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and submedian veins. Underside. Both wings with the basal area pale ochreous-brown (paler than in *S. Nicotia*) and with numerous uniformly distributed dark brown strigæ; transverse discal line, narrow, ochreous-yellow; outer margin of wings pale virescent ochreous-brown; marginal lines ochreous. *Forewing* with ocelli as on the upperside but somewhat smaller, the subapical ocellus generally having a minute ocellule attached above and below it (as in the male *type*), and the large median ocellus sometimes with a minute ocellule attached above it. *Hindwing* with seven ocelli, somewhat larger than in *S. Nicotia*. Female. Upperside paler than in male. *Forewing* with the ocelli somewhat smaller. *Hindwing* with two median ocelli. Underside paler than in male; marked the same. *Male* on the hindwing above with a prominent *subbasal tuft of ochreous hairs* overlapping a *glandular patch of black scales*.

Expanse, ♂ $2\frac{1}{4}$ to $2\frac{1}{2}$, ♀ $2\frac{1}{2}$ inches.

HABITAT.—N.-W. and E. Himalayas.

DISTRIBUTION.—The type specimen, now in the British Museum, was recorded from the Eastern Himalayas. Mr. de Nicéville (*Butt. Ind. i. 128*) records it from Bhutan. It has been taken at Naini Tal, 4200 feet, in September. Mr. W. Doherty, in his notes on the butterflies taken by him in Kumaon, says (*J. A. S. Beng. 1886, 115*): "My two specimens from Kapkot and Baghrihat, taken at 5000 feet, differ from a Sikkim specimen in Indian Museum, Calcutta, in having the band below almost obsolete. One has only two ocelli on the forewing below; the other has two additional smaller ones between them. Both have only two ocelli on the hindwing above. I have also the dry-season form, one male taken at Jhulaghat, 2000 feet, lacking the ocelli below, but otherwise similar, especially in the prehensores."

The illustrations of this species on our Plate 70, figs. 2, 2a, represent the male from a Bhutan specimen, and fig. 2b, that of a female from Naini Tal, kindly lent by Mr. de Nicéville.

Genus TELINGA.

Telinga, Moore, *Trans. Ent. Soc. Lond. 1880, p. 167*.

Mycalesis (Telinga), Marshall and de Nicéville, *Butt. of India, etc. i. p. 123 (1883)*.

IMAGO.—Forewing comparatively long and narrow, apex slightly convex; exterior margin oblique, nearly straight, posterior margin convex near the base; cell long; base of the costal, median, and submedian vein swollen. Hindwing broad, somewhat quadrate; costa arched at the base and thence straight to apex; exterior margin waved, convexly angular in the middle, anal angle convex; cell broad, triangular; discocellulars very long and oblique; second subcostal branch emitted just before end of the cell; upper and middle median branches from lower

end of the cell. *Male* with a small *subcostal tuft* overlapping a *glandular patch of scales* on the upperside of hindwing, and on the underside of forewing is a nacreous patch of modified scales covering the basal area of the posterior margin, but is not accompanied by the ordinary glandular patch of dark scales. *Palpi* stout at the tip. *Eyes* hairy. *Antennæ* with the club well formed.

Type, T. Adolphei.

TELINGA ADOLPHEI (Plate 71, fig. 1, 1a, b, c, ♂ ♀).

Satyrus Adolphei, Guérin, in Delessert's *Souv. Voy. l'Inde*, pt. ii. p. 76 (1843).

Mycalesis Adolphei, Westwood and Hewitson, *Gen. D. Lep.* p. 394 (1851); Butler, *Catal. Satyr. Brit. Mus.* p. 139 (1868).

Telinga Adolphei, Moore, *Trans. Ent. Soc. Lond.* 1880, p. 168.

Mycalesis (Telinga) Adolphei, Marshall and de Nicéville, *Butt. of India, etc.* i. p. 123 (1883).

Mycalesis Onatas, Hewitson, *Exotic Butt.* iii. p. 90, *Myc.* pl. 6, fig. 40 (1864) ♂.

IMAGO.—*Male*. Upperside dark rufescent-brown, brightest and darkest anteriorly; the hindwings palest. *Cilia* cinereous-brown. *Forewing* with a distinct black-bordered white subapical dot, and a moderately-large prominent black ocellus with rufous outer ring between the lower medians. *Hindwing* with either two, three, and sometimes four small medial discal rufous-ringed black ocelli. Underside paler, the outer borders more ochraceous, numerous undulated with darker brown strigæ, and hindwing more or less thickly irrorated with ochreous scales. Both wings with a dark brown transverse discal line. *Forewing* with a small subapical more or less complete ocellus and a somewhat larger lower median ocellus; sometimes there is a distinct white dot below the subapical ocellus. *Hindwing* with six more or less developed small prominent ocelli, of which the four upper and the lowest are minute. *Male* with a *subbasal tuft of dark brown hairs* overlapping a small *glandular patch of black scales* on the upperside of hindwing, and on the underside of the forewing with a large nacreous area at base of the submedian, but with no visible accompanying ordinary glandular patch of dark scales. *Female* larger than male. Upperside of the same colour. *Forewing* with the median ocellus larger. *Hindwing* with three medial discal small ocelli, as in male. Underside much paler than in male, being pale ochreous-brown, the basal area and exterior borders undulated with brown strigæ, the transverse discal brown line outwardly diffused with lilacine-grey. *Forewing* with a subapical white spot, or small imperfect ocellus, and a similar-sized small lower median well-developed ocellus. *Hindwing* with six small ocelli of the same size as on underside of the male. *Body* above dark brown, paler beneath; streaks on sides of palpi, and the legs cinereous-ochreous.

Expanse, ♂ 2 to $2\frac{1}{8}$, ♀ $2\frac{2}{8}$ to $2\frac{3}{8}$ inches.

HABITAT.—South India.

DISTRIBUTION.—Mr. G. F. Hampson (J. A. S. Beng. 1888, 348) obtained it on “the Nilgiris, from 5000 to 6000 feet, where it is confined to the forest on the edges of the plateau.” Examples have also been taken at Mettapalayam in Coimbatore.

HABITS.—According to Mr. Hampson (l. c. 348), “It has only the two wet-season broods; in May and August.”

The illustrations of this species on our Plate 71, figs. 1, 1a, b, c, represent the male and female from the Nilgiris.

TELINGA OCOLUS (Plate 71, figs. 2, 2a, b, c, ♂ ♀).

Mycalesis oculus, Marshall, Journ. Asiatic Soc. Bengal, 1880, p. 247.

Mycalesis (Telinga) oculus, Marshall and de Nicéville, Butt. of India, etc. i. p. 124, pl. xvi. fig. 53, ♀ (1883).

IMAGO.—Male. Upperside rich ferruginous-brown. *Forewing* darker brown externally; with an indistinct small subapical black spot with white pupil; a very large prominent lower black ocellus, with large white pupil, broadly surrounded externally with bright ferruginous-red, which latter colour forms an irregular discal patch extending from the posterior margin and is anteriorly prolonged in front of the subapical spot to near the costa. *Hindwing* with four anteriorly decreasing moderately small black ocelli with white pupils and darker ferruginous-red outer rings. Cilia dark cinereous. Underside paler ferruginous-brown, more ochraceous brown externally. Both wings with the basal area marked with short dark ferruginous-brown strigæ, and with a distinct darker brown transverse discal line, which is widely ochreous bordered externally at its costal end on the forewing, and narrowly with cinereous posteriorly on both wings. *Forewing* with a minute subapical and a small lower median ocellus, and sometimes a white dot is also present between the upper and middle median veins. *Hindwing* with six very small ocelli, the four upper and the lowest being minute.

Male with a *subbasal tuft of brown hairs* overlapping a small *glandular patch of black scales* on the upperside of hindwing, and on the underside of the forewing with a large basal nacreous area with a very slight ordinary glandular patch of blackish scales.

Female larger. Upperside of somewhat brighter colours; all the ocelli larger and more prominent. Underside paler than in the male, the transverse discal line on both wings broadly diffused externally with paler ochreous anteriorly and cinereous posteriorly; ocelli the same as in male.

Body above dark brown; abdomen beneath, legs, and streaks on sides of palpi pale ochreous-brown.

Expanse, ♂ $2\frac{1}{8}$ to $2\frac{2}{8}$, ♀ $2\frac{3}{8}$ to $2\frac{4}{8}$ inches.

HABITAT.—South India.

DISTRIBUTION.—“Occurs only in the extreme south of the Peninsula. It was taken in the Ashamboo Hills in Travancore, in May, and at Eridge, Trevandrum, in May, by Mr. H. Fergusson” (Butt. Ind. i. 124). Also taken in Travancore, in April, at 4100 feet elevation. According to Mr. G. F. Hampson (J. A. S. Beng. 1888, 348) “it is found on the Anaymalai Hills, south of the Palghat Gap.” There are two males from the latter locality taken by Mr. Davison, from 3000 to 4000 feet elevation, in Mr. F. D. Godman’s collection; these males are both smaller than those described above, being less than two inches in expanse, and have only three small less prominent ocelli on the hindwing above, and on the underside the apical external border to the transverse discal band is dark reddish-ferruginous instead of yellow.

The illustrations on our Plate 71, fig. 2, 2a, b, c, represent the male and female from Travancore specimens.

Genus KABANDA.

Kabanda, Moore, Trans. Ent. Soc. Lond. 1880, p. 168.

Mycalesis (*Kabanda*), Marshall and de Nicéville, Butt. of India, etc. i. p. 127 (1883).

IMAGO.—Wings short, broad. *Forewing* very much arched from the base, apex and exterior margin slightly convex and even; base of the costal, median, and submedian vein swollen; cell short and broad. *Hindwing* bluntly conical, short; exterior margin almost even, anal angle very convex; costal vein quite short and nearly straight; first subcostal branch emitted immediately before end of the cell; disco-cellulars almost erect; cell very short; middle median branch emitted before lower end of the cell. *Male* with a *slight subcostal tuft* and *glandular patch of scales* on upperside of the hindwing, and also with the median branches dilated and grooved at the base, the lower *basal area of this wing being hairy*; on the underside of the forewing is a small ordinary glandular patch above the submedian vein.

Type.—K. Malsarida.

KABANDA MALSARIDA.

WET-SEASON BROOD (Plate 72, fig. 1, 1a, ♂).

Mycalesis Malsarida, Butler, Catal. Satyridæ Brit. Mus. p. 134, pl. 3, fig. 14 (1868).

Kabanda Malsarida, Moore, Trans. Ent. Soc. Lond. 1880, p. 168.

Mycalesis (*Kabanda*) *Malsarida*, Marshall and de Nicéville, Butt. of India, etc. i. p. 127 (1883); de Nicéville, J. A. S. Bengal, 1888, p. 273.

IMAGO.—Male. Upperside dark umber-brown. *Forewing* slightly paler at the apex; marginal lines also paler. Cilia cinereous-brown. *Hindwing* hairy on the lower basal area, partially covering the dilated bases of the median veinlets, and with a subbasal

tuft of hairs overlapping a small glandular patch of black scales. On the forewing beneath is a small ordinary glandular patch of black scales above the submedian vein. Underside brighter brown. Both wings with the basal area indistinctly striated with darker brown, a transverse discal narrow violet-grey band, and greyish-ochreous marginal lines. *Forewing* with three small prominent subapical ocelli, and a moderately-large lower median ocellus, both sets encompassed by a pale violet-grey outer line. *Hindwing* with seven prominent ocelli, the second, third, sixth, and seventh the smallest. Female as in male, except in the absence of the tuft, dilated median veins, and glandular patches. *Body* beneath, legs, and sides of palpi pale ochreous-brown.

Expanse, $1\frac{7}{8}$ to $2\frac{1}{8}$ inches.

DRY-SEASON BROOD (Plate 72, fig. 1, b, ♂).

Mycalesis Khasiana, Moore, Proc. Zool. Soc. Lond. 1874, p. 566.

Kabanda Khasiana, Moore, Trans. Ent. Soc. Lond. 1880, p. 168.

Mycalesis (Kabanda) Khasiana, Marshall and de Nicéville, Butt. of India, etc. i. p. 127 (1883).

IMAGO.—Male. Upperside dark umber-brown, paler at the apex and along the exterior border; marginal lines also paler. Subbasal tuft and dilated median branches, and glandular patches, as in wet-season brood. Underside bright vinous-brown basally, and violet-grey along exterior border. Both wings numerous covered with minute dark brown strigæ; transverse discal violet-grey band very narrow, and a distinct yellowish narrow marginal line. *Forewing* with five, and *hindwing* with seven minute perfect ocelli.

Expanse, $1\frac{7}{8}$ inch.

HABITAT.—Khasia Hills, Cherra Punji, Sibsagar, Silhet, Cachar, Naga Hills.

SEASONAL VARIATION.—Mr. L. de Nicéville (J. A. S. Bengal, 1888, 273), says: "Through the kindness of the Rev. W. A. Hamilton I have recently received from Silhet twelve males and two females of this species, all captured within a short period of one another. As regards the upperside they show no variation. The species is a remarkable one, having no ocelli whatever above. The undersides, however, of these fourteen specimens (selected for me from a very considerable number purposely to show these variations) exhibit a perfect gradation, from a specimen with a single ocellus only (and that most minute, in the first median interspace of the hindwing, all the other ocelli being reduced to minute dots) to another with the ocelli as large as shown in Mr. Butler's figure. In addition to this ocellular variation, we have, concomitantly, quite as great a diversity in the ground colour. In the form with the obsolete ocelli, the basal two-thirds of the wings are ochreous-brown, and the outer third, with the abdominal margin of the hindwing, is purplish-grey. In the form with all the ocelli large and perfect, we have the whole of the

ground colour much darker, the discal purple line much more prominent, the purplish-grey border of the other form entirely absent, and the series of ocelli surrounded by a purple line. Every gradation is before me between the two extremes. Mr. Hamilton obtained a very long series of it in the spring, below Shillong in Silhet; the greater portion were, as they should have been, of the dry-season form, but a few were of the other extreme, and these he picked out, together with intergrade specimens between the two extremes, and sent them to me. The prevailing form of this species is therefore *Khasiana* in the dry season and true *Malsarida* in the wet season; and the occasional appearance of the one form or the other out of its proper season will not upset the main fact of the occurrence of two distinct well-marked forms corresponding to the seasons, the dry and the wet, into which the Indian climate may be primarily divided."

DISTRIBUTION.—The wet-season form has been taken in the Khasia Hills in August. The late Mr. W. S. Atkinson obtained it at Cherra Punji. Specimens from Sibsagar, in Assam, are in the Indian Museum, Calcutta. Mr. J. Wood-Mason (J. A. S. Bengal, 1887, 350) records "one male from Cachar, taken on Nemotha Peak in September." Mr. L. de Nicéville (J. A. S. Beng. 1888, 274) records "the capture of numerous specimens by the Rev. W. A. Hamilton below Shillong in Silhet, remarking also, that it may be considered to be a rare species, as it appears to be strictly confined to Assam, though it is probably common enough in the spots where it is found at all." An example from the Naga Hills is in the collection of Mr. P. Crowley.

Of the illustrations of this species on our Plate 72, fig. 1, 1a, represent a male of the wet-season brood, and fig. 1b, that of a male of the dry-season brood.

Genus NISSANGA.

Nissanga, Moore, Lep. of Ceylon, i. p. 23 (1880); Trans. Ent. Soc. Lond. 1880, p. 169.

Mycalesis (*Nissanga*), Marshall and de Nicéville, Butt. of India, etc. i. p. 131 (1883).

IMAGO.—Wings short. *Forewing* triangular, costa arched, exterior margin very slightly convex and nearly erect; costal, median, and submedian vein swollen at the base; second subcostal branch emitted at end of the cell. *Hindwing* bluntly conical; costa broadly convex at the base, and thence oblique to the apex; exterior margin oblique, convex; cell short, quadrate, broadest at its end; subcostal not swollen, its first branch emitted immediately before end of the cell; discocellular erect, radial from the middle; two upper median branches emitted at some distance beyond end of the cell. *Male* with a tuft of fine hairs overlapping a glandular patch of scales at base of the subcostal branches. Antennæ gradually thickened to the tip. Apical joint of palpi long and slender. Eyes hairy.

Type.—N. Patnia.

NISSANGA PATNIA (Plate 72, fig. 2, 2a, b, c, d, ♂, ♀).

Mycalesis Patnia, Moore, Catal. Lep. Mus. E. I. Compy., i. p. 232 (1857). Butler, Catal. Satyr. Brit. Mus. p. 146 (1868).

Nissanga Patnia, Moore, Lep. Ceylon, i. p. 23, pl. 12, fig. 2, 2a, ♂ (1880). Trans. Ent. Soc. Lond. 1880, p. 170.

Mycalesis (Nissanga) Patnia, Marshall and de Nicéville, Butt. of India, etc. i. p. 131 (1883).

IMAGO.—Male. Upperside dusky ochreous-brown, darkest externally; marginal lines ochreous-yellow, slender; cilia pale cinereous-brown. *Forewing* with a more or less developed small, longitudinally-narrow, subapical ocellus, which is black, white-pupilled, and ringed with dark ochreous; a large prominent median ocellus, which is ringed with pale ochreous-yellow, the ring being broadest anteriorly; this latter ocellus more generally showing only the anterior portion, the posterior portion of the yellow outer ring not being continued below the median vein, and thus giving it the appearance of a squinting eye; within the discal area is a broad medial more or less triangular ochreous-yellow patch, which sometimes is restricted, and then extends broadly only on the median veins. *Hindwing* sometimes with two minute median more or less prominent ocelli, and the median vein with its branches lined with ochreous-yellow; a subbasal tuft of cinereous-white hairs radiating over or overlapping a *glandular patch of black scales* at base of the subbasal branches. Underside deeply ochreous-yellow, marginal lines bright yellow, and bordered with black. *Forewing* with a very small elongated white-pupilled subapical ocellus, and large prominent paler ochreous lower ocellus, the latter sometimes posteriorly thickly speckled with black scales; both ocelli being outer ringed with dark ochreous-red; and then encompassed by an outer silvery band; within the cell are three transverse ochreous-red lines, and a fourth line crossing the disc, the latter line being externally bordered by a silvery band; posterior border broadly nacreous from the base to discal band. *Hindwing* with seven ocelli, of which the upper first, fourth, and fifth are small but prominent, the second, third, sixth, and seventh being minute (the second and third generally being indicated by a black dot only); the first or apical ocellus, and the fourth and fifth conjointly, are distantly encircled by an outer black ring of more or less intensity, and the whole seven encompassed by an outer silvery band; crossing the wing is a discal and subbasal ochreous-red line, the former being externally bordered by a silvery band.

Female. Upperside as in male, the median ocellus on the forewing generally paler bordered, and more squint-eyed. Underside as in male. *Body* beneath, ochreous; sides of palpi, and legs beneath pale cinereous-ochreous. Antennæ tipped with ochreous-red.

Expanse, ♂, ♀, $1\frac{1}{2}$ to $1\frac{3}{4}$ inch.

HABITAT.—Ceylon.

DISTRIBUTION.—According to Captain Wade (Lep. Ceylon, i. 23), this species is “very common at Galle and Kandy, and easy to capture.” Mr. E. E. Green obtained it at Pundaloya and neighbourhood, in the Western Central District, in August and October. Major J. W. Yerbury has also taken specimens at Trincomali.

Of the illustrations of this species on our Plate 72, figs. 2a, b, represent a male and female from Galle, fig. 2 and 2c, a male from Pundaloya, and fig. 2d, a female from Trincomali.

NISSANGA JUNONIA (Plate 73, fig. 1, 1a, b, ♂ ♀).

Mycalesis Junonia, Butler, Catal. Satyridæ, Brit. Mus. p. 146, pl. 3, fig. 4 (1868).

Nissanga Junonia, Moore, Trans. Ent. Soc. Lond. 1880, p. 170.

Mycalesis (Nissanga) Junonia, Marshall and de Nicéville, Butt. of India, etc. i. p. 132, pl. 16, fig. 57, ♂ (1883).

IMAGO.—Male. Upperside dusky-brown, darkest exteriorly; marginal lines pale ochreous; cilia cinereous. *Forewing* with a minute subapical white-pupilled ocellate black spot, and a large black median ocellus, with minute white pupil and broadly circled round its upper half only with white, thus giving it much the appearance of a squinting-eye. *Hindwing* with or without one, or two, very indistinct minute ocellate spots; a *subbasal tuft of white hairs* overlapping the *glandular patch of scales*. Underside pale cinereous olivescens-brown, darker exteriorly; marginal lines bright ochreous and prominent. *Forewing* with three subbasal and a discal slender transverse dark ochreous-red lines; a minute slender subapical ocellus, and a large white-ringed median ocellus, the latter with its lower half brown speckled, and both ocelli with an outer dark ochreous-brown ring and encompassed by a dull silvery band. *Hindwing* with a subbasal and a discal transverse dark ochreous line, and seven minute ocelli, the upper or apical and the fourth and fifth conjointly distantly encircled by a dark ochreous-brown line, the whole seven again encompassed by a dull silvery band; above the anal angle is a bright ochreous-red patch. Female. Upperside and underside as in male; the subanal ochreous patch on the hindwing beneath less prominent. *Body* and legs beneath, and sides of palpi cinereous; antennæ apt with bright ochreous.

Expanse, ♂ $1\frac{5}{8}$, ♀ $1\frac{7}{8}$ inch.

HABITAT.—Hills of S. India.

DISTRIBUTION.—Mr. S. N. Ward obtained it at Canara. Capt. R. Bayne Reed took it in the Wynaad, Malabar. Mr. G. F. Hampson (J. As. Soc. Beng. 1888, 348) obtained it on the Nilgiris, being there confined to the southern and western slopes, at 2000 to 3000 feet, where it is common in heavy forest. Mr. H. Fergusson (Butt.

Ind. i. 132) observes that "in Travancore this species was not common in April, and only to be found in heavy forest at about 800 feet elevation, and later on in May that it was fairly common in the hills at the end of the month." Specimens are in the Indian Museum, Calcutta, from the Kadur District, Mysore.

Genus SURALAYA.

Suralaya, Moore, Trans. Ent. Soc. Lond. 1880, p. 159; Marshall and de Nicéville, Butt. of India, etc. i. p. 110 (1883).

Mycalesis (Sect. A, part), Distant, Rhop. Malayana, p. 49 (1882).

IMAGO.—*Forewing* comparatively long and narrow; costa slightly arched; apex rounded; exterior margin oblique, almost straight and even; base of costal, median and submedian vein swollen. *Hindwing* small, bluntly oval; exterior margin convex waved; first subcostal branch slightly swollen at its base, second very concave at its base; cell narrow; discocellular very oblique. Male. Underside of *forewing* with a large elongated patch of dark brown scales on middle of the submedian vein, the surrounding nacreous area extending from the base to beyond the discal band. Upperside of *hindwing* with a subbasal long slender *tuft of black hairs* overlapping a *glandular patch* of brown scales situated above the first submedian branch, and on the median area is a *large rounded glandular patch* of blackish lustreless scales. *Eyes almost naked*. Antennal club slender.

Type.—S. Orseis.

SURALAYA ORSEIS (Plate 73, fig. 2, 2a, b, ♂ ♀).

Mycalesis Orseis, Hewitson, Exotic Butt. iii. p. 89, *Myc.* pl. 6, figs. 36, 37, ♂ (1864); Butler, Catal. Satyr. B. M., p. 136 (1868); Distant, Rhop. Malayana, p. 49, pl. 5, fig. 4, ♂ (1882); Marshall and de Nicéville, Butt. of India, etc. i. p. 110 (1883).

Suralaya Orseis, Moore, Trans. Ent. Soc. Lond. 1880, p. 159.

Mycalesis Nautilus, Butler, Ann. and Mag. Nat. Hist. 1867, p. 402, pl. 9, fig. 7, ♀; *id.* Catal. Satyr. B. M. p. 136 (1868); Distant, Rhop. Malayana, p. 417, pl. 40, fig. 4, ♂ (1886); Marshall and de Nicéville, Butt. of India, etc. i. p. 120 (1883).

Calysisme Nautilus, Moore, Trans. Ent. Soc. 1880, p. 162.

IMAGO.—Male. Upperside pale purpurescent-brown, suffused more or less with violaceous-blue, with the straight transverse pale discal fascia of the underside very slightly visible from above; marginal lines darker brown; cilia cinereous-brown. *Forewing* with the upper and lower submarginal ocelli of the underside slightly showing as dusky-black pale-ringed spots, in some specimens the three intervening ocelli are also slightly visible. *Hindwing* pale cinerous-brown along the costal border, the anterior ocelli of the underside slightly visible from above; with a subbasal long slender *tuft of black hairs* overlapping a *glandular patch* of brown scales situated above the first submedian branch, and on the median area is a *large rounded*

glandular patch of blackish lustreless scales. Underside pale ochreous-brown, tinged with violaceous-brown externally. Both wings crossed by a straight discal narrow dark brown line, which is externally bordered by a broad more or less violaceous-white fascia; submarginal sinuous line and marginal line dark brown. *Forewing* with a linear series of five prominent ocelli, the four upper being small and the lowest large, the uppermost being situated between the subcostal and upper radial, and the lowest between the middle and lower medians, each having a dark brown ring outside the yellow iris; sometimes a minute black dot, or incipient ocellus, is visible between the lower median and the submedian vein; posterior margin broadly nacreous-white from the base to beyond the band and with an elongated *dark brown glandular patch* on middle of the submedian vein. *Hindwing* with seven prominent ocelli, of which the lower fifth is large, the others small, each outwardly ringed with brown.

Female. Upperside paler and duller coloured than in male; the transverse pale discal fascia of underside slightly visible, but broader; the marginal lines dark brown. *Forewing* with the five, sometimes six, dusky ocelli of the underside indistinctly visible, each with a white pupil. *Hindwing* with the ocelli of the underside indistinctly visible, each with a white pupil. Underside paler than the upperside; the transverse discal line and violaceous-white fascia broad and prominent; marginal lines dark brown. *Forewing* with five, sometimes six, ocelli, of which the lower fifth is the largest, and the lowest minute. *Hindwing* with seven ocelli; all the ocelli, on both wings, with a brown ring outside the yellow iris. *Body* beneath, legs, and lateral streaks on palpi, pale ochreous-brown. Antennæ with ochreous-yellow club, banded with black.

Expanse, ♂ $1\frac{7}{8}$ to $2\frac{1}{8}$, ♀ $2\frac{1}{8}$ to $2\frac{2}{8}$ inches.

HABITAT.—Tenasserim. Malayana.

DISTRIBUTION.—A single example of the female (figured on our Plate 73, fig. 2b), and now in Mr. F. D. Godman's Collection, was taken at Meetan, in Upper Tenasserim, by Mr. A. O. Hume. The type specimen of the male, figured by Hewitson, is from Singapore, where it was collected by Mr. A. R. Wallace. Other males are recorded by Mr. Distant (Rhop. Malay, pp. 416, 417) from Sungei Ujong, and Perak, in the Malay Peninsula. It has also been taken in Sumatra, and Nias Island; and Mr. W. B. Pryer obtained it in Borneo.

All the males of this species (including the Singapore type) have the large rounded glandular patch of lustreless scales on the median area of the upperside of the hindwing; as is also the case in examples from Borneo, though this patch is omitted to be described or figured by Mr. Distant (Rhop. Malay, p. 49, pl. 5, fig. 4) in treating of *M. Orseis*. In some Bornean examples, the transverse fascia, on the underside of both wings, is less palely violescent-white than in others. Of the identity of the Hewitsonian *M. Orseis* with the *M. Nautilus*, I have satisfied myself

by having had the opportunity of personally examining the type specimens of both. Of the illustrations of this species on our Plate 73, fig. 2 represents a Malayan male; fig. 2a the Meetan female taken by Mr. A. O. Hume, and fig. 2b is a reproduction of Mr. Butler's figure of *M. Nautilus*—which agrees in every respect with the underside of the Meetan female.

Genus LOESA.

Loesa, Moore, Trans. Ent. Soc. Lond. 1880, p. 177.

Mycalesis (Loesa), Marshall and de Nicéville, Butt. of India, etc. i. p. 132 (1883).

IMAGO.—Male. *Forewing* somewhat elongated and narrow; costa much arched, exterior margin oblique and slightly convex; second subcostal branch emitted at some distance beyond the cell; costal, median, and submedian swollen at the base. *Hindwing* bluntly ovate; costa arched at the base; apex, exterior margin, and anal angle convex; with a *tuft of fine hairs* arising from lower base of the subcostal, and overlapping a *glandular patch of scales*, and another *slender tuft of hairs* covering a groove on the middle of the submedian vein; cell short, broad in the middle; subcostal concave at its base, first branch emitted close to end of the cell, second concave at its base; discocellulars long, oblique, straight; two upper median branches from end of the cell. Antennæ with a well-formed terminal club; palpi pointed at tip; eyes hairy.

Type.—L. Oroatis.

LOESA SURKHA.

WET-SEASON BROOD (Plate 73, fig. 3, ♂).

Mycalesis ustulata, Distant, Rhoplocera Malayana, p. 418, pl. 41, fig. 16, ♂ (1886).

IMAGO.—Male. Upperside bright rufous-brown, with the costa and outer border of the forewing and the outer border of the hindwing brown. *Forewing* with a moderate-sized, almost blind, ocellate spot between the middle and lower medians. *Hindwing* with a subcostal *tuft of fine ochraceous hairs* overlapping a *glandular patch of scales*, and another *slender tuft of hairs* covering a groove on the middle of the submedian vein. Underside dark olivaceous-brown, with a slight dusky, slender subbasal line, and a transverse discal prominent narrow violet-grey band; marginal lines pale ochreous-brown. *Forewing* with a moderate-sized subapical and a larger median ocellus, each with a white pupil and yellowish ring (in some specimens two intermediate minute ocellules are present), each set encompassed by a pale ochreous-brown outer ring. *Hindwing* with seven prominent ocelli, of which the four upper and the two lowest are small, the fifth large, all encompassed by a pale ochreous-brown outer line. *Body* beneath and legs, and sides of palpi pale cinereous-brown.

Expanse, 2 inches.

DRY-SEASON BROOD (Plate 73, fig. 3a, ♂).

Mycalesis Surkha, Marshall, Journ. Asiatic Soc. Bengal (Jan. 1882), p. 37, pl. 4, fig. 1, ♂.

Mycalesis (Loesa) Surkha, Marshall and de Nicéville, Butt. of India, etc. i. p. 133 (1883).

Loesa fervida, Butler, Annals and Mag. Nat. Hist. (Nov. 1882), p. 372, ♂.

IMAGO.—Male. Upperside as in the wet-season form, though of somewhat paler rufous-brown, and paler brown margins. *Forewing* with a minute black dot in the upper discoidal, and an ocellus between the lower medians. *Hindwing* with a similar subbasal and a submedian tuft of hairs. *Underside*. Both wings with the slight dusky subbasal line, and the olivescent-grey transverse discal band; marginal lines pale. *Forewing* with a minute subapical and median white-pupilled black spot. *Hindwing* with seven minute similar white-pupilled dots, the fifth being somewhat the largest. Female unknown.

Expanse, $2\frac{1}{8}$ inches.

HABITAT.—Upper Tenasserim; Malay Peninsula; Sumatra.

DISTRIBUTION.—Within our area, the dry-season form (*Surkha*) was taken by Capt. C. T. Bingham in January, in the Donat Range, Upper Tenasserim, and also in the lower Thoungyeen forests (Butt. Ind. i. 133). Mr. H. J. Elwes (J. A. S. Beng. 1887, 418) also records “three males from Tavoy and one from Ponsekai.” The wet-season form (which I take to be the *ustulata* of Mr. Distant) was taken by Herr Kunstler at Perak, in the Malay Peninsula. A male of this latter form, from Sumatra, is also in the British Museum Collection.

Of the illustrations of this species on our Plate, No. 73, fig. 3 represents the male of the wet-season form (copied from Mr. Distant’s Rhop. Malayana, pl. 41), and fig. 3a, that of a male of the dry-season form, copied from Mr. Marshall’s figure in J. A. S. Bengal.

Genus MYRTILUS.

Mycalesis, subgenus *Myrtilus*, de Nicéville, Journ. Bombay Nat. Hist. Soc. 1891.

“MALE.—*Forewing*, costa strongly and regularly arched; apex rounded; outer margin nearly straight; inner angle acute; inner margin at first slightly marginate, then just beyond the middle strongly bowed outwards; costal nervure swollen at base, ending on the costa beyond the apex of the discoidal cell; first subcostal nervule emitted at about one-fifth before the end of the cell, terminating on the costa about opposite to the origin of the third subcostal; second subcostal originating a little before the end of the cell, ending on the costa a little before the origin of the fourth subcostal; third subcostal arising exactly midway between the apex of the cell and the origin of the fourth subcostal, terminating on the costa about midway between the origin of the fourth subcostal and the apex of the wing; fourth subcostal short, ending at the apex of the wing; terminal portion of sub-

costal nervure longer than fourth subcostal nervule, ending on the outer margin below the apex of the wing; upper discocellular nervule extremely short; middle discocellular about one-fourth as long as the lower discocellular, straight, strongly inwardly oblique; lower discocellular at first strongly inwardly oblique, in a straight line with the middle discocellular, this portion being a little longer than that vein, then suddenly curved and strongly outwardly oblique, straight portion to the curve; median nervure strongly swollen at base; third median nervule strongly curved; second median arising long before the lower end of the cell; discoidal cell reaching exactly to the middle of the wing; submedian nervure swollen at base, beyond this swollen portion distorted and deflected downwards, afterwards straight to the outer margin; a large *patch of androconia* occupying the lobe-like dilation of the inner margin, and extending as far as the middle of the submedian interspace, placed on the underside of the wing. *Hindwing*, costa arched at base, then almost straight to apex; outer margin slightly curved, gently scalloped; abdominal margin almost straight; precostal nervure short, simple, directed towards the apex of the wing; costal nervure short, not reaching to the middle of the costal margin, regularly curved throughout its length; first subcostal nervule curved, arising just before the apex of the cell, and terminating at the apex of the wing; second subcostal nearly straight, ending on the outer margin below the apex; discoidal cell short, its lower end not reaching to the middle of the wing; discocellular nervules almost straight, strongly outwardly oblique, the lower a little longer than the upper; third median nervule strongly curved; second median originating just before the lower end of the cell; submedian nervure straight, distinctly swollen towards the base for some considerable portion of its length, ending just anterior to the anal angle; internal nervure short, recurved; a large *patch of androconia* about the apex of the cell, occupying a considerable area in the subcostal interspace, the base of the first and second subcostal interspaces, and extending into the apex of the cell; a strong *tuft of hairs* of a brown colour arises from near the base of the cell and is directed outwardly, lying across the anterior portion of the androconial patch; there is also a *second strong tuft of hairs* of a black colour arising close to the base of the submedian nervure and lying along the swollen portion of that vein. Eyes hairy. Antennæ a little less than half the length of the costa of the forewing, with a rather large, well-formed club."

MYRTILUS MYSTES.

Myculesis Mystes, de Nicéville (Watson, Journ. Bombay Nat. Hist. Soc. 1891, p. 34).

Myculesis (Myrtilus) Mystes, de Nicéville, Journ. Bombay Nat. Hist. Soc. 1891, pl. F. fig. 1, *dry-season* ♂; fig. 2, *wet-season* ♂.

"**DRY-SEASON FORM.**—Male. Upperside, *both wings* brown, the extreme outer

margins paler, bearing two very fine brown lines. Cilia cinereous. *Forewing* with three very small (the posterior rather the largest) blind black ocelli, one each in the two discoidal and upper median interspaces, each surrounded with a fine outer yellow line; a similar large ocellus in the same straight line as the other ocelli, and touching the lowermost, in the first median interspace, which it slightly overlaps, centred with a minute silvery pupil. *Hindwing* unmarked. Underside, *both wings* ochreous-yellow, the basal darker than the outer half; a prominent perfectly straight discal band, not quite reaching the costa of the forewing nor the abdominal margin of the hindwing, this band is formed of an inner dark-brown line which becomes lost in the ground-colour, outwardly sharply defined by a whitish line, which also soon becomes lost in the ground-colour; beyond this prominent discal band is a nebulous band of a darker shade than the ground, and bearing in the forewing four, and in the hindwing seven, pale blue most minute dots, one in each interspace, these being the pupils of obsolete ocelli; a waved submarginal band."

"WET-SEASON FORM.—Male. Upperside, *both wings* brown, the extreme outer margins paler, bearing two wavy brown lines. Cilia cinereous. *Forewing* with a single round black ocellus in the first median interspace, beyond which it does not extend, pupilled with white, with a narrow outer pale ring. *Hindwing* unmarked. Underside, *both wings* brown, the outer margin bearing two yellowish waved lines, the disc crowned by a narrow perfectly straight pure white band which does not quite reach the costa of the forewing nor the abdominal margin of the hindwing. *Forewing* with four ocelli enclosed in a single outer yellowish line, the two upper ocelli equal sized, the third the smallest, the fourth and lowest the largest. *Hindwing* with seven ocelli, also enclosed by one line, of which the first (uppermost), the fourth and the fifth are the largest, the third and the seventh equal sized and the smallest."

Expanse, 2 inches.

HABITAT.—Upper Burma.

"The dry-season form of *M. mystes* is easily recognizable by the curious ochreous-yellow colour of the ground on the underside, but the wet-season form is so precisely similar to many specimens of the same season form of *M. (Calysisme) mineus*, that it might be easily confounded with that species. The male, however, has the conspicuous tuft of black hair on the upperside of the hindwing, springing from near the base of the submedian nervure, which is characteristic of this subgenus, and is not found in *Calysisme*, and by which it can be easily recognized. In the subgenus *Loesa*, this tuft is yellow not black, and springs from the middle instead of near the base of the submedian nervure. The females of the wet-season form of *M. mystes* will, probably, be difficult to recognize, as in neuration and markings they will, probably, be found to be almost exactly like *M. mineus*." (de Nicéville, *l. c.*)

Described by Mr. L. de Nicéville from two males of the dry-season form, captured on the 1st and 19th March, 1890, and from a single male of the wet-season form taken on the 23rd November, 1890, by Capt. E. Y. Watson, at Tilin Yaw, Upper Burma, during the Chin-Lushai Expedition of 1889-90.

INDO-MALAYAN and CHINESE allied genera and species of the MYCALESIS group.—
 IA. *Males with a glandular patch and tuft on both wings.*—*Gareris Perdiccas*, Hewits. Ex. Butt. iii. Myc. pl. 3, fig. 15 (1862); Moore, Tr. Ent. Soc. 1880, p. 157. *Habitat.* N. China, Japan.—*Satoa Maianas*, Hewits. Exot. Butt. ii. p. 87, Myc. pl. 5, fig. 27, 28, ♀ (1864); Moore, Tr. Ent. Soc. 1880, p. 157; Distant, Rhop. Malay. p. 48, pl. vii. fig. 4, ♀ (1882). *Habitat.* Malay Peninsula, Sumatra, Borneo.—*Sadarga Gotama*, Moore, Catal. Lep. Mus. E. I. C. i. p. 232 (1857); *id.* Tr. Ent. Soc. 1880, p. 158; *Syn.* M. Borealis, Feld. Reise Nov. Lep. iii. p. 500 (1867). *Habitat.* N. China, Japan.—*Sadarga Madjicosa*, Butler, Catal. Satyr. B. M. p. 137, pl. 3, fig. 10, ♀; Moore, Tr. Ent. Soc. 1880, p. 158. *Habitat.* Madjico-Sima.—*Dalapa Sudra*, Feld. R. Nov. Lep. iii. p. 500, pl. 67, fig. 10 (1867). *Habitat.* Java, Sumatra.—*Dalapa Nala*, Felder, Wien. Ent. Monat. 1859, p. 403. *Habitat.* Java.—
 IB. *Males with a glandular patch and tuft on hindwings only.*—*Calysisme Igoleta*, Feld. Wien. Ent. Monats. vii. p. 127 (1863); Semper, Reisen Arch. Philip. Lep. pl. 10, fig. 17, 18, ♂, ♀ (1886). *Habitat.* Philippines.—*Calysisme philippina* (*M. Mineus*, apud Semper, Reisen Arch. Phil. Lep. pl. 10, fig. 11, 12, ♂, ♀ (1886). *Habitat.* Philippines.—*Calysisme semperi* (*M. Drusia*, apud Semper, l. c. pl. 10, fig. 13, 14, ♂, ♀ (1886). *Habitat.* Philippines.—*Calysisme Justinella*, Butler, Catal. Satyr. B. M. p. 135, pl. 3, fig. 12 (1868); Semper, l. c. pl. 10, fig. 15, 16, ♂, ♀ (1886). *Habitat.* Philippines.—*Indalasa Moorei*, Felder, Reise Nov. Lep. iii. p. 502, pl. 67, fig. 9 (1867); Moore, Tr. Ent. Soc. 1880, p. 166. *Habitat.* Java.—*Martanda Janardana*, Moore, Catal. Lep. Mus. E. I. C. i. p. 234 (1857); *id.* Tr. Ent. Soc. 1880, p. 169; Distant, Rhop. Malay. p. 54, pl. v. fig. 2 (1882). *Habitat.* Malay Peninsula, Java, Sumatra.—*Martanda Sangaica*,* Butler, Ann. N. H. 1877, p. 95; Moore, Tr. Ent. Soc. 1880, p. 169. *Habitat.* Shanghai, N. China.—*Martanda regalis* (Leech, Tr. Ent. Soc. 1889, p. 102, pl. 8, fig. 2, 2a), ♂, ♀. *Habitat.* China.—*Mydosama fuscum*, Feld. Wien. Monats. iv. p. 401 (1860); Moore, Tr. Ent. Soc. 1880, 170; Distant, Rhop. Malay. p. 53, pl. v. fig. 1, ♀ (1882); *Syn.* M. Diniche, Hewits. ♂, M. Margites, Hewits. ♀. *Habitat.* Malay Peninsula, Singapore, Sumatra, Borneo.—*Mydosama Anapita*,

* This species is, generically, quite distinct from *Gareris perdiccas*, with which latter it is erroneously placed as a synonym by Mr. Elwes (P. Z. S., 1881, 903), and also by Mr. Leech (Trans. Ent. Soc. 1889, 103). *Sangaica* is easily distinguished from *perdiccas* in having a glandular tuft of hairs on the submedian vein of both the *fore* and *hindwing*—whereas in *perdiccas* there is a tuft only on *forewing*.

Moore, Catal. Lep. Mus. E. I. C. i. p. 232 (1857); *id.* Tr. Ent. Soc. 1880, p. 171; Distant, Rhop. Malay. p. 418, pl. 39, fig. 8 (1886). *Habitat.* Malay Peninsula, Sumatra, Borneo.—*Mydosama Remulia*, Cram. iii. pl. 237, fig. F. G. (1779); Moore, Tr. Ent. Soc. 1880, p. 171. *Habitat.* Java.—*Mydosama Megamede*, Semper, Reisen Archipel. Phil. Lep. p. 53, pl. 10, fig. 3, 4, ♂, ♀ (1886). *Habitat.* Philippines.—*Mydosama Felderi*, Butler, Catal. Satyr. B. M. p. 144, pl. 3, fig. 5 (1868); Semper, l. c. p. 54, pl. 10, fig. 5, 6, ♂, ♀ (1886). *Habitat.* Philippines.—*Mydosama Ita*, Felder (Reise, Nov. Lep. iii. pl. 68, fig. 8, 9); Semper, l. c. p. 54, pl. 10, fig. 7, 8, ♂, ♀ (1886). *Habitat.* Philippines.—*Mydosama Casonia*, Wallengren, Wien. Ent. Monats. 1860, p. 36; Semper, l. c. p. 52, pl. 10, fig. 19, 20, ♂, ♀ (1886). *Habitat.* Philippines.—*Mydosama marginata*, Moore, Tr. Ent. Soc. 1881, p. 307. *Habitat.* Sumatra.—*Mydosama Dohertyi* (M. Dohertyi, Elwes, P. Z. S. 1891, p. 261, pl. 27, fig. 3, 4, ♂, ♀). *Habitat.* Perak, Malay Peninsula.—*Nebdara Tagala*, Felder (Reise, Nov. Lep. iii. pl. 67, fig. 7, 8). Moore, Tr. Ent. Soc. 1880, p. 174; Semper, l. c. p. 56. *Habitat.* Philippines.—*Nebdara Bisaya*, Felder, Wien. Ent. Monats. 1863, p. 127; Semper, l. c. p. 55, pl. ii. fig. 2, 3, ♂, ♀ (1886); Syn. M. Semperi, Butler, M. Mareotis, Hewits. *Habitat.* Philippines.—*Nebdara Amœna*, Druce, P. Z. S. 1873, p. 339, pl. 32, f. 1. *Habitat.* Borneo.—*Nasapa Aramis*, Hewits. Ex. Butt. iii. 91, Myc. pl. 7, fig. 43 (1866); Semper, l. c. p. 55. *Habitat.* Philippines. Ic. *Males with two glandular patches and tufts of hair on hindwing*:—*Loesa Oroatis*, Hewits. Exot. Butt. iii. Myc. pl. 6, fig. 38, 39 (1864). *Habitat.* Java.

Genus NEORINA.

Neorina, Westwood, Doubleday and Hewitson's Genera of Diurnal Lep. p. 369 (1851). Marshall and de Nicéville, Butt. of India, etc. i. p. 133 (1883). Distant, Rhop. Malay. p. 415 (1886).

IMAGO.—Male. Wings large, short, broad. *Forewing* short, subtriangular; costa arched, apex obtuse, exterior margin slightly oblique, nearly straight, posterior angle rounded; costal vein slightly swollen from the base, median and submedian scarcely perceptibly swollen; cell broad, rather short, not reaching half length of the wing; first and second subcostal branches close together, the first emitted

The following is a Chinese Satyrid combining a similarity of pattern of the markings on the upper-side with the *Mycalesis* group and on the underside with those of the *Lethe* group:—gen. nov. *Pegada*. Male. Wings short, broad. Upperside with the basal area slightly hairy. Underside with the basal two-thirds very numerous covered with short fine hairs. *Forewing* subtriangular; costa slightly arched, apex and posterior angle obtusely rounded, exterior margin slightly convex; cell broad, long; discocellulars incurved. *Hindwing* bluntly ovate; exterior margin very slightly wavy; cell broad across the middle, long; discocellulars very oblique, angular in the middle; the middle median veinlet emitted at some distance before end of the cell. Palpi long, slender, very hairy in front; middle and hind-legs naked; antennæ short, slender, club gradually thickened; eyes hairy. Type.—*P. oculatissima* (*Mycalesis oculatissima*, Poujade, Bull. Soc. Ent. France, 1885, p. xxv. Oberthur, Etudes Entom. 1890, p. 43, pl. x. fig. 104).—*P. occulta* (*Lethe occulta*, Leech, Entomologist 1890, p. 26). *Habitat.*—W. China.

about one-fourth before end of the cell; discocellulars outwardly oblique, short, lower slightly concave, lower radial from angle near upper end; middle median veinlet emitted at about one-fourth and lower veinlet at two-fourths before end of the cell; submedian recurved. *Hindwing* broad, bluntly ovate; costa arched at the base; apex rounded; exterior margin convex, slightly scalloped and somewhat angular in the middle; abdominal margin long; costal vein arched at the base; cell short, small; first subcostal branch emitted at nearly one-third before end of the cell; discocellulars slightly oblique, upper shortest, angular in the middle, radial from the angle; two upper median branches emitted from end of the cell, lower branch at about one-third before the end; submedian nearly straight. *Body* robust, laxly clothed; head large; eyes large, smooth; palpi broad, ascending, compressed and laxly clothed, hairy in front, apical joint small and laxly scaled. Antennæ long, slender, terminating in an elongated slender gradually-formed club. Middle and hindlegs stout, long, scaly. Eyes naked.

Type.—N. Hilda.

NEORINA HILDA. (Plate 74, fig. 1, 1a, ♂ ♀).

Neorina Hilda, Westwood, in Doubleday and Hewitson's Gen. D. Lep. p. 370, pl. 65, fig. 2, ♂ (1851).
Moore, Catal. Lep. Mus. E. I. C. i. p. 226 (1857). Butler, Catal. Satyr. Brit. Mus. p. 111 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 134 (1883).

IMAGO.—Male. Upperside rich deep olivescient ochreous-brown, with two submarginal blackish lunular lines; cilia ochreous-yellow, brightest on the hindwing. *Forewing* with the apical half more dusky-brown; an oblique sinuous-bordered bright ochreous-yellow broad band crossing from middle of the costa to posterior angle, this band being indented at end of the cell; beyond is an incurved subapical series of four white spots, of which the upper second is the largest, the third being minute and centring the large slightly-apparent blackish spot of the underside. *Hindwing* with a prominent narrow ochreous-yellow fascia bordering the apex, and some yellow scales externally bordering the outer submarginal line. Underside dark olivescient ochreous-brown; the two submarginal black sinuous lines being very prominent, and the inner line more or less bordered inwardly with lilacine-blue scales. *Forewing* with the ochreous-yellow oblique band as on upperside; the apical white spots, and a large blue-black subapical ocellus with yellow outer ring, all very prominent. *Hindwing* with yellow apical border as above; a prominent large blue-black subapical ocellus, and four lower much smaller and less defined ocelli with blue-speckled centres, of which the three upper anteriorly decrease to a minute spot, and the lower or subanal ocellus only being ringed with yellow; with a subbasal and a discal

slender indistinct blackish zigzag line, the space between them and along the abdominal margin, with the outer discal area distinctly irrorated with ochreous-yellow scales. Female. Upperside as in the male, except that on the hindwing the outer margin is strongly irrorated with yellow scales. Underside also as in the male. *Body* and legs beneath paler ochreous-brown; forelegs beneath ochreous-yellow; a streak on side of head and on sides of the palpi also ochreous-yellow; antennæ reddish.

EXpanse, $3\frac{3}{4}$ to 4 inches.

HABITAT.—N.E. India (Sikkim; Bhotan; Assam).

DISTRIBUTION AND HABITS.—“This lovely insect is one of those most characteristic of the dark gloomy Oak and Chestnut forests of the Eastern Himalayas, and occurs from the end of June till September at 7000 to 9000 feet. It flies up and down the paths in dense forests, and settles on the ground or on tree trunks, when it is not so conspicuous as it is on the wing. The female is either much rarer or more seldom seen than the male; but I once saw one flying rapidly over the bare open top of the Observatory-hill at Jellapahar, which is a very favourite place for the females of many forest-loving butterflies to fly on sunny mornings in the rainy season, and, after a stiff race with a burly bombardier from the dépôt, who was a regular collector on this spot, I netted the prize. I found the species much commoner to the eastward, in British Bhotan than in Sikkim.” (Elwes, Trans. Ent. Soc. 1888, 307). It also occurs in Assam.

NEORINA WESTWOODII (Plate 74, fig. 2, 2a, ♂ ♀).

Neorina Crishna, apud Marshall and de Nicéville, Butt. of India, etc. i. p. 135, pl. xiv. fig. 34, (1883). (*nec Westwood.*)

IMAGO.—Male upperside rich dark purpurescent ochreous-brown; with two submarginal blackish broad lunular lines; cilia of the forewing posteriorly, and of the entire hindwing pale yellow. *Forewing* with a broad pale yellow sinuous-bordered band crossing obliquely from middle of the costa to the posterior angle, the discocellular veinlet being slenderly brown lined; a large indistinctly defined black subapical spot centred by a white dot, above which are two inwardly-oblique pure white apical spots, and below it is another white dot placed at an outwardly-oblique angle to the one in the black spot. *Hindwing* with a short pale yellow band bordering the apical angle. Underside dark dusky olivescient ochreous-brown, palest on the apex of forewing; both wings with two prominent submarginal black sinuous lines; the inner submarginal line and the area within the submarginal line, on both wings, and

the abdominal area on the hindwing thickly irrorated with lilacine-grey scales. *Forewing* with a large subapical blue-black ocellus with a minute white pupil and a narrow ochreous-yellow and a black outer ring; above which are the two white apical oblique spots and below it two smaller white spots; the broad oblique band paler than above, and the discocellular brown streak broader. *Hindwing* with the apical border yellow; with a short subbasal and an entire discal transverse blackish zigzag line; a large prominent subapical and also a subanal blue-black ocellus, each with a minute white pupil and blue speckles, an ochreous-yellow and a black outer ring, the yellow ring dilated inwardly; between these two large ocelli are three very small blue-speckled black spots. Female. Upper and undersides paler than in the male; markings the same. Body beneath ochreous-brown; sides of head, streak on sides of palpi, and forelegs beneath ochreous-yellow.

Expanse, $4\frac{1}{2}$ to 5 inches.

HABITAT.—N.E. India (Assam, Cachar).

This is a larger insect than *N. Crishna*, with which it has hitherto been erroneously associated. The latter species (*Crishna*) is from Java, the type specimen, from which the original description was taken, being then in the East India Company's Collection, and is referred to in the Catal. Lep. Mus. E. I. C. i. p. 221, as *Cyllo Crishna*, but now deposited in the British Museum. *N. Westwoodii* differs from it, on the upperside, in the forewing having the yellow band somewhat broader, the black apical spot being much larger and not encircled with yellow; there are also two small white spots above and one below this black spot, these small white spots being, moreover, placed at an outwardly-oblique angle from the central dot in the black spot, whereas, in *Crishna*, the white spot above and the one below the black ocellus are both in a direct vertical line with its central white dot. On the hindwing the pale yellow apical border is longer, and no ocelli are present, whereas in *Crishna* there are two, and in some specimens three, distinct ocelli, the two upper being of large size and a smaller one subanal. On the underside, the forewing has the yellow band also broader, the discocellular brown streak being entire; the apical ocellus is four times the size of that in *Crishna*, with its adjacent upper and lower white dots placed in position as on the upperside. The hindwing has the apical ocellus also larger; the subanal ocellus is also as large again as that in *Crishna*, and there is no indication of the small anal ocellus. Other minor differences in *Crishna* are that the latter species has a pale yellow dentate spot close to the costal vein within the cell of the forewing, and in the hindwing there is a black dot within the middle of the cell, whereas in *Westwoodii* there is a zigzag blackish subbasal line. Expanse of *Crishna* $3\frac{3}{4}$ inches.

DISTRIBUTION.—“Mr. Wood-Mason took several males on Nemotha, 3300 feet elevation, in Cachar, in September and October. There are specimens in the Indian

Museum, Calcutta, from Cherra Punji, Assam, and in Major Marshall's from Shillong." (De Nicéville, Butt. Ind. 136). Specimens were also obtained at Cherra Punji by the late Mr. W. S. Atkinson, and by Col. Godwin-Austen.

INDO-MALAYAN ALLIED SPECIES OF NEORINA.—The other known species of this genus are *N. Lowii*, Doubleday and Hewitson, Gen. D. Lep. p. 369, pl. 61, fig. 4 (1851). Distant, Rhop. Malay. p. 416, pl. 37, fig. 3 (1886). Staudinger, Exot. Schmett. p. 223, pl. 79, ♂ (1887). Mr. W. Doherty (J. A. S. Bengal, 1889, 124) says, "I have often observed *N. Lowii* in Borneo, the Malay Peninsula, and Eastern Java (where, however, the local representative may be distinct). It is continually changing its perch, flitting round and round the passer-by, and alighting with the wings partly or wholly open. When flying, it has the strongest possible resemblance to *Papilio Helenus*, and it may possibly be advantageous for a scarce, rather weak-flying insect of Morphid or Satyrid affinities to resemble a common Papilio of powerful and irregular flight." HABITAT.—Malay Peninsula; Nias; Sumatra; Borneo.—*N. Patria*, Leech, The Entomologist, 1891, p. 25. HABITAT.—W. China.—*N. Princesa*, Staudinger, Iris, 1889, p. 36. HABITAT.—Palawan.

Genus CÆLITES.

Cærites, Westwood in Doubleday and Hewitson's Genera of Diurnal Lep. p. 367 (1851). Distant, Rhop. Malay. p. 45 (1882). Marshall and de Nicéville, Butt. of India, etc. i. p. 100 (1883).

IMAGO.—Male. *Forewing* triangular; costa much arched, apex rounded, exterior margin somewhat concave, very slightly scalloped, posterior angle rounded, posterior margin short; costal vein perceptibly swollen; cell long, extending more than half length of the wing; first subcostal branch emitted at about one-fourth before and second branch close to end of the cell; discocellulars concave, upper short and bent close to subcostal, the upper radial from the angle, the lower radial from the middle; the middle median branch emitted at one-fourth and lower branch at more than half before end of cell; submedian straight. *Hindwing* short, quadrangularly-ovate, the exterior margin being slightly scalloped and angular in the middle; abdominal margin long; subcostal vein much arched; cell extending to half the wing; first subcostal branch emitted at about one-third before end of the cell; discocellulars outwardly oblique, upper shortest, radial from the angle; two upper median branches from extreme end of the cell, lower branch at about one-third before the end; submedian straight, internal vein recurved. A large *spatular-shaped glandular patch* of blue-black lustreless scales situated broadly on both sides of the submedian vein near its base, overlapping which, and also extending partly along the outer side of the submedian are numerous fine long black hairs. Female less concave below the apex of fore-

wing, and less angular on hindwing. Body short; head small; palpi compressed, second joint projected half beyond the front, apex small and pointed; legs short; antennæ very slender, with a slightly perceptible lengthened club; eyes naked.

Type.—C. Nothis.

CÆLITES NOTHIS (Plate 75, fig. 2, ♂).

Cœlites Nothis, Westwood in Doubleday and Hewitson's Gen. D. Lep. p. 367, pl. 66, fig. 2, ♀ (1851).

Butler, Catal. Satyr. Brit. Mus. p. 111 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 101 (1883).

IMAGO.—Male and female. Upperside dusky purplish-brown. Both wings with the basal half glossed with blue, and with two slender dusky brown marginal lines. Hindwing of male with an elongate *glandular patch of black scales* on the submedian vein near its end, which is overlapped with inwardly projected black hairs arising from a longitudinal fold contiguous to the vein, the hairs also extending along the fold towards its base. Underside. Both wings with the basal half dull brown, the outer half pale virescent-brown. *Forewing* crossed by an outer discal very narrow brown wavy band, and two slender marginal lines. *Hindwing* crossed by a broader angulated brown discal band, which is incurved and narrowest before the upper ocellus, and in the male is posteriorly merged with the brown basal area; beyond are five ocelli, the upper one and the two lowest being large and of almost equal size, the second and third much smaller, each with a black centre and small white pupil, an ochreous ring and then a dark brown ring; two marginal brown lunular lines.

Expanse, ♂ ♀ $3\frac{1}{8}$ inches.

HABITAT.—East India.

Two males and one female of this species in the late Dr. Boisduval's collection, now in possession of Mons. C. Oberthür, of Rennes, France, and a female in the Hewitson Collection at the British Museum, are all that is at present known to us. The precise locality it inhabits is unknown.

The illustration of this species, on our plate No. 75, fig. 2, represents the underside of the male of the type specimen, in the Boisduvalian Collection, reproduced from a coloured drawing kindly forwarded to us by Mons. C. Oberthür, the possessor of the late Dr. Boisduval's collection.

CÆLITES ADAMSONI (Plate 75, fig. 1, 1a, ♂ ♀).

IMAGO.—Male and female. Upperside purpurescent greyish-brown, the basal two-thirds dusky and brilliantly glossed with dark purplish ultramarine-blue; both wings with two slender blackish marginal lines; cilia purplish-cinereous. *Male* with an

elongate *glandular patch of black scales on the submedian vein* near its end, the patch overlapped with inwardly projected fine black hairs arising from a longitudinal fold contiguous to the vein, the hairs also extending along the fold towards its base. Underside paler, the basal two-thirds purplish olivescent-brown; both wings with the two dark brown slender marginal lines as on upperside. *Forewing* with an outer discal transverse slender dark brown sinuous line, which is narrowly bordered interiorly by the pale purplish-grey colour of the outer border. *Hindwing* with a transverse discal narrow dark brown recurved band, which is very narrowly bordered interiorly by pale purplish-grey; a submarginal series of five very prominent black ocelli, the upper one and the fourth and fifth being large and of nearly equal size, the lowest being slightly the largest; these ocelli in the female somewhat larger, the upper second and third are small, and each with a distinct white pupil, an ochreous ring, then a brown ring, and all encompassed by the pale purplish-grey of the outer border; the outer marginal line being slightly ochreous bordered. *Body* brown; legs beneath and sides of palpi pale brownish ochreous; antennæ ochreous.

Expanse, ♂ $2\frac{5}{8}$, ♀ $2\frac{6}{8}$ inches.

HABITAT.—Bhamo, Burma.

This species is smaller than *C. Nothis*. Upperside with the marginal lines more distinct. Underside of a somewhat darker brown colour, the outer borders more narrowly paler purplish-grey brown. *Forewing* with the discal line distinctly defined, narrower, and more wavy, the two marginal lines also strongly defined. The *hindwing* has the recurved discal dark brown line narrow, well defined, and narrowly bordered interiorly with purplish-grey, the two marginal lines are also strongly defined, the five ocelli more prominent, the upper second and third being also larger, and the outer bordering purplish-grey more vivid.

Major C. H. E. Adamson records (Catal. of Butterflies collected in Burma, p. 6), under the name of *C. Nothis*, the capture of several "specimens of this very rare insect in the district of Bhamo, in September and October, in dense rattan jungle, being a shade-loving insect, and is always in damp, dark, and dismal jungles."

The illustrations of this species on our plate No. 75, figs. 1, 1a, represent the male and female, kindly lent from Major Adamson's collection.

COELITES BINGHAMI (Plate 75, fig. 3, 3a, ♂).

Cœlites Epiminthia, De Nicéville, Butt. of India, i. p. 101, pl. 13, fig. 31, ♂ (1883). *Nec Westwood*.

IMAGO.—Male. Upperside dusky purpurescent greyish-brown, the area of the forewing from below the subcostal to near the apex, and the hindwing from near the submedian vein, glossed with dark ultramarine-blue. Both wings with a slender blackish single marginal line; cilia bluish-cinereous. *Forewing* with an ill-defined

short narrow excurved transverse pale bluish-grey fascia before the apex. *Hindwing* with a prominent *elongate glandular patch of black scales on the submedian vein* near the end, the patch overlapped by several longish black hairs, which project inward from a longitudinal fold between the lower median and submedian vein, similar hairs also extending upward along the fold to near the base of the vein. Underside dark umber-brown. Both wings crossed by a uniformly broad glossy bluish-grey straight discal fascia, and an outer marginal fascia, the latter traversed by the two dark brown slender marginal lines, the fasciæ on the forewing being partly confluent towards the apex. *Hindwing* with five prominent ocelli, which are somewhat small and of nearly equal size, each with small black centre, a pure white narrow pupil, an ochreous ring, and then a dark brown ring, all being encompassed in the pale bluish-grey border.

Female. Upperside as in the male, except that the forewing has a more conspicuous bluish-grey excurved subapical fascia, and in the hindwing the marginal bluish-grey band extends beyond the marginal lines, the third ocellus being also decidedly the smallest. Body beneath, legs, and sides of palpi pale brownish-ochreous; antennæ ochreous.

Expanse, ♂ $2\frac{7}{8}$, ♀ 3 inches.

HABITAT.—Upper Tenasserim.

From typical *C. Epiminthia* (Bornean, Sumatran, and Malay Peninsula examples) this species is distinguishable in having more even outer margins and less angular hindwing, the forewing of the male being somewhat narrower at the apex. On the underside the transverse discal fascia crossing both wings is broader and straight, being very similar to that in *C. Euptychioides* and *C. humilis*, and not bent inward in crossing the hindwing, as in *C. Epiminthia*; the ocelli on the hindwing are totally different, those in *C. Epiminthia* being much larger and composed only of an ochreous-brown centre, a narrow white pupil, and an outer black ring.

DISTRIBUTION.—Major C. H. E. Adamson (Catal. of Burmese Butterflies, p. 6) obtained males of this species near Tounggya, Seckkan, in April, 1888, and others near Rannee in October, in the neighbourhood of Moulmain, “in thick moist rattan jungle.” Capt. C. J. Bingham “took a single female in the Mepley Valley, in Upper Tenasserim, in October” (Butt. India, 102).

The illustrations of this species on our Plate No. 75, figs. 3, 3a, represent the male, kindly lent from Major Adamson's collection. An example of this species being also in the possession of Mr. H. Grose-Smith.

INDO-MALAYAN ALLIED CÆLITES.—*C. Epiminthia*, Westwood in Doubleday and Hewitson's Gen. D. Lep. p. 368 (1851). Distant, Rhop. Malay. p. 415, pl. xix. fig. 8 (1886). *Habitat.* Borneo, Sumatra, Salangore, Malay Peninsula.—*C. Euptychioides*, Felder, Reise Nov. Lep. iii. p. 499 (1867). Staudinger, Exot. Schmett. p. 223, pl. 79. *Habitat.* Borneo.—*C. humilis*, Butler, Ann. Nat. Hist. 1867, p. 403, pl. 8, fig.

8, pl. 9, fig. 2. Distant, Rhop. Malay. p. 45, fig. 15, ♂ (1882). *Habitat.* Malay Peninsula.

Genus RANGBIA.

Lethe (group I, part), Marshall and de Nicéville, Butt. of India, etc. i. p. 138 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 308.

IMAGO.—Male. *Forewing* short, subtriangular; costa slightly arched, apex obtusely pointed, exterior margin slightly oblique, even; costal vein perceptibly swollen, median and submedian scarcely swollen; cell extending to fully half the wing, broad; first and second subcostal branches emitted before end of the cell; discocellulars outwardly-oblique, radials from the angles near upper end; middle median branch emitted at one-fourth and lower branch at one-half before end of the cell; submedian straight; a long narrow glandular patch of lustreless scales extending along both sides of the middle of the submedian vein. *Hindwing* short, broad, bluntly ovate; costal margin rather long, exterior margin slightly scalloped and angular in the middle; anal angle rounded; cell rather long and broad; first subcostal branch emitted at one-fourth before end of the cell; discocellulars outwardly-oblique, radial from the middle; the middle median emitted at a short distance before end of the cell; a conspicuous tuft of long hairs overlapping a glandular patch of lustreless scales at base of the middle median veinlet. *Body* short; thorax robust, hairy; palpi porrect, slender, compressed, hairy in front; legs moderately short, stout; antennæ rather short, with a moderately thickened club; eyes hairy.

Type.—R. Scanda.

RANGBIA SCANDA (Plate 75, fig. 4, 4a, b, ♂ ♀).

Debis Scanda, Moore, Catal. Lep. Mus. E. I. Compy. i. p. 218 (1857), ♂.

Lethe Scanda, Butler, Catal. Satyr. Brit. Mus. p. 117 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 139 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 308. Staudinger, Exot. Schmett. p. 221, pl. 78, ♂.

Debis Nada, Moore, Catal. Lep. Mus. E. I. C. i. p. 218 (1857), ♀.

Zophoessa Dirphia,* Druce, Cistula Ent. i. p. 357 (1875), ♀. Marshall and de Nicéville, Butt. of India, etc. i. p. 168 (1883), ♀.

IMAGO.—Male. Upperside purpurescent blue-black, the outer borders glossy greyish-blue, which latter tint is most strongly defined on the forewing, where it forms a definite sinuous-bordered fascia, the fascia being palest at its upper end; abdominal margin purpurescent-brown; cilia white, alternated on the hindwing posteriorly with brown; *Forewing* with a long narrow glandular patch of lustreless scales extending along both sides of the middle of the submedian vein. *Hindwing* with a very indistinct small subapical and two lower median pale-bordered black

* Verified by actual comparison with the type specimen, now in the collection of Mr. F. D. Godman.

ocelli, each with a white pupil; a conspicuous *tuft of long black hairs* overlapping a *glandular patch of lustreless scales* at base of the middle median veinlet. Underside dark ferruginous, palest and sometimes olivaceous-tinged basally; exterior margins yellowish and traversed by a blackish submarginal line. *Forewing* crossed by a darker ferruginous subbasal angular line and a contiguous short line within the cell, with an intervening yellow bar; a transverse discal slightly sinuous narrow yellow band, beyond which is a linear series of four pale ocelli, and above these ocelli is a slight sinuous costal spot. *Hindwing* crossed by a straight subbasal and a wavy discal dark ferruginous line, the latter being yellowish bordered externally; beyond is a curved series of six prominent ocelli, each with a silvery-blue outer ring, the lowest ocellus being bi-pupilled. Female. Upperside dark olivaceous ochreous-brown. *Forewing* crossed by an outwardly-oblique discal ill-defined very narrow pale ochreous-brown band, which is most distinct at its costal end; beyond are three linearly-disposed pale-bordered black subapical spots, and above these is a yellow sinuous costal spot. *Hindwing* with four ill-defined pale brownish-bordered blackish ocelli. Underside of the same colour and markings as in the male, except that the oblique discal band on forewing is broader and brighter coloured. *Body* above blackish; thorax and head clothed with varied glossy green and reddish hairs; thorax and abdomen beneath, and sides of palpi pale ferruginous; antennæ blackish, tip with red.

Expanse, ♂ $2\frac{2}{8}$ to $2\frac{4}{8}$, ♀ $2\frac{2}{8}$ to $2\frac{5}{8}$ inches.

HABITAT.—Sikkim; Bhotan.

DISTRIBUTION.—According to Mr. de Nicéville (Butt. Ind. i. 139), “this is a rare insect in Sikkim, where it has been taken by Mr. O. Möller in September.” “Mr. Möller also took a single female in perfect condition in Birch Hill Park, Darjiling, at 6000 feet elevation” (J. A. S. Beng. 1885, pt. ii. p. 2). It has also been taken at Rikisum, at 7000 feet elevation in Bhotan, in August. Mr. Elwes (Tr. Ent. Soc. 1888, 311) says, “This species is not uncommon, in Sikkim, in the dense virgin forest on Tendong, and near Rikisum, and rarer on the flanks of Sinchul from 6000 to 8000 feet, in the months of July and August. I have, however, taken a single female at the end of June, but this sex is always rare, and flies but little.” It was also obtained at Darjiling by the late Mr. W. S. Atkinson.

RANGBIA BHAIRAVA (Plate 76, fig. 1, 1a, b, ♂ ♀).

Debis Bhairava, Moore, Catal. Lep. Mus. E. I. Co. i. p. 217 (1857), ♀.

Lethe Bhairava, Butler, Catal. Satyr. Brit. Mus. p. 117 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 139 (1883). Elwes, Trans. Ent. Soc. Lond. 1883, p. 308, 309.

Debis Anysis, Hewitson, Exotic Butterflies, iii. p. 73, *Debis*, pl. 1, fig. 1 (1862), ♂.

IMAGO.—Male. Upperside dark rufescent olivaceous-brown; cilia brownish-
VOL. I. January 1st, 1892. H h

cinereous. *Forewing* with a transverse oblique discal dusky-brown narrow fascia and four linearly-disposed ill-defined small subapical ochreous-yellow spots; a *large glandular patch of lustreless black scales* situated above and below the middle of the submedian vein. *Hindwing* with a curved series of four ill-defined black ocelli, each with a pale reddish-brown outer ring, the two lower only showing a minute white pupil; a *large glandular patch of black lustreless scales* occupying the upper discal area, and a prominent *black recumbent tuft of hairs* overlapping a *glandular patch of black scales* at base of the middle median veinlet. Underside ferruginous; marginal lines dark ferruginous-brown. *Forewing* crossed by two outwardly-oblique subbasal dark ferruginous lines, the outer line crossing the cell only, and a discal similar line, the latter sometimes showing two or three indistinct white dentate spots along its outer edge; beyond are four ill-defined pale-ringed ocelli encompassed by a dark ferruginous outer border. *Hindwing* crossed by a sinuous subbasal and a wavy discal dark ferruginous-red line, and a series of six prominent black ocelli, each with pale ring and white pupil, the upper ocellus being placed close to the upper end of the discal line and wide apart from the others, the lower five ocelli being encompassed by a dark ferruginous outer border.

Female. Upperside somewhat paler than in male. *Forewing* with a series of white dentate spots externally bordering the oblique dusky discal fascia, these spots being disposed between the veins, the two between the medians the most prominent, the others ill-defined; subapical ochreous spots less defined, the three lower with minute black pupil. *Hindwing* with the four ocelli as in male. Underside as in male, except that on the forewing the white dentate spots bordering the discal line are distinctly defined. *Body* and legs beneath, and sides of palpi pale ferruginous.

Expanse, $2\frac{1}{2}$ to $2\frac{3}{4}$ inches.

HABITAT.—Sikkim; Bhotan; Naga Hills.

DISTRIBUTION.—“A rare insect in Sikkim, which I have only taken at the Rangbi bridge in May, and on the flanks of Dhumson, in British Bhotan, at 6000 feet, in August. Mr. Möller’s collectors have taken it in June, and near Buxa in Bhotan at 5000 feet in June.” (Elwes, Tr. Ent. Soc. 1888, 311.) It was also taken at Darjiling by the late Mr. W. S. Atkinson. Mr. W. Doherty obtained it in the Naga Hills, at 5000 to 8000 feet in July and August.

RANGBIA GULNIHAL (Plate 76, fig. 2, ♂).

Lethe Gulnihal, de Nicéville, Proc. Zool. Soc. Lond. 1887, p. 450, pl. 39, fig. 7, ♂. Elwes, Trans. Ent. Soc. Lond. 1888, p. 308.

IMAGO.—Male upperside dark vinous ochreous-brown; cilia cinereous-brown. *Forewing* with the posterior margin convex and fringed, and crossed by a very indistinct dusky-black slender discal band, which is sinuously diffused at its costal end; a

large glandular patch of lustreless dusky-black scales situated slightly above and broadly beneath the middle of the submedian, on both the upper and underside of the wing. Hindwing with a series of four very indistinct slightly pale-bordered black ocelli; a large oval subcostal glandular patch of lustrous blackish scales, and a recumbent tuft of black hairs overlapping a glandular patch of blackish scales at base of the middle median veinlet. Underside pale olivaceous ochreous-brown; marginal lunular lines paler. Forewing with two transverse dark reddish-brown lines crossing the cell with a shorter line below them, and a curved wavy discal line, the latter incurved at the costal end; a series of five ill-defined pale-ringed ocelli, the upper ocellus being incompletely developed, and all encompassed by a dark brown outer border. Hindwing crossed by a dark reddish-brown angular subbasal line and a wavy discal line; beyond which are six prominent black ocelli, each composed of a black centre with a white pupil, a yellow and then a black, and lastly a pale violet outer ring, the upper ocellus largest and placed near the discal line, the lowest being duplex. Body and legs beneath, and sides of palpi pale ochreous-brown. Female unknown.

Expanse, ♂ $2\frac{1}{4}$ inches.

HABITAT.—Bhotan.

DISTRIBUTION.—“Males of this species were obtained in Bhotan by the native collectors of Messrs. O. Möller and A. V. Knyvett.” (De Nicéville, l. c. 451.)

The illustration of this species on our Plate No. 76, fig. 2, is taken from the type specimen of the male, kindly lent for this purpose by Mr. L. de Nicéville.

RANGBIA PEGUANA.

Lethe Gulnihal, var. Elwes, Proc. Zool. Soc. 1891, p. 263.

Male. Differs from typical Bhotanese *Gulnihal* in the forewing being comparatively more convex at the apex, the exterior margin slightly concave, a longer and less convex posterior margin; the glandular patches similar, but the black tuft of hairs on hindwing somewhat broader. Upperside purpurescent-brown. Underside much brighter coloured and ochreous in tint; the transverse cell streak on the forewing, and the subbasal and discal line on both wings brighter red, more irregular in their course, especially those on the hindwing, and sinuous; the ocelli on the forewing are incurved (not linearly disposed as in *Gulnihal*), are also larger in size but less defined; the ocelli on the hindwing are also much smaller (being half the size of those in *Gulnihal*) and with much less developed outer rings.

Expanse, $2\frac{3}{8}$ inches.

HABITAT.—E. Pegu, Burma.

The female of *R. Peguana*, according to Mr. Elwes (l. c. 263), “is much paler on both surfaces than the male, and has the costa of the forewing, a spot near the apex, and a faintly marked patch below it, of a lighter brownish-yellow,

with a whitish spot on the first median interspace; the hind margin of the wing not bowed as in the male; the ocelli of the hindwing showing on the upper surface, and the transverse lines of the underside are wider apart and much fainter. The ocelli are also smaller and nearly obsolete on the forewing."

DISTRIBUTION.—“ Found not uncommonly by Mr. W. Doherty, at from 2000 to 5000 feet in the Karen Hills. A single specimen was also taken by Dr. Manders in the Shan Hills ” (Elwes, l. c. 263). Dr. N. Manders (Tr. Ent. Soc. 1890, 518) records “ three specimens of the male taken at the Hill station of Bernardmyo, at 7000 feet, in the Shan States.”

RANGBIA LATIARIS (Plate 76, fig. 3, 3a, b, ♂ ♀.)

Debis latiaris, Hewitson, Exotic Butt. iii. *Debis*, pl. 1, fig. 4 (1862), ♂.

Lethe latiaris, Butler, Catal. Satyr. Brit. Mus. p. 117 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 140 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 308, 312.

IMAGO.—Male. Upperside olivaceous ochreous-brown; cilia pale cinereous-brown. *Forewing* with a *slightly developed glandular patch* of dusky scales on the submedian vein. *Hindwing* with the five ocelli of the underside slightly visible; marginal lines pale bordered; with a prominent *tuft of recumbent black hairs* overlapping a *glandular patch of scales* at base of *middle median veinlet*. Underside pale olivaceous-brown; marginal lines dark brown and ochreous bordered. *Forewing* crossed by a dark reddish-brown straight subbasal line, a shorter line within the cell, and a discal line, the latter slightly bordered externally with lilacine; beyond is a series of four very palely-defined ocelli laterally bordered by a brown shade. *Hindwing* crossed by a straight subbasal dark reddish-brown line, a biangulated discal line, and an outer series of six ocelli each with white-speckled black centre and outer lilacine-grey ring, the anal ocellus duplex; inner marginal line bordered with lilacine-grey.

Female. *Forewing* less triangular; crossed by an outwardly-oblique discal very indistinct pale ochreous-brown narrow band, and a short subapical similar oblique line. *Hindwing* more angulate at end of the upper median; with four median and an apical ill-defined blind blackish ocelli. Underside pale olivaceous-brown, marked as in the male, except that the discal transverse line of the *forewing* is somewhat more oblique and has a pale yellowish outer bordering-fascia. *Hindwing* with the discal line angulated on each median vein, the ocelli much more prominent. *Body* and legs beneath, and sides of palpi pale ochreous.

Expanse, ♂ $2\frac{3}{8}$, ♀ $2\frac{7}{8}$ inches.

HABITAT.—Sikkim, Assam, Silhet, Khasias, Upper Tenasserim.

DISTRIBUTION.—“ Sikkim, 4-5000 feet, through Assam to Tenasserim.” (Elwes Tr. Ent. Soc. 1888, 308.) “ A rare or local species in Sikkim, but, according to

Mr. O. Möller, found in April and May, and again in October, at 2-5000 feet on the Tukvar Spur. My collectors brought a single female from the interior in 1883, which must, I think, have been taken at a higher elevation." (Elwes, *id.* p. 312.) "Somewhat rare. It has been taken at Shillong in May" (de Nicéville, Butt. Ind. i. 140). It was taken at Cherra Punji by the late Mr. W. S. Atkinson, and by Dr. G. Watt (Ann. Nat. Hist. 1885, 301) on the borders of Assam. It is not uncommon in the Khasia Hills.

The illustrations on our Plate No. 76, fig. 3, 3a, b, represent the male and female, the latter sex taken from a specimen kindly lent for this purpose by Mr. H. J. Elwes.

Genus NEMETIS.

Temenis (part), Hübner, Verz. bek. Schmett. p. 34 (1816).

Debis (part), Westwood, Gen. D. Lep. p. 358 (1851).

Lethe (group I., part), Marshall and de Nicéville, Butt. of India, etc. i. p. 158 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 308.

IMAGO.—Male. *Forewing* triangular; costa much arched, apex rounded, exterior margin oblique and slightly concave in the middle, posterior margin slightly convex and fringed; the basal area with numerous fine short recumbent hairs projecting outwardly above the ordinary scales; costal vein swollen; submedian vein much recurved; with a prominent *recumbent patch of hairs* overlapping a narrow *glandular patch of scales* situated below the middle of the submedian vein. *Hindwing* with a prominent *recumbent tuft of long hairs* overlapping a *glandular patch of scales* between the base of the middle and lower median veinlets; cell long; discocellulars very oblique. Antennal club slender.

Type.—N. Minerva.

NEMETIS MINERVA (Plate 77, fig. 1, 1a, b, ♂ ♀).

Papilio Minerva, Fabricius, Syst. Ent. p. 493, ♀ (1775); Spec. Ins. p. 74 (1791); Mant. Ins. p. 37 (1787); Ent. Syst. iii. p. 95 (1793).

Lethe Minerva, Butler, Catal. Fabrician Lep. Brit. Mus. p. 29 (1869). Marshall and de Nicéville, Butt. of India, etc. i. p. 140 (1883). Distant, Rhop. Malayana, p. 414, pl. 36, fig. 8, ♂.

Satyris Minerva, Godart, Enc. Méth. ix. p. 499 (1818). Westwood, Gen. D. Lep. p. 392.

Papilio Arcadia, Cramer, Pap. Exot. ii. pl. 116, fig. E, F (1779), ♀.

Temenis Arcadia, Hübner, Verz. bek. Schmett. p. 34 (1816).

The following is an allied Chinese form: gen. nov. *Kirrodessa*. Male. *Forewing* triangular, narrow; glandular patch absent. *Hindwing* ovate, exterior margin slightly scalloped; with a *tuft of hairs arising within the upper base of the cell* and overlapping a subcostal glandular patch of scales, and a *second tuft also arising within the cell* and overlapping a narrow lower-discocellular glandular patch of scales. Type *K. Sicelis* (Hewitson, Exot. Butt. *Debis*, pl. i. fig. 3 (1862). *Habitat*. China, Japan.

Debis Arcadia, Westwood, Gen. D. Lep. p. 359 (1851). Moore, Catal. Lep. Mus. E. I. C. i. p. 219 (1857).

Lethe Arcadia, Butler, Catal. Satyr. Brit. Mus. p. 118 (1868).

Satyryus Caumas, Godart, Enc. Méth. ix. p. 479 (1819), ♂ ♀.

IMAGO.—Male. Upperside. *Forewing* reddish olivescence-brown, the basal half with numerous outwardly recumbent fine reddish-ochreous hairs, and a *prominent tuft* of similar hairs overlapping a *glandular patch of ochreous scales* below the middle of the submedian vein, the patch being broadly encompassed by an area of black scales. *Hindwing* with the basal half reddish olivescence-brown, the posterior half reddish-ferruginous; marginal lines brown; with a curved discal series of five more or less defined black spots, and a prominent *recumbent tuft of blackish-tipt hairs* overlapping a *glandular patch of scales* between the base of middle and lower median veinlets. Underside pale dull brownish-ochreous; marginal lines slender, black. *Forewing* crossed by a reddish-brown inwardly-oblique subbasal line, a short inner streak and a dot above it within the cell, and a discal angulated line, the latter broadly pale bordered externally; beyond is a row of very ill-defined pale-bordered brownish ocelli with minute black pupils. *Hindwing* with a straight reddish-brown subbasal line, and a zigzag discal line, the latter broadly pale-bordered externally; beyond is a curved series of six indistinct brownish-ochreous ocelli, each with a black centre sprinkled with ochreous-white scales.

Female. Upperside reddish-ferruginous, the apical half of forewing being reddish olivescence-brown. *Forewing* with an angular macular white discal band composed of four portions, the upper portion being long and extending obliquely inward to the costa, the three lower parts triangular in shape and disposed transversely, the middle part being the smallest; beyond are two small conjoined white apical spots. *Hindwing* with two large outwardly-quadrate apical black spots and three lower discal small oval spots. Underside as in the male, except that on the forewing the discal line is outwardly angular and bordered externally by the whitish spots as on the upperside. *Body* and legs beneath, and sides of palpi pale ochreous.

Expanse, $2\frac{3}{8}$ to $2\frac{5}{8}$ inches.

HABITAT.—Burma; Tenasserim; Malay Peninsula; Sumatra, Java.

DISTRIBUTION.—“This species has been taken in Upper Tenasserim by Capt. C. T. Bingham, in the Donat Range in January, in the Mepley Valley in January and February, and in the Thoungyeen forests in March and May.” It has also been taken at Houndraw in November (de Nicéville, Butt. Ind. 141). Mr. O. Limborg (P. Z. S. 1878, p. 824) obtained it at Ahsown in the cold weather. Messrs. Elwes and de Nicéville (J. A. S. Beng. 1887, 417) record it from Tavoy. Major C. H. E. Adamson (Catal. Butt. coll. in Burma, p. 7) records it as being “sparsely spread throughout Burma.”

DISTRIBUTION OUTSIDE INDIAN AREA.—In the Malay Peninsula, it has been taken at Perak. It also occurs in Sumatra, and was taken by Dr. Horsfield in Java; the specimens from these latter localities being much more brightly coloured beneath than those from Tenasserim.

Genus HANIPHA.

Hanipha, Moore, Lep. of Ceylon, i. p. 18 (1880).

Lethe (group I. part), Marshall and de Nicéville, Butt. of India, etc. i. p. 139 (1883).

IMAGO.—Wings very short, broad. *Forewing* triangular, costa much arched, apex obtusely pointed, exterior margin slightly concave, posterior angle convex, posterior margin straight. *Hindwing* with a prominent broad extended caudate point at end of the upper median veinlet. *Male* with a conspicuous lengthened recumbent tuft of hairs transversely overlapping a sericeous glandular patch of scales situated between the lower median and submedian veins; lower median very much curved. Antennal club short and stout.

Type.—H. Dynsate.

HANIPHA DYNSTATE (Plate 77, fig. 2, 2a, b, ♂ ♀).

Debis Dynsate, Hewitson, Exotic Butt. iii. p. 76, *Debis*, pl. 2, fig. 9, 10 (1863), ♀.

Hanipha Dynsate, Moore, Lep. of Ceylon, i. p. 20, pl. 9, fig. 1, 1a (1880), ♀.

Lethe Dynsate, Butler, Catal. Satyr. Brit. Mus. p. 115 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 142 (1883), ♀.

Lethe Sihala, Moore, Proc. Zool. Soc. Lond. 1872, p. 555. Marshall and de Nicéville, Butt. of India, etc. i. p. 141 (1883).

Hanipha Sihala, Moore, Lep. of Ceylon, i. p. 19, pl. 8, fig. 2, a, b (1880).

IMAGO.—Male. Upperside dark olive-brown, glossy; cilia cinereous-brown. *Forewing* with two, or three, very indistinct small pale ochreous apical spots, and a faint indication of a blackish oblique discal fascia with pale outer border; a prominent longitudinal tuft of long blackish-brown recumbent hairs overlapping a glandular sericeous patch of scales situated between the lower median and submedian veins. *Hindwing* with a series of five indistinct black spots; marginal lines blackish. Underside olivescence-brown, the basal half very dark brown; marginal lines dark brown. *Forewing* with a short pale purple-bordered brown subbasal line, an outwardly-oblique transverse discal chalybeate-purple fascia, and a series of five small pale ocelli, each with a similar coloured outer ring and a black dot in the centre. *Hindwing* with a sinuous subbasal purple-bordered brown line, and a dark brown discal line, which latter is acutely angulated between the upper median and radial, beyond which are six prominent black ocelli with white-speckled pupils, the

upper and the fifth being the most prominent and more circular than the others, all with a chalybeate outer ring; inner marginal line also chalybeate bordered. *Body* beneath dark brown; legs beneath and sides of palpi pale cinereous-brown; antennæ bright ochreous, club with black band.

Female. Upperside pale olivescient ochreous-brown. *Forewing* with a broad oblique discal white band, and a contiguous terminal spot near posterior angle; two, or three, small white apical spots, and two, or, three, indistinct black lower ocellate spots; a pale ochreous streak above the posterior margin. *Hindwing* with an angulated discal brown line with irregular yellowish outer border; two upper apical and three median black spots, the two former irregularly quadrate and confluent, the others rounded, the middle one being very small, the two lower with a white central dot, all being irregularly yellowish bordered; marginal lines brown and yellowish bordered. Underside paler; the base and outer borders palest. *Forewing* with a pale bordered subbasal line, white oblique discal band, and four, sometimes five ill-defined pale-bordered ocelli. *Hindwing* with a sinuous subbasal line, an angular discal line with irregular yellow outer border, and six ocelli as in male, with brown and yellowish outer borders. *Body* and legs beneath, and sides of palpi pale ochreous.

Expanse, ♂ $2\frac{2}{8}$ to $2\frac{3}{8}$, ♀ $2\frac{2}{8}$ to $2\frac{5}{8}$ inches.

HABITAT.—Ceylon.

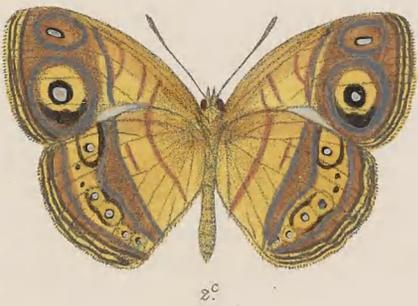
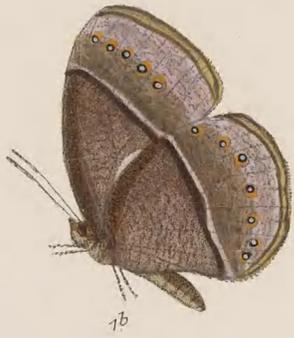
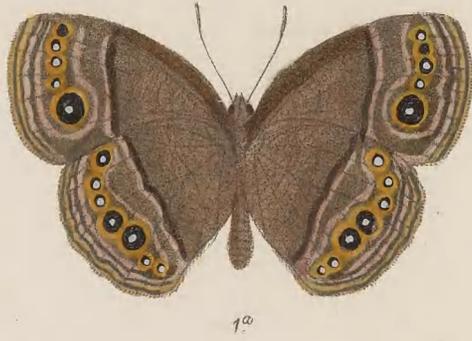
DISTRIBUTION.—“Rare and very local. Observed only in two places in forest land near Newera Eliya; March and April” (Hutchison). Mr. F. M. Mackwood, in his MS. notes, remarks that this species is the rarest of the group, in Ceylon. Mr. E. Ernest Green notes its capture at Pundaloya in July.

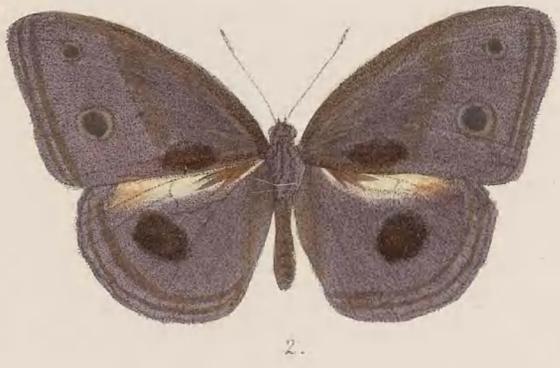
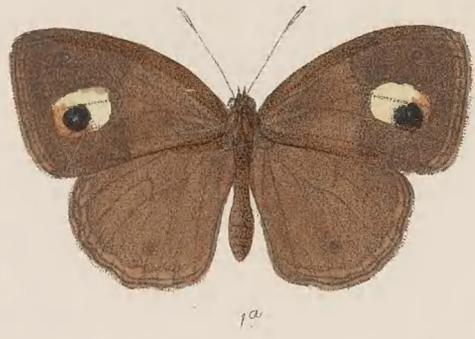
Genus DEBIS.

Debis, Doubleday and Hewitson, Gen. Diurnal Lep. pl. 61, fig. 3 (1849). Westwood, *id.* p. 358 (1851). Scudder, Amer. Acad. Arts and Sci. Boston, 1875, p. 155.

Lethe (group II., part), Marshall and de Nicéville, Butt. of India, etc. i. p. 143 (1883).

IMAGO.—Male. *Forewing* subtriangular, narrow; costa much arched, apex abruptly rounded, exterior margin very oblique and slightly concave; posterior margin short; basal half hairy; a very indistinctly-defined broad inwardly-oblique discal *dusky fascia, composed of glandular scales* extending from the subcostal to the posterior margin; costal vein swollen, median and submedian very slightly swollen; cell broad; first and second subcostal branches emitted before end of the cell; discocellulars oblique, slightly incurved, both radials close to upper end; median branches equidistant; submedian nearly straight. *Hindwing* short; costa convex at the base, exterior margin slightly scalloped and with a prolonged broad caudate angle at end of upper median, anal angle excavated; basal area hairy; cell rather long, much pointed at end; discocellulars very oblique, long, bent in the middle;





F.C. Moore del et lith.

Vincent Brooks, Day & Son Imp.

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1.



1a



2a



2



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7.



1a



1b



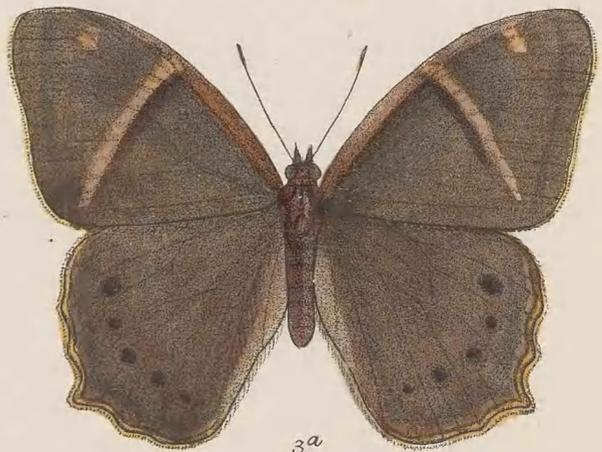
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3b



3.



3a

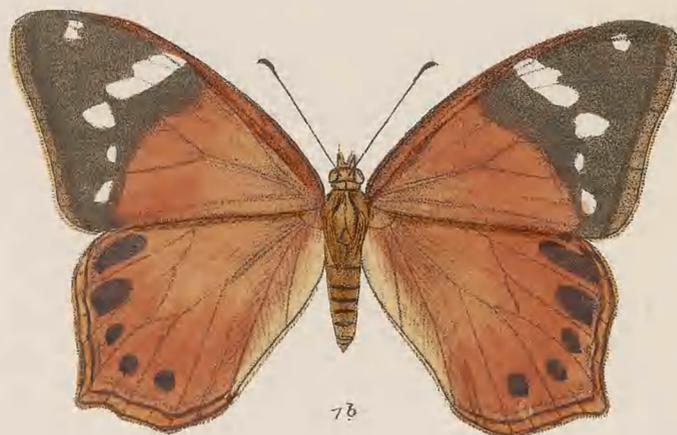
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7.



7b



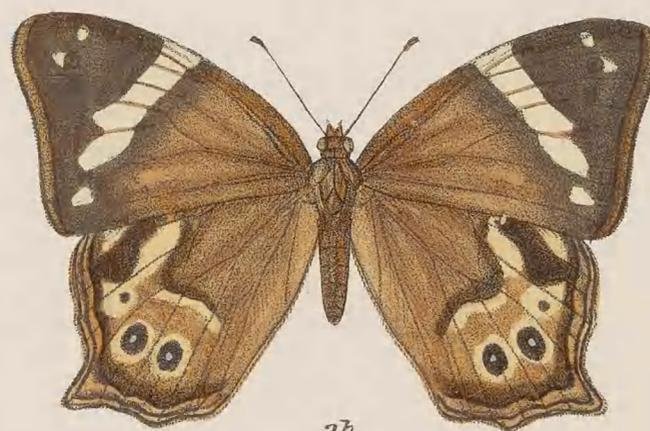
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F.C. Moore, del. et lith.

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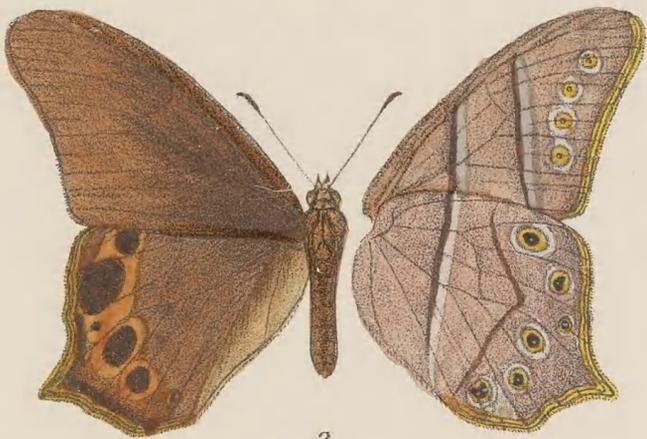
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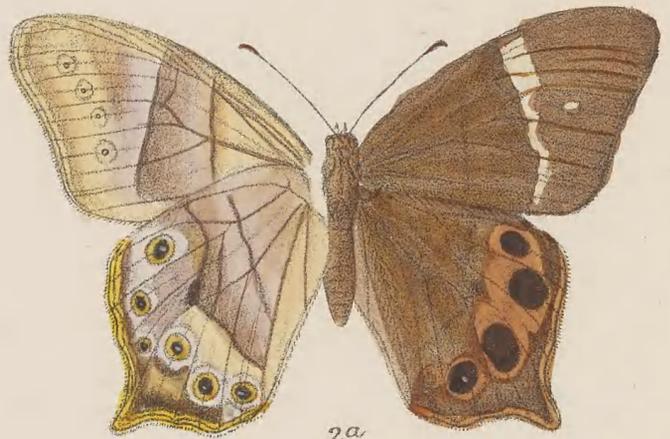
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1a



2



2a



2a



3



3b

F. C. Moore, del. et lith.

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