with ferruginous; palpi porrected. Abdomen dark grey. Posterior tibiae with tolerably appressed scales. Forewings elongate, posteriorly dilated, costa gently arched, apex obtuse, termen slightly rounded, somewhat oblique; ferruginous brownish more or less overlaid with purplish-leadengrey, markings dark ferruginous-brown, partially finely edged with whitish; an oblique transverse blotch from dorsum marking lower half of edge of an angulated basal patch; a small triangular dorsal spot beyond this; central fascia rather narrow, curved, oblique, posterior edge well-defined, anterior suffused and dilated into a large blotch projecting downwards in disc; a rounded blotch before middle of termen, well-defined above, suffused beneath; an oblique spot on costa at  $\frac{2}{3}$ , and two or three oblique strigae beyond this: cilia ferruginous-brown, towards tornus suffused with grey. Hindwings dark fuscous, lighter anteriorly; cilia grey irrorated with whitish, with dark grey subbasal shade.

Khasis, in June and July; nine specimens.

*Argyroploce aeraria*, n. sp.

♂ ♀. 13-15 mm. Head, palpi, and thorax whitish-ochreous, sometimes faintly rosy-tinged, palpi ascending. Abdomen blackish, segmental margins yellow. Posterior tibiae with appressed scales. Forewings elongate, posteriorly dilated, costa slightly arched, apex rounded-obtuse, termen slightly rounded, somewhat oblique; varying from olive-greenish or brownish-ochreous to bright deep ferruginous, sometimes partially sprinkled with black; usually more or less distinctly ferruginous towards tornus; three cloudy streaks varying from pale pinkish to orange, viz., costal and median streaks from base to near middle, and one from near costa before apex to near middle of dorsum; some irregular scattered blue-leadengrey marks specially on a longitudinal supramedian series; area between these streaks and beneath median sometimes suffused with dark red-brown, sometimes partly mixed with black; apical area sometimes suffused with crimson: cilia varying from ochreous to ferruginous. Hindwings with 3 and 4 usually short-stalked; blackish; an irregular variable orange-yellow streak in disc from base to middle, slenderly attenuated anteriorly, and an elongate-triangular spot above its posterior extremity; cilia whitish, with blackish basal line.

Khasis, from December to March; fourteen specimens.

*Argyroploce solaris*, n. sp.

♀. 14-15 mm. Head and thorax whitish-ochreous tinged with rosy, and mixed with reddish-fuscous and dark fuscous. Palpi ascending, whitish-ochreous tinged with rosy, with one or two blackish dots. Abdomen blackish, segmental margins orange. Posterior tibiae with appressed scales. Forewings elongate, posteriorly dilated, costa slightly arched, apex rounded-obtuse termen, almost straight, rather oblique; reddish-fuscous, more or less rosy-tinged, irregularly mixed with ochreous-whitish and sprinkled with dark fuscous; numerous irregularly scattered small dark leadengrey marks or strigulae, some-







times partly marked with black, the most conspicuous being two irregular oblique spots from costa at  $\frac{1}{5}$  and  $\frac{2}{5}$ , and a smaller spot at  $\frac{3}{5}$ ; costal edge yellowish; a fine black terminal line: cilia reddish-fuscous, mixed with ochreous-whitish, and somewhat barred irregularly with blackish. Hindwings bright orange; irregular black costal, submedian, and dorsal streaks, connected with a broad black terminal fascia; cilia orange, base blackish round apex and upper part of termen.

Khasis, in October and November; three specimens. A specimen from same locality, with similar hindwings, but forewings deep coppery-orange with numerous irregular dark leaden-grey spots is probably a variety only, though at first sight very different.

*Argyroploce callicratis*, n. sp.

♂. 15 mm. Head dark fuscous mixed with white. Palpi ascending, white. Thorax greyish-white, with a small spot on each shoulder, a cruciform mark on back, and two posterior spots black. Abdomen blackish, segmental margins yellow. Posterior tibiae rough-scaled above on anterior half. Forewings elongate, posteriorly dilated, costa almost straight, apex rounded-obtuse, termen slightly rounded, somewhat oblique; grey, strewn with moderate dark bluish-leaden rounded spots, interspersed with irregular black marks; a white basal patch, extended as a moderate streak along costa to  $\frac{3}{4}$ , enclosing a blackish spot on base of dorsum, costal edge with minute dark grey strigulae; a very pale pinkish spot beneath costal streak beyond middle, and a pale pinkish-grey streak from beyond this to termen above tornus, beyond which the apical area is black, enclosing several round dark blue-leaden spots and two or three white marks: cilia dark grey, base brownish, on upper half of termen sprinkled and indistinctly barred with whitish. Hindwings blackish; an elongate orange discal patch extended as a narrow streak to base, partially interrupted by a blackish vein, and an ill-defined orange-yellow subdorsal streak beneath this; cilia white, with dark grey basal shade.

Khasis, in October; one specimen.

*Argyroploce tonica*, n. sp.

♂ ♀. 12-14 mm. Head and thorax dark fuscous irrorated with whitish. Palpi ascending, whitish, second joint mixed with dark fuscous except towards apex and beneath. Abdomen rather dark fuscous, anal tuft in ♂ ochreous-whitish. Posterior femora in ♂ with long projecting white hairs beneath, posterior tibiae in ♂ with rough white scales above and beneath. Forewings elongate, narrow towards base, dilated posteriorly, costa almost straight, rather bent near apex, apex obtuse, termen slightly sinuate, hardly oblique; 3 strongly curved, 3-5 rather approximated posteriorly; dark brown, finely irrorated with whitish; costa marked with oblique whitish strigulae; from dorsum between  $\frac{1}{4}$  and tornus several cloudy lines of whitish irroration converge to  $\frac{4}{5}$  of costa, the interspaces partially streaked indistinctly with leaden-grey, and a similar whitish line from middle of termen tends to unite with last of these beneath costa, enclosing a triangular patch more or less tinged with leaden-grey; a more or less defined small apical spot of blackish suffusion: cilia ferruginous.

brown, paler towards tornus. Hindwings fuscous, suffused with dark fuscous posteriorly; cilia grey, with dark grey basal shade, suffused with brownish round apex and upper part of termen, more or less whitish towards dorsum.

Maskeliya, Kandy, and Haldamulla, Ceylon (Green, Pole); Khasis; in May, and from August to December; eight specimens.

*Argyroploce dimorpha*, n. sp.

♂ ♀. 11-13 mm. Head and thorax whitish ochreous, sometimes suffused with brown-reddish. Palpi ascending, ochreous-whitish, sometimes reddish-tinged, with two small blackish spots on second joint above, and usually one on base of terminal joint. Abdomen fuscous or dark fuscous, anal tuft of ♂ mixed with ochreous-whitish. Posterior tibiae with appressed scales. Forewings elongate, rather dilated posteriorly, costa slightly arched, apex obtuse, termen slightly rounded, vertical; whitish-ochreous or pale clay-colour, more or less strigulated or striated with fuscous or dark fuscous, sometimes sprinkled with black, sometimes largely or wholly suffused with brown-reddish; costa black, obliquely strigulated with whitish; a roundish spot in disc before middle, and a suffusion along costa from near base to near apex grey or fuscous, sometimes much mixed with blackish and extending over whole basal area; sometimes two or three fine leaden strigæ from costa, and a leaden streak on posterior margin of ocellus; sometimes a fine black terminal line: cilia pale greyish-ochreous or whitish-ochreous, sometimes suffused with brown-reddish. Hindwings fuscous, thinly scaled, posteriorly broadly suffused with dark fuscous; cilia grey-whitish, sometimes reddish-tinged round apex, with blackish-grey subbasal line.

Khasis, from October to March; twenty specimens.

*Eucosma*, Hb.

This name is now applied to the genus formerly called *Epiblema*, Hb.

*Eucosma ceriodes*, n. sp.

♂ ♀. Head, palpi, and thorax ochreous or ochreous-brownish, palpi ascending. Abdomen grey. Forewings elongate, posteriorly dilated, costa slightly arched, apex obtuse, termen sinuate, rather oblique; yellow-ochreous, variably suffused with brownish or dark fuscous on costal half or sometimes wholly (especially in ♀); sometimes irrorated with black except towards dorsum; costa marked with pairs of whitish strigulae, whence proceed irregular bluish-leadens transverse striæ, sometimes much marked with white on antemedian area, but often more or less wholly obsolete: ocellus represented by a more or less defined irregular white streak from termen beneath apex to dorsum before tornus, marked with four or five short black dashes, and followed by a thick leaden metallic streak; apex of wing ferruginous-ochreous: cilia ochreous, sometimes with two or three grey lines, with a whitish tornal patch, and sometimes a whitish subapical spot. Hindwings varying from greyish-ochreous to rather dark fuscous; cilia whitish-ochreous or pale greyish-ochreous, sometimes with an indistinct grey line.

Khasis, from July to September; ten specimens. Allied to *ancyrota*, Meyr., but less narrow-winged.





Wendell Phillips

From the above, it follows that

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blackish patches on terminal  
 or half of both segments  
 scale-teeth on dorsum in  
 11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-

## TORTRICIDAE.

*Peronea divisana*, Walk.

Phagu, Simla Hills, 9,000 feet in May (Annandale).

## EUCOSMIDAE.

*Eucosma balanoptycha*, n. sp.

♂ ♀ . 12-14 mm. Head and thorax grey or brownish, thorax more or less irrorated with dark fuscous. Palpi moderate, porrected. Abdomen dark fuscous. Forewings elongate, costa gently arched, in ♂ without fold, apex obtuse, termen abruptly sinuate-indentured beneath apex, then rounded, somewhat oblique; dark grey, sprinkled with whitish specks; costa marked with groups of very fine oblique alternate whitish and dark fuscous strigulae; a trapezoidal blotch of whitish irroration on dorsum beyond middle; a more or less marked dark stria from middle of costa to tornus, angulated in middle, where it forms a small spot; upper end of ocellus indicated by some whitish suffusion edged by an irregular black line, between which and costa is a subterminal series of short black marks; a round dark fuscous apical spot edged with whitish: cilia grey sprinkled with blackish and whitish. Hindwings with 3 and 4 stalked; dark fuscous, darker posteriorly; longitudinal hyaline patches in and beneath cell towards base; in ♂ beneath an elongate subdorsal glandular patch of dense dark fuscous scales; extending from near base to tornus, and an elongate blackish dorsal patch alongside; cilia fuscous, darker toward base, tips whitish-tinged.

Puri, Orissa coast, in October (Annandale); Konkan, Bombay (Young); Maskeliya, Ceylon, in June (Alston); three specimens.

*Argyroploce illepida*, Butl.

(*Teras illepida*, Butl., Trans. Ent. Soc., Lond., 1882, 42; *Arotrophora ombrodelta*, Low., Proc. Linn. Soc., N. S. Wales, 1898, 48; *Cryptophlebia carpophaga*, Wals., Ind. Mus. Not., iv, 106, pl. vii, 1; *Cryptophlebia illepida*, Wals., Faun. Haw. i, 681, pl. x, 23-25.)

Calcutta, bred from litchi fruit in June, and at light in August (Annandale). Having obtained a series of the Hawaiian form, I find it is identical with Australian, Indian, and South African examples; the larva feeds in various fruits.

*Argyroploce aprobola*, Meyr.

Puri, Orissa, in October; Quilon, Travancore, in November (Annandale). This widely distributed insect is doubtless attached to some garden tree or plant.

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

RESEARCH REPORT

THE REACTION OF HYDROGEN PEROXIDE WITH  
SODIUM HYDROGEN SULFATE IN AQUEOUS  
SOLUTION. THE EFFECT OF TEMPERATURE AND  
CONCENTRATION ON THE RATE OF REACTION.  
BY J. H. HARRIS AND J. E. HARRIS

RECEIVED JANUARY 10, 1934  
REVISION RECEIVED FEBRUARY 10, 1934

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THE REACTION OF  
HYDROGEN PEROXIDE WITH  
SODIUM HYDROGEN SULFATE





*Argyroploce citharistis*, Meyr.

Quilon, Travancore, in November (Annandale).

*Laspeyresia jaculatrix*, n. sp.

♂ ♀. 10-11 mm. Head and thorax rather dark fuscous. Palpi whitish, sprinkled with light fuscous. Abdomen dark grey, segmental margins whitish-sprinkled. Forewings elongate, slightly dilated posteriorly, costa gently arched, apex obtuse, termen slightly rounded, rather oblique; rather dark fuscous, tips of scales whitish; costa marked with groups of two or three very fine oblique whitish strigulae; a median dorsal patch of four slightly curved rather oblique whitish strigae, not reaching half across wing; two angulated purplish-leadene transverse striae posteriorly, of which the lower halves margin the ocellus, containing four or five short fine black dashes: cilia whitish-fuscous, with two dark fuscous shades. Hindwings dark fuscous, towards base whitish and thinly scaled; cilia whitish, with dark fuscous sub-basal line.

Calcutta (Annandale); Pusa, Bengal, bred from beneath bark of *Dalbergia sissu*, in February, May, and June (Lefroy); nine specimens.

## AEGERIADAE.

*Oligophlebia amalleuta*, n. sp.

♂. 12 mm. Head and thorax dark shining prismatic-bronze. Palpi short, white. Antennae dark bronzy-fuscous, simple. Abdomen short, dark fuscous, segmental margins of 1, 2, and 5 partially white, apex white, beneath white. Legs dark purplish-fuscous ringed with white, middle and posterior pairs with whorls of long projecting bristles at middle and apex of tibiae, and at apex of two basal joints of tarsi. Forewings very narrow, dilated towards apex, costa sinuate, apex obtuse, termen obliquely rounded; purple-blackish; six whitish interneural streaks beyond cell, not reaching termen: cilia grey. Hindwings hyaline; veins blackish; a blackish terminal line; cilia grey.

Paresnath, W. Bengal, 4,000 feet, in April (Annandale); one specimen.

## GELECHIADAE.

*Epithectis oschophora*, n. sp.

♂ ♀. 8-10 mm. Head and thorax fuscous, face whitish, crown sometimes suffused with whitish. Palpi whitish, second joint with several whorls of greyish scales with black bases, terminal joint with two blackish rings. Abdomen grey, apex whitish. Forewings lanceolate, acute-pointed; 9 out of 6; brownish, more or less irrorated with dark fuscous; stigmata cloudy, dark fuscous, plical obliquely before first discal: cilia greyish, with scattered black scales towards base. Hindwings grey; cilia light grey.

Calcutta and Purneah district, Bengal (Paiva); Maskeliya (Pole), Diyatalawa (Fletcher), Ceylon; from March to August, seven specimens. An inconspicuous insect.

*Epithectis telifera*, n. sp.

♂ 13 mm. Head, antennae, and thorax whitish. Palpi whitish, second joint externally with a dark fuscous streak. Forewings elongate, narrow, costa slightly arched, apex acute, termen slightly sinuate, very oblique; whitish, with some scattered fuscous and dark fuscous specks; a line of blackish irroration along fold from  $\frac{1}{4}$  of wing to beyond middle; a similar line from middle of disc to apex: cilia whitish, at apex with a black basal mark and two dark fuscous lines, on costa with a fuscous basal line. Hindwings and cilia grey-whitish.

Darjiling, 6,000 feet, in September, at light (Brunetti); one specimen.

*Anacamptis nerteria*, Meyr.

Calcutta, in September, at light (Paiva).

*Timyra toxastis*, Meyr.

Tenmalai, W. Ghats, Travancore, in November (Annandale).

*Timyra dipsalea*, Meyr.

Katihar, Purneah district, N. Bengal, in October (Paiva). The female (not previously described) differs from the male in having the palpi simple, and hindwings wholly fuscous.

*Lecithocera itrinea*, Meyr.

Tenmalai, W. Ghats, Travancore, in November (Annandale).

*Lecithocera triophthalma*, n. sp.

♂. 11 mm. Head and thorax purplish-fuscous, sides of crown tinged with ochreous-yellowish. Palpi dark fuscous, extreme apex of second joint pale ochreous. Antennae rather dark fuscous. Abdomen grey, anal tuft pale ochreous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen nearly straight, rather strongly oblique; 2 and 3 stalked, 7 and 8 stalked; rather dark fuscous, somewhat mixed with whitish-ochreous; stigmata represented by round blackish spots edged with whitish-ochreous, plical beneath first discal; an indistinct whitish-ochreous subterminal line, indented beneath costa, forming a wedgeshaped inwardly oblique mark on costa; cilia fuscous, base barred with whitish-ochreous. Hindwings pale fuscous; cilia pale fuscous tinged with yellowish.

brachmi: triophthalma.



Tenmalai, W. Ghats, Travancore, in November (Annandale); one specimen.

*Heliangara macaritis*, n. sp.

♂ ♀. 13-14 mm. Head and palpi bright deep orange. Antennae dark fuscous, base orange. Thorax deep shining coppery-purple. Abdomen dark grey. Forewings elongate, rather narrow, costa slightly arched, apex obtuse, termen very obliquely rounded; bright deep coppery-purple: cilia concolorous. Hindwings and cilia dark fuscous.

Goalbathan, E. Bengal, in July (Hodgart); Konkan, Bombay (Young); two specimens. Nearly allied to *H. lampetis*, but distinguished by the dark antennae, and absence of yellow dorsal patch of forewings.

*Onebala agnatella*, Walk.

Trivandrum, Travancore, in November (Annandale).

*Brachmia gradata*, n. sp.

(*Schemataspis*)

♂ ♀. 9-10 mm. Head and thorax ochreous-bronze. Palpi bronzy-whitish, terminal joint with a dark fuscous line. Abdomen light fuscous, and tuft ochreous-whitish. Forewings elongate, rather narrow, costa slightly arched, somewhat sinuate in middle, apex obtuse, termen rather strongly sinuate, oblique; 2 and 3 short-stalked, 8 and 9 out of 7; dark fuscous; a whitish streak above middle from  $\frac{1}{5}$  to  $\frac{3}{5}$ , surmounted by an ochreous-yellowish streak extending to beyond it; three oblique white streaks from anterior half of costa, first two running into the yellowish streak, third to beyond its apex; a white oblique striga from costa close beyond this; an ochreous-yellow line from apex of discal streak very obliquely inwards to fold; an undefined irregular streak or line of pale ochreous suffusion beneath fold; an oval whitish ring beneath middle of disc, and a patch of whitish irroration beyond this; three short white strigulae from costa posteriorly; terminal area ochreous-yellowish, cut by a straight transverse leaden-metallic line rising from last costal strigula; adjoining this line is a small well-marked black spot anteriorly towards dorsum, and another in middle posteriorly reaching termen beneath apex: cilia ochreous-whitish, on costa dark fuscous, with a white basal line, and forming an apical projection, on termen bronzy-shining, with a metallic-grey basal shade, beneath apex with a dark fuscous patch beyond this. Hindwings grey; cilia ochreous-grey-whitish, with a grey subbasal shade.

Kurseong, 5,000 feet, E. Himalayas, in September (Annandale); Khasi Hills, in August and September, common; fifteen specimens. Belongs to a group of closely allied species, requiring attention to details; a characteristic point of this species is the arrangement of the two black spots adjoining the metallic subterminal line.

*Brachmia elephantopa*, n. sp.

♂ ♀. 16-21 mm. Head and thorax dark slaty-fuscos, crown sprinkled, with pale specks. Palpi whitish-ochreous, second joint externally dark fuscous, except towards apex, terminal joint somewhat longer than second, towards apex usually with a few dark fuscous scales. Antennae dark fuscous in ♂ simple. Abdomen fuscous, anal tuft in ♂ whitish-ochreous. Posterior tibiae fuscous. Forewings elongate, rather narrow, posteriorly slightly dilated, costa slightly arched, apex obtuse, termen obliquely rounded; 2 and 3 stalked, 7 and 8 stalked, 9 connate with 7; dark slaty-fuscous; stigmata cloudy, black, plical beneath first discal, both often more or less elongate: cilia dark fuscous, tips lighter. Hindwings and cilia fuscous.

Bhogaon, Purneah district, N. Bengal, in March (Paiva); Konkan, Bombay (Young); Coorg, 3,500 feet, in September (Newcome); Nilgiris, 3,500 feet, in March, April, and August (Andrewes); twenty specimens.

*Brachmia sigillatrix*, n. sp.

♂ ♀. 11-12 mm. Head, palpi, and thorax deep ochreous-yellow, partially tinged with brownish. Antennae grey, ciliations in ♂ 1. Abdomen pale whitish-ochreous. Posterior tibiae whitish-ochreous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen nearly straight, oblique; 2 and 3 stalked, 7 and 8 stalked, 9 connate with 7; deep ochreous-yellow, irregularly mixed with light brown suffusion; stigmata black edged with white, plical obliquely before first discal: cilia ochreous-yellow. Hindwings and cilia ochreous-whitish.

Ernakulam, Cochin State, Malabar coast, in November (Annan-dale); Karwar, Kanara, in August (Maxwell); three specimens.

*Brachmia autonoma*, Meyr.

Ernakulam, Cochin State, Malabar coast, in November (Annan-dale); Bhogaon, Purneah district, N. Bengal, in September and October (Paiva). I described this originally from the Chagos Islands, but expressed the anticipation that it would be found in India.

*Trichotaphe planata*, n. sp.

♀. 18 mm. Head and thorax pale greyish-ochreous tinged with flesh-colour. Palpi ochreous-whitish, second joint dark fuscous, except apex, scales roughly expanded above towards apex, terminal joint longer than second. Abdomen whitish-ochreous. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen sinuate, oblique; 9 out of 7; light greyish-ochreous tinged with flesh-colour; costal edge ochreous-whitish; stigmata dark fuscous, discal nearly approximated, plical obliquely before first discal: cilia ochreous-whitish partially suffused with

Leithocera elephantopa

Brachmia sigillatrix

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pale brownish, with traces of darker bars. Hindwings with 6 and 7 approximated towards base; grey; cilia light grey.

Dharampur, Simla Hills, 5,000 feet, in May (Annandale); one specimen.

*Nothris malacodes*, Meyr.

Trivandrum, Travancore, at light, in November (Annandale).

*Ypsolophus ianthes*, Meyr.

Quilon and Shencottah, Travancore, in November (Annandale).

*Ypsolophus decusellus*, Walk.

Calcutta, in September (Annandale); one example, yellower than usual.

#### COSMOPTERYGIDAE.

*Cosmopteryx asiatica*, Stt.

Museum compound, Calcutta, in July (Annandale).

*Cosmopteryx basilisca*, Meyr.

Sukna, E. Himalayas, 500 feet, in July (Annandale).

*Cosmopteryx hamifera*, Meyr.

Sukna, E. Himalayas, 500 feet, in July (Annandale).

*Stathmopoda anconias*, n. sp.

♂ ♀. 10-11 mm. Head and thorax dark shining bronze, face whitish-bronzy. Palpi ochreous-whitish, terminal joint more or less suffused with dark fuscous. Abdomen dark fuscous, segmental margins purple-grey edged anteriorly with coppery, on sides white. Tibiae with whorls of long bristles at origin of spurs. Forewings lanceolate, widest at  $\frac{1}{3}$ , thence narrowed to acute apex; dark purple-bronze, sometimes with indigo-greenish reflections; base narrowly blackish; a rather narrow orange-yellow fascia at  $\frac{1}{3}$ , strongly edged with black; an orange-yellow elongate longitudinal mark in disc about  $\frac{2}{3}$ , preceded and followed by black suffusion reaching costa, connected anteriorly with a shorter orange-yellow mark on termen; a small white costal spot or mark above posterior extremity of this, sometimes confluent with it: cilia fuscous. Hindwings dark fuscous; cilia fuscous.

Puri, Orissa, in October (Annandale); Pusa, Bengal, in December (Lefroy); Peradeniya, in February (Green); Trincomali, in June (Fletcher), Ceylon.

## OECOPHORIDAE.

*Scythris expolita*, n. sp.

♂ ♀. 11 mm. Head, palpi, antennae and thorax dark fuscous-bronze, palpi moderately long, rising above vertex; antennal ciliations in ♂  $\frac{3}{4}$ . Abdomen rather dark fuscous, beneath with last four segments and half preceding one suffused with whitish-ochreous, in ♂ somewhat less strongly. Forewings lanceolate, acute, neuration normal; shining dark bronzy-fuscous, hardly perceptibly purplish-tinged towards apex: cilia concolorous. Hindwings  $\frac{1}{2}$ , cilia 3; 5 absent; rather dark fuscous: cilia fuscous.

Kurseong, E. Himalayas, 5,000 feet, in July (Annandale); Ukhral, Manipur, 6,400 feet, in August (Pettigrew); two specimens.

*Endrosis lacteella*, Schiff.

Kurseong, E. Himalayas, 5,000 feet, in July (Annandale); Darjiling, 7,000 feet, in August (Paiva).

*Borkhausenia pseudospretella*, Stt.

Darjiling, 7,000 feet, in August (Paiva).

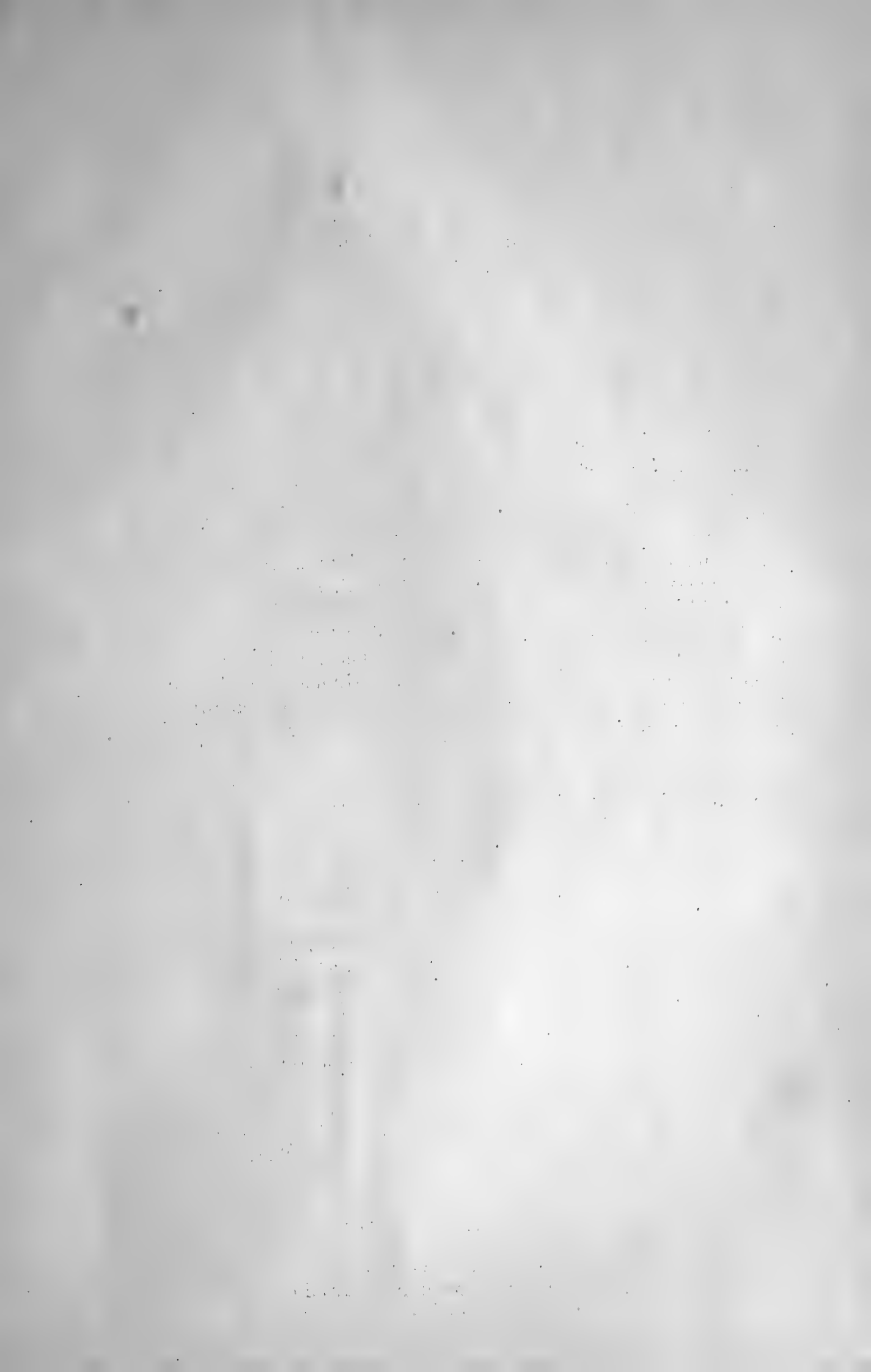
*Periacmia* (?) *mnemonica*, n. sp.

♀. 13-14 mm. Head, palpi, and thorax dark purplish-fuscous. Abdomen rather dark fuscous. Forewings elongate, costa gently arched, apex obtuse, termen rounded, rather strongly oblique; 7 to costa; dark purplish-fuscous; a large pale whitish-ochreous oblique transverse blotch rather before middle, reaching costa but not dorsum; a small cloudy ochreous-whitish spot on costa before  $\frac{3}{4}$ : cilia dark purplish-fuscous. Hindwings dark bronzy-fuscous; cilia bronzy-fuscous.

Kurseong, E. Himalayas, 5,000 feet, in September (Annandale); Khasi Hills, in August; two specimens. In the absence of the ♂ the generic position is not fully assured, but is probably correct.

*Cryptolechia stomota*, n. sp.

♂ ♀. 11-12 mm. Head pale ochreous or whitish-ochreous, sometimes somewhat marked with fuscous suffusion. Palpi whitish-ochreous, second joint with appressed scales, sprinkled with blackish, terminal joint with blackish median band. Antennae whitish-ochreous ringed with dark fuscous. Thorax pale ochreous somewhat sprinkled with dark fuscous, shoulders dark fuscous. Abdomen greyish, anal tuft of ♂ whitish-ochreous. Forewings elongate, narrow, costa gently arched, apex round-pointed, termen extremely obliquely rounded; 7 to costa; pale ochreous sprinkled with dark fuscous; a dark fuscous blotch on base of costa; stigmata dark fuscous, plical obliquely before first discal; a semioval





dark fuscous blotch on costa somewhat beyond middle; a triangular dark fuscous tornal spot, and a dark fuscous apical blotch, sometimes confluent on termen: cilia dark fuscous. Hindwings grey; cilia pale grey.

Kurseong, E. Himalayas, 5,000 feet, in September (Annan-dale); Khasi Hills, from August to October; Coorg, 3,500 feet, in May and September (Newcome); Nilgiris, 3,500 feet, in August (Andrewes); Matale, Ceylon, in August (Pole); eleven specimens.

#### ELACHISTIDAE.

##### *Elachista ithygramma*, n. sp.

♂ ♀ . 7-8 mm. Head ochreous, sides broadly whitish. Palpi whitish, second joint with several whorls of pale ochreous whitish-tipped scales. Thorax ochreous, with two white stripes, lateral margin of patagia white. Abdomen grey, on sides and beneath ochreous-whitish. Forewings lanceolate, acute; ochreous, with four white longitudinal streaks, more or less sprinkled throughout with grey; first streak along costa from  $\frac{1}{3}$  to apex, second from base above middle to or near termen beneath apex, third along fold throughout, fourth along dorsum and termen throughout; an indistinct small blackish dot between second and third towards termen; a few blackish scales at apex: cilia whitish-ochreous, base ochreous, round apex sprinkled with dark grey points towards base. Hindwings grey; cilia pale whitish-ochreous tinged with grey.

Quilon, Travancore coast, in November (Annandale); four specimens. Apparently allied to *E. thallophora* from New Zealand.

##### *Elachista nearcha*, n. sp.

♂ ♀ . 8-9 mm. Head, palpi, and thorax white, palpi shorter and straighter than usual. Abdomen light grey, segmental margins whitish. Forewings lanceolate, acute; white; plical stigma represented by a thick elongate black mark, second discal by a short fine black dash; an oblique fascia of brownish irroration crossing wing before second discal stigma, and a less marked inwardly oblique fascia from costal extremity of this across plical stigma to dorsum; a more or less developed apical patch of brownish irroration: cilia white, round apex sprinkled with brownish towards base, and with a median line of dark fuscous points. Hindwings rather dark grey; cilia pale grey.

Puri, Orissa, in October, at light (Annandale); Calcutta, in April; two specimens.

#### *SCHENDYLOTIS*, n. g.

Head smooth; ocelli present; tongue developed. Antennae  $\frac{3}{4}$ , basal joint moderately elongate, without pecten. Labial palpi moderate, slender, smooth-scaled, slightly curved, porrected,

terminal joint shorter than second, acute. Maxillary palpi obsolete. Posterior tibiae smooth-scaled, with whorls of expanded bristles at origin of spurs. Forewings with 2 from towards angle, 4 absent, 7 and 8 stalked, 7 to costa, 9 and 10 from near angle, 11 absent. Hindwings  $\frac{2}{3}$ , lanceolate, cilia 4; transverse vein absent between 4 and 5, 5 and 6 stalked.

I denuded the undersurface of one pair of wings of the unique specimen, and satisfactorily ascertained the neuration.

*Schendylotis chrysota*, n. sp.

♀ . 7 mm. Head, palpi, and thorax blackish, patagia golden-metallic. Forewings lanceolate, acute; bronzy-blackish; a triangular golden-metallic spot on base of dorsum, not reaching costa; golden-metallic fasciae at  $\frac{1}{3}$  and  $\frac{3}{4}$ , furcate on dorsum, white on costa, with violet reflections in disc; a white discal dot between these: cilia dark fuscous, with a golden-metallic basal streak on termen. Hindwings and cilia dark fuscous.

Kurseong, E. Himalayas, 5,000 feet, in September (Annandale); one specimen.

GLYPHIPTERYGIDAE.

*Phycodes minor*, Moore.

Rajmahal, Bengal, in July (Annandale).

*Simaethis orthogona*, Meyr.

Rajmahal, Bengal, in July (Annandale).

*Simaethis fabriciana*, L.

Simla, 7,000 feet, in May (Annandale).

*Brenthia elatella*, Walk.

Puri, Orissa, in October (Annandale).

GRACILARIADAE.

*Lithocolletis conformis*, n. sp.

♂ ♀ . 6-7 mm. Head pale ochreous. Thorax bronzy-ochreous sprinkled with whitish. Abdomen dark grey. Forewings lanceolate; bronzy-orange-ochreous, sometimes tinged with fuscous; a short fine indistinct whitish median basal dash; two slightly curved narrow shining white rather inwardly oblique transverse fasciae at  $\frac{1}{4}$  and  $\frac{1}{2}$ , anteriorly blackish-edged, slightly approximated towards costa, second sometimes slightly angulated in disc; a similar fascia at  $\frac{3}{4}$ , interrupted in middle; an inwardly oblique



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describes the general situation

and the results of the investigation

are given in the following table

TABLE I

Results of the investigation

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TABLE I

Results of the investigation

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short silvery-whitish mark from costa before apex, edged with some blackish scales: cilia greyish or greyish-ochreous, with two or three rows of blackish points. Hindwings and cilia grey.

Kasauli, Simla Hills, 6,300 feet, in May (Annandale); three specimens.

*Epicephala bromias*, n. sp.

♀. 7 mm. Head ochreous-whitish on crown, frontal hairs dark grey beneath, face white. Palpi white, second and terminal joints each with extreme apex and a median dot black. Antennae white ringed with dark fuscous. Abdomen dark grey. Forewings elongate, very narrow, moderately pointed; dark fuscous; a light fuscous streak along dorsum from base to tornus, upper edged suffused with white, thrice indented, and margined by a black plical streak; a whitish streak partially suffused with light fuscous extending on costa from  $\frac{1}{3}$  to middle and thence running as a slender line to above tornus, edged anteriorly with blackish suffusion; an angulated white line from  $\frac{3}{4}$  of costa to tornus, nearly preceded on upper half by a fuscous line edged anteriorly with blackish suffusion, its apex angulated backwards above extremity of preceding line from costa; a short black mark along termen, edged above with white, apical area above this streaked with blackish: cilia light fuscous mixed with whitish, round apex with two or three rows of black points. Hindwings dark grey; cilia grey.

Calcutta, in May (Annandale); one specimen.

*Epicephala albifrons*, Stt.

Calcutta and Purneah district, Bengal; W. Ghats, Travancore; in October and November (Annandale).

*Acrocercops convoluta*, Meyr.

Parasnath, W. Bengal, 4,300 feet, in April (Annandale); Kurseong, E. Himalayas, 5,000 feet, in September (Annandale).

*Gracilaria octopunctata*, Turn.

Darjiling, 7,000 feet, in August (Paiva).

*Gracilaria scansoria*, n. sp.

♂. 10 mm. Head and thorax lilac-ochreous sprinkled with dark fuscous. Palpi pale ochreous, suffused with blackish towards apex of second joint, and on terminal joint, except towards base. Antennae whitish ringed with dark fuscous. Abdomen grey, anal tuft whitish-ochreous. Anterior and middle femora and tibiae blackish, tarsi white with black dots at apex of joints, posterior legs whitish. Forewings very narrowly elongate, moderately

pointed; pale brownish-ochreous irrorated with dark fuscous, slightly lilac-tinged: costa and dorsum shortly strigulated with blackish irroration; a pale brassy-yellowish spot on costa at  $\frac{1}{3}$  reaching half across wing, anterior edge convex, well-defined, posterior edge suffused: cilia grey, round apex pale ochreous with several dark fuscous lines. Hindwings rather dark grey; cilia grey.

Phagu, Simla Hills, 9,000 feet, in May (Annandale); one specimen.

#### PLUTELLIDAE.

##### *Epermenia chelyodes*, n. sp.

♂ ♀. 8-11 mm. Head, palpi, and thorax white. Abdomen whitish. Forewings elongate-lanceolate, acute; 7 and 8 stalked; white, with scattered blackish scales; two undefined oblique patches of pale ochreous suffusion from dorsum near base and before middle, marked with black scales on dorsum; more or less irregular pale ochreous suffusion towards middle of disc, sometimes forming a defined patch beyond middle; a small blackish spot on middle of costa; apical third variably more or less suffused with blackish irroration, including a roundish pale ochreous patch anteriorly: cilia grey, on costa and at apex mixed with blackish, beneath apex and at tornus with whitish base, on dorsum whitish with three small blackish scale-teeth. Hindwings dark grey; cilia whitish, on apical half of termen grey, above apex with a dark grey patch.

Kurseong, E. Himalayas, 5,000 feet, in July (Annandale); Khasi Hills, in September and October; Palni Hills, 6,000 feet (Campbell); five specimens.

##### *Zelleria petrias*, Meyr.

Simla, 7,000 feet, in May (Annandale).

##### *Yponomeuta temulentus*, n. sp.

♂. 12 mm. Head and thorax dark grey suffused with reddish-brown. Palpi dark fuscous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen rounded, oblique; 7 and 8 stalked; dark grey, strewn throughout with small undefined suffused black spots, veins partially suffused with red-brown; an irregular white patch in disc about  $\frac{1}{4}$ ; an irregular white spot on costa beyond middle; some scattered white scales in disc; an irregular transverse white mark from tornus reaching half across wing; an irregular white terminal streak running round apex: cilia red-brown, base sprinkled with white. Hindwings dark fuscous; cilia reddish-fuscous.

Theog, Simla Hills, 8,000 feet, in May (Annandale); one specimen.

Prays temulentæ, Mapp., Can. Hypon: p. 15 (1913)

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*Acrolepia nitrodes*, n. sp.

♂. 11 mm. Head and thorax brownish mixed with black. Palpi brownish, suffusedly banded with dark fuscous irroration. Antennae fuscous ringed with black. Abdomen grey. Forewings elongate, narrow, costa anteriorly moderately, posteriorly slightly arched, apex round-pointed, termen almost straight, very oblique; light brownish, with a faint violet tinge, irregularly mixed and strigulated with black; costa marked with longer black strigulae; a dorsal patch of three white strigulae before middle; a whitish line from  $\frac{2}{3}$  of costa to tornus, margined anteriorly by a blackish-fuscous patch on upper half; three white strigulae from costa between this and apex; a small blackish spot towards termen in middle: cilia whitish-grey, with two blackish-grey lines. Hindwings ovate-lanceolate, pale grey, suffused with dark grey towards termen and apex; cilia grey.

Parasnath, W. Bengal, 4,300 feet, in April (Annandale); one specimen. Allied to the European *pygmaeana*, but I have a Ceylon species still more like the European form, though certainly distinct.

*Plutella maculipennis*, Curt.

Purneah district and Rajmahal (Annandale), Bengal.

## TINEIDAE.

*Nepticula oritis*, n. sp.

♂. 5 mm. Head and eyecaps pale whitish-yellow, antennae and thorax dark leaden-fuscous. Abdomen dark fuscous. Forewings lanceolate; blackish; a rather broad little oblique shining white fascia beyond middle: cilia grey. Hindwings and cilia grey.

Phagu, Simla Hills, 9,000 feet, in May (Annandale); one specimen, in fine condition.

*Oxostega chalcophylla*, n. sp.

♂ ♀. 7-10 mm. Head and eyecaps shining whitish, sometimes ochreous-tinged, antennae ochreous-grey. Thorax shining bronze. Abdomen dark grey. Forewings rather broad-lanceolate: shining bronze, with greenish or purplish reflections, variable in depth of colouring: cilia pale bronzy-ochreous. Hindwings and cilia grey or dark grey.

Kurseong, E. Himalayas, 5,000 feet, in September (Annandale); Khasi Hills; six specimens.

## CLADARODES, n. g.

Head smooth, with rough frontal tuft; ocelli present; tongue absent. Antennae  $\frac{5}{6}$ , in ♂ simple, basal joint dilated into a large oblong eyecap. Labial palpi moderate, filiform, drooping. Maxillary palpi rather long, several-jointed, filiform. Posterior tibiae

with series of bristles above. Forewings with 3 absent, 4 absent, 7 and 8 stalked, 7 to costa, 11 from middle. Hindwings under  $\frac{1}{2}$ , linear, cilia 6; 3 absent, 4 absent, 6 absent.

Differs from *Lyonetia* mainly by the well-developed maxillary palpi.

*Cladarodes peloptera*, n. sp.

♂. 7-8 mm. Head pale greyish-ochreous, face ochreous-whitish. Palpi and antennae whitish. Thorax greyish-ochreous. Abdomen grey-whitish. Forewings narrowly lanceolate, acute; glossy greyish-ochreous, with a purplish tinge: cilia pale greyish-ochreous. Hindwings grey; cilia whitish-grey.

Calcutta, at light, in June (Paiva); N. Coorg, 3,500 feet, in September (Newcome); three specimens.

*Opogona chalinota*, n. sp.

♂ ♀. 7-10 mm. Crown and thorax dark bronzy-fuscous, fillet, face, and antennae ochreous-white. Palpi ochreous-white, second joint with a dark fuscous streak externally on upper half from base to near apex. Abdomen dark fuscous. Forewings lanceolate; dark fuscous-bronze; a white line crossing wing about  $\frac{2}{3}$ ; a whitish-ochreous apical spot: cilia fuscous, round apex whitish-ochreous. Hindwings dark grey; cilia grey.

Puri, Orissa coast, in October (Annandale); Pusa, Bengal, bred in March from larvae feeding in dry stems of *Polypodium quercifolium* (Lefroy); Colombo, Ceylon, in August (Green); five specimens.

*Opogona percnodes*, n. sp.

♂ ♀. 12-15 mm. Head, thorax, and abdomen dark purplish-fuscous, fillet and face shining pale whitish-ochreous. Palpi ochreous-whitish, externally dark fuscous. Antennae fuscous, beneath whitish-ochreous. Forewings lanceolate, acute; glossy dark fuscous, with purplish-bronzy reflections: cilia dark fuscous. Hindwings dark fuscous, faintly purplish-tinged; cilia dark fuscous.

Kurseong, E. Himalayas, 5,000 feet, from July to September (Paiva); Maskeliya, in May (Pole), Diyatalawa, in August (Fletcher), Ceylon; eight specimens.

*Opogona flavofasciata*, Stt.

Calcutta, in June and September (Paiva).

*Ereunetis xenica*, Meyr.

Calcutta, at light, in August (Annandale).

*Monopis sertifera*, n. sp.

♂ ♀. 12-13 mm. Head and thorax yellow, palpi, patagia, and abdomen dark fuscous. Forewings elongate, rather narrow,



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costa moderately arched, apex obtuse, termen somewhat rounded, oblique; 9 and 10 short-stalked; dark purplish-fuscous mixed with blackish, strewn with small leaden-bluish dots; a suffused round subhyaline spot in middle of disc; an irregular bright yellow streak along dorsum from base to tornus, edge emarginate beneath discal spot; a bright yellow blotch beyond discal spot, almost reaching costa; an irregular bright yellow apical spot extending along upper half of termen, more or less produced anteriorly into irregular streaks on lower part of wing; all these yellow markings are more or less edged with ferruginous suffusion: cilia bright yellow, on costa dark fuscous, except towards apex. Hindwings bronzy-grey; cilia whitish-grey.

Kurseong, E. Himalayas, 5,000 feet, in September (Annandale); Khasi Hills; four specimens.

*Monopis dicycla*, Meyr.

Bred from larvae destroying woollen cloth, Calcutta, in September (Annandale).

*Tinea fuscipunctella*, Haw.

Kurseong, 5,000 feet, in July (Annandale); Dharampur, Simla Hills, 5,000 feet, in May (Annandale).

*Tinea pachyspila*, Meyr.

Trivandrum, Travancore, in November (Annandale).

*Tinea nestoria*, n. sp.

♂. 17-19 mm. Head and antennae yellowish-white. Palpi dark fuscous. Thorax rather dark purplish-fuscous. Abdomen pale brassy-ochreous. Forewings elongate, costa moderately arched, apex round-pointed, termen very obliquely rounded; pale greyish-ochreous, more or less tinged and sprinkled with fuscous; base suffused with dark fuscous, extending as a narrow streak along costa to  $\frac{2}{3}$ ; a small undefined spot of dark fuscous suffusion on end of cell: cilia light ochreous, sometimes tinged with fuscous, more whitish towards tips. Hindwings grey, with brassy-yellowish and purplish reflections; cilia grey-whitish, sometimes infuscated towards base.

Phagu, Simla Hills, 9,000 feet, in May (Annandale); Dalhousie, Kashmir, in May; two specimens.

*Pylactis mimosae*, Stt.

Calcutta, at light, in July (Annandale). I have now ascertained that *seminivora*, Wals., and *ophionota*, Meyr., are both synonyms of this.

Asia, *Chet* (1904) = *TROPHIMAEA*, n. g.

Head loosely rough-haired; ocelli present; tongue absent. Antennae  $\frac{1}{2}$ , in ♂ moderately ciliated, basal joint clothed with long dense hairs projecting in front in a broad tuft. Labial palpi moderate, porrected, clothed with long rough projecting scales beneath, second joint with several projecting lateral bristles. Maxillary palpi obsolete. Posterior tibiae clothed with long hairs. Forewings with 1b furcate, 2 rather remote from angle, 3 and 4 connate from angle or 4 absent, 7 absent, 9 absent, 11 from or beyond middle. Hindwings  $\frac{3}{4}$ , ovate-lanceolate, cilia  $1\frac{1}{2}$ ; 2-7 separate, parallel, or 4 and transverse vein between 3 and 6 sometimes absent.

*Trophimaea arenatella*, Walk.

Kurseong, E. Himalayas, 5,000 feet, in September (Annandale).

*Sapheneutis crocotricha*, n. sp.

♂. 14-17 mm. Head with tolerably appressed scales, ochreous-yellow, face sometimes mixed with fuscous. Palpi short, loosely scaled, yellowish mixed or suffused with dark fuscous. Antennal ciliations 2. Thorax and abdomen dark fuscous. Forewings elongate, moderate, costa moderately arched, apex obtuse, termen somewhat rounded, oblique; 8 and 9 stalked; purplish-fuscous, suffusedly and indistinctly strigulated with darker fuscous, veins and costa darker-suffused: cilia purplish-fuscous, sometimes with pale greyish-ochreous basal line. Hindwings rather dark fuscous, purplish-tinged; cilia light ochreous-fuscous, basal half suffused with purplish-fuscous.

Kurseong, E. Himalayas, 5,000 feet, in July (Annandale); N. Coorg, 3,500 feet, in November (Newcome); two specimens.







Basilus Hübner  
An. 1796  
p. 175

XXXIX. NEW MICRO-LEPIDOPTERA  
FROM INDIA AND BURMA.

By E. MEYRICK, B.A., F.R.S.

The following descriptions are from specimens taken by Dr. N. Annandale, and the types are in the collection of the Indian Museum.

CERACIDÆ.

*Cerace*, Walk.

I have formerly treated this genus as belonging to the *Plutellidæ*, but I now recognise that its neuration is essentially Tortricid in character, and that the smooth head cannot outweigh this. I propose, therefore, to constitute the *Ceracidæ* as a distinct family, agreeing with typical *Tortricidæ* in neuration and other important points, but differing from them by the smooth head.

*Cerace mesoclasta*, sp. nov.

♀. 41 mm. Head white, collar purple-blackish edged with white. Palpi white, with a grey streak along upper edge of second joint except at apex, terminal joint grey. Antennæ dark grey ringed with white. Thorax dark purple-fuscous, with five white spots, patagia edged with white. Abdomen blackish, segmental margins light ochreous-yellow, apex orange. Fore wings elongate, narrow, rather dilated posteriorly, costa gently arched, apex very obtuse, termen rounded so as to project rather beyond apex; dark purple-fuscous, covered with rows of numerous small whitish spots between veins, towards costa united into transverse strigæ which become larger towards base; in the middle of disc these spots coalesce into a longitudinal streak; an elongate orange spot on termen, extending from vein 2 to 6; cilia dark fuscous (imperfect). Hind wings whitish; a fuscous blotch suffusedly spotted with dark fuscous occupying apical fourth of wing; a row of dark fuscous spots along costa; about three rows of dark fuscous spots extending over dorsal area of wing from base to apical blotch, smaller towards base; cilia white, round apical blotch mostly dark fuscous.

Kurseong, E. Himalayas, at 5,000 feet, in May; one specimen. Nearest *C. stipatana*, but easily known by the discal white streak, less extensive orange patch, spotted dorsal area of hind wings, and blackish-banded abdomen. In the specimen described veins 6 and 7 are short-stalked in one fore wing by an abnormality, the other wing being quite normal.

## GELECHIADÆ.

*Ochmastis*, gen. nov.

Head smooth-scaled ; ocelli absent ; tongue developed. Antennæ  $\frac{4}{5}$ , in ♂ simple, basal joint elongate, without pecten. Labial palpi long, recurved, second joint rather short, with moderate projecting tuft of rough hairs towards apex beneath, terminal joint nearly twice as long as second, slender, acute. Maxillary palpi very short, filiform, drooping. Posterior tibiæ clothed with long hairs above. Fore wings with vein 16 furcate, 2 from near  $\frac{4}{5}$ , 3 and 4 approximated from angle, 5 parallel, 6 absent, 7 and 8 stalked, 7 to apex, 11 from middle. Hind wings 1, elongate-trapezoidal, termen scarcely sinuate, cilia over 1 ; 2 widely remote, 3-5 rather approximated at base, 6 and 7 long-stalked.

Belongs to the group of *Ypsolophus*, in which it is characterised by the neuration.

*Ochmastis chionacma*, sp. nov.

♂. 16 mm. Head and thorax white sprinkled with dark fuscous. Palpi white, second joint blackish except towards apex, terminal joint sprinkled with grey ; with three undefined blackish rings. Antennæ blackish ringed with white. Abdomen grey, anal tuft ochreous-yellowish. Fore wings elongate, narrow, costa gently arched, apex obtuse, termen very obliquely rounded ; white, irregularly sprinkled with dark fuscous ; two small dark fuscous spots near base above and below middle, upper marked with black ; an irregular quadrate dark fuscous patch on dorsum before middle, reaching  $\frac{3}{4}$  across wing, enclosing an elongate pale yellow-ochreous blotch of somewhat raised scales dilated posteriorly and edged above with a few black scales ; three subconfluent dark fuscous blotches forming an irregular streak from middle of disc to  $\frac{5}{6}$  of costa, crossed by an interrupted thick black streak in disc from before middle to  $\frac{3}{4}$ , and two or three short black streaks on veins beyond this ; an elongate black mark on costa before middle ; apical area forming a roundish clear white spot, edged by a marginal black line ; cilia white, on costa with three black wedge-shaped spots, round apex with three dark fuscous bars towards tornus suffused with fuscous and sprinkled on basal half with dark fuscous. Hind wings grey, thinly scaled towards base ; cilia pale grey towards base, ochreous-tinged.

Dawna Hills (2—3,000 feet), Lower Burma, in March ; one specimen.

## ELACHISTIDÆ.

*Stathmopoda placida*, sp. nov.

♀. 10-11 mm. Crown whitish-ochreous irrorated with fuscous, face pearly white. Palpi whitish-ochreous, in front white.







Antennæ whitish-ochreous, tips dark grey above. Thorax whitish-ochreous irrorated with blackish, posterior extremity white. Abdomen grey, beneath white. Fore wings sublanceolate, broadest near base, thence narrowed to acute apex; rather dark fuscous, with slight purplish tinge; two broad white fasciæ, first very broad dorsally, where it covers basal third of wing, much narrowed towards costa at beyond  $\frac{1}{4}$ , margins straight, enclosed basal area of costa ochreous-whitish irrorated with black; second fascia at  $\frac{2}{3}$ , rather narrowed towards costa, anterior edge straight, posterior convex, oblique: cilia fuscous. Hind wings and cilia grey.

Rangoon, in February; two specimens. I note here that the genus *Placostola*, Meyr., founded on a species allied to the above, cannot be maintained as distinct from *Stathmopoda*.

*Stathmopoda calyptræa*, sp. nov.

♀. 10 mm. Head shining white. Palpi white, terminal joint externally with a dark fuscous line. Antennæ whitish. Thorax white, on back with a curved dark fuscous transverse line near anterior margin. Abdomen yellowish-fuscous, beneath and at sides white. Fore wings very narrow, widest near base, thence narrowed to acute apex; dark fuscous; a white basal patch occupying  $\frac{2}{5}$  of wing, its outer edge inwardly oblique from costa; some undefined whitish suffusion about  $\frac{2}{3}$  and before apex: cilia fuscous. Hind wings and cilia fuscous.

Dawna Hills (2—3,000 feet), Lower Burma, in March; one specimen.

*Promalactis nebrias*, sp. nov.

♀. 9 mm. Head glossy ochreous-whitish, sides of crown sprinkled with grey. Palpi whitish, second joint yellowish-tinged and transversely striated with dark fuscous, terminal joint with a longitudinal line of dark fuscous irroration on each side. Antennæ white ringed with blackish. Thorax light ochreous-yellowish, shoulders black. Abdomen grey. Fore wings lanceolate, apex acute; light ochreous-yellowish, tinged with deeper yellow in disc posteriorly; a fine white line edged with black irroration beneath from middle of base to  $\frac{1}{4}$  of dorsum; two fine white acutely angulated transverse lines at  $\frac{1}{4}$  and  $\frac{1}{2}$ , edged with black irroration, each preceded on costa by an oblique wedge-shaped fuscous blotch irrorated with black, second followed on costa by a larger triangular similar blotch extending to  $\frac{4}{5}$ ; from angle of first a fine white line edged with some black scales proceeds to tornus; an irregular streak of blackish irroration along termen from tornus to apex, marked with small white spots in middle and at apex: cilia pale yellowish, towards base with some blackish specks. Hind wings grey; cilia pale grey.

Dawna Hills (2—3,000 feet), Lower Burma, in March; one specimen.

## GRACILARIADÆ.

*Acrocercops cyclopa*, sp. nov.

♂ ♀. 6 mm. Head and thorax shining ochreous-white. Palpi slender, white. Abdomen whitish. Legs white spotted with grey. Fore wings very narrowly elongate-lanceolate, acute; white; a slender light fuscous streak along basal third of costa; three light fuscous oblique fasciæ, first in middle, slender; second at  $\frac{3}{4}$ , somewhat broader; third very slender, separated by a fine line from a conspicuous roundish deep black apical spot: cilia whitish-fuscous, round apex white with two light fuscous shades. Hind wings grey; cilia whitish-grey.

Calcutta, in August; two specimens. Nearest to *A. sauropis*, Meyr.

*Acrocercops thraustica*, sp. nov.

♀. 9 mm. Head loosely haired, white, crown ochreous-tinged. Palpi white, second joint grey towards base, with short rough apical tuft beneath. Antennæ grey. Thorax white, sides grey. Abdomen grey, beneath white with lateral series of oblique blackish stripes. Legs white, obliquely striped with blackish. Fore wings very narrowly elongate, short-pointed; light fuscous; costa whitish-suffused on median third; a blackish longitudinal streak in disc from  $\frac{1}{4}$  to beyond middle, edged above with fuscous-whitish; an elongate white dorsal patch from base to beyond  $\frac{1}{4}$  of wing, edged with blackish above, and containing a series of four blackish dots; a white sub-dorsal streak from beyond this to beyond middle, rather oblique upwards, edged with blackish above and beneath; beyond apex of this is a blackish patch composed of three confluent oblique streaks, beneath which is a white dorsal dash, and followed by a very oblique white streak extending to  $\frac{5}{6}$  of disc, where it meets a very oblique black streak from middle of costa, whitish-edged above; a white elongate mark above tornus; a fine curved whitish line from  $\frac{3}{4}$  of costa to termen above tornus; apical area beyond this ochreous-whitish finely and irregularly striated with black, with a black apical dot: cilia white, with basal and posterior black lines, and two black apical hooks, towards tornus greyish-tinged. Hind wings and cilia grey.

Calcutta, in July, at light; two specimens.

## PLUTELLIDÆ.

*Atteva sciodoxa*, sp. nov.

♂ ♀. 23-28 mm. Head whitish, collar orange edged with white. Palpi white, terminal joint dark grey mixed with white. Antennæ grey. Thorax ochreous-orange, with a white spot on patagia, and two behind middle of back. Abdomen ochreous-orange. Posterior legs in ♂ thin, weak, tibiæ clothed with long whitish hairs, tarsi twisted. Fore wings elongate, narrow at base,

Stomphaxia Transfusa, Mey = plectica, Mey. 1912

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considerably dilated posteriorly, costa towards apex gently arched, apex rounded-obtuse, termen little oblique, slightly rounded; ochreous-orange, slightly violet-tinged; about 18—24 white spots, viz., three large transverse ones and two or three small on dorsum, three more or less large rounded ones and two or three small in disc, one rather large transverse on termen above tornus, and the rest small, rounded, scattered along costa and towards apex: cilia whitish, base ochreous-orange. Hind wings grey, thinly scaled and sub-hyaline towards base; cilia whitish, base grey.

One specimen at base of Dawna Hills, Lower Burma, in March; and I possess three others from the island of Penang, and Labuan, Borneo.

#### TINEIDÆ.

##### *Tischeria ptarmica*, sp. nov.

♂ ♀. 4-5 mm. Head, palpi, and antennæ light greyish-ochreous. Thorax greyish-ochreous sprinkled with fuscous. Abdomen grey, apex greyish-ochreous. Fore wings lanceolate; 6 present; light greyish-ochreous irrorated with fuscous, with some scattered dark fuscous scales, on dorsal half more or less yellowish-tinged; undefined dorsal spots of dark fuscous irroration at middle,  $\frac{3}{4}$ , and apex: cilia pale greyish. Hind wings and cilia pale greyish.

Bred in plenty from larvæ mining small elongate blotches in leaves of *Zizyphus jujuba*, at Puri, Orissa, in January. The species occurred in great profusion, leaves an inch in diameter containing twenty or more larvæ, and the moths are described as "swarming like a cloud of midges round the tree." The mine, larval habits, and pupa are similar to those of European species.

##### *Crypsithyris spelæa*, sp. nov.

♂ ♀. 9-10 mm. Wholly pale whitish-ochreous except eyes, which are deep black. Fore wings elongate, narrow, costa gently arched, apex pointed, termen extremely obliquely rounded. Hind wings with transverse vein present, 2—7 separate.

Khayon ("Farm") Cave, Moulmein, Burma, in March; three specimens. This is a very curious and interesting species, apparently a true cave-dweller, found permanently resident "in total darkness" (Annandale), being the only known species of *Lepidoptera* adapted to such conditions; but since the eyes are fully developed and the power of flight maintained, it would seem probable that the darkness is not quite absolute, but such that eyes accustomed to it can still perceive faintly. The absence of light has, however, sufficed to prevent the development of colour, the insects being practically bleached or colourless. The larvæ of four Indian species of *Crypsithyris* are known, and all are lichen-feeders, so that probably this may feed the same way, in portable cases on the rock-walls. Other Indian caves should be examined for similar species.

*Melasina apracta*, sp. nov.

♀. 15-18 mm. Head with appressed hairs, pale greyish-ochreous. Palpi moderate, rather curved, pointed, pale greyish-ochreous, second joint sometimes infuscated. Antennæ pale greyish-ochreous. Thorax pale greyish-ochreous suffused with fuscous anteriorly. Abdomen pale ochreous, more yellowish posteriorly, with large anal tuft of long hairs. Fore wings elongate, rather narrow, costa moderately arched, apex round-pointed, termen extremely obliquely rounded; pale greyish-ochreous, sometimes yellowish-tinged, suffusedly irrorated throughout with fuscous; a cloudy spot of darker fuscous suffusion in disc at  $\frac{2}{3}$ ; cilia ochreous-grey-whitish sprinkled with fuscous. Hind wings light greyish; cilia pale greyish-ochreous.

Mandalay, in March; two specimens.

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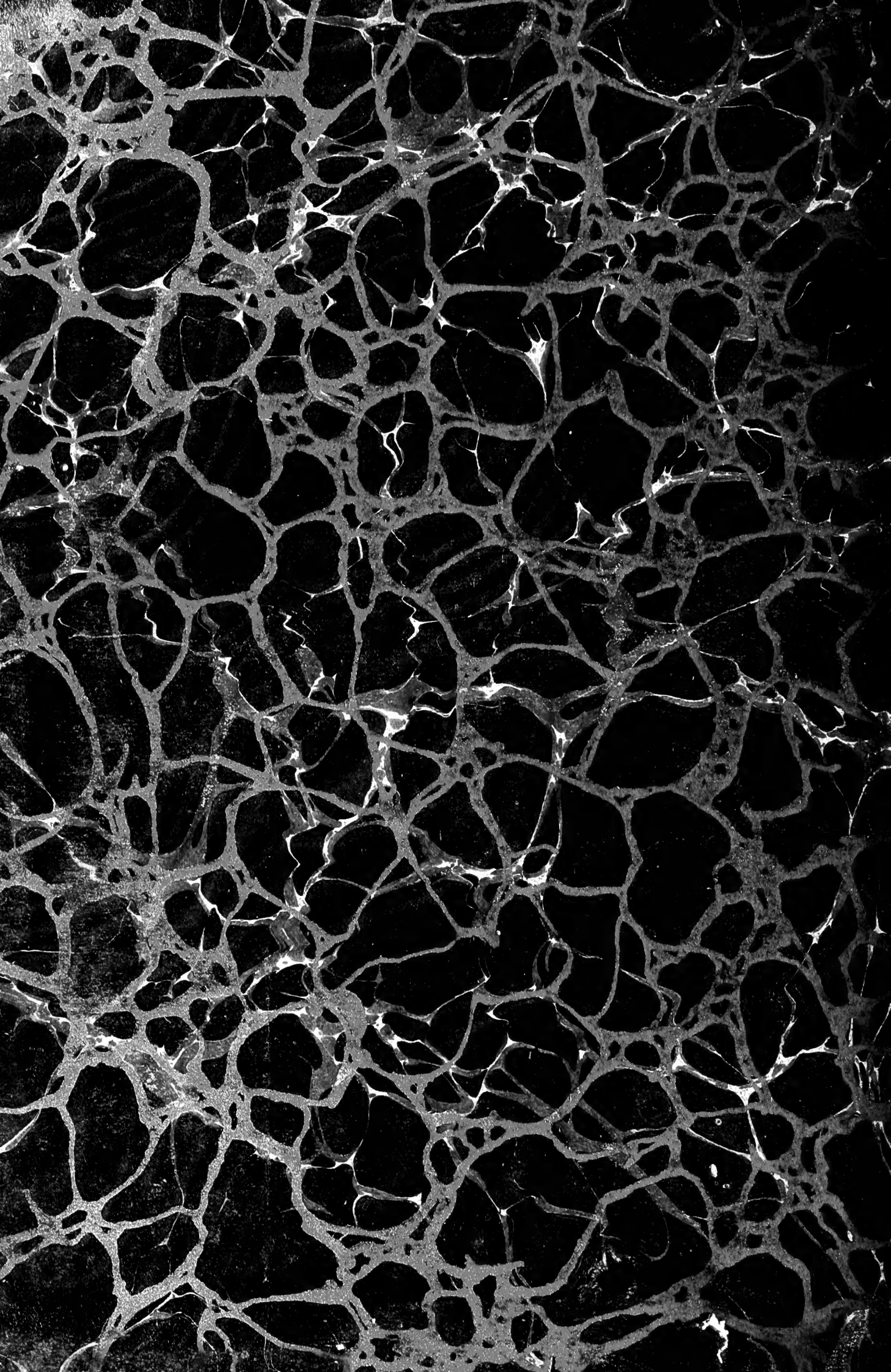


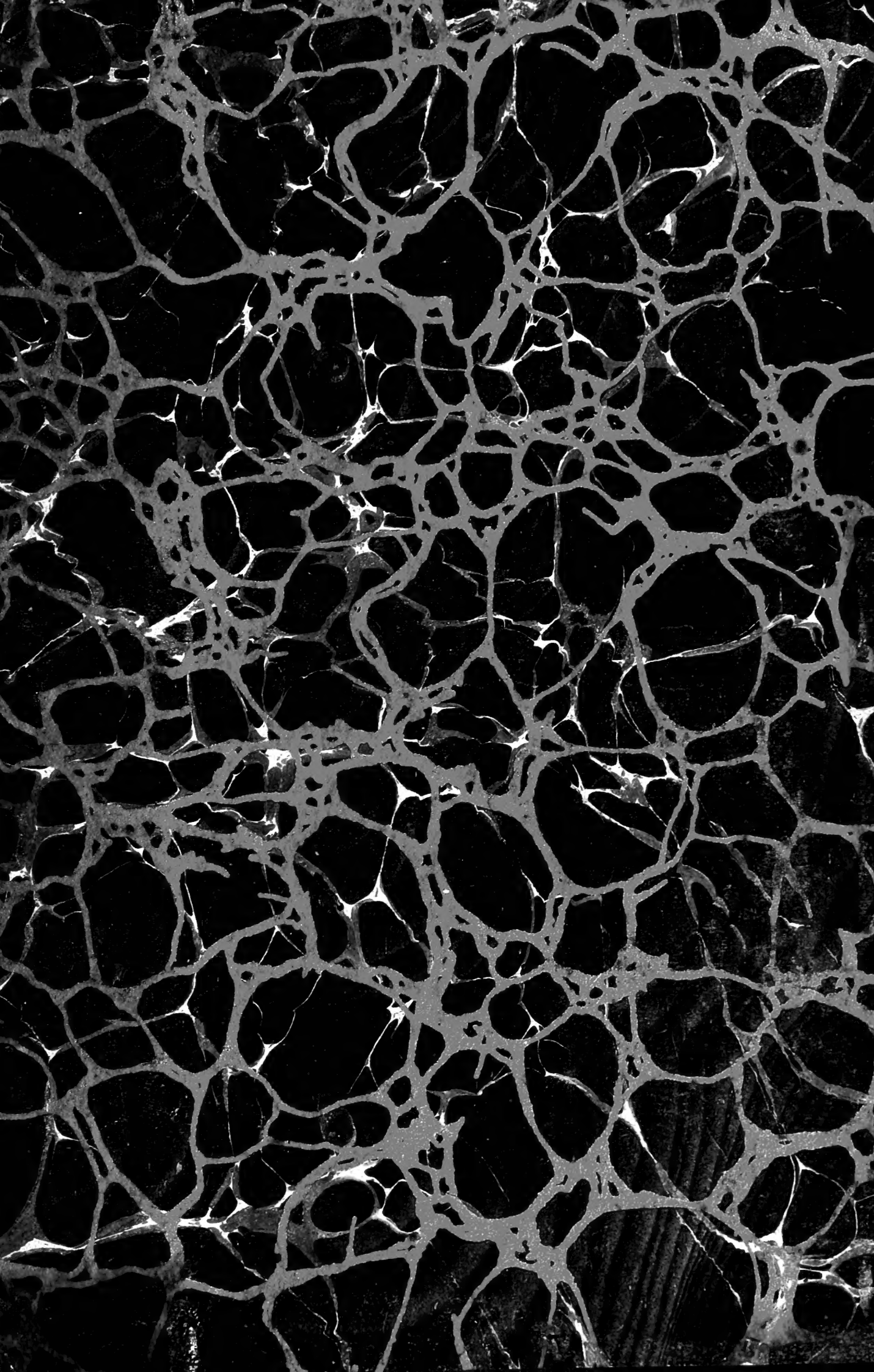














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