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Arctiidae, Nolinae

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Arctiidae : Nolinae

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The Nolinae collected during the two expeditions to Ruwenzori together consist of 48 specimens representing 12 species, ten of which are described as new in the following pages. So high a percentage of novelties in so small a collection is less remarkable when it is realized that fewer than 60 species of this little-worked subfamily have been recorded from continental Africa south of the Sahara.

The colour names used in the descriptions are taken from Ridgway's 'Color Standards & Color Nomenclature'. The genitalia illustrations are of uniform magnification; the males are × 60, the females × 30. The illustrations of the moths are natural size, unless otherwise indicated.

Celama poliophasma sp.n. (Figures 20, 21, 34)

♂ 12 mm.: Antenna ciliate, the cilia twice as long as the diameter of the shaft. Palpus one-and-one-half times as long as the diameter of the eye, the inner surface white, the outer surface snuff brown. Frons, vertex, thorax and abdomen white lightly irrorate with drab. Fore wing white, the antemedial, medial and postmedial fasciae bistre, broadly marked at costa then ill-defined. A conspicuous tuft of fuscous scales is situate in the cell area. Terminal area lightly irrorate with bistre; terminal interneural spots bistre. Fringes white mixed with bistre. Underside white, the costa and veins drab. Hind wing white. Underside white, costa drab.

Genitalia: Valve shaped as illustrated. Harpe equal in length to the valve, incurved apicad and tapered. A small, tapered process with a hooked apex arises medially from base of valve. Aedeagus little more than one-half as long as valve, slightly serrate below apex, which is sclerotized with a projection at one side. Vesica with a single, slender cornutus equal in length to the aedeagus.

Related to *C. phaeocraspis* Hampson (1907), of which *C. megasema* Hampson (1914) has proved to be a synonym (**syn. nov.**); this differs in the aedeagus, which is rounded at the apex and is without the lateral projection; the vesica bears a considerably stouter cornutus. The figures in Van Son's revision of the S. African Nolinae (1933), purporting to illustrate *phaeocraspis* and *megasema*, represent two unnamed species.

UGANDA: Bundibugyo, 3440 ft., 22.viii–3.ix.1952 (*Fletcher*), 1 ♂, holotype.

Celama adelpha sp.n. (Figures 18, 19, 36)

♂ 20 mm.: Antenna ciliate, the cilia twice as long as the diameter of the shaft. Palpus twice as long as the diameter of the eye, white lightly irrorate with snuff brown. Frons, vertex and patagia white. Tegulae, thorax and abdomen white irrorate with snuff brown. Fore wing white; anterior

half of basal fourth fuscous; antemedial fascia boldly outcurved from one-third costa to one-third inner margin, postmedial sinuous from three-fourths costa to two-thirds inner margin; medial area fuscous except for a small patch of the ground colour at and proximad of the discocellulars and another at the inner margin; in the cell area is a small tuft of black, raised scales; terminal area drab. Underside tilleul buff and glossy, the medial area rather darker. Both surfaces of the hind wing white and glossy, immaculate.

Genitalia: Valve and harpe similar to *C. poliophasma*; aedeagus one-and-one-half times as long as valve, the ventral surface slightly serrate just below the rounded apex; vesica with a single, slender, tapered cornutus, three-fourths as long as the aedeagus.

Related to *C. iridescens* Van Son (1933) but differing in pattern, the serrate surface of the aedeagus and the longer, straight cornutus.

UGANDA: Fort Portal, 5000 ft., xii.1934–i.1935 (*Edwards*), 1 ♂, holotype.

Celama synethes sp.n. (Figures 14, 17, 35)

♂ 14–15 mm.: Similar in size, colour and pattern to *C. partitalis* Walker (1865) but differing from it in the male genitalia.

Valve bifid as in *partitalis*. Harpe slender, slightly sinuous, the apex tapered; in *partitalis* the harpe is bluntly rounded at the apex. Saccus evenly rounded; in *partitalis* the saccus is tapered. Aedeagus one-half as long as the valve, the apex tapered; in *partitalis* the apex is rounded. Vesica with a single, triangular cornutus, one-third as long as the aedeagus; in *partitalis* the cornutus is a tapered spine with a dilate base, the whole one-fourth as long as the aedeagus.

RUWENZORI: Ibanda, 4700 ft., 4–12.ix.1952 (*Fletcher*), 4 ♂, including holotype.

Vandamia illaudata sp.n. (Figures 22–24, 37)

♂♀ 16–18 mm.: Male antenna bipectinate to two-thirds of shaft, the pectinations on the proximal edge of the shaft being one-half as long as those on the distal edge, which are rather longer than the diameter of the eye. Female antenna minutely ciliate. Palpus twice as long as the diameter of the eye in the male, three times as long in the female, white; in some specimens, more or less irrorate with cinnamon-brown to snuff brown. Frons, vertex, thorax and abdomen similarly coloured. Fore wing in the male light buff more or less irrorate with cinnamon-brown to snuff brown, the medial and terminal areas more densely irrorate especially the distal half of the medial area, which in some specimens resembles a very broad, postmedial fascia. In the female the fore wing is uniformly snuff brown. Underside in both sexes light buff irrorate with snuff brown, except along the inner margin; irroration denser basad. Hind wing in both sexes tilleul buff, termen and fringes light drab. Underside tilleul buff, the costa and discocellulars irrorate with snuff brown.

Male genitalia: Uncus short and stout, the apex bilobed, each lobe tipped with two coarse and several fine spines. Valve of even width in apical half, apex rounded; basal half with a strongly sclerotized harpe on ventral margin, the rounded apex with a lateral projection. Aedeagus slender and straight with a tapered apex, subequal in length to the valve. Vesica without cornuti.

Female genitalia: Genital plate rounded posteriorly. Posterior half of ductus bursae sclerotized, anterior half membranous. Bursa copulatrix ovate and membranous with two signa in a slender scobinate band along one side.

Distinguishable from the other three species in the genus, *typica*, *mariepi* and *lightfooti* described and illustrated by Van Son (1933, Ann. Transvaal Mus., 15:206–208, Plates 5, 8), superficially by

the absence of transverse fasciae on the fore wing and structurally by the genitalia of both sexes; in the male by the relatively short, stout harpe and in the female by the presence of signa on the bursa copulatrix.

RUWENZORI: Ibanda, 4700 ft., 4–12.ix.1952 (*Fletcher*), 3 ♂, 1 ♀, including holotype and allotype; Namwamba Valley, 6000 ft. (*Edwards*), 2 ♂, 1 ♀.

Nola dochmographa sp.n. (Figures 13, 16, 27)

♂ 23–34 mm.: Basal two-thirds of antenna bipectinate, the pectinations on the proximal edge of the shaft being one-half as long as those of the distal edge, which are rather longer than the diameter of the eye. Palpus broken. Frons, head, thorax and abdomen light buff irrorate with cinnamon and bistre; in the paratype the tegulae and thorax are bistre. Fore wing light buff densely irrorate with bistre; medial area and proximal edge of subterminal fascia uniformly bistre. Transverse fasciae light buff; antemedial, slightly outcurved at middle, extends from one-fourth costa to one-third inner margin; postmedial obliquely from three-fourths costa to two-thirds inner margin; the subterminal, arising close to the postmedial at the costa, extends obliquely towards termen as far as vein *R5*, then straight to inner margin. Underside uniformly bistre. Hind wing light buff, the termen and fringes lightly irrorate with bistre. Underside similar but with the proximal half of the wing also irrorate with bistre.

Genitalia: Valve shaped as illustrated; the harpe extends to a little more than one-half of the ventral margin, the distal third being sclerotized and bluntly rounded; in the closely related *N. hypenoides* Talbot (1929) the harpe is less stout. Aedeagus slightly shorter than harpe and straight, with the apex sclerotized and bifurcate. In *hypenoides* the aedeagus is longer than the harpe and sinuous, with the apex produced to a fine point.

RUWENZORI: Ibanda, 4700 ft., 4–12.ix.1952 (*Fletcher*) 1 ♂, holotype; Bwamba Pass (west side), 5500–7500 ft. (*Edwards*), 1 ♂, paratype.

Nola ochrographa Hampson

Nola ochrographa Hampson, 1907, Ann. Mag. nat. Hist., (7) 19:227.

RUWENZORI: Kilembe, 4500 ft. (*Edwards*), 1 ♂.

Distribution: Uganda.

Nola loxoleuca sp.n. (Figures 12, 15, 26)

♂ 22 mm.: Antenna and palpus similar to those of the preceding species. Frons, head, patagia and tegulae white; thorax and abdomen light buff irrorate with bistre. Fore wing light buff. Antemedial fascia parallel with termen, bistre; postmedial, incurved between veins *Cu1* and *A1*, otherwise parallel with termen, bistre; distad of the postmedial is a conspicuous, pale fascia of the ground colour; subterminal sinuous, bistre, followed distally by a slender fascia of the ground colour. Posterior half of medial area and distal third of wing densely irrorate with cinnamon and bistre; fringes similarly coloured. Underside drab, the basal two-thirds densely irrorate with bistre. Hind wing light buff; termen lightly irrorate with the fringes conspicuously bistre; cell spot weakly marked. Underside drab, the costa irrorate with bistre; cell spot well marked.

Genitalia: Valve shaped as illustrated. Harpe produced to one-half of ventral margin of valve and connected to dorsal margin by a sclerotized band; posterior half slenderly digitate, apex

rounded. Aedeagus equal in length to the harpe; apex sclerotized and projecting at one side. Vesica with a single cornutus subequal in length to the width of the aedeagus.

Similar in size and wing-shape to *N. hypenoides* Talbot (1929) but readily distinguishable from it by the pale hind wings.

RUWENZORI: Bwamba Pass (west side), 5500–7500 ft., xii.1934–i.1935 (*Edwards*), 2 ♂, including holotype.

Nola leucographa sp.n. (Figures 1–3, 31, 32)

♂ 23 mm.; ♀ 21 mm.: Male antennae lost. Palpus snuff brown. Frons, head and thorax white; abdomen white densely irrorate with snuff brown to bistre. Fore wing. Proximal two-thirds white, except for two small, costal patches of snuff brown, one at one-fourth and one at one-half, and a small, triangular patch of the same colour at the inner margin proximad of the white postmedial fascia. Distal third of wing snuff brown to bistre, darker proximad of the slender, white subterminal fascia, which is sharply toothed towards the termen along vein *M*1 and boldly outcurved between *M*2 and *Cu*1. Underside uniformly drab. Hind wing drab, paler towards base; underside similar but irrorate with bister to fuscous along costa and discocellulars.

Male genitalia: Valve of even width with rounded apex. Harpe one-half as long as valve, the apex inwardly right-angled and tapered. Aedeagus two-thirds as long as valve, broadened apicad. Vesica with two cornuti, one equal in length to the width of the apex of the aedeagus, the second slightly longer and consisting of a cluster of short, stout spines.

Female genitalia: Ostium bursae cylindrical, a little longer than broad, strongly sclerotized. Ductus bursae sclerotized posteriorly at one side, the remainder membranous. Bursa copulatrix shaped as illustrated, membranous; minutely scobinate posteriorly and bearing two serrate-edged signa.

The striking and well contrasted pattern readily distinguishes *leucographa* from any other known species in the Nolinae.

UGANDA: Fort Portal, 5000 ft., xii.1934–i.1935 (*Edwards*), 1 ♂, holotype.

RUWENZORI: Ibanda, 4700 ft., 4–6.vii.1952 (*Fletcher*), 1 ♀, allotype.

SIERRA LEONE: Njala, 2 ♀.

GOLD COAST: Bibianaha, 1 ♀.

Nola nigroradiata Debauche (Figures, 4, 5)

Nola nigroradiata Debauche, 1942, Expl. Parc Nat. Albert, Miss. G. F. de Witte 1933–5, 41:14, Plate 1:8.

RUWENZORI: Misigo, 8550 ft. (*Fletcher*), 1 ♂.

Nola drepanucha sp.n. (Figures 9, 10, 25)

♂ 24 mm.: Antenna as in *N. dochmographa*. Palpus rather longer than the diameter of the eye, light buff above, the remainder bister. Frons, vertex, patagia, tegulae and first abdominal segment white irrorate with drab; thorax and abdomen drab. Fore wing a very pale tone of drab, almost without marking; costa fuscous black in basal sixth and again at one-half, where a fuscous black triangular patch extends to the cubitus; distad of this, the costa is light buff almost to the apex.

Ante- and postmedial fasciae faintly traceable on veins. Underside fuscous, the distal part of the costa buff-coloured before apex. Hind wing tilleul buff, slightly darker at termen. Underside similar, but with costa and discocellulars irrorate with fuscous.

Genitalia: Valve shaped as illustrated. Harpe two-thirds as long as valve, the apical third very slender, incurved and tapered. Aedeagus as long as the valve, cylindrical, slender and straight, narrowed at base and with a sclerotized sickle-shaped apex.

Superficially lacking in any readily recognizable feature and best distinguished by the genitalia (Figures 9, 10), with the long, finely tapered harpe and the sickle-shaped apex of the long, slender aedeagus.

RUWENZORI: Mahoma River, 6700 ft., 13–16.viii.1952 (*Fletcher*), 1 ♂, holotype.

Nola kennedyi sp.n. (Figures 6–8, 29, 30)

♂♀ 35–41 mm.: Male antenna as in *N. dochmographa*; female ciliate, the cilia equal in length to the diameter of the shaft. Palpus in both sexes white, the outer and under surfaces densely irrorate with black, three times as long as the diameter of the eye. Male. Frons, vertex and patagia white irrorate with drab and fuscous; thorax and abdomen light buff irrorate, densely in some specimens, with drab and fuscous. Fore wing white irrorate more or less with fuscous and ochraceous tawny. Pattern black; costa with a basal streak; antemedial fascia broad from costa to cell area, where it is acutely angled, then slender and extending straight to a lunule just anterior of the inner margin; postmedial fascia dentate in anterior half, edged proximally with a broad fascia of ochraceous tawny or fuscous and distally by a clear fascia of the ground colour; subterminal fascia broad, ill-defined and edged proximally with ochraceous tawny or fuscous; terminal area ochraceous tawny or fuscous; terminal interneural spots black; fringes black edged distally with fuscous and drab. Underside uniformly fuscous. Hind wing light buff lightly irrorate with fuscous; the distal margin, the discocellulars and occasionally the postmedial fascia are densely marked in fuscous. Underside similarly marked but more evenly suffused with fuscous. The female differs in having both wings more densely irrorate with fuscous so that the pattern is almost untraceable.

Male genitalia: Valve shaped as illustrated. Harpe rather less than one-half as long as the valve, apex slender, angled inwards at almost 90° and narrowly rounded at tip. Aedeagus rather less than two-thirds as long as the valve; vesica with a single, arcuate cornutus situate medially.

Female genitalia: Posterior half of ductus bursae sclerotized with a fold at each side; anterior half membranous; bursa copulatrix globular and membranous with two thorn-like signa on rounded bases.

Nola kennedyi is at once recognizable by its large size, being considerably greater in wing-span than any other known species of Nolinae and it is with pleasure that I name this remarkable species in honour of Professor W. Q. Kennedy, leader of the 1952 expedition.

RUWENZORI: Namwamba Valley, 10,200 ft. (*Edwards*), 2 ♂; Nyamaleju, 10,530 ft., 14–19.vii.1952 (*Fletcher*), 11 ♂, 1 ♀, including holotype and allotype; Bigo, 11,400 ft. (*Fletcher*), 1 ♂, 3 ♀; Lamia Valley, 11,900 ft. (*Fletcher*), 1 ♂; Nyamagasani Valley, 12,000–13,000 ft. (*Buxton*), 1 ♂.

Nola kennedyi minorata subsp.n. (Figure 28)

♂ 26–28 mm.; ♀ 32–34 mm.: The five specimens from the rain forest zone differ from the nominate subspecies in their smaller size and in their coloration. The dark irroration on both fore

and hind wings is considerably reduced and the pattern is but slenderly marked. In the female the apex of the fore wing is markedly more rounded.

RUWENZORI: Bwamba Pass (west side), 5500–7500 ft., xii.1934–i.1935 (*Edwards*), 1 ♀, allotype; Namwamba Valley, 6500 ft. (*Edwards*), 1 ♀; Mahoma River, 6700 ft. (*Fletcher*), 2 ♂; Misigo, 8550 ft., 2–3.viii.1952 (*Fletcher*), 1 ♂, holotype.

Paranola euryochra sp.n. (Figures 11, 33)

♀ 21 mm.: Frons, vertex, thorax and abdomen white irrorate with smoke grey. Fore wing white, basal half of costa and distal third of wing irrorate with bistre and fuscous. Basal sixth of costa fuscous; a densely fuscous patch extends from one-fourth to one-half of costa and posteriorly to the lower median vein, enclosing a small tuft of black raised scales in the cell area. Subterminal fascia broad, toothed towards termen between veins *R*5 and *M*1, boldly out-curved between veins *M*2 and *Cu*1 and edged distally with white. Termen narrowly white with fuscous spots at the vein ends. Fringes chequered smoke grey and fuscous. Underside light drab, the central, costal patch of the upperside showing through in a darker shade. Hind wing tilleul buff, termen lightly irrorate with bistre. Underside similar but with costa and discocellulars also irrorate with bistre.

Genitalia: Ductus bursae slender and mainly membranous, the posterior fourth dilate and sclerotized. Bursa copulatrix shaped as illustrated, with a single signum.

Related to *P. bipartita* Van Son (1933) but differing superficially in the pattern and structurally in the shape of the bursa copulatrix.

RUWENZORI: Ibanda, 4700 ft., 20–21.viii.1952 (*Fletcher*), 1 ♀, holotype.

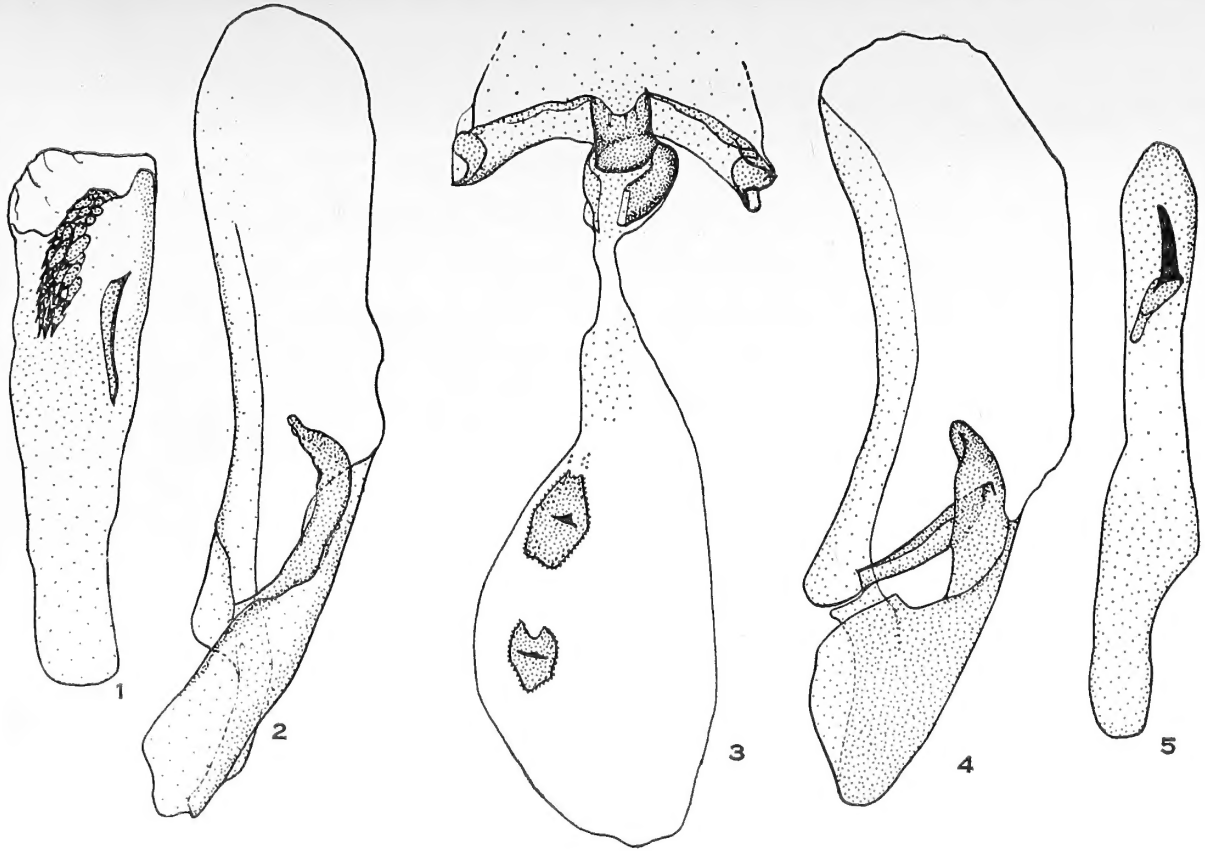


FIG.

1. *Nola leucographa* sp.n. aedeagus
2. *Nola leucographa* sp.n. right valve
3. *Nola leucographa* sp.n. ♀ genitalia
4. *Nola nigroradiata* Debauche right valve
5. *Nola nigroradiata* Debauche aedeagus

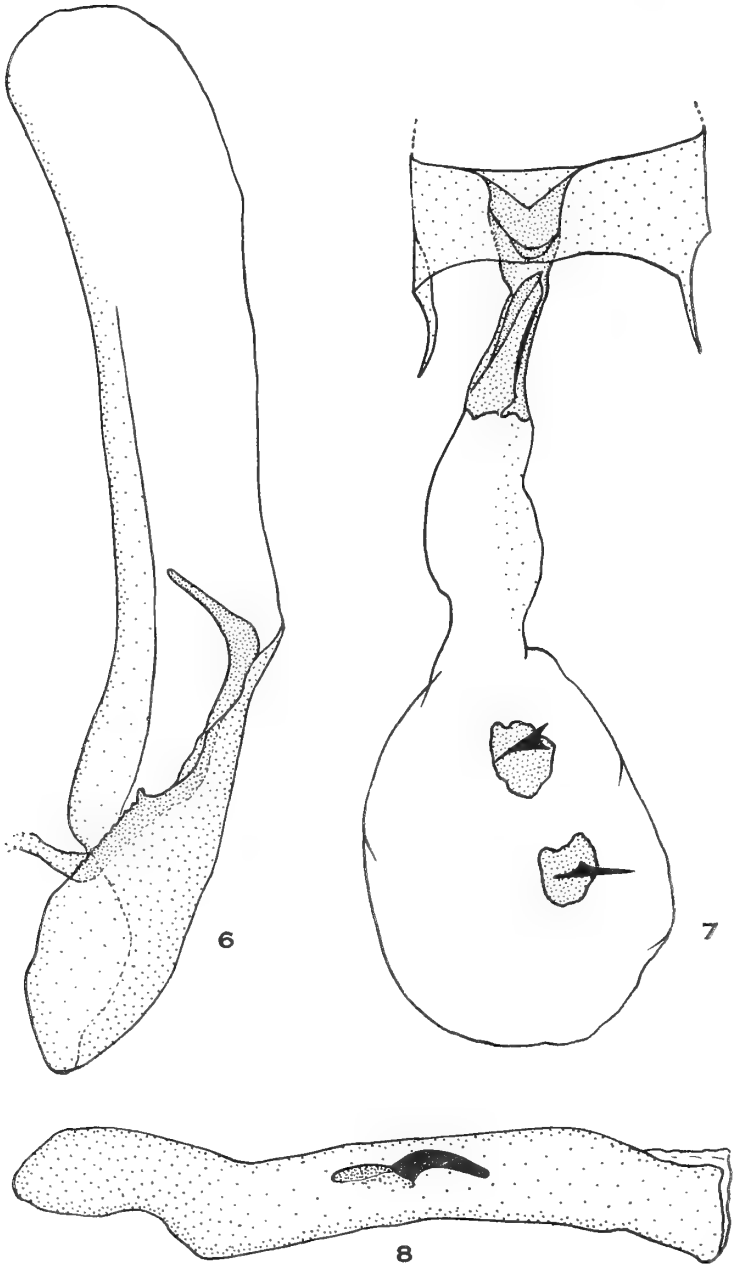


FIG.
6. *Nola kennedyi* sp.n. right valve
7. *Nola kennedyi* sp.n. ♀ genitalia
8. *Nola kennedyi* sp.n. aedeagus

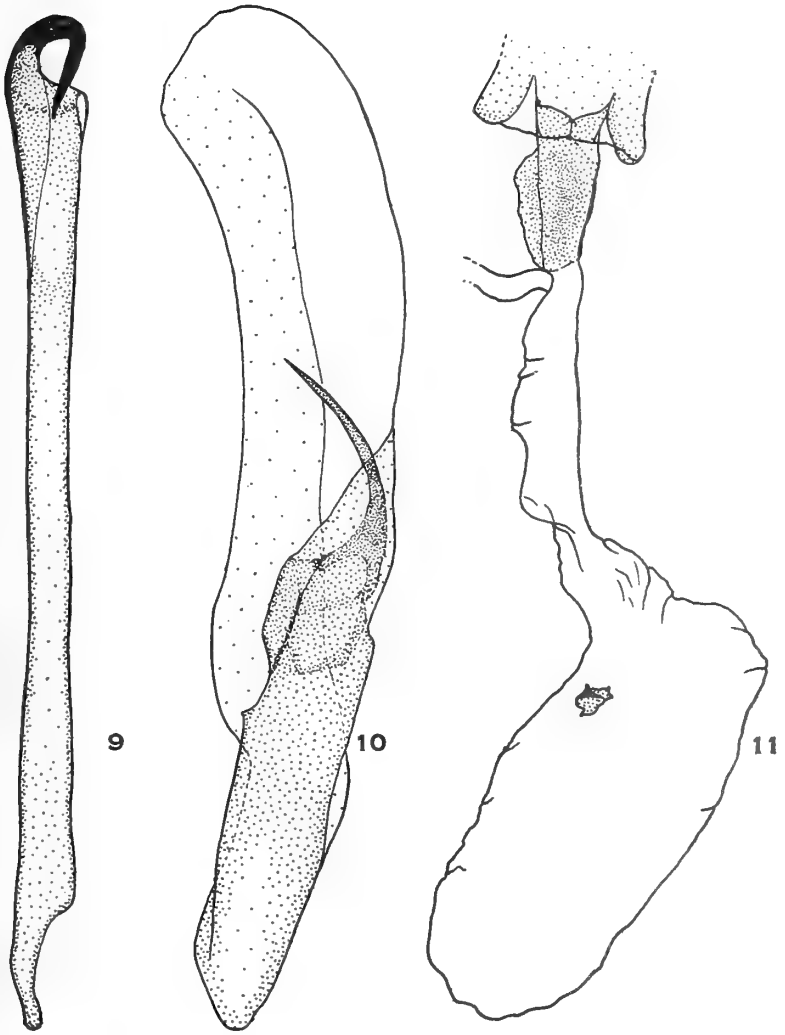


FIG.
9. *Nola drepanucha* sp.n. aedeagus
10. *Nola drepanucha* sp.n. right valve
11. *Paranola euryochra* sp.n. ♀ genitalia

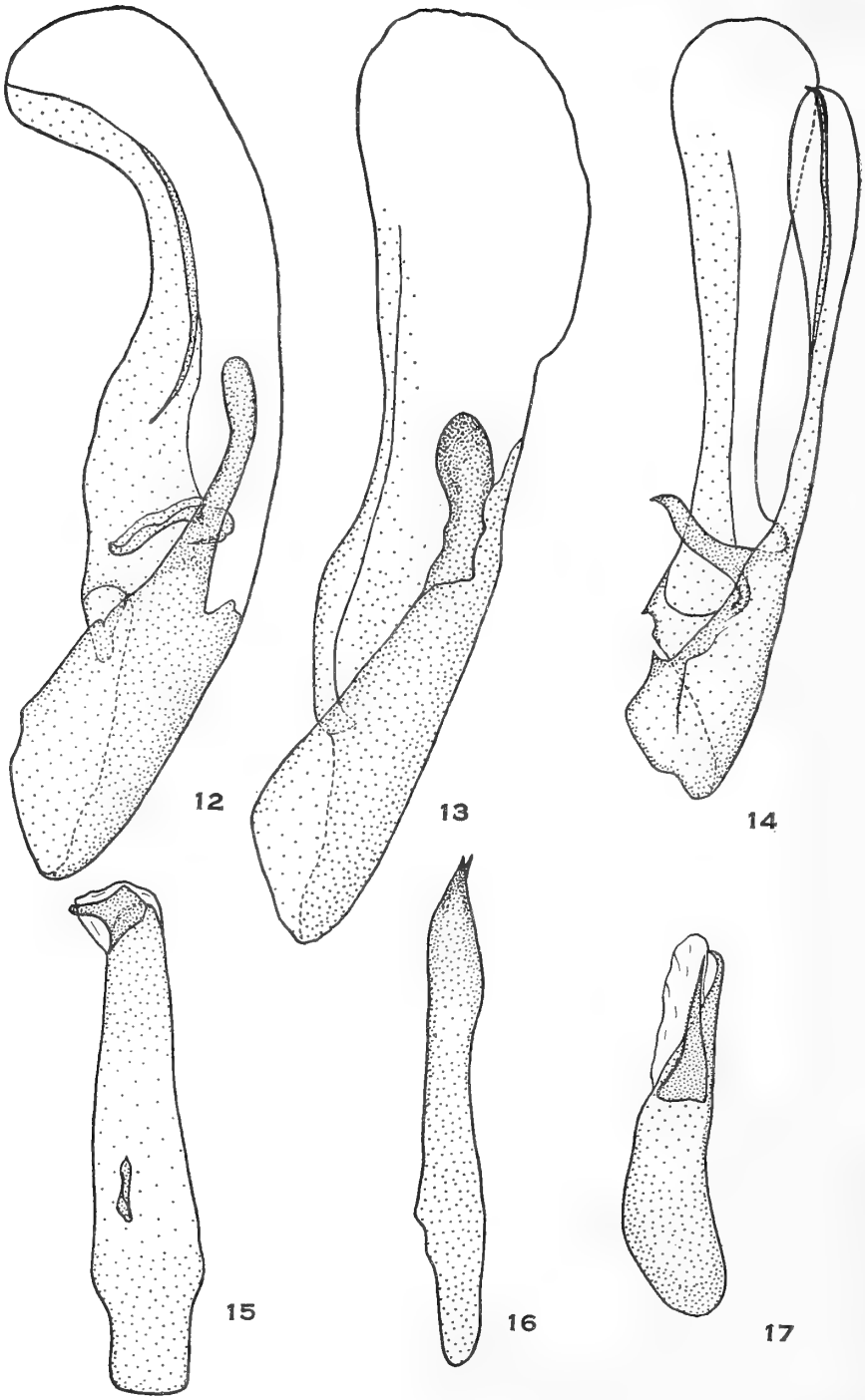


FIG.
12. *Nola loxoleuca* sp.n. right valve
13. *Nola dochmographa* sp.n. right valve
14. *Celama synethes* sp.n. right valve

FIG.
15. *Nola loxoleuca* sp.n. aedeagus
16. *Nola dochmographa* sp.n. aedeagus
17. *Celama synethes* sp.n. aedeagus

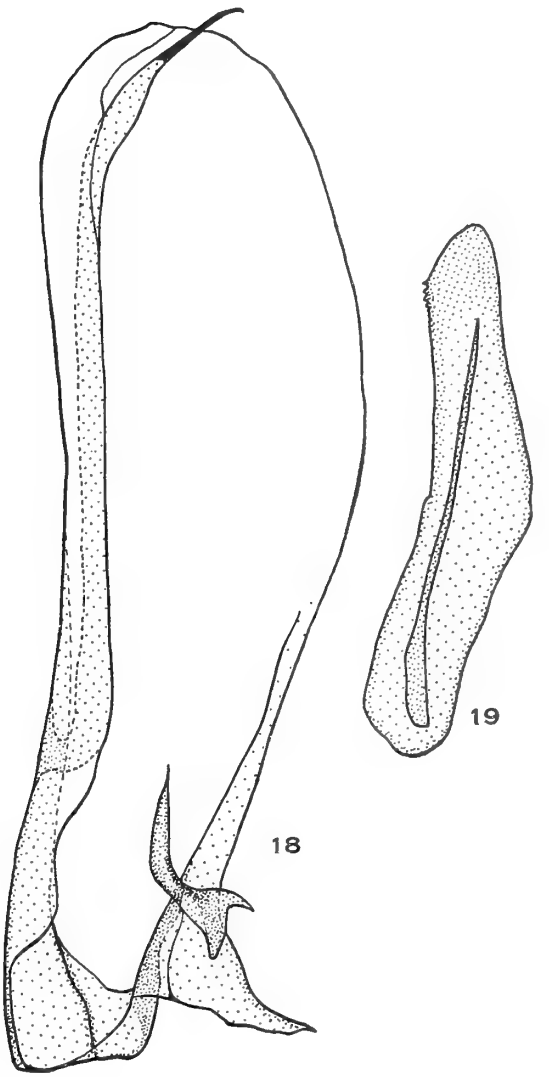


FIG.
18. *Celama adelpha* sp.n. left valve
19. *Celama adelpha* sp.n. aedeagus

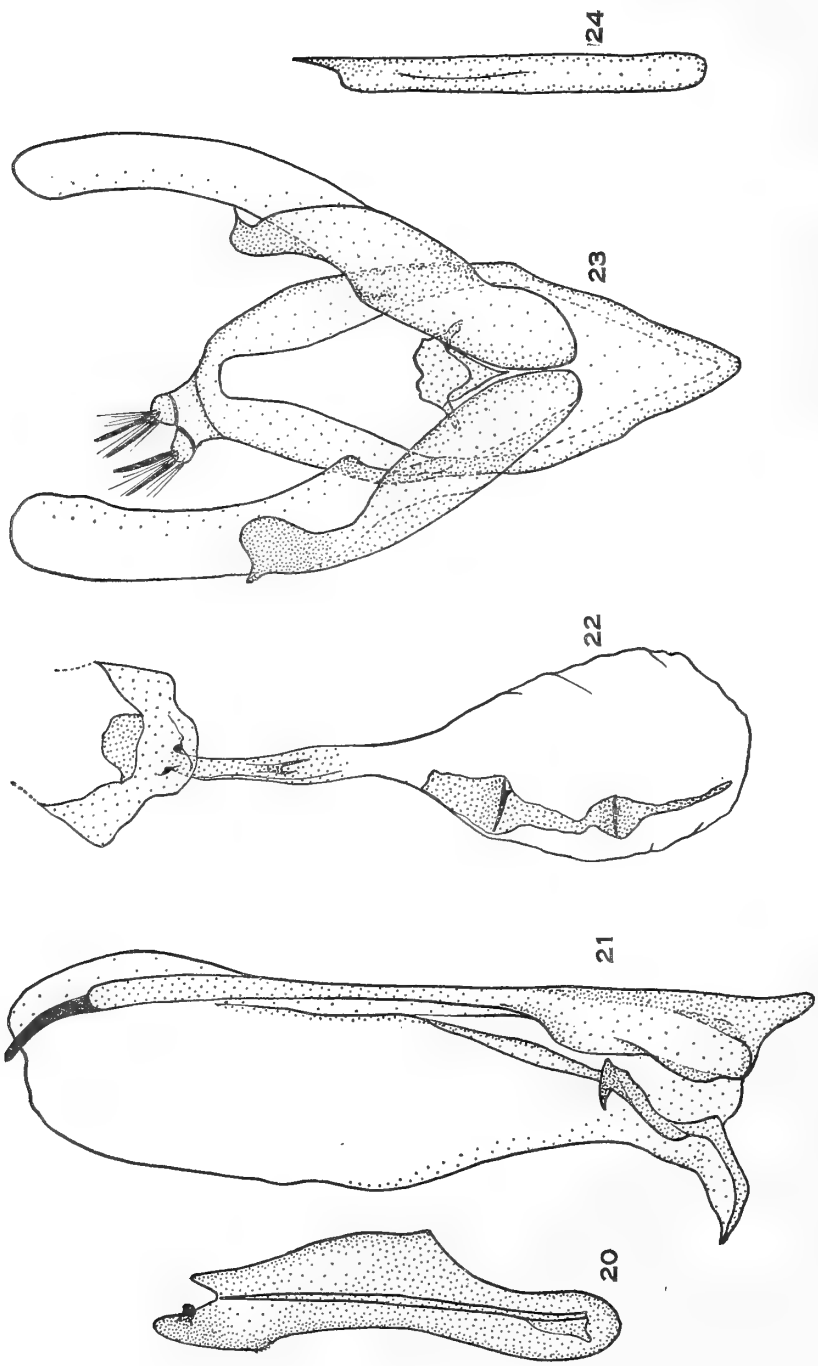
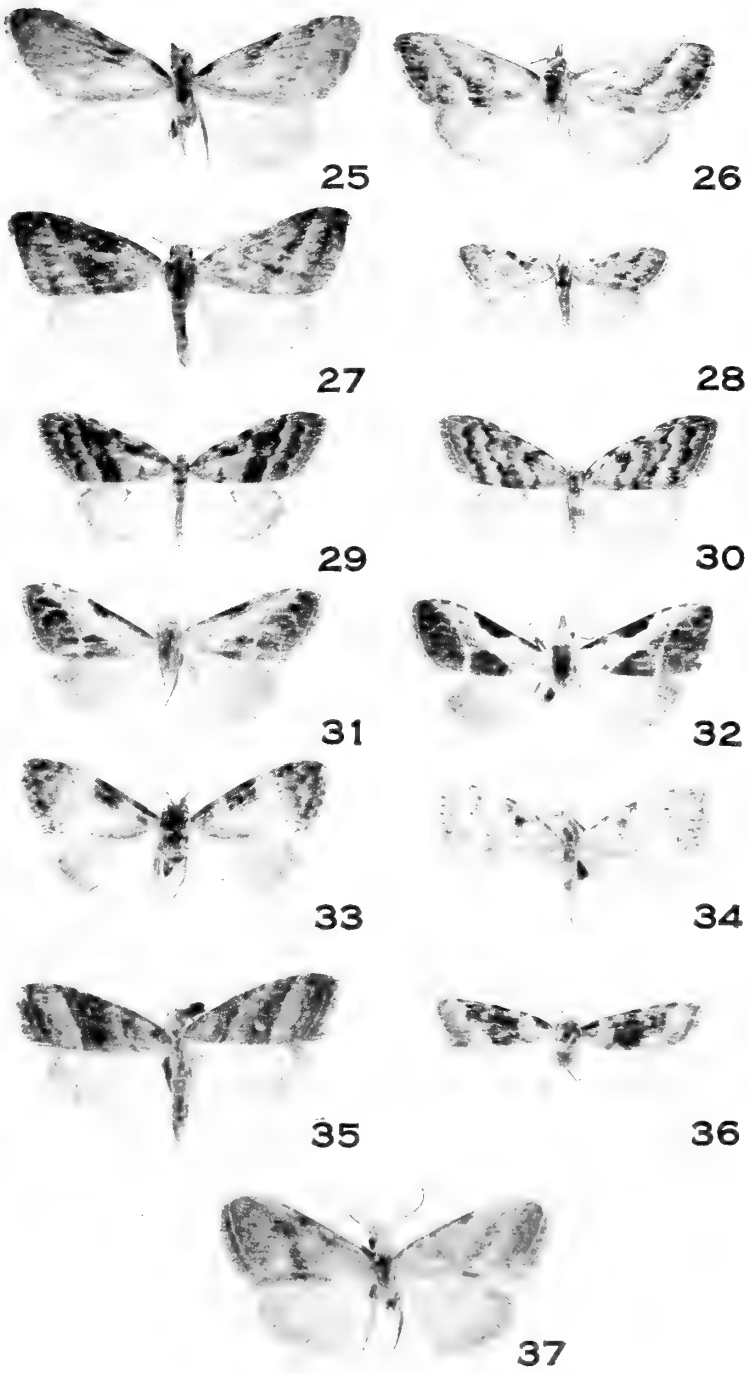


FIG.
20. *Celama poliophasma* sp.n. aedeagus
21. *Celama poliophasma* sp.n. right valve
22. *Vandamia illaudata* sp.n. ♀ genitalia
23. *Vandamia illaudata* sp.n. ♂ genitalia
24. *Vandamia illaudata* sp.n. aedeagus

FIG.

25. *Nola drepanucha* sp.n. ♂ (× 2)
26. *Nola loxoleuca* sp.n. ♂ (× 2)
27. *Nola dochmographa* sp.n. ♂ (× 2)
28. *Nola kennedyi minorata* subsp.n. ♂
29. *Nola k. kennedyi* sp.n. ♂
30. *Nola k. kennedyi* sp.n. ♂
31. *Nola leucographa* sp.n. ♀ (× 2)
32. *Nola leucographa* sp.n. ♀ (× 2)
33. *Paranola euryochra* sp.n. ♀ (× 2)
34. *Celama poliophasma* sp.n. ♂ (× 3).
35. *Celama synethes* sp.n. ♂ (× 3)
36. *Celama adelpha* sp.n. ♂ (× 2)
37. *Vandamia illaudata* sp.n. (× 3)



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