

# TORTRICIDAE FROM ATJEH, NORTHERN SUMATRA (LEPIDOPTERA)

by

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With 104 text-figures and 22 plates

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## INTRODUCTION

In the very heart of the island of Sumatra, on the right and left banks of the Alas and the Gajo Rivers, in the so-called Atjeh Region ("Acheen") there extends a wild, densely forested country of not easily accessible mountain ranges and high tops. Several are over 3000 m and covered with little disturbed primary forest, still the home and refuge for big animals: elephant, Sumatran rhino and orang-utan. The region is declared a National Park by the Indone-

sian Government, and it may be hoped that this status will offer not only a symbolical, but also an actual protection to the fauna and flora of these wonderful mountains.

The higher parts of this extensive region have remained so far little affected by the activities of man. Its flora and fauna have been but little explored. In 1937 an important, chiefly botanical expedition by 's Lands Plantentuin (the Buitenzorg Botanic Gardens, now Kebun Raya Indonesia), has been made, under leadership of the Botanist, Dr. C.G.G.J. van Steenis, with the late A. Hoogerwerf, as Zoologist (Van Steenis, 1938; Hoogerwerf, 1939). The aim of that expedition was the ascent of Mt. Losir (3466 m); some insects have been collected during that expedition by the native assistants of the Museum Zoologicum Bogoriense, chiefly Odonata and Bombidae — apparently the only insects ever collected in Acheen up to recent times.

It was therefore highly tempting and promising, to carry out a purely entomological exploration of the region. In 1972 Mr. J. Krikken, Coleopterist of this Museum, secured a grant from the Netherlands Foundation for the Advancement of Tropical Research (WOTRO), for that purpose, and succeeded in organising a collecting expedition to the valley of the Alas River and the bordering mountains, viz., the slopes of Mt. Bandahara (3012 m), above the left bank of the river.

Although Mr. Krikken's aim was the collecting of chiefly Coleoptera, he kindly consented to pay special attention to the so-called Microlepidoptera, especially Tortricidae. Upon my suggestion, through a lucky circumstance, he succeeded in securing the help of Mr. Liem Swie Liong, of Bogor, former assistant of the insect division of the Museum Zoologicum Bogoriense, and for years collaborator in the collecting of Microlepidoptera in East and West Java, and Borneo. To them both I owe an extremely interesting collection of the Tortricidae (Leaf Rollers, Lepidoptera), that forms the subject of the present study. Tortricidae had never been collected in Atjeh before. Besides, a great number of other Lepidoptera, Coleoptera, Diptera, Hymenoptera, etc., have been brought together.

On Krikken's map (fig. 1), from his 1972 itinerary of the expedition, numerous collecting localities are indicated. We are here chiefly concerned with only four of these, viz., the localities along the route from the village of Soldok (330 m) on Alas River, up the steep jungle-covered slopes of Mt. Bandahara, Serbolangit Range, to below the top of the mountain, at 810, 1430, 1810 and 2430 m altitude, respectively.

In the tropics many orders of insects, especially nocturnal Lepidoptera, are best collected in light traps; the tortricids usually start to appear in numbers only above 800–900 m; consequently few Tortricidae have been collected at

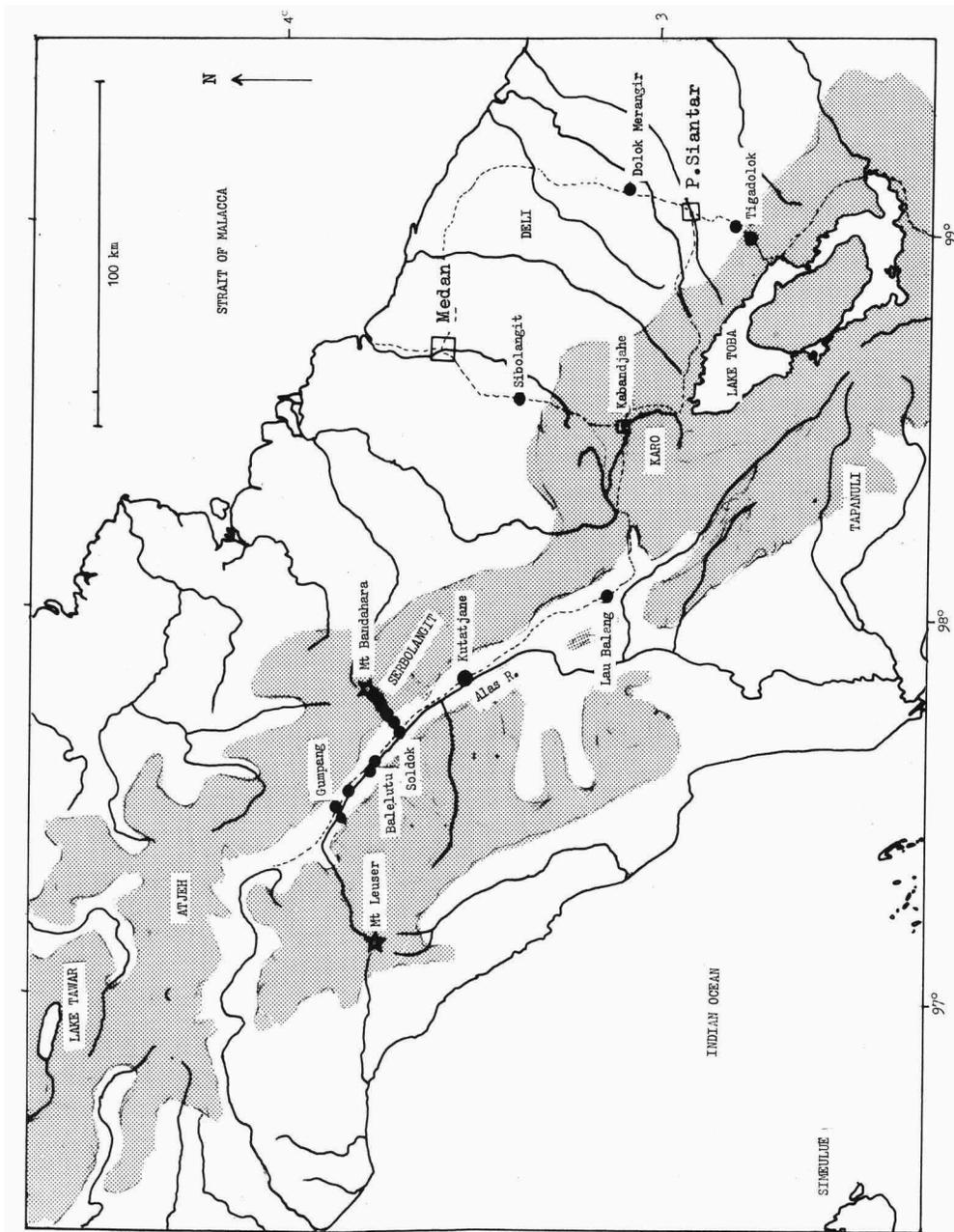


Fig 1. A Map of N Sumatra, with the route and collecting localities of the North Sumatra Expedition 1977 by J. Krikken (After J. Krikken, 1978).

- collecting localities
- altitude summits & ridges over 1000 m
- main road

other than the above mentioned four elevated bivouacs. Particulars of the collecting sites are recorded on the list of localities, below. For the sake of brevity these data are abbreviated in the text to the number of the bivouac and its altitude, the latter being, in my experience, of paramount faunistic importance, with regard to the Microlepidoptera.

In this museum there is some material of the Tortricidae from Sumatra collected by the well-known naturalist Edward Jacobson, who was active at Fort de Kock (now Bukittinggi), Central West Sumatra, in the mid-twenties. He sent everything to this museum at the time. Using this opportunity, I am including a few records on this material, as far as it has also been collected in North Sumatra.

The present, relatively small collection of the Atjeh Tortricidae appeared to present a series of surprises. In the first place, the proof that this fauna is surprisingly different from that of the mountains of Java of comparable altitude: although some species are very similar to those from Java superficially, they possess quite distinct genitalia and are vicariant species. Furthermore some peculiar monotypical genera from Java and other parts are represented in Atjeh by a second, endemic, species, e.g., *Rhopaltriplasia* Diak., 1973, *Mimeoclysis* Diak., 1941, and *Phaenacropista* Diak., 1941. Generally the Atjeh endemism is striking: 58 out of 83 species named.

One more surprise is the occurrence in Atjeh of one of the queerest Malaysian Tortricidae, *Borneogena antigrapha* Diak., 1941, described from Borneo, a form so unusual, that at the time I had doubts as to the unique male available being a true tortricid. Now, exactly forty years later, I am delighted to find a good series of specimens of the two sexes from Mt. Bandahara, and to describe the not less peculiar female.

To return for a moment to the flora of the Atjeh mountains, it has been studied by Dr. C.G.G.J. van Steenis, who had specialised in the phytogeography of the high mountains of southern Asia. In his above-mentioned survey of the Mt. Losir Expedition of 1937, he presents a theory on the distribution of these alpine plants and states that this flora contains a number of Pleistocene relics and that it is possible therefore to discern a number of routes or tracks of invasion of southern Asia by plant elements from distant regions. He indicates three such routes, one Himalayan, from the North, one Pacific and Australian, by way of New Guinea, from the East, and a third, again from the North, through the Philippine Islands. His map (fig. 2) shows that in Indonesia only a relatively small region combines two of the first above mentioned invasion tracks, viz., exactly in the Atjeh region. He records series of names of plants of high mountain tops of decidedly Himalayan or Pacific origin, that he had found in Atjeh during the Mt. Losir Expedition, side by side.

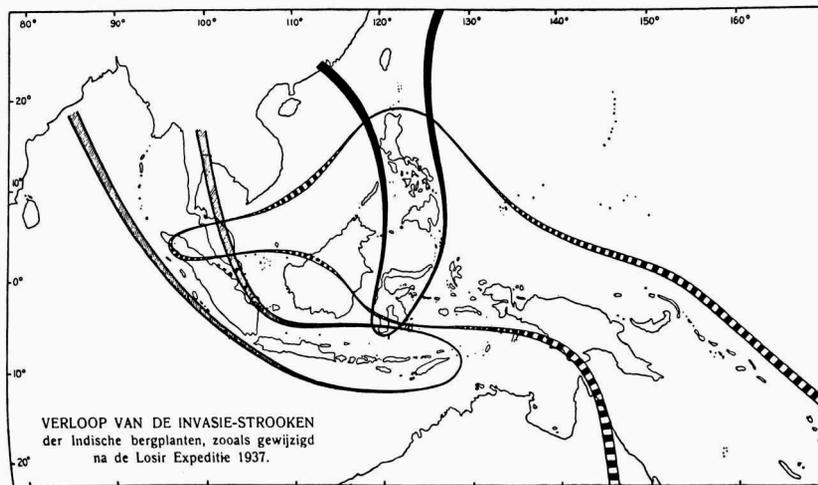


Fig 2. A map of SE Asia with three invasion tracks of glacial relict mountain flora (After Van Steenis, 1939).

It so happens that the faunas of the Tortricidae from the Himalayan as well as from the Pacific Regions, have been studied recently (Diakonoff, 1976, and Clarke, 1976, respectively) and are somewhat better known than others. It was fascinating therefore to find out whether the present material would provide any support for the theory of Van Steenis. To my satisfaction I found a good series of *Dynatocephala cruenta* Diak., described from 1600–1800 m altitude in Nepal, and collected now at Mt. Bandahara, at 810 m, the true element of the “Himalayan invasion”.

As to the “Eastern invasion”, one interesting species may be recorded, viz., *Adoxophyes melia* Clarke, 1976, described from the Pacific Region, viz., the Southern Mariana Islands. Although not a species of high altitudes (collected on Mt. Bandahara at 810 and 1430 m), it apparently is a straggler from that remote region indeed.

Another, more recent paper of the same tenor is by Holloway (1970), who made a biogeographical analysis of a transect sample of the Macro-Heterocerous fauna of Mt. Kinabalu, Sabah, North Borneo. This author does not doubt the Himalayan origin of a part of the high montane fauna of that region, that further also has a high degree of endemism; but the Austral element, as recorded by Van Steenis for the montane flora of Indonesia was restricted for the Macro-Heterocera of Mt. Kinabalu to a single example. He therefore suggests that further extensive collecting in other high mountains of southern Asia is necessary for a re-investigation of the existence of other than Himalayan invasion tracks.

Although our material is rather incomparably more limited than his, we actually arrive at the same conclusion for the tortricid fauna of Mt. Bandahara: a high degree of endemism, a doubtless presence of the Himalayan element and a single example of the intrusion of the Pacific fauna.

#### ACKNOWLEDGEMENTS

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#### A LIST OF COLLECTING LOCALITIES (from Krikken, 1972)

No. 23. Mt. Bandahara, Bivouac One (North Sumatra, Serbolangit Range, ca. 3°43'N—97°41'E, 25.vi.—5.vii.1972, J. Krikken, no. 23, ca. 810 m; lowland multistratal evergreen forest, at light, Malaise trap, Tullgren funneling, manually, sweeping form vegetation.

No. 24. Mt. Bandahara, Bivouac Two, ca. 3°44'N—97°43'E, 5—10.vii.1972, J. Krikken, ca. 1430 m; submontane multistratal evergreen forest, at light, with Malaise trap, Tullgren funneling, manually.

No. 25. Bivouac Three, ca. 3°45'N—97°45'E, 10—16.vii.1972, J. Krikken, ca. 1810 m; montane multistratal evergreen forest, at light, with Malaise trap and manually.

No. 26. Bivouac Four, ca. 3°45'N—97°46'E, 16—22.vii.1972, J. Krikken, ca. 2430 m; gnarled evergreen mossy forest (on peat), at light, in Malaise trap and manually.

No. 36. Balelutu, in Alas River Valley, ca. 3°43'N—97°8'E, 3—8.viii.1972, J. Krikken, ca. 320 m; ladang (dry field) in lowland multistratal evergreen forest (on sand), at light.

No. 41. Kutatjane, Tanah Merah, Alas Valley, ca. 3°31'N—97°47'E, 9.viii.1972, J. Krikken, ca. 200 m; native gardens, at light.

## SYSTEMATIC PART

## COCHYLIDAE

***Eupoecilia sumatrana* spec. nov.**

(figs. 3—4, pl. 4 fig. 1)

♂ 20 mm. Head light ochreous, frons and face pale ochreous. Palpus rather long, sinuate, ascending, median segment gradually and strongly dilated towards apex, pale ochreous, gradually suffused with orange-fulvous, except extreme apex; terminal segment smooth, clavate, drooping, ochreous-whitish. Thorax pale ochreous, suffused with orange-ochreous anteriorly, pale ochreous in centre. Abdomen glossy pale ochreous.

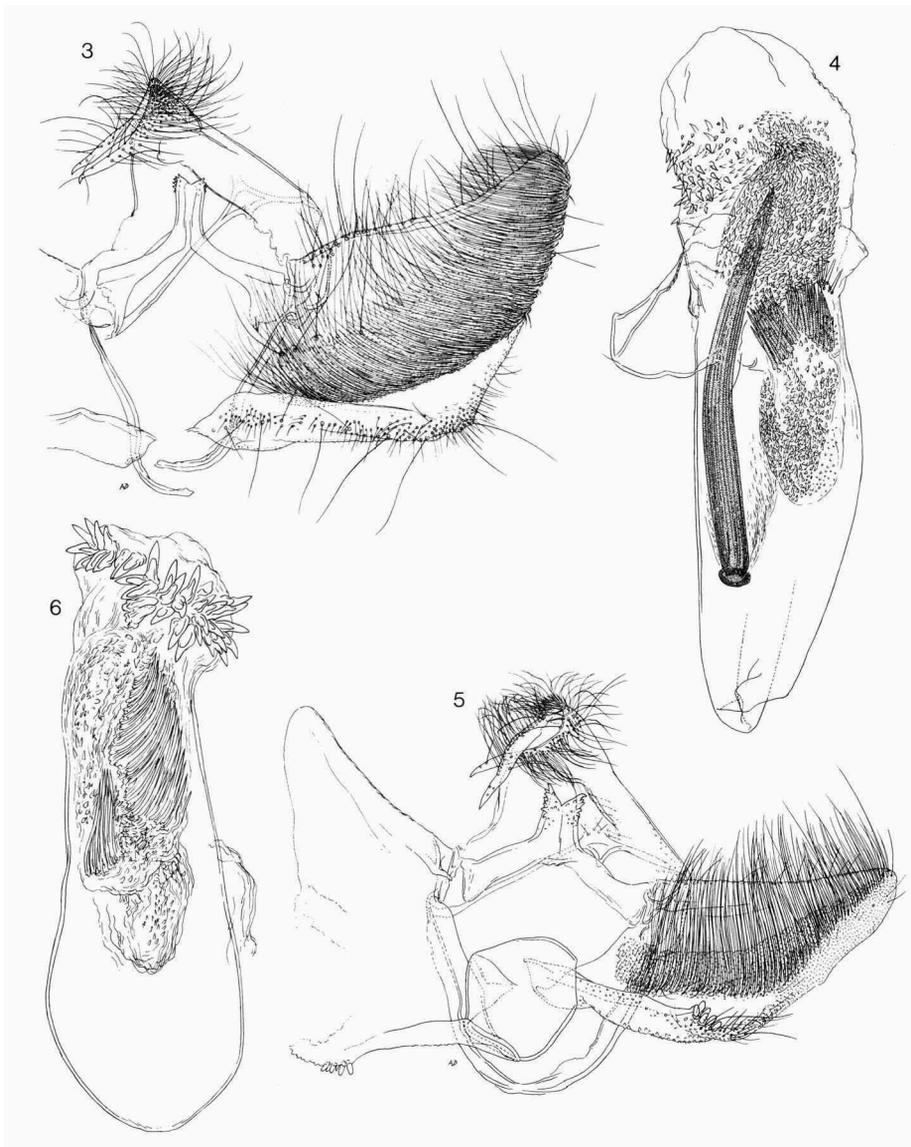
Fore wing oblong, rather narrow, gradually considerably dilated, costa little curved, apex obtusely pointed, termen gently, irregularly convex, oblique. Glossy pale ochreous, marbled with dull deep orange-ochreous, markings chestnut-brown. Costa along 2/3 with very short, numerous, partly confluent, deep purplish-brown, small dots, along posterior third with four suffused orangeish-ochreous spots, purplish only along extreme costal edge and alternating with lighter ochreous suffused marks; a large triangle of brown marbling, purple along costal edge, occupying more than second fourth of costa, including a smaller triangle of ground colour and reaching to middle of fold, with top quadrate, below fold; a fasciate oblique patch of loose chestnut, ferruginous and fulvous marbling and dusting, from below posterior part of vein 7 to 3/4 of dorsum; this patch with upper half formed by loose deep chestnut network, and lower half of a more continuous, lighter orangeish-fulvous suffusion, its anterior edge well-defined, with a dark brown interrupted line: from closing vein outwards-convex to below lower angle of cell, thence shallowly convex and inwards-oblique to 3/4 of dorsum; posteriorly patch ill-defined, reaching termen only along veins. Cilia glossy ochreous, with a suffused orange-ochreous median band, and tips with a few blackish spots (apparently partly rubbed).

Hind wing semipelluculent pale ochreous, becoming brighter and more opaque in apex. Cilia long and dense, pale golden ochreous-orange.

Male genitalia characteristically eupoecilian, gnathos arms moderately long, transtilla strong, with abruptly dilated bases and a strong median process, gently dilated above and denticulate. Valva with an ascending top, sacculus with a hardly prominent end. Aedeagus huge, cornuti: one big spike (almost as long as valva), two bunches of moderate spines and four fields of short thorns, two fields forming an incomplete ring.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9040.

A large species, characteristic by markings and especially by genitalia, which resemble those of the Palearctic *E. angustana* Hübner rather closely, but differ by the shape of the transtilla, broader valva with prominent end of sacculus and by the armature of the aedeagus.



Figs. 3–6. Male genitalia of Cochylidae, holotypes. 3, *Eupoecilia sumatrana* sp. n.; 4, the same, aedeagus; 5, *E. anebrica* sp. n.; 6, the same, aedeagus.

**Eupoecilia anebrica** spec. nov.

[ ἀνεβρω = to find back]

(figs. 5–6, pl. 4 fig. 2)

♂ 10 mm. Head ochreous-whitish, face white. Palpus pale ochreous, whitish in certain lights. Thorax glossy pale ochreous. Abdomen pale ochreous, infuscated at base and over anal tuft.

Fore wing with costa almost straight, apex subobtuse, termen hardly convex, very oblique, dorsum rather rounded; pale ochreous, touched with orangeish above tornus and on costa posteriorly. A rather submedian transverse band, strongly dilated towards costa, inwards-oblique, finely dusted dark brown-purple (bases of scales being pale), this colour extending along costa anteriorly to base, posteriorly to 2/3; band with a median orange-tawny longitudinal fascia, shifted slightly posterad from middle and reaching from dorsum at 2/5 to upper edge of cell; apex suffused with orange-fulvous and strewn with a few small purple-black scales; indistinctly forming two vertical rows: from end of vein 5 and from end of vein 7 respectively, not reaching costa; some dark scales along dorsum. Cilia golden-ochreous, around apex touched with pink, a faint median grey line, tips of scales touched with fuscous.

Hind wing almost transparent, pale ochreous, veins finely ochreous, dusted regularly with minute pale fuscous scales, dorsum dusted with larger dark points forming a marginal band from vein 3 to tornus. Cilia pale golden-ochreous, tips silvery.

Male genitalia, very similar to those of *E. tenggerensis* (Diakonoff), but socii much longer, long-haired, top of tegumen densely spined between the socii, with longer and stronger sclerotic crossed pieces; top of sacculus more strongly spined, with longer, oblique spines.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♂, holotype, genit. slide 10303; 1 ♂, paratype (without abdomen).

Closely related to *E. tenggerensis*, the mountain species from Eastern Java, of almost the same altitude (1300 m) but distinct by the peculiarities of the genitalia.

TORTRICIDAE  
OLETHREUTINAE  
GRAPHOLITINI

**Pammene isocampta** Meyrick  
(fig. 7, pl. 4 fig. 3)

*Pammene isocampta* Meyrick, 1914, Exotic Microlep., 1:196. Fletcher, 1921, Mem. Dept. Agric. India, Ent., 6:68. Clarke, 1958, Meyrick's Types, 3:564, pl. 281 figs. 1-1a.

Distribution. Ceylon.

Food. "Associated with *Lecanium* sp., presumably feeding on these coccids" (Fletcher).

Mt. Bandahara, Bivouac One, 810 m, 2 ♂, genitalia slides 9099 and 10307.

**Grapholita diaphorotorna** spec. nov.

[διάφορος = varied, *tornus* = part of wing]  
(fig. 8, pl. 4 fig. 4)

♀ 9 mm. Head opalescent slaty grey, face fuscous-blackish. Palpus dark grey, terminal segment almost concealed. Thorax dark grey. Abdomen dark grey.

Fore wing rather broad, suboval, costa curved throughout, apex rounded, termen slightly notched below apex, rounded below notch. Slaty-grey, rather finely and sparsely marbled with little darker fuscous, wing gradually becoming darker grey posterad. Costa black, its posterior 2/3 with some ten thin white oblique marks, single or paired and arranged in three groups, each group with paler slaty-grey suffusion, forming oblique continuations of pairs of costal marks and reaching to upper edge of cell; first group containing four pairs of very thin marks, second group with two pairs of somewhat longer, more distinct marks, third group not suffused with paler grey, containing three single, more distant, less oblique marks, posterior vertical, subapical; spaces between grey suffusion forming black oblique bands, merging in a horizontal dark fuscous band or streak, reaching from middle of wing to before apex, thence descending as a dark and little contrasting ocelloid spot to above tornus; black costa continued as a marginal black fascia through apex along dorsum, to above tornus, narrowed there; ocelloid spot with five jet-black horizontal lines, becoming smaller upwards, first mark above tornal area larger, conspicuous and crescentic, more or less limiting a leaden-grey metallic se-

mioval spot in tornus, this colour forming an ill-defined posterior edge to ocelloid spot and a transverse blotch preceding that spot, and as wide as that; apex and termen with a blackish marginal line. Cilia dark grey, with a whitish basal line.

Hind wing deep brown-fuscous, becoming deep brown-fuscous towards apex and termen. Cilia pale fuscous-grey, with a dark subbasal band and a pale basal line.

Female genitalia. Ostium circular, rather large, edge robust. Colliculum large, subsclerotic, with a few irregular longitudinal and at end, transverse dark folds. Corpus bursae at origin with characteristic irregular transverse groups of minute crochets (slightly too large in figure). Signa two, long and slender hooks, upon slightly irregular basal sclerites.

Mt. Bandahara, Bivouac One, 810 m, 1 ♀, holotype, genit. slide 9105.

A small, dark species characteristic by the crescentic longer first black line of the ocelloid spot; judging from the genitalia it may belong into the Palearctic sectio junguicellae.

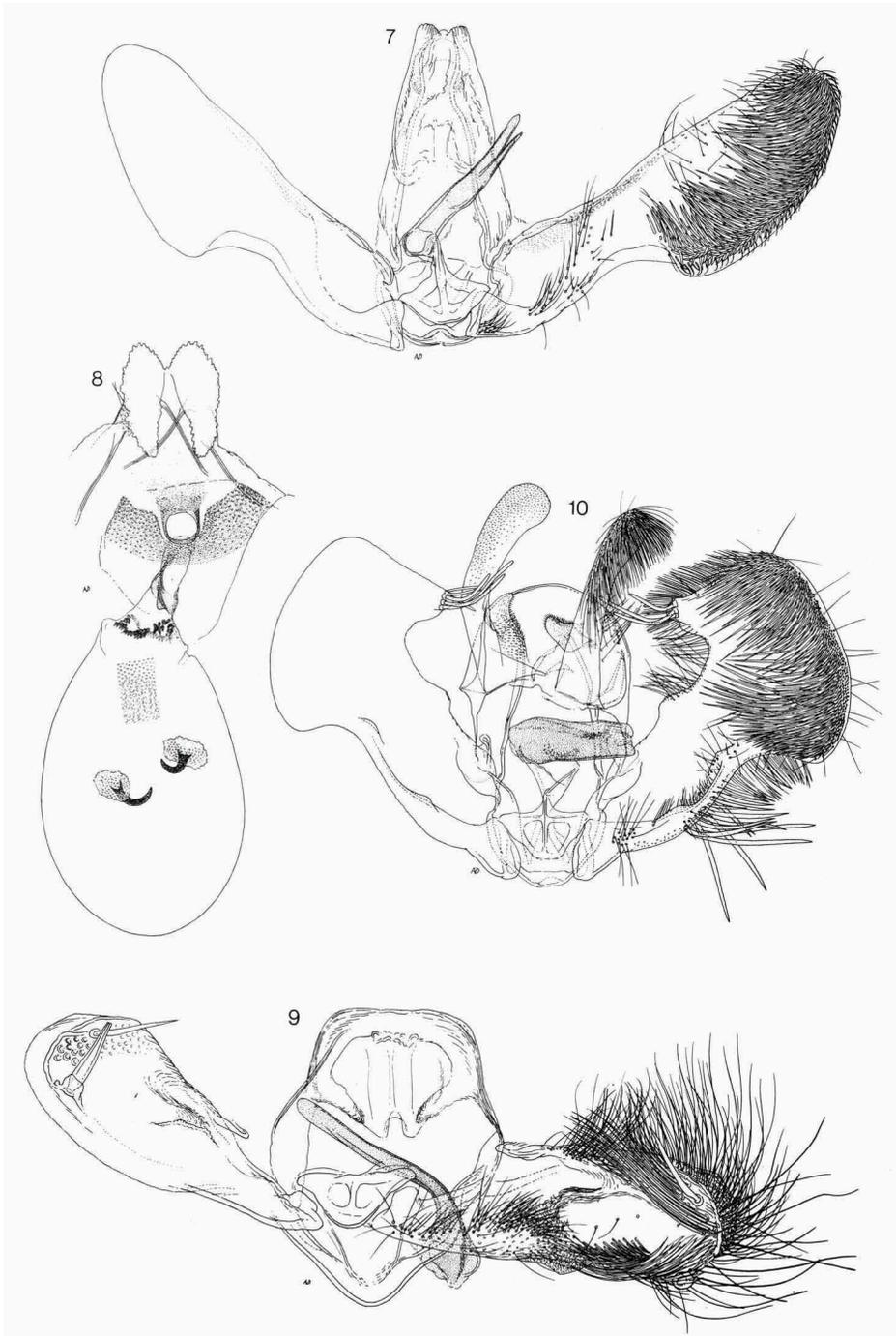
**Cryptophlebia aniacra** spec. nov.

[ἀνία = mourning, ἀκρός = top]

(fig. 9, pl. 4 fig. 5)

♂ 20 mm. Head greyish-tawny, face except lateral and lower edges, black. Antenna tawny. Palpus dark grey, apex of median segment dilated, smooth, lighter tawny. Thorax dark grey, tegula pale greyish-lilac. Posterior tibia glossy white, flattened laterally, closely appressed scales forming a keel along upper edge. Abdomen fuscous, rather long-haired, venter blackish, valvae outwardly paler.

Fore wing broad, subtriangular, dilated, costa curved at extremities, straight in middle, apex obtusely pointed, termen almost straight, slightly convex, oblique. Rather pale greyish with a lilac tinge, densely dusted with dark grey. Basal third of costal edge suffused with blackish; a black semioval spot well beyond middle, preceded and followed by three short oblique greyish lines upon an ochreous-lilac ground, each median line thickest; apical third of costa with three similar but more outwards-oblique sub-semioval black spots, two posterior approximated, subapical; these spots alternating with indistinct single black marks and obscured by purplish suffusion, occupying apical third of wing, edge rather well defined, with a prominence on vein 8, below this concave, to termen well above tornus; lower part of suffusion rather interrup-



Figs. 7–10. Genitalia of Grapholitini and Eucosmini. 7, *Pammene isocampta* Meyrick, ♂; 8, *Grapholita diaphorotorna* sp. n., ♀, holotype; 9, *Cryptophlebia aniacra* sp. n., ♂, holotype; 10, *Rhopobota bostrichus* sp. n., ♂, holotype.

ted by pale purplish-lilac ground colour; a black-purplish line from subultimate costal spot, crossing before apex to below end of vein 7, thence running along termen to end of vein 3; similar marginal dark line around apex and along termen, not reaching end of vein 7; a faint pale transverse line preceding dark apical area; dorsum almost to fold suffused with blackish-purple; veins in disc indistinctly paler. Cilia black, with a white basal line.

Hind wing rather light fuscous-purple, slightly glossy. Cilia dull fuscous with a pale basal line, cilia along dorsum long.

Male genitalia. Tegumen strong, subspheroid, depressed, top flattened. Gnathos-like lateral processes, moderately pointed and descending. Valva oblong, thickened, moderately dilated, end of disc with a huge ventral and a thinner, dorsal spine and two submarginal crests of dense long spines: one along sacculus, another along costa; valva outwardly densely haired. Aedeagus thin and long, bent at 2/3 from apex, apex rounded.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 10335.

A typical member of the genus, by the dark apical patch rather resembling *C. toxotis* Diakonoff, from New Guinea, but with very distinct male genitalia and scaling of posterior tibia.

#### EUCOSMINI

#### **Rhopobota hypomelas** spec. nov.

[ ὑπο = under, μέλας = black]

(pl. 4 fig. 6, pl. 15 fig. 85)

♂ 11–12 mm. Head pale grey-fuscous. Antenna little thickened, short-ciliate. Palpus rather slender, pale grey-fuscous, basal segment, median and apical bands of median segment and tip of terminal segment blackish. Thorax light fuscous-grey. Abdomen dark bronze-grey, anal tuft pale grey mixed with pale ochreous.

Fore wing oblong-oval, costa slightly curved, more so at base, apex pointed and projecting, slightly falcate, termen strongly sinuate above, broadly rounded-prominent below, vertical. Pale glossy grey, with faint darker grey scales strewn over wing; costa throughout with numerous transverse and slightly outwards-convex strigulae, along posterior 2/3 alternating with white similar strigulae; traces of blackish-fulvous markings in disc, indicating a dark spot on end of cell, connected by a straight band of blackish-fulvous dusting towards apex and a badly traceable one, to middle of costa; some ferruginous-

black but faint dusting below middle of fold (absent in holotype); apex of wing with a black spot, some black marbling before apex. Cilia (imperfect) white, with a subbasal and an apical dark grey band.

Hind wing dark glossy grey, in cell, and more so along costa, suffused with anthracite-black androconial semipellucent scales. Costa convex, from the underside with jet-black opaque, androconial scales; these scales extending widely over central part of wing underside, but semipellucent there. Cilia light fuscous with a white basal band.

Male genitalia. Tegumen considerably rounded. Socius, a naked, slender, curved process upon a curved base. Gnathos with a strong pyramidal base, its lower edge concave; arms long, straight, tops elongate-clavate, pressed together, with long backwards-directed hairs. Valva with costa convex, sacculus straight and regularly bristled throughout; cucullus of equal width throughout, a dense patch of bristles at each end (base and top), at top bristles rather short, slightly diverging. Harpe, a slender curved hook.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype; Bivouac Three, 1810 m, 1 ♂, paratype, genit. slide 10380 (head missing).

**Rhopobota bostrichus** spec. nov.

[βόστριχος = a curl]

(fig. 10, pl. 4 fig. 7)

♂ 16 mm. Head light grey, scape and top of tuft between antennae darker brown. Palpus light tawny-fuscous, apical third of median segment creamy-white, terminal segment acute, pale grey. Thorax fuscous-grey, tegulae tinged fulvous. Abdomen dark grey.

Fore wing oblong, moderately long, costa curved throughout, apex subfalcate, projecting, little obtuse, termen deeply notched above, strongly and obliquely rounded below, prominent and oblique. Basal patch to 1/4 of costa, angulate and projecting to before middle along fold, rather light grey, centre with a fulvous spot, edge broadly dark brown-fuscous; patch followed by an indistinct whitish transverse band, obliterated towards fold; indication of an inwards-oblique suffused band from below 2/3 of costa to 2/5 of dorsum; posterior half of costa black with some six or seven pairs of thin greyish-white oblique marks, becoming whiter and more distinct posterad, ultimate mark single, wedge-shaped, slightly turned inward, rather thick, subapical; apex beyond this with a black falcate spot, extending over cilia, below (above notch of termen) with a white dot, along upper half of termen continued as a sinuate black marginal streak, narrowly edged with white on both sides; posterior half of wing beyond suffused brown band rather glossy and tinged light orangeish,

above tornus with some irregular dark brown dotting; a leaden-grey faint fascia before termen, cut in middle by a creamy longitudinal mark. Cilia sordid light tawny, irregularly barred along basal half with dark fuscous, a creamy pale basal line, cilia opposite apex with a black falcate spot.

Male genitalia. Tegumen broadly rounded, without any processes. Gnathos arms distant from each other, rising, clavate, haired. Valva hammer-shaped, without a central harpe, sacculus curled, short-haired, along outer edge with very long broad curved spines, becoming smaller posterad, costa with a median knob, colliculum bristly, also along costal end as far as knob, top with a few (about six) robust and bent, obtuse spines. Aedeagus moderate (cornuti missing).

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9128.

The species is characteristic by the dark terminal streak, and by the genitalia. Perhaps related to "*Acroclita*" *symbolias* Meyrick, but with much broader valva and entirely different colouring and markings.

***Peridaedala triangulosa* spec. nov.**

[*triangulosus* = with many triangles]

(pl. 4 fig. 8, pl. 15 fig. 86)

♀ 15 mm. Head pale ochreous-green (rubbed). Palpus rather long, median segment strongly dilated with fine long hairs above and beneath, narrow and smooth towards base, terminal segment slender, smooth, pointed, drooping, less than 1/2 median; whitish, marginal fringe pale green, an oblique transverse median band of faint blackish dusting; terminal segment whitish, except top dusted with fuscous. Thorax ochreous, tinged greenish (denuded), metathorax infuscated. Abdomen dark brown.

Fore wing narrow, slightly narrowed, broadest at 1/3, costa curved throughout, more so at the extremities, apex rather rounded, termen gently sinuate, oblique. Glossy whitish-green, coarsely marbled with light ochreous-green, on posterior third becoming brighter green. Markings black along costa, below costa becoming pale greyish-brown edged with dark brown, here and there centred with greenish, on dorsum as in disc. An ill-defined oblique transverse line from costa beyond base; costal marks as follows: a moderate wedge-shaped oblique spot at 1/4, reaching 1/3 across disc, a large median triangle almost reaching fold, on costa, including beyond its middle a small wedge of ground colour, followed by three equal and equidistant suboval marks, last apical; an inwards-oblique oval irregular spot below penultimate costal mark; dorsum with two smaller dark triangles, at 1/3 and just beyond

2/3, respectively. Cilia light green, with pale base.

Hind wing semipellucant glossy bronze-brown, becoming darker and more opaque towards apex. Cilia dark fuscous with a narrow pale basal line.

Female genitalia. Sterigma a moderately excurved plate, concave caudally, angles slightly rounded, hardly prominent. Ostium round, sunk to its middle into edge of sterigma, lamella antevaginalis convex, concave at extreme sides. Ductus bursae little longer than height of sterigma, a small upper part spherical and slightly constricted, remainder subsclerotic, with sclerotic folds; corpus bursae inverted-pear-shaped, minutely aciculate; signa, flat hollow horns, slightly inequal.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♀, holotype, genit. slide 10376.

The moderate species is distinct by characteristic markings. Judging from the genitalia it is allied to *P. archaea* Diakonoff, from New Guinea, which has a larger and erected ostium and a more rounded sterigma.

***Peridaedala thesaurophora* spec. nov.**

[θησαυρός = a treasure, φέρω = to bear]

(fig. 13, pl. 5 fig. 9)

♂ 21 mm. Head pale yellowish-green. Antenna with scape pale green, flagellum yellowish, banded with dark fuscous on upper side. Palpus very long and slender, with closely appressed short scales, projecting almost three times diameter of eye beyond face, strongly sinuate, median segment dark fuscous on basal 2/3, apical third pale greenish, terminal segment long and slender, over 1/2 median, pale yellowish-green. Thorax (partly defaced) pale green. Abdomen glossy white, with long white hair-pencils on pleura.

Fore wing oblong and very narrow, costa with a slender costal fold to 2/5; considerably curved along basal half, almost straight posteriorly, apex pointed, produced, termen strongly sinuate, oblique. Green, becoming deeper towards costa, paler along dorsal third, markings fuscous- or purple-bronze, edged with black. Costal fold blackish along basal half, with black dots on top; costa beyond fold deep fuscous-bronze to apex, this colour divided by deeper green transverse broad bars parted narrowly by black, into five spots, first semioval, twice as broad as others, second to fourth rounded and wedge-shaped, fifth slender, apical; a large purple-bronze median patch, extending from middle of cell to before termen, containing a jet-black oblong spot in middle of wing with a transverse small green mark before its end; the median patch filling out cell, below third costal spot strongly constricted, thence black, triangular, upper angle to apex, lower almost to tornus, termen with a deep green

band; a vertical purplish-bronze broad bar on 1/3 of dorsum, dilated top truncate by fold; a smaller irregularly semioval black spot on 1/3 of dorsum; anterior third of cell (probably partly rubbed) tinged pinkish because of the reddish androconia of the under side showing through. Under side of wing with cell from before 1/4 to beyond 3/4 filled out by very smooth, short and glossy chestnut androconial scales, the patch well defined, broadly transversely interrupted in middle. Cilia green.

Hind wing semioval, rather pointed, 1½; costa strongly prominent in middle and broadly convex. Basal half semipellucet, colourless, with an oblong almost entirely naked broad streak, filling out cell and extending rather beyond cell; terminal and apical half of wing gradually becoming more opaque and light purplish bronze, deeper towards apex; on the under side costa beyond base with a large patch of very long and stiff white hair-scales mixed with bronze at base, convexity of costa with dense smooth purplish-bronze scales, becoming normal above the end of naked central streak. Cilia light bronze-fuscous with a pale basal line.

Male genitalia. Tegumen high, shoulders rounded with thickened and sinuate edge. Uncus bicornute, deeply concave between lateral flattened "horns". Socii pending, club-shaped, thinly scaled, with rounded tops turned towards each other. Gnathos with a large sclerotic median sheet, rising to base of uncus. Valva with basal third oblong-oval, sacculus with an oblique, pointed blade, median third of valva very narrow and curved, sacculus suboval, transverse and inwards-oblique, spiny. Aedeagus moderate, straight with a dozen scars of fallen-off cornuti.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 10334.

A remarkably specialized form, of uncertain affinity. Apparently in repose the androconia of the fore wing underside fit exactly into the naked space of the hind wing upper side, while the prominent edge of the costa of the hind wing forms an extra protection to the scent organ.

***Peridaedala enantiosema* spec. nov.**

[ἐναντίος = against, σέμα = mark]

(figs. 12a,b, pl. 5 fig. 10)

♀ 15 mm. Head pale ochreous-greenish, face glossy whitish-green. Palpus rather long, sinuate and ascending, median segments dilated with appressed scales, roughish along the edges, pale green-ochreous, a narrow submedian transverse black band, terminal segment slender, porrect, 1/3 whitish. Thorax

pale greenish-ochreous, with a few scattered black scales, anterior third of thorax and anterior half of tegulae suffused with black. Abdomen dark fuscous, venter pale ochreous.

Fore wing oblong, broadest at  $3/4$ , costa curved, more at ends, apex moderately pointed, termen sinuate. Green, partly tinged ochreous, with a silky gloss. Markings black, edged with white. Costa with seven transverse spots, outwards-oblique, except penultimate spot, directed inwards-oblique; first spot small, beyond base, second erected-wedge-shaped, under top constricted; third spot large, median gradually curving posterad, top rounded, followed by a round dot; two following, small equal, quadrate, penultimate large, parallel to termen, gradually dilated downward, top flat, ultimate spot triangular, small, apical; a small triangular spot below fold in middle of wing, base along fold; three spots on dorsum: a semioval, beyond base, an acute-triangular, at  $1/3$  reaching fold, and a clavate, inwards-oblique, at  $3/4$ , top rounded; a twice interrupted somewhat irregular marginal fascia along lower half of termen and in tornus; termen narrowly white. Cilia dull pale green.

Hind wing light bronze-grey, subsemipellucent, terminal edge before tornus suffused with brownish. Cilia fuscous with a pale base and whitish tips.

Female genitalia. Sterigma hardly modified. Ostium, a sclerotic oval cup in which fits a more sclerotic wide funnel, with extended ends of upper edge. Colliculum very short. Ductus bursae slightly twisted, with unequal sclerotic folds. Corpus bursae simple, wall finely aciculate, with a circular, not aciculate area.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♀, holotype, genit. slide 10357.

Distinct by the markings of the fore wing.

***Peridaedala beryllina* (Meyrick) comb. nov.**

(pl. 5 fig. 11, pl. 16)

*Spilonota beryllina* Meyrick, 1925, *Treubia*, 6:428.

Distribution. Java: Tjibodas, 1500 m.

♂ 20 mm. Head whitish-green (damaged). Antenna thickened, pale ochreous, finely brownish-ringed, short-ciliate. Palpus long, porrected, median segment thickened with smoothly appressed scales, oblong-oval, pale green, with an oblique black-brown transverse submedian patch; terminal segment rather slender, moderately drooping, under  $1/2$  of median, whitish posteriorly. Abdomen white.

Fore wing oblong, dilated along  $1/3$ , thence gradually and but slightly dilated, costa without a fold, curved throughout, more so towards apex, apex obtusely pointed, termen sinuate. Rather bright grassy-green, with a silken gloss,

markings black, narrowly edged with white. Costa with seven subequidistant fasciate larger marks, alternating with small dots or short outwards-oblique markings; costal edge anteriorly narrowly black, here and there emitting small additional costal markings; extreme base of costa suffused with blackish; first costal dot beyond base, rounded, another, smaller dot beyond and below it; second costal mark beyond 1/4, inwards-oblique, to below upper edge of cell; third mark from before middle, longer, more oblique, in cell slightly dilated by oval spot; two following costal marks almost similarly spaced, below interconnected, forming a rounded-quadrate mark; penultimate mark short, below and slightly beyond connected by a slender transverse spot, last mark wedge-shaped, fasciate, apical; dorsum with five almost equidistant and parallel inwards-oblique marks, reaching to middle of wing; alternating with dorsal dots: first, third and fifth slender, somewhat irregular, first angulate in fold; second erect-triangular, fourth spindle-shaped, fifth marginal. Cilia green, concolorous.

Hind wing pale greyish-golden, glossy, cilia concolorous.

Male genitalia. Tegumen robust, with shoulders, prominent, rounded and flat blades, from centre of these originate finger-shaped, clavate and thinly haired, mesad-directed socii. Uncus broad, with pointed top and broad lateral folds, folded over mesad. Gnathos plate sclerotic, lower half rounded, upper half bottleneck-shaped. Valva, basal third transversely oval, with peculiar, strong, pencil-like bristles, median third strongly narrowed and curved, cucullus third obliquely oval, thinly hairy and with a marginal band of spines of diverse sizes along outer margin. Aedeagus moderate, straight.

Female genitalia. Eighth segment slightly sclerotic. Sterigma with a central sclerite, slightly oblong, lower edge rounded, upper shallowly triangularly emarginate, in middle deeply excised, to fit the ostium, surface strongly wrinkled towards upper edge, this more strongly wrinkled, with semioval ridges towards middle. Ostium round, hyaline. Colliculum, a short sclerotic tube, passing into sclerotic and longitudinally plicate, slightly twisted ductus bursae. Signum one, a small hollow thorn.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♀, genit. slide 10354.

The unique type-specimen is lost, but fortunately there are topotypical females available, together with old material from Sumatra:

West Java, Mts. Gede-Panggrango, Tjibodas, 1400 m, 27.ii.1940 (L.J. Toxopeus), 1 ♀, metallotype, genit. slide 10372; the same, 6.iv.1940 (the same collector), 1 ♀.

Central West Sumatra, Fort de Kock, 920 m, iv.1921, 1 ♀, genit. slide 10373; vi.1921, 2 ♂, genit. slide 10397; 1925, 1 ♂; 1926, 1 ♂ (all, E. Jacobson).

**Assulella Kuznetsov**

*Assulella* Kuznetsov, 1973, Rev. ent. U.R.S.S., 52:691, figs. 13–14.

Type-species: *Eucosma litigosa* Meyrick (Assam).

Head with appressed scales, roughish on vertex. Ocellus posterior. Haustellum very short. Antenna thickened in male, short fasciculate-ciliated. Labial palpus rather long, projecting diameter of head beyond it, sinuate, with closely appressed scales, median segment considerably dilated towards apex above, with a pointed moderate smooth tuft below, terminal segment under 1/3 of median, smooth, porrected, gently narrowed posteriorly, obtuse. Thorax smooth. Abdomen normal, with a large apical tuft. Posterior tibia in male with smoothly appressed scales.

Fore wing without costal fold, oblong-subtruncate, rather narrow, gradually dilated, costa curved, apex subobtuse, termen distinctly sinuate (seldom straight). Vein 2 from 2/3, 3 from angle, 3–5 equidistant at base, 4 and 5 moderately approximated on margin, 7 separate, to termen, seldom 7 and 8 short-stalked, 9 closer to 8, 11 from middle or slightly before middle, chorda from halfway 10–11, to base of 7, median branch in cell present, sinuate to, or just above, base of 5.

Hind wing with a cubital pecten, 1½, veins A1–A3 present, 2 from 3/5, 3 and 4 connate from angle, 5 curved and closely approximated at base, 6 and 7 closely approximated towards base.

Male genitalia. Sixth segment unmodified but sclerotic, forming a kind of “second sterigma”. Tegumen depressed, broad and rounded, rather narrowed along upper fourth to a broad, flat “head”, densely short-pubescent on top; shoulders of tegumen densely long-bristled and forming parietal socii, continued almost to top. Gnathos formed by narrowed rising stiff arms united at top. Processus basalis of valva with an additional vertical small process. Valva robust, sinuate, cucullus part strongly outwards-oblique, obliquely rounded, densely long-bristled; sacculus under 1/3, ending in a free, acute point, above and posteriorly with a patch of bristly hairs; disc with a median subcrescentic patch of bristles. Aedeagus moderately slender, base spherical. Caulis with a concave support around that base.

Female genitalia. Lobi anales rounded-semioval. Ninth segment, a sclerotic cylinder. Seventh ventrite sclerotic all over, broad and smooth, above lower edge usually several thick spines. Ostium small, close to posterior edge of sterigma, with lateral ridges, ventrally edge deeply excised. Ductus bursae slender, straight, upper part forming sclerotic colliculum, lower, a less distinct cestum. Corpus bursae rounded. Signum one, a small, hollow thorn.

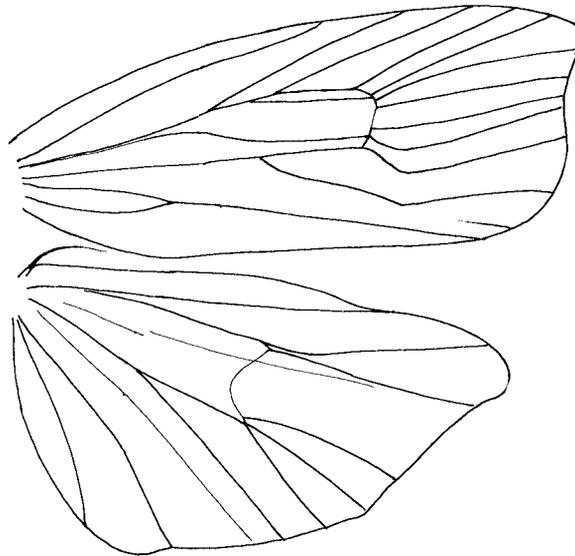


Fig. 11. *Assulella lithocosma* sp. n., wing venation, ♂.

An interesting genus, with facies, markings and especially the shape of the valva suggesting a close connection with the *Hermenias* Meyrick group of genera, but with broad tegumen bearing parietal socii and a complicated gnathos, relegating the genus at once to the “higher” group of the Eucosmini, which, in my opinion, represents a transition to the Olethreutini, as, e.g., *Scolio-grapha* Diakonoff, *Rhctogonia* Diakonoff, but especially *Rhopobota* Lederer.

[***Assulella kuznetsovi*** spec. nov.]  
(fig. 15)

*Assulella litigosa* Kuznetsov, 1973 (nec Meyrick, 1912), Rev. Ent. U.S.S.R., 52:692, figs. 13–14.

My experience with the above recorded species of the genus *Assulella* Kuznetsov convinces me that the species, described and recorded by that author from China in 1973 as *litigosa* Meyrick, is still another distinct species, deserving a new name.

The terse reference to the single specimen, studied by Dr. Kuznetsov may be translated thus. “Wing expanse 20–22 mm. The scaling of the studied specimen is preserved badly and therefore it is not possible to add anything to the diagnosis of E. Meyrick (1912)”.

In the fore wing veins 7 and 8 are short-stalked, vein 4 closer to 5, otherwise the neurulation of both wings as in the type-species.

Male genitalia resembling those of the type-species closely, but differing as follows. Tegumen more compressed. Front of uncus with two triangular sub-lateral lobes, the felty cover very short. Shoulders of tegumen rather prominent and densely haired. Gnathos arms acutely pointed (instead of truncate), middle of transverse part curving down (instead of being straight). Sacculus of the valva with an elongate-triangular base and a distinct projecting point; neck of valva with an additional dorsal fold of the costa; sacculus with a moderate crescentic fold at base below, terminal spines very long and slender, in a group of seven.

Holotype, the male, original of Kuznetsov's figs. 13 and 14, with a printed yellow label: "Li-Kiang, China (H. Höne) 14.6.1934", genit. slide 11984 V. Kuzn. The specimen was named "*Eucosma litigosa*" Meyr. The type, according to Dr. Kuznetsov, is preserved in the Museul de Istoria Naturala "Grigore Antipa", Bucarest, Rumania.

[*Assulella litigosa* (Meyrick)]

(pl. 17)

*Eucosma litigosa* Meyrick. 1912. J. Bombay Nat. Hist. Soc., 21:867. (Khasis, ♂ ♀). Diakonoff, 1959, Zool. Verh., 43:55 (corr.).

*Olethreutes litigosa*: Clarke. 1958, Meyrick's Types, 3:527, pl. 262 figs. 1–1a (lectotype designated, wings, genit. ♂ figured).

Distribution. Assam: Khasis.

Male genitalia. Top of uncus thickly felty, in middle slightly impressed. Socius thinly haired. Shoulder of tegumen with thin short bristles. Gnathos halves not distinctly and angularly prominent in middle of outer edge, their bases obliquely rising. Caulis rather short. Sacculus base elongate-triangular; cucullus top with a short subobtusate prominence; discal bristles rather thin and moderately long; "neck" shorter; cucullus rather short, almost regularly semicircular, with rather thin, long spines, three longer, marginal.

Female genitalia. Lamella antevaginalis, an erect sclerotic rather high collar with pointed lateral descending folds. Ostium V-shaped, also sclerotic, upper edge roundly excised. Seventh segment a sclerotic one, with a parallel pair of slight sclerotic ridges, forming an inverted large V; a single strong thorn sublaterally above rostral edge of sterigma, with a minute one more mesally; rostral edge sclerotic, lateral angles thicker, rounded. Ductus bursae moderately sclerotic throughout. Colliculum bivalval, slender, almost height of sterigma. Cestum, a corrugated, narrowed sclerite at base of ductus. Signa two, a larger one at the top and a small one in middle of corpus bursae.

Material studied. Lectotype /Khasi Hills, Assam, 7/1906 (print and Meyrick's hand)/Lectotype *Eucosma litigosa* Meyrick, J.F.G.C. 1948/ ♂ genitalia on slide 9. iv. 1948 J.F.G.C. 7174/ *Argyroploce litigosa* Meyr. 6/2 E. Meyrick det., in Meyrick Coll.) *litigosa* Meyr. (in Meyrick's hand)/ Meyrick Coll. BM 1938—290.

Paralectotype ♀ / Khasi Hills, Assam, 9/1906 (print and Meyrick's hand)/ Gen. no. 10403, A. Diak./ *Argyroploce litigosa* Meyr. 6/6 E. Meyrick det., in Meyrick Coll.

The holotype is rather more brownish tinged, instead of ashy grey as in the other species, but this might be due to discolouration; furthermore, there is a rounded large rather orangeish-ochreous tinged pale spot at the end of cell, absent in other species. The female paratype has the same brownish tinge, but the discal spot is obliterate by rubbing.

***Assulella lithocosma* spec. nov.**

[λίθος = stone, κοσμά = ornament]  
(figs. 11, 12, pl. 5 figs. 13, 14, pl. 18)

♂ 22 mm. Head white, mixed with fuscous. Palpus white, median segment with basal half black above, apical half strongly mixed with black, terminal segment black with white tip. Antenna dark fuscous, short-ciliate. Thorax dark grey with a slight bronze hue, suffused and marbled with whitish, an anterior, a submedian white band and a white spot at apex. Abdomen light grey-bronze, anal tuft black above, venter whitish.

Fore wing oblong-subtruncate, costa moderately curved throughout, apex rounded-prominent, termen sinuate, hardly oblique. Wing pattern rather variable, in the holotype as follows. White, marbled with pale tawny-fuscous and marked with darker fuscous and black. A light grey basal patch, slightly marbled with black, a narrow black patch from costa to halfway below fold; this patch from beyond 1/5 of costa to 1/3 of disc just above fold, thence receding, angle truncate; costa with some 11 subquadrate black dots of diverse size, alternating along 2/3 with small strigulae, third spot larger, on end of basal patch, spots 5—7 included in a semioval dark spot just before middle, following four spots larger, more distant, last apical; coarse dark fuscous marbling beyond basal patch, with a subquadrate dot on its angle and a large oblong black spot on lower angle of cell, limited below by fold, not reaching dorsum, upper edge emarginate; a smaller, roundish dark spot above and beyond this; an excurved blackish suffused streak from apex, convex anteriorly, descending to tornus, followed by a marginal dark line, semiovally dilated

below apex. Cilia dark grey with a submedian and a basal white line, interconnected by a few fine white bars.

Hind wing dark grey-fuscous, becoming bronze towards apex. Cilia paler, glossy grey-bronze.

One melanistic male has white ground colour strongly reduced.

♀ 23 mm. Much paler, basal patch replaced by a greyish marbling, preterminal transverse fascia ill-defined; more conspicuous and dark are the submedian semioval costal spot and the large dark spot before end of fold, almost black, extending over fold to dorsum.

Hind wing pale grey, apex suffused darker grey. Cilia pale grey.

Male genitalia differing from those of *A. litigosa* as follows. Top of uncus with an erect lip-like fold in front. Shoulders of tegumen densely long-haired. Gnathos halves distinctly angulate outwardly, their base a straight transverse rod. Valva with sacculus base abruptly triangular, not elongate, top of sacculus with a pointed process. Cucullus larger, more outwards-oblique, much denser long-spined, top outwardly with some six rather short projecting bristles. Caulis longer.

Female genitalia. Ostium smaller, a simple, sclerotic cup, lateral folds less oblique and smaller. Anterior edge of sterigma with a thickened ridge throughout, gently but inwards submedially, submarginal pairs of spines large on the inside, small on the outside; outer surface of sterigma with a hardly visible top of the outer V-shaped ridge. Colliculum ill-defined, entire ductus being sclerotic throughout; cestum and signa about similar.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 10337; the same, 1 ♀, allotype, genit. slide 10386; the same, 8 ♂, 6 ♀, paratypes, genit. slide 10352 ♀

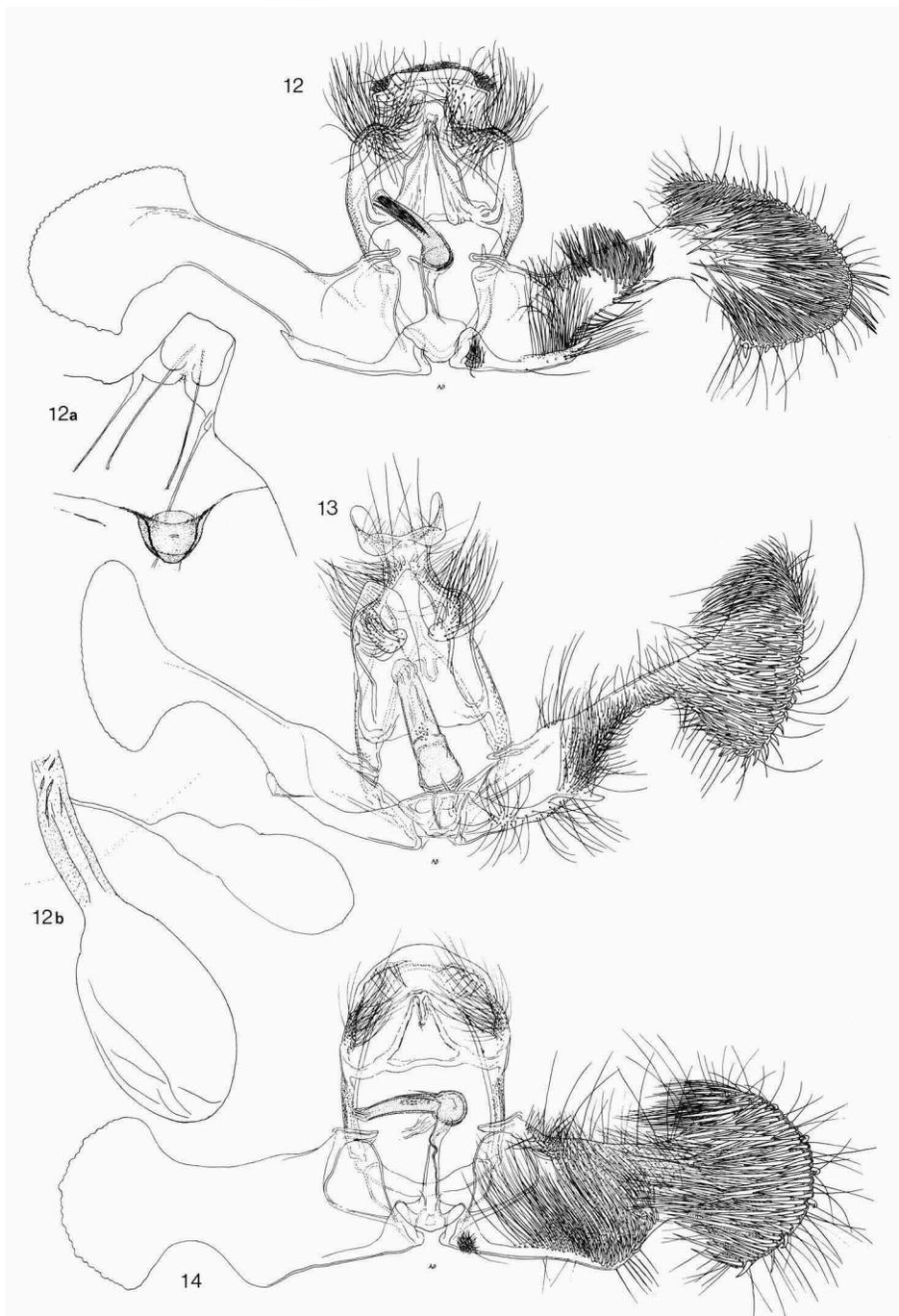
The species is sexually dimorph, besides having melanistic specimens among the males. The differences with the type-species are larger size, much larger, darker and more irregular spot on end of fold (rounded in *litigosa*), not crowned with orangeish spot. Females are more contrasting black and white.

**[*Assulella anoechoptera* spec. nov.]**

[ἀνοειχτοτερός = lighter]

(figs. 16, 17, pl. 5 fig. 16)

♀ 21.5 mm. Head white, mixed with dark grey. Palpus white, median segment with a narrow basal and a broad median black ring, upper side black, posterior half of segment light grey with a basal and an apical white suffusion,



Figs. 12–14. Male and female genitalia of Eucosmini, holotypes. 12. *Assulella lithocosma* sp. n. ♂; 12a. *Peridaedala enantiosema* sp. n. ♀, ostium (ovipositor missing); 12b. the same, bursa; 13. *Peridaedala thesaurophora* sp. n. ♂; 14. *A. archaea*, sp. n. ♂.

terminal segment black, white-tipped. Thorax grey, edged with white, collar and tegulae white, shoulder black. Abdomen fuscous, anal tuft black.

Fore wing oblong, costa gently curved, apex rounded, almost rectangular, termen sinuate, almost vertical. White, strewn with light brown spots, below costa arranged more or less longitudinally, small, on lower 2/3 of wing layer, forming transverse series or complete bands: one from centre of cell to 1/3 of dorsum, preceded and followed by paler, more irregular series. Costa with eight black spots, two submedian close together, last spot black, surrounded by dark fuscous continuing along upper half of termen; a suffused blackish-fuscous fascia from apex to halfway cell and termen above middle of disc, thence with one branch to tornus, with another towards costa beyond middle. Cilia dark grey with a suffused white basal line.

Hind wing grey, subsemipellucet (scales forming fine transverse striation), towards apex becoming darker grey-bronze. Cilia lighter grey with a whitish basal line.

Female genitalia moderately similar to the type species. Sterigma with anterior edge unmodified; large and sclerotic, forming a darker oblong pyramidal small lamella antevaginalis, concealing ostium, upper edge emarginate; this lamella laterally continued as narrow wrinkled ridges, further forming the strong smooth edges of a double inverted V, stronger but also shallower than in *litigosa*. Ostium simple, colliculum, a straight sclerotic tube, narrower and darker than ductus bursae, at base forming a large corrugated simple cestum, open to one side, curving around base of ductus bullae. Signa strongly unequal, upper large, scobinate and cordiform with a long point, apparently contiguous to end of ductus bursae; another, a small horn upon a scobinate base.

East Java, Tengger Range, Nongkodjadjar, 1300 m, at light, 5.v.1940, (A.M.R. Wegner), ♀, paratype, genit. slide 10381; the same, 16.ii.1940 (same collector), 1 ♀, paratype, genit. slide 4983; 1 ♀, paratype, W Java, Preanger [region], 5000 ft (Anthony), Snellen Collection (without abdomen; Meyrick's identification label "M94"). 1 ♀, paratype, East Java, Ardjuno Range, Sumber Brantas, 1936 (Walsh), 1 ♀, genit. slide 4647.

***Assullella archaea* spec. nov.**

[ἀρχαῖος = simple]

(fig. 14, pl. 5 fig. 15)

♂ 18 mm. Head pale grey, dusted on vertex with dark fuscous, tuft above face dark grey, face below whitish. Antenna ashy-grey, ringed with darker, ciliations under 1/2. Palpus rather long, sinuate, median segment with lower half white with black base, a narrow streak along upper side and a me-

dian band, posterior, dilated, half light grey-fuscous, all edges dark grey, terminal segment white, with a grey median ring. Thorax silvery-white, a black band at anterior 1/5 and a couple of black spots in middle. Abdomen blackish-grey, anal tuft grey-ochreous with a black base. Posterior tibia with a triangular flat tuft of long scales below, smooth on the inside, whitish to strongly opalescent whitish to light blue, a long dull dark grey pencil from base.

Fore wing oblong, rather broad, moderately dilated, costa gently curved, more so at base, apex obtusely pointed, termen concave above, rounded-prominent below, vertical. Creamy-white, becoming pure white towards costa, marbled throughout with brownish, turning black towards costa. Basal third of costa with five black spots: three anterior small, fourth subquadrate, largest, fifth slender, transverse; a pair of larger jet-black oblong spots just before middle, united by black suffusion, extending into a roundish patch reaching to upper edge of cell; remainder of costa with four obliquely wedge-shaped spots, posterior just before apex, all alternating with minute transverse marks; a patch of brownish suffusion along median half of dorsum, above reaching lower edge of cell by three subtriangular projections, slightly inwards-oblique, first to middle of lower edge of cell, second to just before its lower angle, third beyond this point, to vein 4; an ill-defined large Y-shaped thick mark, ferruginous-brown, partly interrupted, tips from below first and fourth posterior costal spots, respectively, base in tornus; all these markings more or less interconnected by fine dark network. Cilia white, suffused with black except along base, this suffusion interrupted into unequal bars.

Hind wing rather dark grey, on posterior half becoming grey-bronze, with a silky purplish gloss. Cilia grey, with a pale basal line, cilia along dorsum elongate, in tornus forming a dense, thick brush, grey, with a strong bluish opalescence in certain lights, a dark grey hair-pencil from base of dorsum on upper side, directed parallel to dorsum.

Male genitalia. Tegumen broad and rather short, top smooth, broad, rounded. Socii parietal and entirely lateral, long-haired. Gnathos-like structure slender and submembraneous: a thin transverse rod, median part forming a rising triangle, with appendix at top, hanging down. Valva broad, densely haired on basal half, bristled on apical, moderately constricted beyond middle. Aedeagus short, slender, with round base, upon a long caulis. Cornuti ejected, a median field of over 20 small scars in three parallel rows.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♂, holotype, genit. slide 10336. Bivouac One, 810 m, ♂, paratype, with marking rather rubbed.

The species is distinct by the polychrome palpi and strongly bluish opalescent tornus of the hind wings and the hind tibiae, and by the simplified genitalia.

***Hermenias pachnitis* Meyrick**  
(figs. 21, 28, pl. 6 fig. 17)

*Hermenias pachnitis* Meyrick, 1912, J. Bombay Nat. Hist. Soc., 21:852. — Diakonoff, 1950, Bull. Brit. Mus., Ent., 1:283 (lectotype designated). — Clarke, 1958, Meyrick's Types, 3:424, pl. 211 figs. 2–2a (wings, genit. ♂ figured).

Distribution. Ceylon.

Mt. Bandahara, Bivouac One, 1 ♂, genit. slide 10338; Bivouac Two, 1 ♂, genit. slide 10375.

Also from CW Sumatra, Fort de Kock, 920 m, i.1922, 1 ♂; 1926, 1 ♂, genit. slide 7194 (E. Jacobson).

E. Java, Tengger Range, Nongkodjadjar, 1300 m, 30.xii.1940 (A.M.R. Wegner), 1 ♂; 26.iv.1940, 2 ♀, genit. slides 7195, 7196.

***Hermenias dnophera* spec. nov.**

[δνοφερός = dark]

(fig. 22, pl. 6 fig. 18)

♂ 12.5 mm. Head black, vertex with a white spot. Palpus black, snow-white inwardly, median segment broad, terminal slender, pointed. Thorax black, with a few white scales. Abdomen black.

Fore wing oblong, narrow, hardly dilated, costa with thickened fold to middle, beyond base reaching over 1/3 of wing breadth, costa curved at base, almost straight posteriorly, apex obtusely pointed, prominent, termen sinuate, oblique. Costal fold and costa to 2/3 black, remainder of wing dark black-fuscous, apex and termen black, a very irregular subtriangular spot on costa well before apex, posterior edge angularly prominent in middle, rectangularly excavate above and below, along costa. The white patch deeply cut by three slender black marks, median largest; dorsum with a white triangular spot before 1/4, containing on edge of wing a small black mark; this spot followed by a large prostrate-S-shaped white mark, from before middle of dorsum to torus, thence to lower 1/3 of termen; termen with a narrow black marginal line, preceded by a few white small dots; white scales strewn here and there over wing. Cilia dark grey with a whitish base, and a darker grey submedian band.

Hind wing rather light fuscous-grey, semipellucant, with prismatic reflections. Cilia slightly more grey, with a narrow pale basal line.

Male genitalia. Uncus present, two diverging rather thick processes, slightly curved outwards at top, together V-shaped. Socius large, a triangular, loose flap, densely haired on upper surface. Valva moderate, sacculus at base with a small patch of hairs, beyond 1/3 with a rounded hairy prominence, shallowly

excised thence, deeply emarginate at 2/3, cucullus inverted-pyramidal, broader than rest of valva, spiny, outer edge with two spikes, upper apical. Aedeagus long, gradually curved. Cornuti, a sheaf of long spines; long, over 1/2 of aedeagus.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, holotype, genit. slide 10339.

A small darkish, black and white species, quite distinct by the shape of the cucullus.

***Hermenias metaspra* spec. nov.**

[μετά = behind, άσπρός = white]

(fig. 20, pl. 6 fig. 19)

♂ 12 mm. Head whitish, forehead and scales between bases of antennae grey. Palpus light grey, median segment with a subapical lateral white spot, terminal segment with a whitish tip. Thorax white. Abdomen creamy-white.

Fore wing narrow, without a costal fold, costa gently curved throughout, apex produced and subobtuse, termen sinuate, oblique. Costal half of wing suffused with dark grey and dusted with black, suffusion gradually narrowing posterad; a strongly suffused black streak from base to apex, forming lower edge of dark colour, ending in a black, inverted-subtriangular, well defined small spot on costa just before apex; apex proper and a convex area along termen pale fuscous-tawny; termen with a blackish marginal line, extending just above tornus, so as to form a triangular grey spot; remainder of wing, especially more than lower half silvery-white, glossy. Cilia white, broadly barred with dark grey.

Hind wing whitish, costal cilia grey, apical third of wing pale grey-fuscous, this colour formed by numerous minute transverse short striae. Cilia white.

Male genitalia. Tegumen moderately narrowed, shoulders rounded. Uncus rather broad, gently narrowed, with short, curved and acute lateral horns, edge slightly emarginate and accolade-shaped. Socius rather large, pending, triangular with rounded top thinly bristled. Valva with rectangular basal half and a deeply bow-shaped, sclerotic posterior half, large concavity anteriorly with a patch of long thick sinuate bristles, exceeding width of concavity; cucullus large, triangular, top bristly and rounded, lower part narrowed, with two apical acute spines. Aedeagus very long, exceeding bases of socii, its base rhomboidal, upon a long straight caulis, operculum erected. Cornuti, small spines in a slender row. Second ventrite with a thick patch of black, curly scales.

Mt. Bandahara, Bivouac Two, 1480 m, 1 ♂, holotype, genit. slide 10377.

The unique specimen is somewhat rubbed, but very distinct by colouring of the half-white fore wing, whitish hind wing and male genitalia. It belongs to the group of species with hairy anterior edge of the cavity of the valva.

**Anoecophysis** gen. nov.

[ἀνοῦκος = not own, φύσις = kind, nature]

Head with loosely appressed scales on vertex, face smooth. Ocellus posterior. Haustellum moderate. Maxillary palpus vestigial, but perceptible. Antenna in male moderately thickened, pubescent. Labial palpus moderately long, curved and ascending, reaching halfway height of eye, median segment with smoothly appressed scales below, hardly dilated, terminal segment short, porrected. Thorax smooth. Posterior tibia strongly thickened with scales, smooth outwardly, expanded inwardly, with a subappressed long pencil of hair-scales, from above knee, and a similar pencil from below knee, femur rough-scaled along lower side, tarsus with smoothly appressed scales.

Fore wing oblong-oval, moderately broad, costa gently curved throughout, apex and termen rounded. Vein 1b furcate along basal third, 2 from well beyond middle, 3 from angle, 4 closer to 3, 7 free to termen, 9 from 1/4 distance 9–10, 11 from middle, chorda strong, from halfway 10–11, to between bases of 7 and 8. Median branch developed, to between bases of 4 and 5.

Hind wing with a cubital pecten. Vein 2 from beyond middle of cell, 3 and 4 connate from angle, 5 approximated, 6 and 7 closely approximated towards base, 7 to apex; dorsum forming a marginal fold in which fits a long hair-pencil from base.

Male genitalia. Tegumen slender and high, slightly narrowed below top, thence narrowed. Uncus, a transverse oval thin-walled body, sparsely bristled. Socii and gnathos absent. Tuba analis voluminous, rising from middle of the height of tegumen, top dilated, with a median-like fold. Valva very slender, narrowed, sacculus ending in a conical downward-directed process with a small sclerotic hook, cucullus slender, long, clavate. Aedeagus oblong-oval, less than 1/2 length of valva, with sclerotic sides; upon a long, thin caulis.

Female genitalia. Lobus analis semioval. Sterigma unmodified. Ostium, a semisclerotic tube, slightly wider along upper half, densely denticulate inside, denticulations extending also over lamella postvaginalis, collicullum narrower than tube of ostium, narrowed below, sclerotic. Ductus bursae short and simple. Corpus bursae ovoidal, one third of its length formed by a narrower neck, at top with some dark sclerites (perhaps an artefact). Signum small, transverse and semioval, finely scobinate.

Type-species: *Argyroploce branchiodes* Meyrick.

A characteristic form, belonging to the large group of "higher" eucosmine genera, with the appearance of true *Olethreutini*, but with surprisingly eucosmine male genitalia. The female genitalia of the type-species are not very instructive.

***Anoecophysis branchiodes* (Meyrick)**

(figs. 23b, 24, pl. 6 fig. 21)

*Argyroploce branchiodes* Meyrick, 1910, Trans. Ent. Soc. London, 1910:435 (♂, Pulo Laut off Borneo).

*Olethreutes branchiodes*; Clarke, 1958, Meyrick's Types, 3:488, pl. 243 fig. 1—1a (wings, genit. ♂ figured).

Mt. Bandahara, Bivouac One, 810 m (J. Krikken), 1 ♂, genit. slide 10351.

Additional material in Leiden Museum collection:

West Borneo, Tabang, Bengen River, 125 m, 22.ix.1956 (A.M.R. Wegner), 2 ♂, genit. slides 5944, 7527.

North Borneo, Sarawak, Matang Road, 14, 24.i.1910, 22.iii.1911, 3 ♀, genit. slide 4647.

West Java, Dungus Iwul, 17.xii.1952 (A.M.R. Wegner), 1 ♂, genit. slide 7526, 1 ♀.

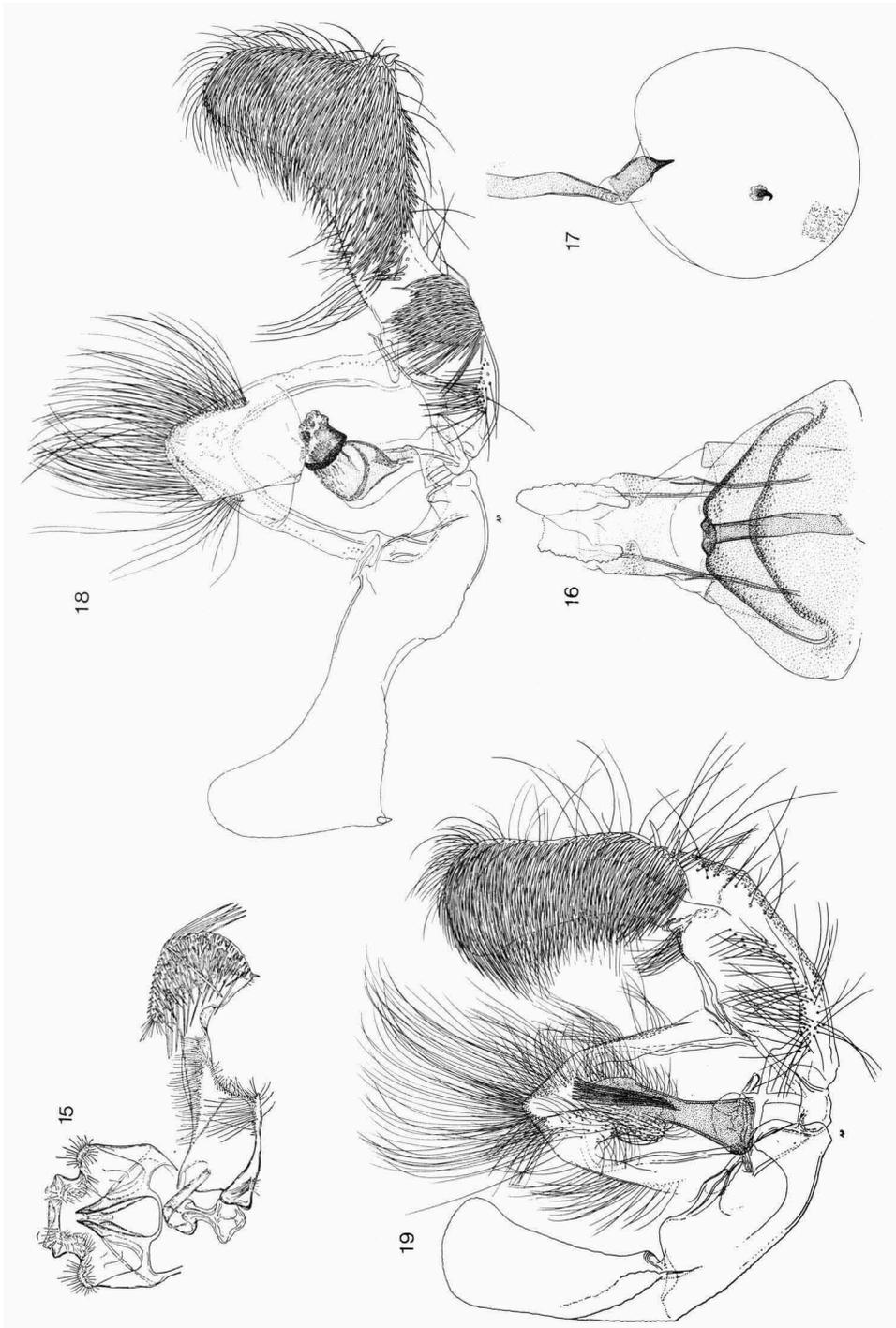
***Dolichurella* gen. nov.**

[δολιχός = long, ούρα = tail]

Head with appressed dense scales, projecting in a small tuft over forehead, another such tuft over face. Ocellus posterior. Haustellum short. Antenna thickened in male, short bi-serrate, scape rather long. Palpus moderately long, flattened laterally, strongly dilated above and beneath with appressed scales, roughish along apex, terminal segment moderate, exposed, obtuse, slightly drooping. Thorax with a very small apical tuft.

Fore wing rather narrow, oblong, little dilated, costa gently curved throughout, apex obtuse, termen straight, oblique. Neuration as in *Eriopsela* Guenée, except that veins 3 and 4 and 7—8—9 in the fore wing of the two sexes are closely approximated at base and that the chorda is fully developed.

Male genitalia with tegumen triangular, being gradually narrowed to the top, densely long-haired on the outside. Socii long (almost 1/2 tegumen), pending. Vinculum small. Valva rather long and moderately broad long basal



Figs. 15–19. Genitalia of Eucosmini. 15, *Assulella kuznetsovi* sp. n., ♂, holotype (after Kuznetsov, 1973); 16, *A. anoechtoter* sp. n., ♀; 17, the same, bursa; 18, *Arcesis anax* sp. n., ♂, holotype; 19, *Dolichurella viridimicans* sp. n., ♂, holotype.

half, costa with a rounded knob in middle, opposed by a small transverse ridge of the ventral side; posterior half with a dilated base (cucullus) little narrowed, rather slender, moderately clavate, bristly over disc throughout. Aedeagus rather long, sclerotic, with dilated base. Cornuti, a sheaf of rather long spines.

Female genitalia. Ovipositor strongly elongate and tubular, ninth segment distinctly sclerotic, postapophyses slender and long, anapophyses with curled anterior ends. Sterigma not modified, seventh tergite pyramidal, upper angles curved over ventrally. Ostium, a sclerotic moderate tube. Ductus bursae with a median spindle-shaped sclerotic cestum, subtortuous below, with slight additional ridges. Corpus bursae strongly aciculate, long-pear-shaped. Signa two, inequal hollow blades.

Type-species: *Dolichurella viridimicans* spec. nov.

The genus belongs to the *Eriopsela* group, and has rather similar superficial characters, as pointed out above, but is quite distinct by the specialised female genitalia, with a long, tubular ovipositor.

***Dolichurella viridimicans* spec. nov.**

[*viridis* = green, *micare* = to glitter]

(figs. 19, 25, 26, pl. 6 figs. 23, 24)

♂ ♀ 15 mm. Head whitish-vinaceous, sides of vertex dark purplish. Antenna purplish. Palpus pale vinaceous-greyish, dusted with purplish, top of median segment in front and entire terminal segment pale grey. Thorax purplish, more or less centred with pale vinaceous, tegula with anterior half purplish, posterior light green with metallic lustre. Abdomen purple, becoming blackish-purple towards apex, paler in female, anal tuft mixed with grey.

Fore wing oblong, rather narrow, little dilated, costa gently curved throughout, apex obtuse, termen straight, oblique. Costa with a moderate brownish-black edge, cut by some nine pairs of white hardly oblique transverse marks, last subapical; apex with a black spot; remainder of wing glossy light tawny, finely marbled with light grey and here and there strewn with dark brown small dots, especially over upper half of wing, anteriorly; an irregular diametral series of dark ferruginous-brown larger spots: a streak along basal third of dorsum, a conspicuous, inverted-trapezoidal spot, just before middle of fold, edges slightly margined with whitish and concave, especially the upper edge, anterior upper angle emitting a narrow streak towards a rounded black spot on  $\frac{1}{4}$  of costa; three dark brown spots in a row: a small one on end of cell in middle of wing, a larger, semioval spot between preceding and apex, and a

small round spot, merging in apical black one; a quadrate small snow-white spot on end of cell, upon the brown one, and a white dot above and beyond the quadrate mark; light emerald green suffusion, arranged as follows: a less defined longitudinal broad stripe from above brown spot in fold to above penultimate brown spot; a brilliant green patch between fold and dorsal brown streak from base to middle of dorsum, its top connected with an oblong triangular lighter subdorsal green spot, whitish-edged and contiguous to posterior edge of brown spot in fold; area before termen paler and more glossy light vinaceous-bronze; termen from below apex to above tornus with a black line, above merging in brown preapical spot. Cilia pale greyish-tawny, with a pale patch below apex; two blackish spots on posterior half of cilia alternating with a single one, on anterior half; a black small jolt on end of cilia on dorsum.

Hind wing bright submetallic grey-bronze, with a strong pinkish gloss, deeper towards edge, especially in apex; veins darker. Cilia grey-fuscous with a vinaceous tinge and a pale basal line.

Markings variable, paler and darker, sometimes either the ferruginous-brown marks, or the green ones, more extended.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 10369; 1 ♂, paratype (J. Krikken).

Also from W Java, Mts. Gedeh-Panggrango, Tjibodas, 1400 m, 1 ♀, allotype, genit. slide 10388, iv–v.1949, 9 ♂, 2 ♀, paratypes (A.M. Neervoort).

Java, Mt. Gedè, Tjibodas, 15.viii.1909 (Bryant & Palmer), 1 ♀, paratype; W Java, Mt. Salak, 4500 feet, 23.viii.1909 (the same collectors). In the United States National Museum, Washington D.C., U.S.A.

Buitenzorg (= Bogor), 250 m, 1 ♂, 4.xi.1948, 1 ♀, 30.xi.1955, paratypes (F.C. Drescher).

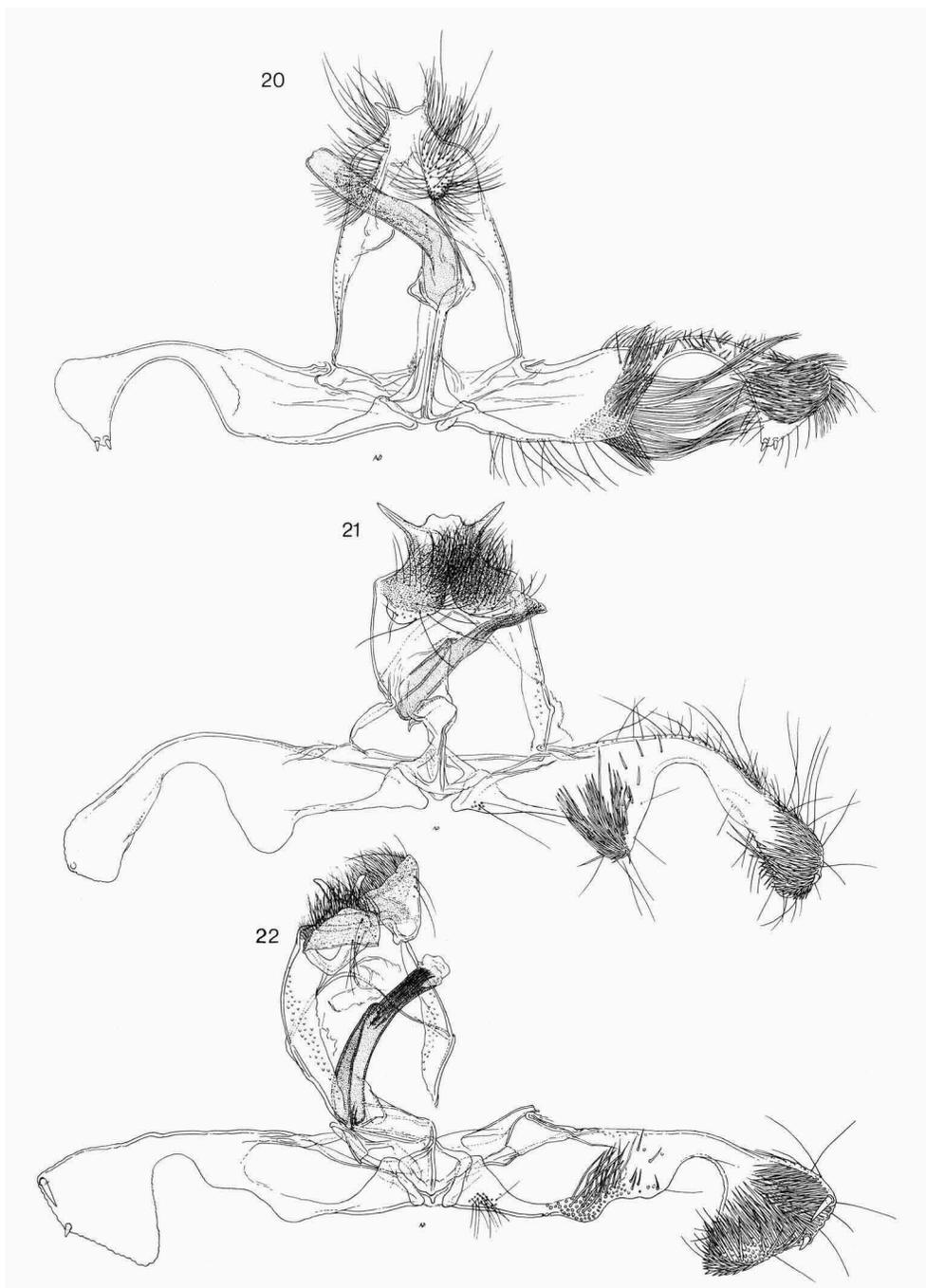
Mt. Malabar, Tjinjirioean Government Cinchona Estate, 1700 m, xii, 1909, 1 ♀, paratype, genit. slide 10379 (H.W. van der Weele). This specimen bears a hand-written label "*Erinaea verditer* Hampson, type"; this name, however, pertains to an all-green species of *Peridaedala*, described from the Nilgiris District, in India.

***Epinotia (Steganoptycha) araea* spec. nov.**

[ἀραιός = narrow]

(fig. 27, pl. 6 fig. 20)

♀ 10.5 mm. Head dark fuscous, mixed with creamy on vertex, face and middle part of a rough tuft over fore head, white, tuft at the sides dark fuscous. Palpus rather short and very slender, dark fuscous, terminal segment



Figs. 20–22. Male genitalia of *Hermenias* Meyrick. 20, *metaspra* sp. n., holotype; 21, *pachnitis* Meyrick; 22, *dnophera* sp. n., holotype.

creamy. Thorax dark fuscous, anteriorly slightly suffused with pale grey, in middle with white, metathorax in centre whitish. Abdomen pale grey, base and venter white.

Fore wing oblong-suboval, narrow, without a costal fold, costa very gently curved throughout, almost straight, apex rounded and slightly prominent, termen slightly sinuate above, obliquely rounded below, oblique. White, marked with bluish leaden-grey, partly edged with black and marbled with pale grey. Basal patch to  $1/3$ , edge obtusely angulate just below fold, rather oblique above, less so, below angulation; this patch traversed by a pale grey, less angulate band before its middle, band with a median row of fine irregular branched marks; basal third of patch black, including paler transverse mark; costa along posterior  $3/5$  black, with five pairs of sharp white oblique strigulae, last extended into a white, dark-parted larger triangular spot just before large black and round patch filling out apex and touched with tawny on extreme posterior edge; an irregular central fascia from beyond middle of costa, moderately outwards-oblique, narrowed downwards, to about  $3/4$  of dorsum; this fascia bluish-leadен, suffused with paler tawny and irregularly spotted with jet-black inequal blotches; fascia preceded and followed by irregular bluish-grey suffusion, extending below posterior part of costa and merging with it, as far as apical patch, and including jet-black oblique continuations of costal interspaces between pairs of white strigulae; a round tawny-black patch preceding apical spot and extending to middle of wing breadth; a conspicuous round-oval pale grey patch in tornus separating preceding dark patch from central fascia, suffused over lower  $2/3$  with leaden-grey; termen beyond it blackish. Cilia black, rather dusted with pale grey.

Hind wing about  $2/3$ , pale purplish-fuscous, becoming semipellucen towards base. Cilia concolorous but paler.

Female genitalia. Ninth segment rather extended. Ostium a simple sclerotic cup, supported by lateral small sclerites. Cestum, a plicate sclerotic tube, almost the length of ductus bursae. Corpus bursa of typical *Epinotia* shape, with lower fourth narrowed, signa equal, large granulose hooks.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♀, holotype, genit. slide 10340.

A small, narrow-winged species, with markings, neuration and bursa copulatrix of a typical *Epinotia*.

***Epinotia (Asthenia) clasta* spec. nov.**

[κλαστός = broken in pieces]

(fig. 30, pl. 7 fig. 25)

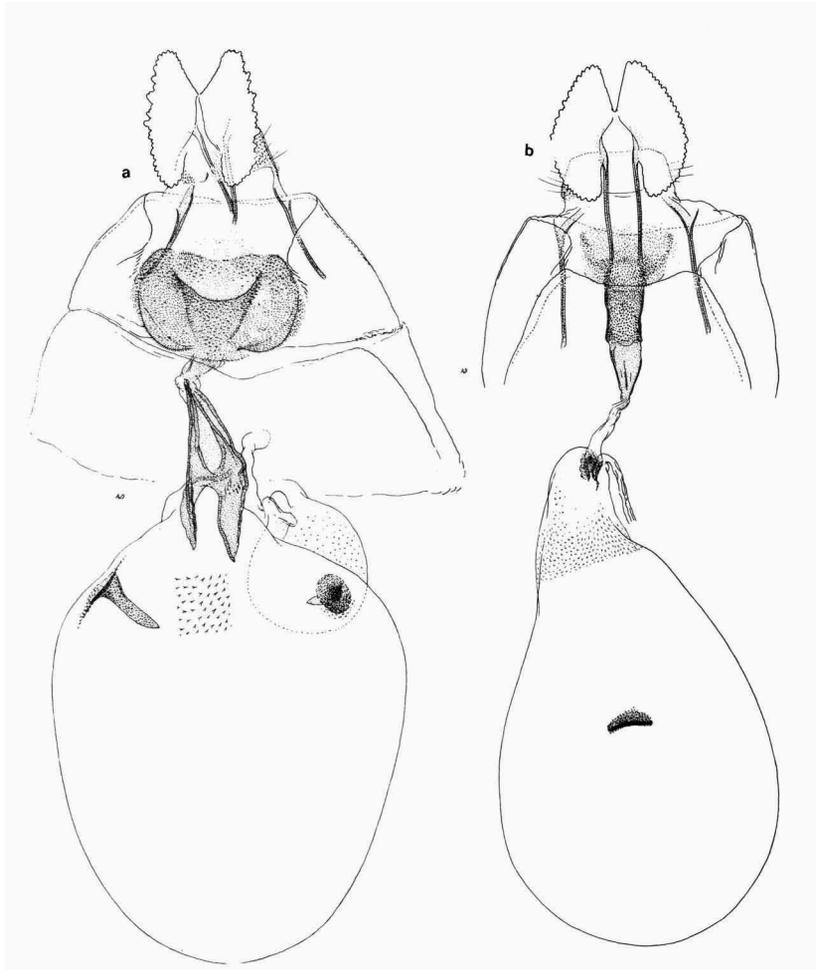
♀ 11 mm. Head and thorax white. Palpus triangularly dilated; silvery-white, median segment with basal half black-edged, apical half, black. Abdomen pale grey, white towards base.

Fore wing with veins 7 and 8 stalked; little dilated, costa almost straight, apex rounded and falcate, termen strongly sinuate above, oblique. White, strongly marbled with black. Costa along basal half, with 9 thick and blunt white marks, arranged in pairs, except the first one; posterior 2/5 of costa with four large and coarse pairs of thick white marks, little oblique and merging in a silvery-white, subcostal horizontal streak, emitting below a branch parallel to termen and another, parallel, thicker branch halfway towards dorsum, at end abruptly zigzagging towards end of termen, not reaching this and zigzagging abruptly to tornus; this white zigzag conspicuous, so crossing wing and preceded by a broader black similar fascia, from costa beyond middle, to 3/4 of dorsum, rather dusted with whitish, anterior edge well-defined, posterior broken by numerous white quadrate spots; anterior half of wing above fold dark grey, irregularly marbled all over with white ground colour, below fold wing white, from base to 2/3, along dorsum with a large rectangular black patch at 1/3 preceded and followed by a small irregular dark leaden-grey mark; apex with a round black spot, including a thin crescentic mark before extreme tip and below emitting a slender black marginal line along termen. Cilia blackish, around apex and along upper fourth of termen black entirely, with a thin white basal line, below apex cut by a silvery bar; cilia along rest of termen and in tornus suffused with light grey and cut above tornus by a black bar.

Hind wing with veins 3 and 4 and also 6 and 7 stalked; narrow, white, towards base semipellucant, towards apex becoming suffused with pale golden-fuscous. Cilia concolorous.

Female genitalia. Sterigma large, occupying almost entire ventrite, moderately sclerotic and finely short-haired, with lower edge thickened by folds, concealing ostium; lamella postvaginalis well defined, broadly rectangular, more strongly haired-aciculate. Ostium inside a broad, semioval cup. Ductus bursae appearing short, its lower part forming a voluminous almost pyramidal cestum, strongly sclerotic, with three leg-like processes inside corpus bursae. Signa, moderate, obtuse horns.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♀, holotype, genit. slide 10306 (right fore wing missing).



Figs 23 a–b. Female genitalia of Eucosmini, holotypes. 23a, *Epinotia (Asthenia) munda* sp. n., ♀ ; 23b, *Anoecophysis branchiodes* (Meyrick), ♀, genit. slide 4647 (Java).

A narrow-winged, slender species, judging from the genitalia, neuration and wing shape, belonging to the Palearctic subgenus *Asthenia*.

***Epinotia (Asthenia) munda* spec. nov.**

[*mundus* = elegant]

(fig. 23a, pl. 5 fig. 12)

♀ 13 mm. Head whitish-ochreous, vertex with scales, roughly projecting over face, mixed with pale chestnut brown. Antenna light fuscous, darkly stri-

ped above, scape whitish. Palpus with median segment strongly dilated, with long, not dense, projecting scales above and beneath; pale fulvous, with irregular basal oblique band and similar submedian one and with apical third of segment, purplish; terminal segment long, slender, obliquely drooping, pale ochreous. Thorax whitish-ochreous, mixed and marbled with light brownish and pale fulvous. Abdomen fuscous.

Fore wing oblong-suboval, moderately dilated, costa considerably curved throughout, more so at apex, apex acutely prominent, termen distinctly sinuate, vertical. Whitish-ochreous, irregularly dusted with light and darker chestnut-brown, with larger spots dark fuscous, anterior half of costa with short, somewhat irregularly spaced white strigulae, alternating with blackish-fuscous strigulae; a suffused black moderate spot at 1/4 and another, before middle of costa; posterior half of costa with five broader pairs of white strigulae, longer and more outwards-oblique, alternating with black oblique striae and parted by short blackish marks; the oblique striae narrowly continued along disc, so as to converge on termen below apex in a chestnut-brownish suffusion, extending along termen to tornus; these pairs of white streaks quickly becoming less oblique, ultimate pair preapical; apex filled out with black; dorsal third of wing paler, little dusted with brownish, with a semioval blackish-purple spot at 1/4 of dorsum and an outcurved smaller such spot above and beyond it, in disc (probably these two forming a single curved horn-shaped mark in intact specimens?); a larger, slightly outwards-oblique brownish-purple spot before end of dorsum, tip to vein 4, anterior end extended along dorsum to before middle and gradually turning black. Tornus with a blackish marginal line along median third. Cilia (damaged) fuscous, becoming chestnut towards tornus; with a white basal line.

Hind wing dark fuscous, dull, slightly pellucid. Cilia paler fuscous, with a creamy basal line, in apex creamy colour slightly extending over wing.

Female genitalia. Sterigma, a semispherical, densely aciculate body, lamella antevaginalis inverted-triangular, with emarginate upper edge; colliculum, a short, narrow funnel; cestum large, an irregularly ribbed tube, with two pointed processes on the lower edge, penetrating into corpus bursae. Signa, two inequal straight horns. Receptaculum seminis traceable, rather small.

Mt. Bandahara, Bivouac One, 810 m, 1 ♀, holotype, genit. slide 10385.

The broad-winged and rather pale species is distinct by the subfalcate apex and sinuate termen of the fore wing and by the genitalia. It is related to the previous species, *E. (A.) clasta* spec. nov.

**Cryptasasma (Allobrachygonia) bellicosa** spec. nov.[*bellicosus* = belligerent]

(fig. 29, pl. 6 fig. 22)

♂ 26 mm. Head blackish-grey. Antenna black, short-ciliate. Palpus long, median segment smooth, thickened and strongly recurved, terminal segment short, obtusely pointed; black, with a faint bronze sheen. Thorax deep blackish-brown, thickly scaled, metathorax and its large lateral tufts light fuscous-grey. Abdomen light grey, densely long-haired on dorsum and pleura, except terga 1 and 2 which are normally scaled. Hind tibia light grey, long-haired above.

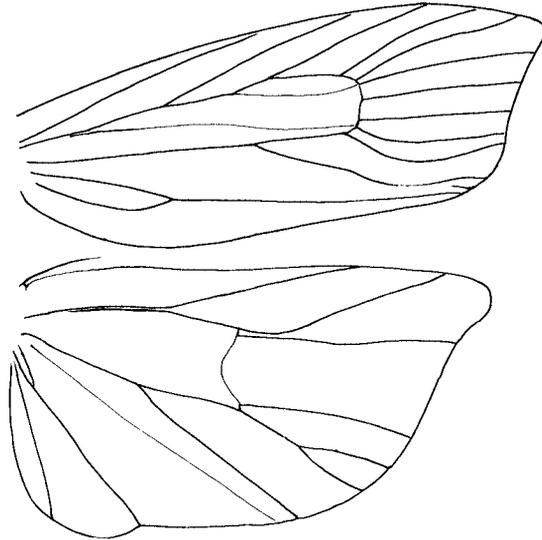


Fig.24. *Anoecophysys branchiodes* (Meyrick), ♂, head and wing venation.

Fore wing long, gradually dilated; rather grey, densely and finely marbled with fuscous, marked with darker fuscous and slightly suffused with orange-golden. Costal fold rather narrow, to middle of costa, darker grey; posterior half of costa with five rather indistinct subtriangular darker fuscous spots, alternating with small dark transverse costal lines, becoming larger posteriorly, two ultimate largest, continued below and united, so as to form, below vein 8, a single irregular vertical band, becoming furcate again below vein 5, anterior branch inwards-oblique, broader, to fold below dorsum, posterior branch narrow, slightly excurved (outwards-convex), to fold before its end, edges of band scalloped irregularly, with small projections on veins; a large purplish-black patch on fold just beyond middle, more than 1/3 width of wing at that place,

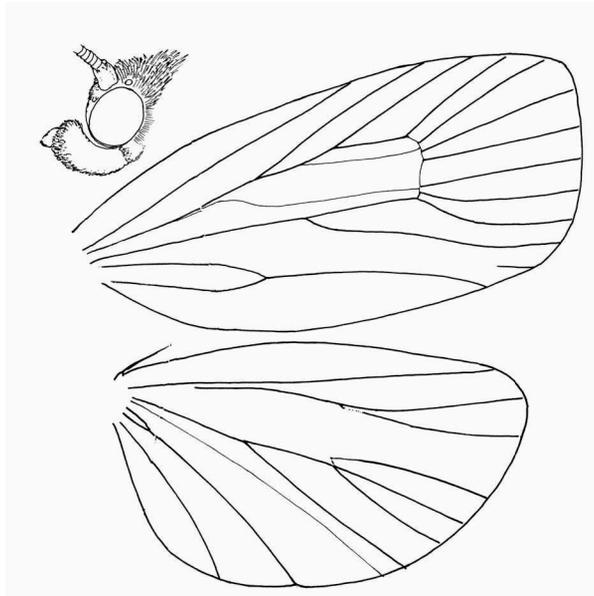


Fig. 25. *Dolicurella viridimicans* sp. n., wing venation, ♂.

connected with a smaller black spot on upper angle of cell, beyond and above round patch; an oval large spot beyond cell of orange-yellow suffusion with a golden gloss, between veins 7 and 4; similar suffusion below and along posterior 2/3 of fold, except on round central patch, beyond patch indistinctly connected with orange-yellow spot beyond cell; a slender terminal dark brown narrow streak from end of vein 7 to that of vein 3; veins posteriorly dark fuscous. Cilia ochreous-fuscous, with two dark fuscous bands and a pale ochreous basal line.

Hind wing rather dark ashy-grey, subsemipellucet, with strong prismatic reflections and dark grey veins. Cilia pale grey with a dark grey subbasal band and a pale ochreous basal line.

Male genitalia. Uncus, a down-turned pencil of long hairs. Valva thick, strongly concave, sacculus with a single spike at prominent base, beyond this deeply concave and with a dense fringe of short, flat scales. Aedeagus rather long, sigar-shaped. Menses of the 8th segment very large, membranous.

Northern Sumatra, Acheen, Bivouac III, Mt. Bandakara, 10–16.vii.1972 (J. Krikken), no. 25, 1 ♂, holotype, genit. slide 10113. A large species, perhaps nearest to *C. (A.) hesyca* Diakonoff, from the Philippine Islands, but larger, with distinct genitalia.

## OLETHREUTINI

**Phaecasiophora (Phaecasiophora) caelatrix** spec. nov.[*caelatrix* = carver]

(fig. 31, pl. 7 fig. 26)

♀ 18 mm. Head and antenna vinaceous-brown, orbits and face paler vinaceous, scape suffused with ochreous in front. Palpus moderately sinuate, rising close to face, median segment with closely appressed short scales, hardly roughish below; light pinkish-vinaceous; terminal segment short, porrect, tip purplish. Thorax dark purple, mixed with lighter greyish, metathorax light vinaceous with a pair of suffused black submedian spots. Abdomen black. Posterior tibia smooth, short-scaled, fuscous-grey, whitish below.

Fore wing oval, rather broad, costa moderately curved at base, distinctly emarginate in middle, slightly rounded posteriorly, apex rounded, thorax rounded. Leaden-grey with a slight violet tinge, faintly glossy. Basal patch not indicated, partly marbled with deep purple, two irregular spots and a transverse strigula, deep purple, on costa beyond base; costal emargination edged below with an outwards-oblique, suboval orangeish-vinaceous patch, becoming paler and golden along lower, convex, edge and including in centre a blackish-purple semicircular costal mark; posterior half of costa from that mark, of ground colour, irregularly and densely marbled with dark purple, with five blackish suboval marginal dots, three ultimate of these alternating with two white, black-parted small marks; apex brighter leaden-grey, cut by two irregular, oblique purple lines from costa; dorsum broadly suffused with black-purple from base to lower third of termen and tornus; a suffused dark purple crescentic horizontal mark in centre of disc, followed by a transverse, broader and subtriangular one beyond cell, enclosing a leaden-grey small mark; area beyond these marks forming a leaden-grey large transverse patch, slightly outwards-oblique, from 1/4 to 3/4 of wing breadth, parted to below its top by a chestnut and blackish streak, dilated below; a suboval light yellow and leaden spot on middle of termen, edged above by black suffusion. Cilia light grey, continuing dark markings and terminal pale spot.

Hind wing purplish, becoming paler basad, dorsal third as far as vein 2 tinged blackish.

Male genitalia. Tegumen with upper half occupied by large socii, contiguous at top, long-haired. Gnathos broad, membranous, very thin. Valva long, rather slender, moderately narrowed before middle, sacculus-bristles at base thin and sparse, beyond base forming an oval submarginal patch, rather connected with dense continuous cucullus bristles; cucullus slightly over 1/2,

little curved, elongate, top rounded, outer edge with a crown of stiff short projecting bristles. Aedeagus small, globular.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♂, holotype, genit. slide 10308.

An intricately marked species, probably nearest to *P. (P.) caryosema* (Meyrick), from Taiwan and Assam, but distinct by wing shape and genitalia.

***Phaecasiophora (Phaecasiophora) decolor* spec. nov.**

[*decolor* = faded]

(fig. 32, pl. 7 fig. 27)

♂ 22 mm. Head and palpus whitish. Antenna pale ochreous, short-ciliate, cilia white. Thorax (denuded) whitish. Abdomen whitish-ochreous, dorsum infuscated towards apex. Posterior tibia with a pencil of long and fine, silky white hair-scales from base above, reaching beyond middle of tarsus, top of pencil rounded.

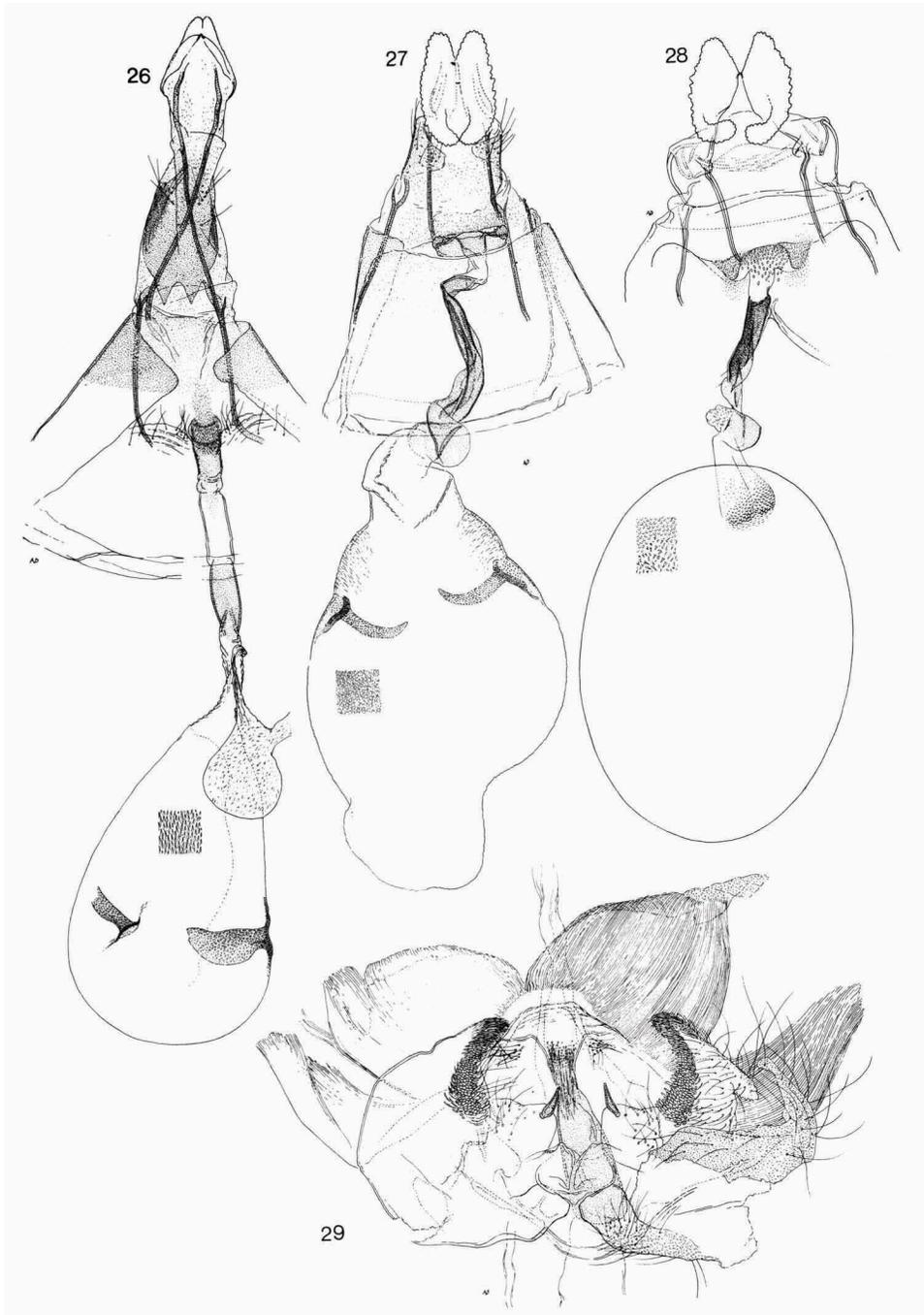
Fore wing suboval, broad, costa oblique along basal third; thence gently and gradually curved, apex rectangular, termen straight above, rounded below, vertical. Creamy-white. Anterior third of dorsum with two irregular black-fuscous transverse marks, alternating with two narrow strigulae, first dark mark reaching fold and suffused below; posterior 2/3 of costa with a suffused fuscous-grey streak, lower edge well-defined but rather irregular, costal edge with numerous blackish small transverse marks, end of streak narrowed, to apex of wing; a strongly suffused light tawny oblong spot, filling out posterior third of cell, not reaching upper and lower edges, extending beyond discoidal vein, minute dark fuscous specks sparsely scattered over wing, dorsum with some dark dots along margin posteriorly. Cilia (imperfect) whitish, regularly barred with dark fuscous.

Hind wing purplish-fuscous, rather light, sub-semipellucid. Cilia light fuscous with a pale base.

Male genitalia. Closely resembling those of *P. (P.) attica* (Meyrick), but differing in minor details: valva stronger constricted, posteriorly not abruptly dilated and angularly prominent (as in *attica*), but longer, top also longer, more curved. Basal part of valva with minor differences in position and size of bristles. Aedeagus longer.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9096.

Judging from the genitalia, closely allied to *P. (P.) attica* Meyrick, but with a distinct shape of the fore wing and completely different colouring and markings. The unique specimen may be somewhat rubbed, though, but only very slightly.



Figs. 26–29. Genitalia of Eucosmini. 26, *Dolichurella viridimicans* sp. n., ♀, allotype; 27, *Epinotia* (*Steganoptycha*) *araea* sp. n., ♀, holotype; 28, *Hermenias pachnitis* Meyrick, ♀; 29, *Cryptaspasma* (*Allobrachygonia*) *bellicosa* sp. n., ♂, holotype.

***Sycacantha rotundata* spec. nov.**[*rotundatus* = rounded]

(pl. 7 fig. 28, pl. 19 fig. 94)

♂ 22 mm. Head pale ochreous, mixed with light brown, face white. Antenna light fuscous, darker ringed. Palpus white, median segment brown except lower edge and apex, terminal segment with brown tip. Thorax pale greyish-ochreous, mixed and spotted with darker brown-fuscous, apical tuft paler ochreous. Posterior tibia above with a vertical comb of snow-white, silky hair-scales. Abdomen dark fuscous, anal tuft pale ochreous, venter whitish.

Fore wing very broad, abruptly dilated, broadest at 3/4, costa faintly curved along basal half, arched along posterior half, apex subrectangular, hardly prominent, termen slightly sinuate above, strongly rounded-prominent below, slightly outwards-oblique. Pale ochreous, touched with pinkish, markings formed of fine dark brown reticulation, partly filled out with light fuscous, turning brown towards costa. Costa along posterior half marbled with pinkish tawny and marbled throughout with some 12 black spots, three basal small, next four larger, sub-semioval, alternating with black points and becoming larger posteriorly; eighth spot small and more distant from others; following three spots largest, equal, obliquely wedge-shaped, ultimate spot transverse, fasciate, apical; all spots alternating with minute black lines. Basal patch ill-defined, strongly marbled and reticulate, from well below costa, to about 1/3, edge undulate, strongly outwards-oblique; central fascia irregular, almost interrupted at 1/4, with edges deeply undulate, anterior deeply excised in cell and below fold, posterior, at 1/4 and below lower angle of cell; preapical fascia regularly rounded, formed of some six suboval, interconnected spots, posterior between veins, dark fuscous, each centred with lighter tawny; followed along termen by a marginal regularly interrupted dark brown line, being the continuation of apical spot; space between fasciae, from below 2/3 of costa to before tornus, strongly extended below, of conspicuously paler ground colour. Cilia sordid tawny, gradually becoming paler downward, along more than upper half with broad dark grey bars, throughout with a narrow whitish basal line.

Hind wing light tawny-grey, with a silky gloss, dorsum paler. Cilia concolorous, with a whitish basal line.

Male genitalia. Nearest to those of *S. potamographa* Diakonoff, but differing as follows: external socii much longer, almost as long as internal socii, and almost as slender. Valva with the base of costa more strongly and more abruptly rounded and prominent posteriorly, with pulvinus more strongly isolated and projecting; apical part of valva narrower. Aedeagus and the sheaf of cornuti shorter.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, holotype, genit. slide 10365.

A characteristic species by its unusually broad, dilated and rounded fore wings. The genitalia are nearest to *S. potamographa* Diakonoff, from Borneo and the Philippine Islands, and their differences rather small, but these are strongly supported by the entirely different facies and markings of that species. Superficially, except for the broad and rounded fore wings, the present species resembles those of the *inodes* Meyrick group most, but those species have much thicker valvae.

***Sycacantha inodes inodes* (Meyrick)**

*Argyroploce inodes* Meyrick, 1911, Proc. Linn. Soc. N.S. Wales, 36:269. Clarke, 1955, Meyrick's Types, 1:171.

*Argyroploce albitibiana* (part.) Meyrick, 1928, Exotic Microlep., 3:447 (nec Snellen, 1901).

*Olethreutes albitibiana* Bradley, 1961, Bull. Brit. Mus., Ent. 10:125 (nec Snellen, 1901).

*Argyroploce conchifera* Meyrick, 1931, Exotic Microlep., 4:130. Diakonoff, 1949, Bijdr. Dierk., 28:136 (syn. of *albitibiana* Snellen); 1966, Zool. Verh., 85:10 (syn. of *inodes* Meyr.).

*Sycacantha inodes*; Diakonoff, 1966, Zool. Verh. 85:19, fig. 22; 1968, U.S. Nat. Mus. Bull., 257:59, fig. 70; 1971, Veröff. Zool. Staatssamml. München, 15:195; 1973, Zool. Mon., 1:147, figs. 176–177, 224–225, 233.

*Sycacantha inodes inodes*; Diakonoff, 1971, Veröff. Staatssamml. München, 15:195 (S. Thailand).

Distribution. Java, Bali, Tambora Is., Borneo: Bawean Is., New Guinea: Woodlark Is., St. Matthias Is., East Papuan Is., d'Entrecasteaux Is., Goedenough Is.; Bismark Is.: New Hannover, New Ireland. Solomon Is.: Guadalcanal Is..

Mt. Bandahara, Bivouac One, 810 m, 2 ♂.

***Sycacantha crocamicta* Diakonoff**

(pl. 7 fig. 29)

*Sycacantha crocamicta* Diakonoff, 1973, Zool. Mon., 1:163, fig. 250.

Distribution. Bali; Borneo.

Mt. Bandahara, Bivouac One, 810 m, 2 ♂, genit. slide 10356.

***Statherotis antisema* Diakonoff**

(fig. 33, pl. 7 fig. 30)

*Statherotis antisema* Diakonoff, 1973, Zool. Mon., 1:259, figs. 360, 362–363, 387.

Distribution. East Borneo: Tabang, Solomon Is.

Mt. Bandahara, Bivouac One, 810 m, 2 ♂, genit slides 9129, 10366.

**Statherotis amoebaea leucotorna** Diakonoff

*Argyroiploce amoebaea* Meyrick, 1911, Proc. Linn. Soc. N.S. Wales, 36:281 (nec Lower, 1896).  
*Statherotis amoebaea leucotorna* Diakonoff, Zool. Mon., 1:241, fig. 371.

Distribution. Solomon Is., New Guinea, Queensland, Moluccan Is.: Buru, Amboyna.

Mt. Bandahara, Bivouac One, 810 m, 2 ♂, genit. slides 10367, 10368.

**Asaphistis phanerops** Diakonoff

*Asaphistis phanerops* Diakonoff, 1973, Zool. Mon., 1:265, figs. 413–414 (♂ ♀, Java).

Distribution. West Java, Tjibodas, 1400 m; Buitenzorg (= Bogor), 250 m.

Mt. Bandahara, Bivouac Three, 1810 m, 2 ♂, genit. slide 10358.

**Arcesis** gen. nov.

[ἀρκεσις= aid]

Head rather rough, especially on vertex. Ocellus posterior. Haustellum developed. Antenna in male minutely ciliate below. Labial palpus rather long and slender, exceeding top of eye, strongly rising, median segment in middle appressed to face; smooth except a short thick fringe below, apex of median segment also smooth, with a short projecting tooth of scales above, apical segment very short, oblique and rounded, slightly longer and less obtuse in female. Thorax with a very small, apical tuft, tegulae with long loose scales at apex. Abdomen normal. Posterior tibia strongly flattened laterally with a compressed brush of long scales above, a denser brush of shorter glossy scales below, a longitudinal median split on inner side concealing a dark grey pencil from beyond base.

Fore wing oblong-truncate, rather long, gradually dilated, costa hardly curved at base, straight in middle, longer curved before apex, apex rounded rectangular, termen straight above, rounded below, little oblique. Vein 2 from beyond 2/3, 3 from angle, 3–5 equidistant, 7 separate to termen, 9 from 3/4, 10 from middle distance from 8 to 11, 11 from about middle of cell, chorda well developed, from halfway between 11 and 10 to base of 7, median branch in cell well developed, from towards base to base of 4, sinuate.

Hind wing with a cubital pecten, vein 2 from beyond middle, 3 and 4 connate from angle, 5 closely approximated at base, 6 and 7 closely approximated towards base, a finger-like small, curved appendix (a smooth scale tuft) at extreme base of dorsal edge.

Male genitalia. Tegumen simple, gradually narrowed, top with continuous

submarginal ridge of long, rising bristles. Gnathos halves narrowly triangular. Valva robust but rather narrow, twice gently sinuate, cucullus oblong erect with rounded top, below angulate, with a thorn. Sacculus at end with a dense brush of bristles, opposite this a sinuate oblique ridge. Aedeagus small, caliciform, in middle constricted, on a moderate caulis, top conical, subsclerotic, cornuti indistinct.

Female genitalia. Sterigma simple, subsclerotic, in middle edge emarginate, housing a cylindrical, aciculate ostium, in this a caliciform colliculum, ending in a slender longitudinally ribbled long tube. Bursa larger, elongate. Signa two, huge, concave punctulate sclerites, with a pair of diverging oblong lobes.

Type-species: *Arcesis anax* spec. nov.

An interesting form, superficially resembling a very large *Eucosma*, but actually belonging to the Olethreutini, with the male genitalia of the type of the subtribe Sorolophae, while the female signa and neuration assign it to the subtribe Neopotamiae, so that the present genus represents an intermediate between these two groups of genera or subtribes, indicating their mutual affinity.

To the present genus belongs also "*Platypeplus*" *threnodes* Meyrick, 1905, from Ceylon and other parts of southern Asia: also a conspicuously large insect of which Meyrick already stated the olethreutine character. Recently I have transferred the species to *Eucosma*, but I am now satisfied that Meyrick's opinion is correct.

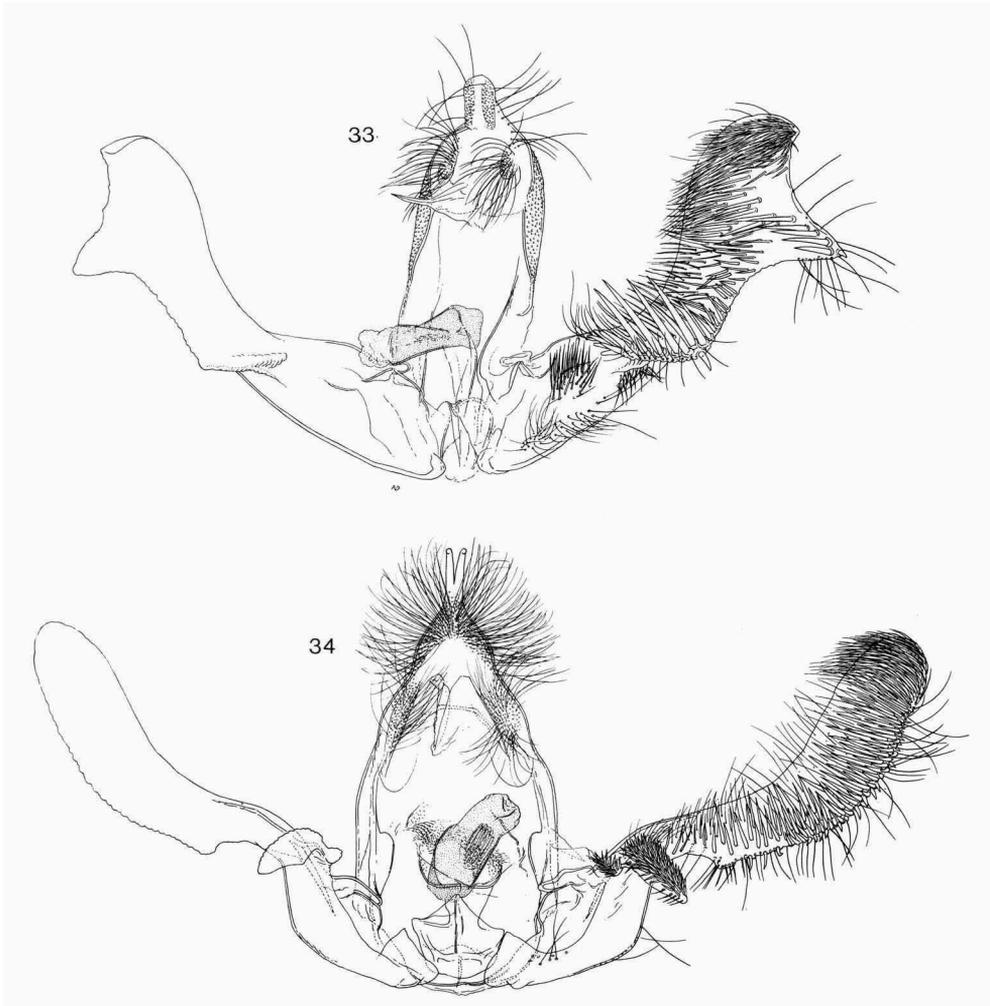
***Arcesis anax* spec. nov.**

[ἀναξ = prince]

(figs. 18, 35, 37, pl. 7 figs. 31, 32)

♂ 30 mm. Head blackish-grey, vertex light grey. Antenna dark fuscous, scape dilated with scales. Palpus blackish-brown. Thorax dark fuscous. Abdomen glossy pale golden-ochreous, anal tuft whitish.

Fore wing oblong, rather narrow, moderately dilated, costa slightly curved at ends, more so along posterior fourth, almost straight in middle, apex moderately rounded, termen slightly rounded, almost straight in middle. Rather dark grey-fuscous, moderately marbled with lighter and darker grey and fuscous. Costa with numerous whitish short and ill-defined transverse strigulae from about middle, first single, posteriorly strigulae becoming double, pairs of these moderately approximated, to before apex; lower half of wing paler, especially along dorsum, dorsal edge with a series of suffused dark grey round spots, larger and smaller alternating; a somewhat irregular whitish round spot



Figs. 33–34. Male genitalia of Olethreutini. 33, *Statherotis antisema* Diakonoff; 34, *Neopotamia cathemacta* sp. n., holotype.

on end of cell, from base of vein 7 to that of vein 3, lower edge anteriorly narrowly dark-notched, posterior edge along upper half with a black-brown narrow submarginal line, preceded by an oblique triangle of very pale ochreous colour, hardly perceptible, with top upon notch of lower edge; beyond this spot, another, larger spot on termen, slightly longitudinally elongate, from vein 7 beyond middle, to about vein 4 before its end, anterior half of spot semicircular, lower edge oblique and slightly rounded; this spot with upper half blackish-brown, lower rather bright orangeish-tawny, these colours well-

defined, encircled, except on termen, with whitish; some irregular suffusion glossy pale leaden, horizontal, above second spot and before first; apex tinged tawny. Cilia concolorous.

Hind wing rather light tawny-fuscous, becoming more yellowish tawny towards apex, more greyish, towards dorsum; with a slight silky gloss. Cilia (imperfect) light grey with a pale basal line.

Male and female genitalia as described with the genus, above.

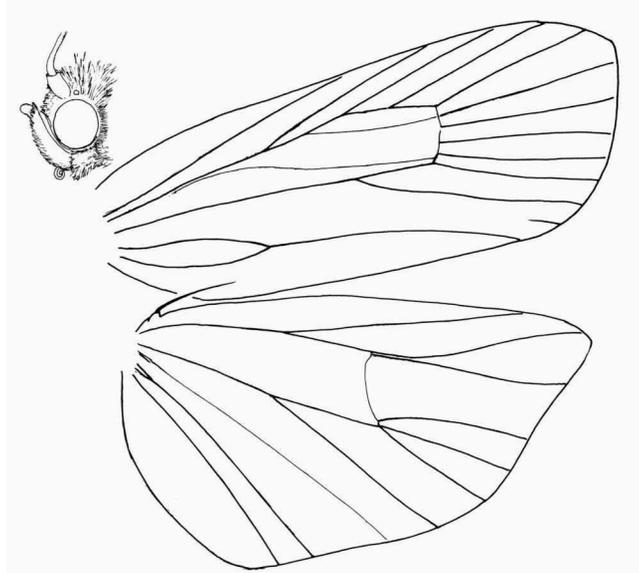


Fig. 35. *Arcesis anax* sp. n., head and wing venation, ♂.

♀ 33 mm. Less rubbed than the males. Fore wing darker purple, being a dense marbling upon whitish, almost concealed ground colour; on costa ground colour to end of vein 9, from this point dark colour running obliquely to middle of dorsum, containing a paler tawny-vinaceous-fuscous streak along fold from base to before middle, thence form rather beyond middle, just below fold, to tornus; posterior edge of dark ground colour so forming a narrower band crossing middle of fold to dorsum, thence along dorsum to base of wing; basal half of fold with a deep purple, interrupted and slightly dentate line; dark marginal dots only along posterior half of dorsum; a slightly oblique purple blotch from between and below the two round discal spots, to fold, followed by coarse purple reticulation; lower half of termen with a whitish triangular patch; lower half of terminal round spot darker, almost chestnut. Otherwise as male.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, holotype, genit. slide 10349; 1 ♂, paratype. Bivouac Four, 2430 m, 1 ♀, allotype, genit. slide 10350.

Closely allied with "*Platypeplus*" *threnodes* Meyrick, differing by the shape of the valva and that of the signa.

***Neopotamia cathemacta* spec. nov.**

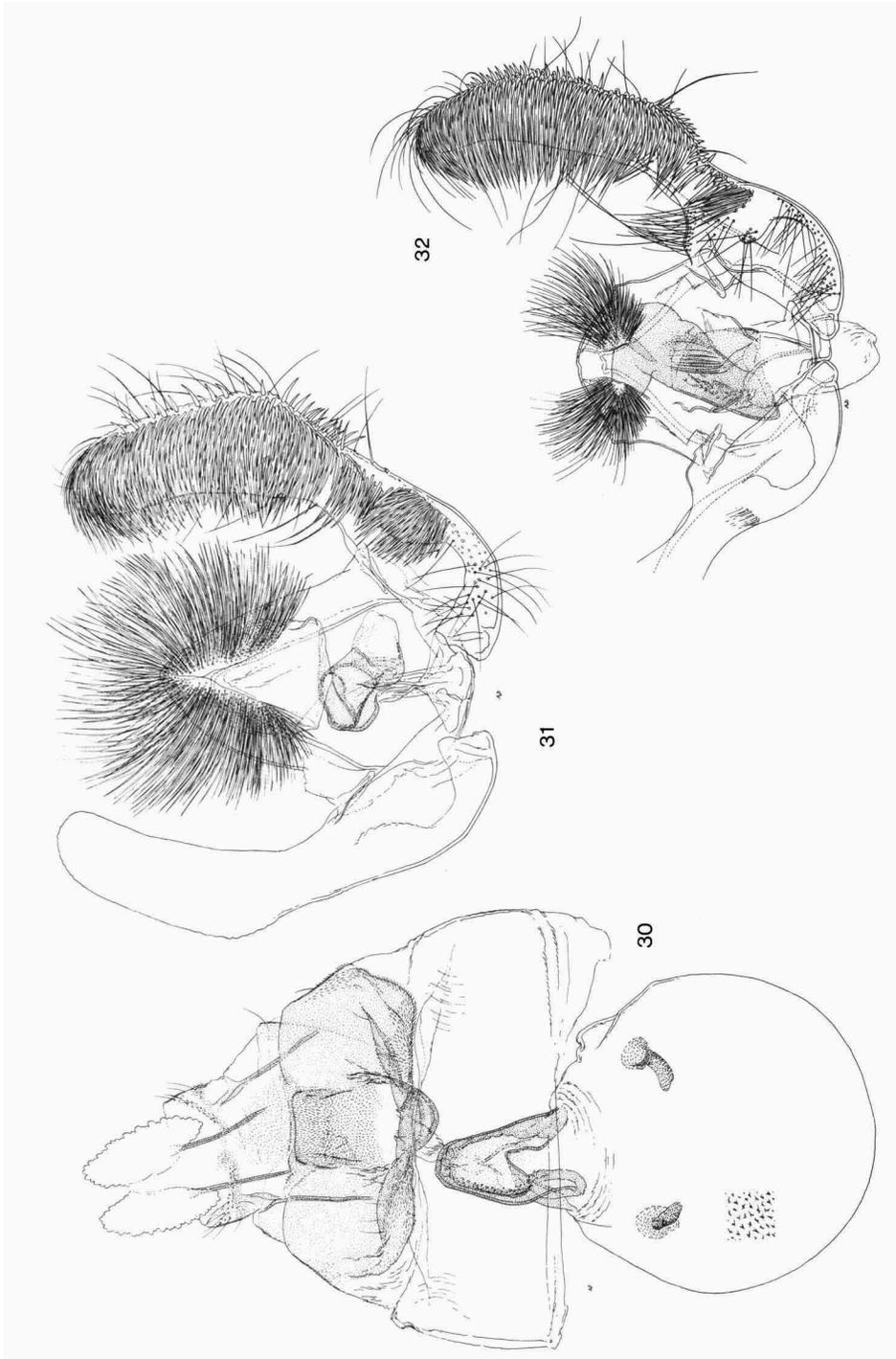
[καθεμακτός = with a necklace]

ig. 34, pl. 8 fig. 33)

♂ 18 mm. Head pale fulvous, palpus whitish-orangeish, upper half of base and apical half of median segment slightly brighter fulvous. Thorax light fulvous mixed with ferruginous, tegulae deeper ferruginous-red. Abdomen ashy grey. Posterior tibia strongly dilated with dense, smoothly appressed greyish-creamy hair-scales, with smooth upper and lower edges, tibia inside with smoothly appressed thick grey-white scale-tufts, not reaching upper and lower edge, posterior tarsus with basal segments elongate, above with a triangular flat tuft of grey hair-scales.

Fore wing oblong, dilated, rather broad, anterior half of wing as far as middle, but not reaching fold, blackish-purple, finely marbled with grey, along costa with four pairs of short, indistinct pairs of grey lines, a fifth pair preceded by a darker purple-black line, obliquely, then horizontally extending to well before termen below apex; below this similar, shorter and thinner black streaks along veins 5, 6 and 7; an oblong-oval suffused spot slightly beyond centre of disc, traversing discoidal vein; remainder of costa as far as vein 5 deep reddish-ferruginous, on costa with four more distinct pairs of grey lines, first of these extended as a grey indistinct streak towards dorsum below apex, a small slender white vertical line across costa before apex; termen to about vein 4 reddish-ferruginous, including a light ochreous elongate and wedge-shaped spot on dorsum below apex, mixed with fuscous and below apex, with white; dorsum and tornus, as far as vein 4 light buff, partly spotted with ferruginous-red, dorsum slightly infuscated, darker so towards base; termen with a narrow blackish line interrupted by whitish opposite pale bars of cilia. Cilia (imperfect), blackish-fuscous, a long white bar below apex to about vein 6, a smaller bar on end of vein 5, cilia around tornus light fuscous.

Hind wing in centre and at base purplish-grey, along apical and terminal third evenly suffused with black, tornus and dorsum light ochreous, dorsum forming a sac in which perhaps can be folded a large pencil of light ochreous and white hairs. Cilia concolorous, around apex and along termen with a narrow hyaline basal line.



Figs. 30–32. Genitalia of Eucosmini and Olethreutini, holotypes. 30, *Epinotia (Asthenia) clasta* sp. n., ♀; 31, *Phaecasiophora (P.) caelatrix* sp. n., ♂; 32. *P. (P.) decolor* sp. n., ♂.

Male genitalia. Tegumen gradually narrowed, uncus, a narrow slender fork; tuba analis robust, not sclerotic. Valva very slender, long and sinuate, base dilated, Spc, a double, downcurved process, spiny on upper side. Aedeagus short, tubular; caulis at top dilated and caliciform.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, genit. slide 10312.

A characteristic member of the genus, distinct by extended reddish colour and the male genitalia. Nearest to *N. orophias* (Meyrick), from Punjab, Assam and Nepal.

**Apsidophora purpurorbis** Diakonoff  
(pl. 8 fig. 34)

*Apsidophora purpurorbis* Diakonoff, 1973, Zool. Mon. 1:329, figs. 504, 641, 649A (♂ ♀).

Distribution. W Celebes (Lindoe Paloe), NE New Guinea (Geelvink Bay), SW New Guinea (Kapaur), Malay Peninsula. (Singapore Id.).

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, genit. slide 10348.

**Bactra (Bactra) furfurana** (Haworth)

*Tortrix furfurana* Haworth, 1811, Lep. Brit.:466.

*Bactra furfurana*; Wilkinson, 1859, Brit. Tortr.:147. Zeller, 1875, Verh. zool.-bot. Ges. Wien, 25:41. Fernald, 1882, Trans. Amer. Ent. Soc., 10:29. Etc., etc..

*Grapholitha (Aphelia) furfurana*; Heinemann, 1863, Schm. Deutschl., Kleinschm.:135.

? *-acutana* Eversmann, 1841, Faun. Lep. Volgo-Ural.:539 (non binom.).

? *Phoxopteris lamana* Zeller, 1846, Isis, 30:257.

? *Tortrix (Aphelia) scirpana* Herrich-Schäffer, 1849, Syst. Bearb. Schm. Eur., 4:243.

? *Tortrix (Aphelia) pauperana* Herrich-Schäffer, 1849 (nec Haworth, 1811), *ibid.*, suppl.:302.

? *Sciaphila cannisana* Millière, 1874, Rev. & Magaz. Zool., [3]:2:247; Ann. Soc. ent. Cannes, 1875, pl. 1 fig. 6.

*Bactra lanceolana* var. *lacteana* Caradja, 1916, Iris, 1916:62.

*Bactra gozmanyana* Toll, 1958, Ann. Zool. Pol., 17:65, figs. 1, 2; pl. 2 figs. 1, 5; pl. 3 fig. 8.

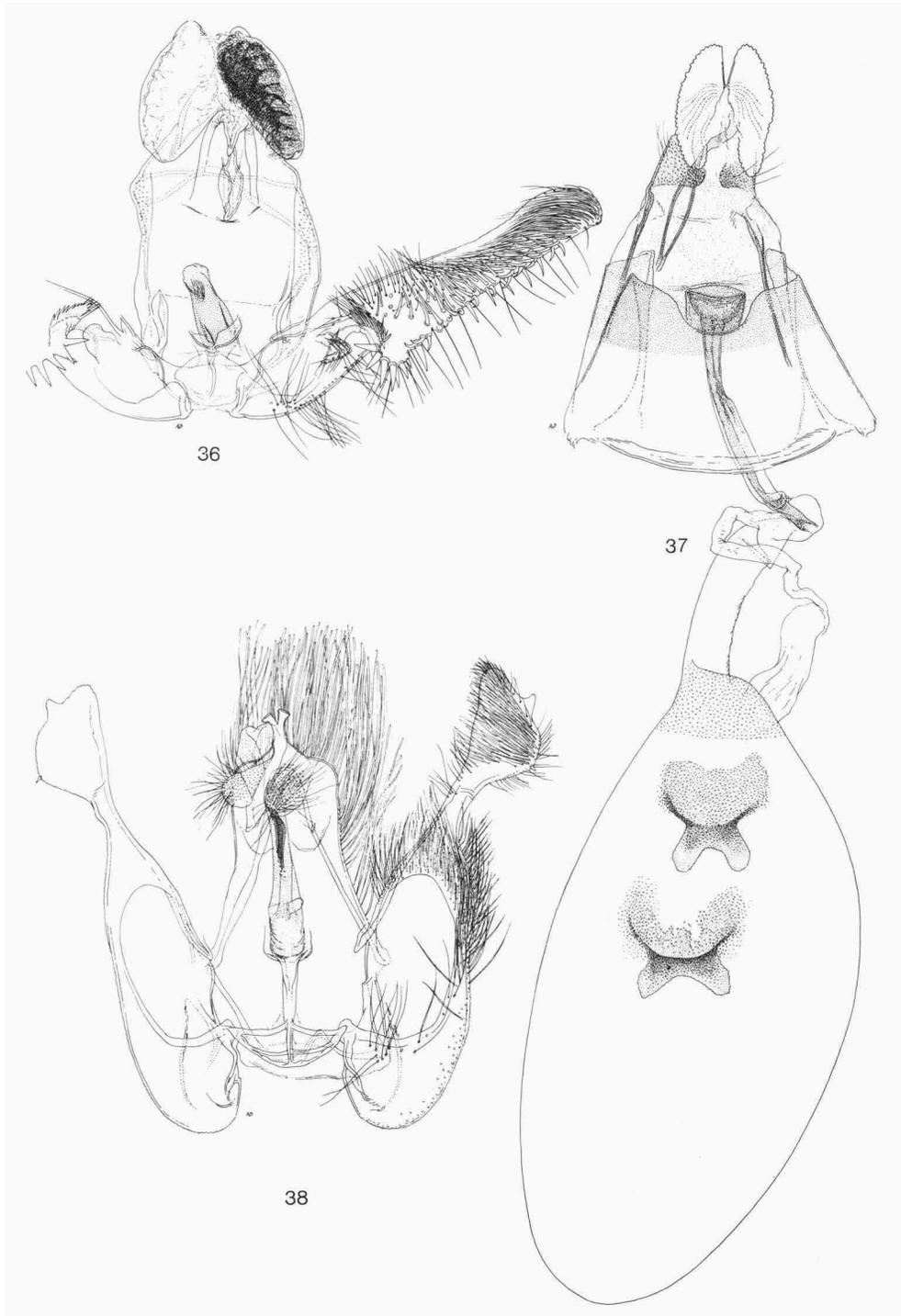
Distribution. The genitalia of the material which provided the following data, have been dissected.

Entire Palaearctic Region; Israel, Jordan; Caucasus; Tangier. Central Asia: Marghelan. Kazakhstan. China: Tianshan. Siberia: Ussuri Region.

United States of America: Maryland, District of Columbia, Virginia, N Carolina, Texas, California.

Southern Asia: S China, Shanghai. Assam: Shillong. Central West Sumatra: Fort de Kock.

Soldok, 2 ♂, genit. slides 10331, 10332, "Cult. area, native gardens, rice fields, etc., at light".



Figs. 36–38. Genitalia of Olethreutini. 36, *Socioplana idicopoda* sp. n., ♂, holotype; 37, *Arcesis anax* sp. n., ♀, allotype; 38, *Rhopaltriplasia macrorhis* sp. n., ♂, holotype.

The two species, viz. *furfurana* Haworth and *lancealana* Hübner, of the subgenus *Bactra* Stephens, are widely distributed but most common in the Palearctic Region. These two species cannot be discriminated with certainty, without dissection of the genitalia. Therefore, when considering the generally accepted synonymic list of older names, as given above, it seems desirable to put question marks before those old names that are not genitally checked. The intention of the author is to try and search for this purpose the type-specimens, pertaining to the specific names in question. It is disappointing, however, that the chance of locating those old specimens is problematic.

**Socioplana** gen. nov.

[*socius* = genital appendix, *planus* = flat]

Head with loosely appressed scales on face, roughish and rather long on vertex. Haustellum developed. Ocellus large, posterior. Antenna slightly thickened in male, short-pubescent. Labial palpus curved and ascending, median segment moderately dilated with closely appressed scales, roughish only along lower edge and more so, at apex above, terminal segment short, obtuse, drooping. Thorax apparently without a crest (partly denuded). Posterior tibia strongly thickened by very dense, dark long scales, rather smoothly appressed, moderately compressed laterally, scales projecting beyond end of tibia in a flat rounded fan (further as described with the species below).

Fore wing oblong-suboval-truncate, rather broad, costa gently curved, without a fold. Vein 1b furcate along more than basal 1/3, 2 from well beyond middle of cell, 3 sinuate, from angle, approximated to 4 posteriorly, 3–5 rather remote and equidistant at base, 7 separate to termen, 9 closer to 8, 10 halfway between 8 and 11, 11 from middle of cell, chorda to below base of 7, median branch sinuate, to below base of 5.

Hind wing over 1, vein 2 from 3/5, 3 and 4 connate from angle, 5 approximated at base, 6 and 7 closely approximated towards base.

Male genitalia, as described with the species below, characteristic by very large, naked and flat, fleshy, united socii, with internal, dark trachea-like structures.

Type-species: *Socioplana idicopoda* spec. nov.

A puzzling form, somewhat resembling *Lobesia* Stainton, especially subgenus *Lomaschizodes* Diakonoff (*paradisea* Diakonoff, New Guinea), but with quite different neuration of the fore wing and with the uniquely flattened socii.

***Socioplana idicopoda* spec. nov.**

[ιδιόκοσ = peculiar, πόδες = leg]

(figs. 36, 39, pl. 8 fig. 35)

♂ 15.5 mm. Head pale ochreous, collar orange, Antenna ochreous, scape infuscated, flagellum ringed with fuscous. Thorax light fuscous, tegulae suffused with orange. Abdomen slaty-black, venter paler, anal tuft tinged ochreous above, long hair tufts jet-black. Posterior tibia strongly thickened by very dense black scales, smoothly appressed outwardly, roughish inwardly, less so along lower edge, dorsally with a white longitudinal line, being upper edge of a longitudinal split or cavity, clothed throughout with white scales, knee with additional dense spreading pale ochreous hair-pencil.

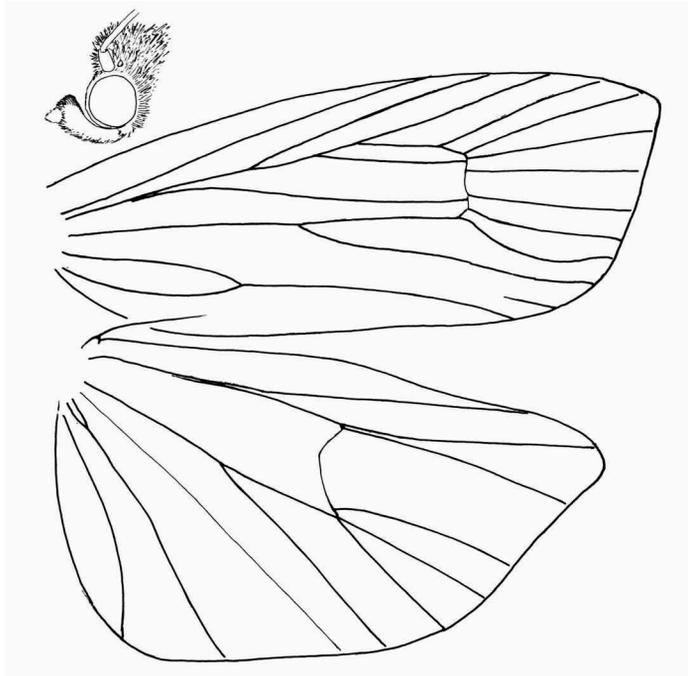


Fig. 39. *Socioplana idicopoda* sp. n., head and wing venation, ♂.

Fore wing broad, rather short, moderately dilated, costa gently curved, apex obtuse, termen moderately rounded. Base suffused with chestnut-orange; costa with a deep-ferruginous-brown streak, anterior half with minute indistinct transverse marks, posterior half with four oblique short pale blue metallic lines, on costa mixed with white, ends slightly turning outwards; a subapical vertical white costal mark parted with jet-black; costa below dark,

marginal streak suffused with deep ferruginous-crimson, this suffusion forming a large triangle, with broad top exceeding fold beyond middle, there meeting a compressed, similarly suffused fuscous triangle extending over dorsum; terminal third of wing filled out with reddish-orange, turning paler posteriorly; all colours strongly suffused; tornus with an erect irregular leaden-grey metallic mark, preceded in disc by a second such, more irregular mark. Cilia (tips rubbed away) fulvous, turning pale orange towards apex, blackish-fuscous around tornus.

Hind wing deep reddish-brown, darker on apical half, dark fuscous in tornus, pellucid at base, veins darker scaled. Cilia dark fuscous (tips probably paler) with a pale basal line.

Male genitalia. Tegumen large but little sclerotized. Socii strongly extended, flattened, interconnected and looking like anal lobes, with dark trachea-like veins. Gnathos complicated, but little sclerotic. Valva rather slender, straight, with a deep primary excision, flanked by a triangular bristly lobe, a pecten of very dense bristles opposite, and a marginal pecten of strong spikes around the process of the sacculus. Aedeagus small, straight.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 9103.

The single specimen is slightly rubbed; its coloration reminds one of the species of *Costosa* Diakonoff. The posterior tibiae are very peculiarly scaled and coloured.

***Rhopaltriplasia macrorhis* spec. nov.**

[μακρός = long, ῥίς = nose]

(fig. 38, pl. 8 fig. 36)

♂ 18 mm. Head dark fuscous-brown. Antenna fuscous-grey, scape with a whitish medio-lateral spot and underside. Palpus long, basal and median segments sinuate, gradually dilated with closely appressed scales, broadest and rather triangular beyond middle, narrower again towards apex: dark brown, extreme base below and median segment above base, with a whitish band, a pale yellowish oblique lateral streak at 3/4, not reaching upper edge; terminal segment, long, slender, subacute, slightly drooping. Thorax whitish, anteriorly dark fuscous. Posterior tibia normal, rather smooth, dark fuscous. Abdomen silvery-grey, second tergite with two white lateral stripes, tergite three white, with dark grey median longitudinal stripe.

Fore wing oblong, rather narrow, dilated, costa gradually curved throughout, apex subacute, slightly produced, termen sinuate, rather oblique. Whitish, partly with a silken gloss, marbled with warm deep brown and lighter

chestnut brown, finely strigulated transversely with black, costal edge narrowly suffused with blackish-brown. Costa with about eight pairs of short whitish transverse marks, below more or less continued by oblique pale grey lines; second and third pairs larger and thicker, reaching to upper edge of cell; fourth and fifth pairs small, emitting two almost horizontal streaks, converging at a point below  $3/4$  of costa with a sharp posterad directed point, thence abruptly recurving as an almost straight double pale band, to a whitish spot below lower angle of cell and emitting a clavate anterad process above middle of disc, and a slender posterad one along vein 2, not reaching termen; costal sixth pair of white marks continued below by a long whitish, very oblique line, edged anteriorly by a brown line, both to a point below the larger eighth subapical pair of white marks; at this point rectangularly bent and forming posterior edge of two broad brown transverse blotches, more or less parallel to termen, upper oblong-rectangular, to above vein 2, lower triangular, from below that vein to dorsum before tornus; apex dark brown, centred with greyish, a dark brown terminal line, preceded by a pure white subterminal line, glossy and interrupted, from below apex to above tornus, upon a glossy pale greyish ground; dorsum deep brown, with an inwards-oblique, slightly zigzagged and brown-parted pale tooth, above indistinctly merging into discal markings (there rather rubbed). Cilia grey, mixed with dark fuscous, with a white basal line.

Hind wing moderately glossy bronze-fuscous. Cilia concolorous, with a darker subbasal band and pale basal line, cilia around tornus becoming long, apical half light ochreous, cilia along dorsum light ochreous throughout.

Male genitalia. Tegumen high and rather narrow, shoulders angular, slightly rounded. Uncus small, rising, furcate, arms clavate. Socius rather large, ovate, flat and hairy. Gnathos, a pair of flat pending sclerites. Valva on the outside beset with very long and dense, slender black hair-scales, in length exceeding uncus (fallen off in mount); rather narrow, base rounded, discal opening very large; valva strongly constricted at  $2/3$ , top part triangular, with rounded ventral and apical prominences and a small angular process in between. Aedeagus elongate, with a dilated base, upon a long straight caulis. Cornuti, a sheaf of long spines.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 10355.

A very welcome third member of this peculiar genus, with a wing neuration congruent with that of the type-species, and with the male genitalia very distinct, but showing similar peculiarities. Only the palpi are much longer than in the two other species.

**Dudua perusta** spec. nov.  
 [*perustus* = blackened by fire]  
 (figs. 42,43, pl. 8 fig. 37)

♀ 16 mm. Head black, face with a jet-black tuft, back of vertex dark grey. Antenna light ochreous. Palpus blackish-brown, terminal segment paler brownish. Thorax purple. Abdomen purple.

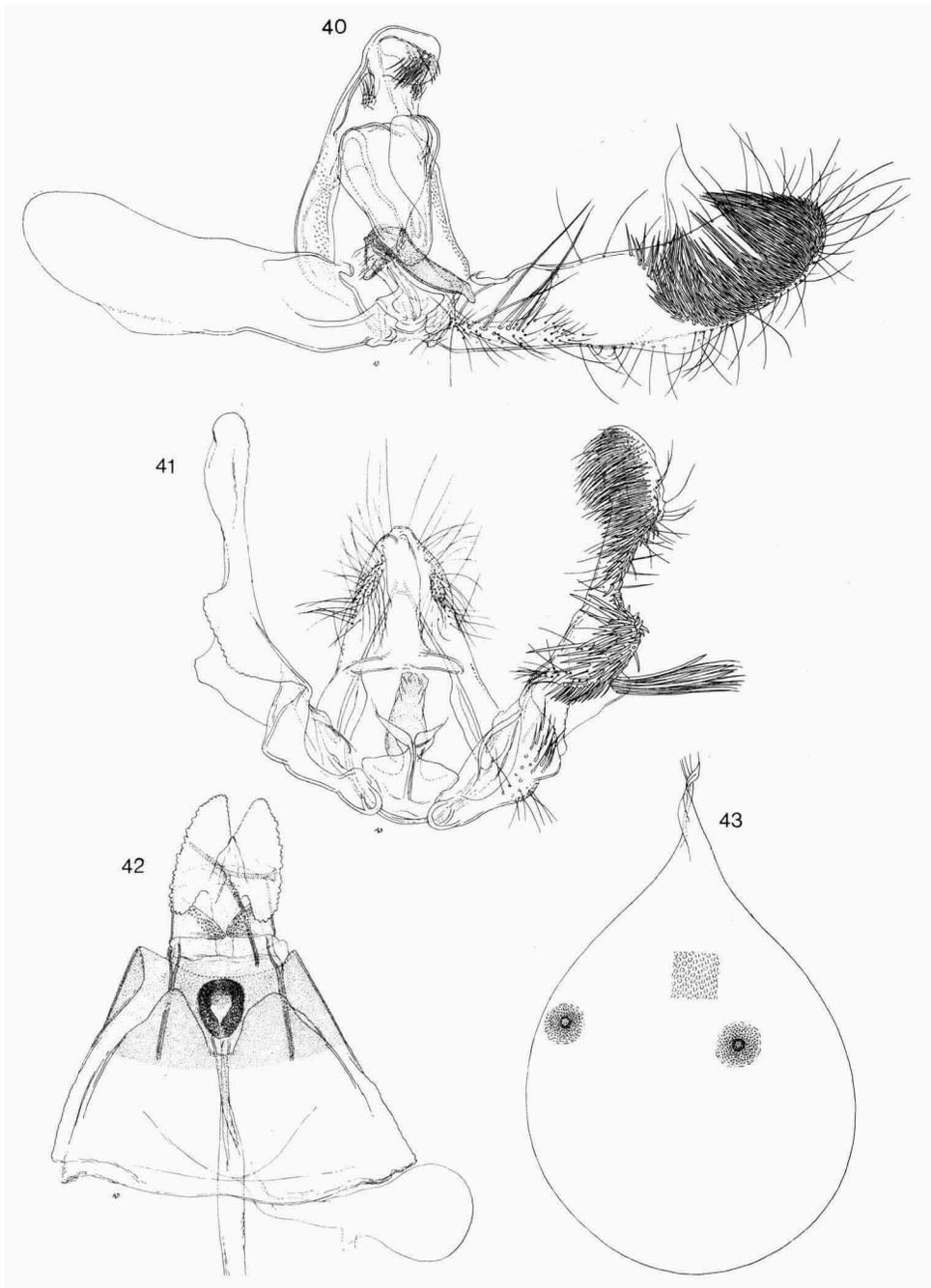
Fore wing oblong, gently dilated, moderately broad. Costa black, a leaden-metallic patch at 1/3, on costal edge with two pairs of oblique slender white lines; posterior half of costa with three similar pairs, but lines less oblique and more distant, fourth and fifth white lines single, becoming less oblique, tips curving outwards; first pair extended by two leaden lines, to a round leaden spot below second pair of costal lines, lines and spot preceded by a conspicuous dark brown-black subrhomboidal subcostal-patch, obliquely extending below upper edge of cell; tips of three ultimate lines united by a subcostal fulvous-orange stria, quickly dilated posterad, to termen just below apex, including a round black submarginal dot; an interrupted silvery-leaden transverse band at 2/3, from round leaden spot below costa to dorsum before its end, slightly dilated downwards, a little outwards-convex; a purple band slightly constricted on veins and densely dusted with whitish, closely following preceding, straight, from above fold to below costa, there curved posterad and descending obliquely to termen below middle, here becoming tinged fulvous and ending in a fulvous-orangeish spot on termen, centred with black and similar to the mark below apex; between these, termen whitish, with three black dots; tornus with a glossy creamy large patch, including a greyish oval figure on margin of wing; dorsum dark grey mixed black; remainder of wing (rubbed) creamy, strongly dusted with purple. Cilia dark grey with a black subbasal streak and creamy base.

Hind wing (damaged), bronze-purplish, becoming sub-semi pellucid on basal half. Cilia dark fuscous.

Female genitalia. Sterigma sclerotic, narrowed above, with a triangular deep emargination, in which fits ostium, lateral angles of sterigma somewhat oblique, a trifle constricted. Ostium shaped as a dark granulose oval collar, with posterior wall hardly reduced (in *aprobola* distinctly reduced). Colliculum, a straight, narrow sclerotic and long tube. Corpus bursae and signa as in *D. aprobola*.

Mt. Bandahara, Bivouac One, 810 m, 1 ♀, holotype, genit. slide 10359.

Allied to the common *D. aprobola* (Meyrick), but sufficiently distinct by the shape of the ostium.



Figs. 40–43. Genitalia of Olethreutini. 40, *Balbidomaga dorophora* sp. n., ♂, holotype; 41, *Olethreutes (Loxoterma) nomas* sp. n., ♂, holotype; 42, *Dudua perusta* sp. n., ♀, holotype; 43, the same, bursa.

**Olethreutes (Loxoterma) nomas** spec. nov.

[νομάς = roamer]

(fig. 41, pl. 8 fig. 38)

♂ 10 mm. Head with vertex loosely scaled, blackish-brown, forehead and face roughish, white. Antenna moderately thickened; dark grey. Palpus short and slender, median segment with roughish fringe of scales below; blackish-brown, terminal segments white. Thorax ashy-grey, smooth, with a narrow median blackish band, tegula with basal third and a narrow edge throughout, blackish. Abdomen dark fuscous, paler towards base, anal tuft glossy pale ochreous.

Fore wing oblong, moderately broad, costa slightly curved at base, straight beyond, hardly curved at apex, apex rounded, termen almost straight, hardly concave, strongly oblique. Pale whitish-ochreous, with some orangeish tinge, before termen brighter golden-ochreous, markings sooty black. Basal patch over 1/5, black; costal edge beyond patch with an oblong marginal small mark, preceded and followed by one or two black points; central fascia broad, occupying second fourth of costa, moderately outwards-oblique and sooty black on upper half of wing, thence slightly curving and vertical, to dorsum well before its end, becoming much paler, except along middle almost obliterate; this fascia on costal edge with one or two very faint short pairs of white lines; more than posterior fourth of costa with a black streak, cut by three pairs of thick white marks; apex with a slightly transversely oblong blackish-brown spot; termen with a couple of fine dark marginal strigulae; an oblique straight band of ochreous suffusion from 4/5 of costa to lower third of termen, sparsely dusted with brownish. Cilia rather dull ochreous-orange, black around apex.

Hind wing narrow, hardly 1, semipellucant pale fuscous, towards apex and dorsum more opaque darker fuscous. Cilia glossy, very pale yellow, around apex fuscous, throughout with a transparent basal and a fuscous subbasal band.

Male genitalia. Tegumen high, triangular and pointed. Socius moderate, free, pending, slightly curved. Gnathos (subscaphium) a double transverse support of the voluminous tuba analis. Valva long and slender, with long spines, sacculus forming a broad zig-zag ridge, top strongly prominent, with a fan-shaped group of long, diverging spines, outer edge of valva with a tumescence with a pencil of long spines. Cucullus strongly clavate, oblong-oval with constricted stalk, beset throughout with a sinuate row of spines. Aedeagus rather short, upon a caliciform anellus.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 10398; 1 ♂, paratype.

A small species with the appearance of an *Endothenia*, but, surprisingly, with the genitalia very close to those of the Palearctic *O. (L.) aurofasciana* Haworth.

**Balbidomaga** gen. nov.

[ βάλλω = starting point, μάγος = a wizard]

Head with appressed scales. Ocellus posterior. Haustellum absent. Antenna slightly thickened in male, ciliations under 1. Maxillary palpus not perceptible. Labial palpus moderately long, sinuate, sub-ascending, with smoothly appressed scales, median segment moderately dilated towards apex, terminal segment slender, subacute, porrected. Thorax smooth. Posterior tibia slender.

Fore wing moderately long, oblong-truncate, broadest before tornus, costa arched at base, almost straight beyond, apex rounded and distinctly projecting, termen being excised above, rounded-prominent below; a semi-oval lobe folded over costa from 1/5 to just before middle, elevated by dense scent scales it conceals, and smoothly covered with large glossy scales arranged obliquely-outwards; on underside of this fold, a thick oblong patch of smooth scales with a longitudinal groove. Vein 1b furcate at base, 2 from beyond 4/5, 3 from angle, 4 close to 3, but almost connate with 5, 7 to termen, at base 7–9 closely approximated, 8 and 9 parallel and very close, 10 also parallel but slightly more distant, 11 present, from middle.

Hind wing over 1, subtrapezoidal, with very slight cubital pecten of a few hairs only; veins 1a and 1c vestigial, 1b furcate at base, 2 from beyond middle, 3 and 4 connate from angle, 5 closely approximated at base, 6 and 7 closely approximated towards base.

Male genitalia. Tegumen narrowed, uncus rounded, bristly in front. Hami absent. Socii parietal, moderate. Gnathos and tuba analis forming together a voluminous fleshy triangular body, pending down and submembranous. Valva long, rather narrow, little dilated, posterior half of disc and cucullus bristly; base of sacculus hairy, with a row of very long bristles. Aedeagus angulate at 1/3, top pointed and flattened.

Type-species: *Balbidomaga dorophora* spec. nov.

A remarkable and puzzling form, with the facies of a true *Archimaga* Meyrick, but also with some characters unusual for the family, as e.g., the presence of vein 11 in the fore wing, mostly absent in the Chlidanotini, and of veins 6 and 7 in the hind wing being closely approximated towards base, instead of being stalked. At the other hand the neuration is more chlidanotine than olethreutine: with the veins 7 to 9 in the fore wing closely approximated to

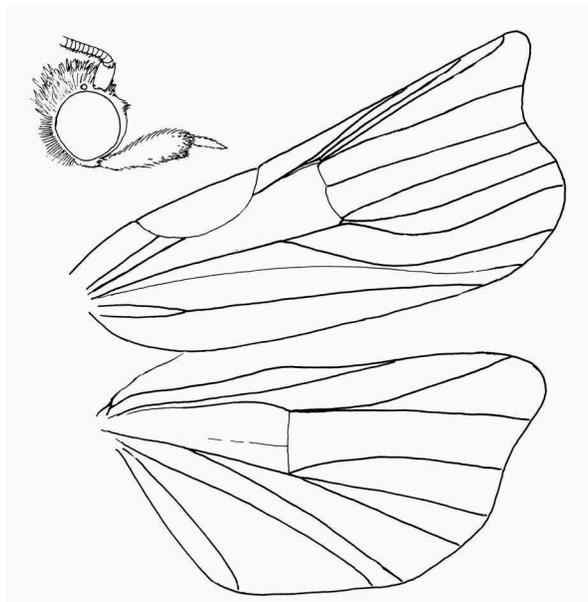


Fig. 44. *Balbidomaga dorophora* sp. n., head and wing venation. ♂.

each other, the vein 2 being strongly shifted posterad, there being no veins inside the cell of the fore wing, and the presense of the typical vestige of the media in the hind wing. I venture to characterise this genus as an early offshoot of the Eucosmini, towards the Chlidanotini, but not yet having become this tribe.

***Balbidomaga dorophora* spec. nov.**

[δόρος = pouch, φερω = to bear]

(figs. 40, 44, pl. 8 fig. 39)

♂ 11–14 mm (holotype 11 mm). Head grey, orbits opalescent creamy, face whitish. Antenna light tawny, dorsally banded with grey. Palpus dark fuscous-grey, basal segment and an oblique transverse spot at apex creamy, terminal segment grey. Thorax whitish, anterior third suffused with black, faint median and subapical transverse bands of dark grey suffusion. Abdomen dark grey with a white apex (sometimes whole abdomen grey).

Fore wing moderately broad, oblong-truncate, costa arched at base, almost straight beyond base, apex rounded and produced, termen excised above, rounded below and gently prominent; a semioval lobe folded over costal edge from about 1/5 to just before middle, slightly elevated and apparently concealing scent scales, on upper surface also smoothly clothed with oblique silvery-leadен glossy scales, folding over costal margin from under surface (where

scales form a shallow thickened groove). Fore wing white, thinly strewn with blackish scales; irregularly condensed towards dorsum and forming an almost compact patch along second fifth of dorsum; costal edge beyond fold with a moderate blackish-brown streak along its median fifth, narrowing posterad, then slightly thickened again towards apex, posteriorly marked with four thin snow-white oblique lines and before apex, with two white larger and vertical blotches; apex and termen, as far as incision, with a ferruginous-fulvous blotch; dark costal markings edged below by faint crimson tinge; a couple of black marks transversely on termen. Cilia white, tips above apex with a black line, along termen cilia with a series of orangeish broad bars, alternating with suffused faint median grey spots.

Hind wing semipelluculent light fuscous-bronze, narrow edge of wing suffused whitish. Cilia fuscous, with a narrow whitish base, cilia along dorsum very long.

Male genitalia, as described with the genus above.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♂, holotype; Bivouac One, 810 m, 3 ♂, paratypes, genit. slide 10311.

TORTRICINAE  
PHRICANTHINI

**Phricanthes eutrachys** (Diakonoff)

(pl. 8 fig. 40)

*Protypanthes eutrachys* Diakonoff, 1948, *Treubia*, 19:518, fig. 36 (♂, C.W. Sumatra).

*Phricanthes eutrachys*; Diakonoff, 1981, *Proc. Kon. Ned. Akad. Wet. Amst.* [C], 84(2):159 (ref.).

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, genitalia slide 10305.

Distribution. C.W. Sumatra: Fort de Kock.

SCHOENOTENINI

**Protarchella nivis protera** Diakonoff

*Schoenotenes paraptera* Diakonoff, 1941 (nec Meyrick, 1910), *Treubia*, 18:429 (South Sumatra); 1947, *Tijdschr. Ent.*, 88 (1945):344 (Java).

*Protarchella nivis protera* Diakonoff, 1960, *Nova Guinea, n.s.*, 10:69, figs. 44,45, pl. fig. 5. (W Java, Preanger Range).

Distribution. S Sumatra; W Java.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, genit. slide 9062.

Superficially the unique specimen resembles more the nominate form, *P. nivis nivis* Diakonoff, but the genitalia provide the distinction; the species is slightly smaller, has slightly narrower wings and is whiter than most specimens of the subsp. *protera*, present in the collection.

***Protarchella acheenensis* spec. nov.**

(figs. 45, 46, pl. 9 fig. 41)

♂ 15–15.5 mm. Head white, on frons slightly mixed with pale fuscous, vertex white. Palpus rather long, fuscous, upper side of apex of median segment and upper side of terminal segment throughout, white. Thorax pale greyish, dusted pale fuscous. Abdomen whitish, slightly infuscated.

Forewing suboval, gradually gently dilated and broadest at 3/4. Creamy white, minutely infuscated with faint fuscous interrupted lines and strewn with a few microscopic fuscous scales. Costal edge along anterior half with five or six very narrow marginal black strigulae; a rather small dark brown triangular spot just beyond middle, a trifle outwards-oblique, slightly interrupted above top by vein 11; very small brownish short strigulae along veins, arranged in faint transverse series, one most distinct from 4/5 of costa to tornus, rather outwards-convex below, with larger dark strigulae on end of vein 10, on vein 7 halfway to apex and on vein 3, respectively; a straight continuous fine strigula between tops of 8 and 5; dark points on ends of 8 and 7; a group of dark brown scales above middle of disc beyond 1/5; a transverse slightly elevated mark along closing vein and an inwards-convex dark stria from fold to dorsum, opposite costal triangle; a narrow, almost vertical pale brownish stria beyond these markings, resting on end of fold. Cilia creamy, becoming suffused with pale fulvous along costa, along termen with a median series of darker points, beyond this tinged pale tawny.

Hind wing glossy, semipellucent, very pale fuscous, veins slightly darker.

Male genitalia very similar to those of *P. sisir* Diakonoff, from Java, but differing as follows: uncus slightly longer, arms broader, with more rounded tips; socii massive, oblong-triangular, densely bristled (in *sisir* slender, thinly bristled and more distant from each other). Transtilla, a narrower rectangular flap, with top notched in middle, angles rounded, edge of upper half only coarsely aciculate (in *sisir* the flap much broader, edge finely aciculate throughout); valva with denser and longer spines, edge of valva almost naked (in *sisir* bristles gradually decreasing in number outwards). Otherwise as *P. sisir*.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, holotype, gen. slide 9063; Bivouac One, 810 m, 1 ♂, paratype, genit. slide 9064.

Superficially rather similar to *P. sisir* Diakonoff.

## POLYORTHINI

**Lopharcha conia** spec. nov.

[κονιός = dusty]

(fig. 48, pl. 9 fig. 42, pl. 21 fig. 101)

♂ 13 mm. Head marbled with dark and light fuscous. Palpus very long, projecting beyond over diameter of head, straight, slightly ascending; grey-fuscous, slightly mixed with paler, median segment along lower edge whitish, along posterior half above with a triangular tuft of loose scales; terminal segment moderate, pointed. Thorax fuscous (rubbed). Abdomen fuscous-bronze.

Fore wing oblong-oval, costa curved throughout, more so at ends, especially towards apex, apex pointed, termen considerably sinuate above, rounded below, oblique. Pale fuscous, marbled with darker fuscous, costa with more or less regular row of darker fuscous suffused dots, marbling slightly tending to form oblique transverse striae, not distinct. Cilia (rubbed) light fuscous with a dark subbasal line.

Hind wing light fuscous-bronze, along terminal margin with a moderate band of darker fuscous suffusion. Cilia fuscous (rubbed).

Male genitalia. Rather similar to those of *L. erioptila* Meyrick but distinct; uncus longer and thinner; socii plicate; transtilla massive, dilated, upper edge triangular in middle, emarginate at the sides; valva more narrowed, at base broader, shorter; aedeagus with apical half rather narrowed. Halves of eighth segment rounded and cup-shaped, emitting a long hair pencil which obviously traverses the base of valva. Aedeagus straight, with apical half rather narrower than basal.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 10333.

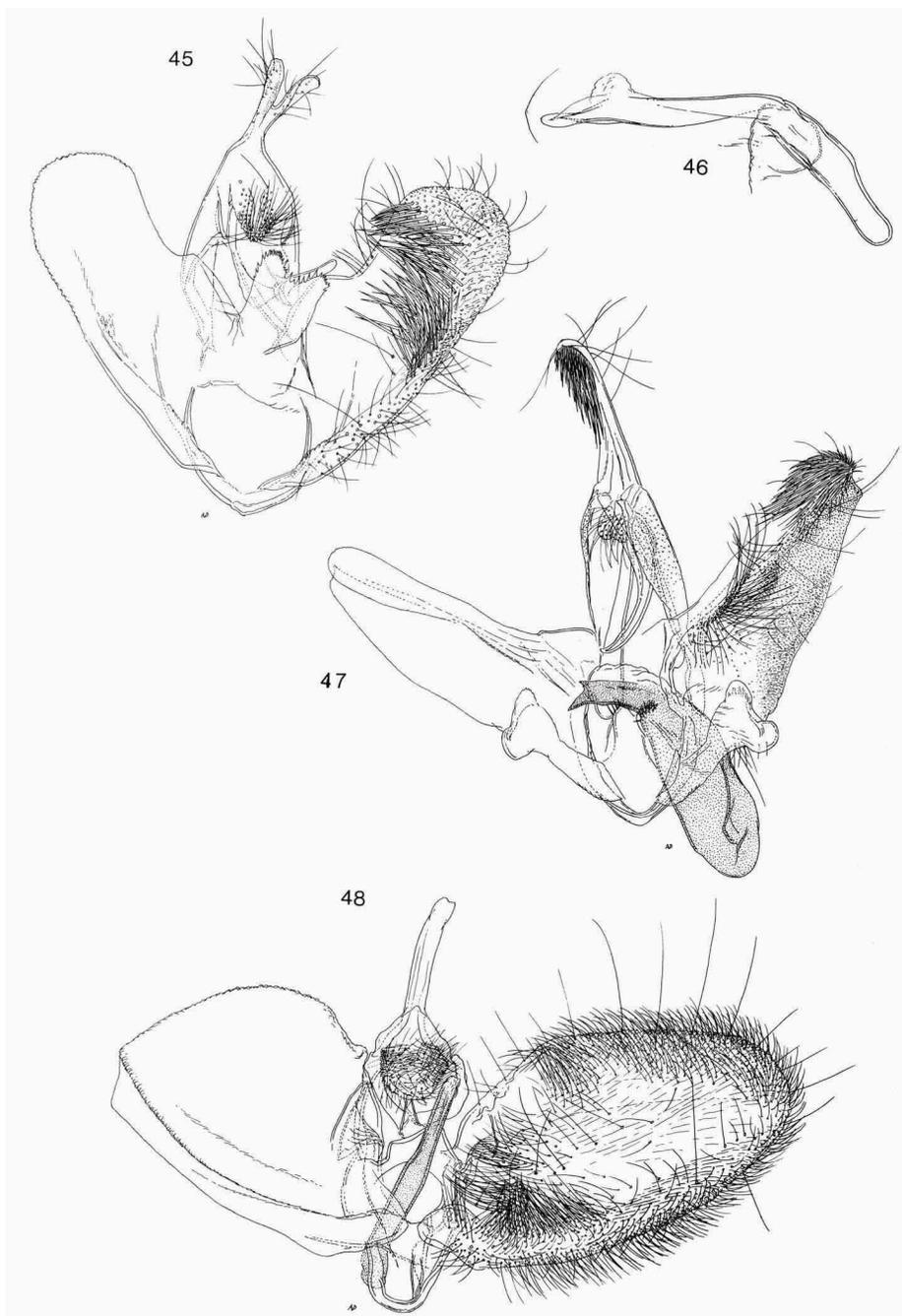
Nearly allied to *L. erioptila* (Meyrick), but differing by the male genitalia. The unique specimen is rubbed, but the above-mentioned genital characters are very distinct.

## TORTRICINI

**[Trophocosta** Razowski, status nov.]

*Trophocosta* Razowski, 1964, Acta zool. cracov., 9:392 (type-species, *Spatalistis nummifera* Meyrick); 1966, World Fauna Tortricini: 100.

*Trophocosta*; Diakonoff, 1976, Zool. Verh., 144:48 (lapsus).



Figs. 45—48. Male genitalia of Tortricidae. 45, *Protarchella acheonensis* sp. n., holotype; 46, the same, aedeagus; 47, *Mimeoclysia strongylopa* sp. n., holotype; 48, *Loparcha conia* sp. n., holotype.

Dr. Razowski's concept of the genus is rather broad: eight species from Southern Asia are included, with the male genitalia, as far as known, diverging considerably. The author himself remarks (p. 101) that "some parts of the male genitalia are of not uniform type in all species" . . .

For the discrimination of the genera of the Tortricini I am inclined to give preference to the evidence of the male genitalia above that of the wing venation, the former being especially plastic specifically and rich in diagnostic characters; while venation I would characterize as the indispensable criterium of second degree. When Razowski, using chiefly the neuration in his generic key, finally separates *Trophocosta* from *Spatalistis* with differences of the shape of the valva and of the signum, in my opinion he does not exhaust the evidence of the genitalia of the males.

Therefore I propose to divide his *Trophocosta* a step further, into two genera: one, *Trophocosta* Razowski, 1964, with the type-species *Spatalistis nummifera* Meyrick, and with the species *cyanoxantha* (Meyr.), *argyrosperma* (Diak.), *perusta* (Diak.) and *nummifera* (Meyr.) (all described as *Spatalistis*), furthermore with *aurea* Raz., *nitens* Raz. and *multiastra* Raz. (described as *Trophocosta*); seven species in total, to which *Spatalistis hilarochroma* Diak., stat. nov., should also be added. The other genus is described below comprising one species of Meyrick and another new, described here.

#### [*Trophocosta perusta* (Diakonoff)]

*Spatalistis perusta* Diakonoff, 1953, Verh. Ned. Akad. Wet., Natuurk., (2)49(3):82, fig. 301.

*Trophocosta nummifera*, Razowski, 1964 (nec Meyrick, 1910), Acta zool. cracov., 9:393; 1966, World Fauna Tortricini: 111, figs. 136-138.

Dr. Razowski proposed the above synonymy which I am unable to accept. His figure of the male genitalia of *nummifera* (1966, fig. 136) is decidedly not similar to my figure of *perusta* (1953, fig. 301): not only the length of the socii is different (ascribed by Razowski to position in mount), but also the exact shape of the whole valva is different. For this reason I consider *T. perusta* (Diak.) from New Guinea to be a good species. As to the neuration, it has veins 7 and 8 in the fore wing originating from one point, while in *nummifera* they are well separated.

#### **Reptilisocia** gen. nov.

[*reptilis* = creeping, *socius* = appendix of tegumen]

With the general characters of *Trophocosta* Razowski, 1964 (type-species, *Spatalistis nummifera* (Meyrick)), but with the following differences.

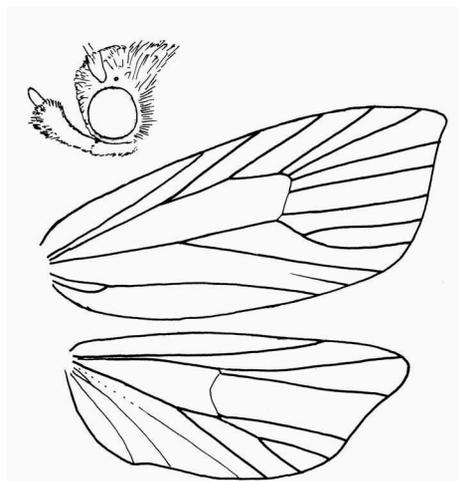


Fig. 49. *Reptilisocia paraxena* sp. n., head and wing venation, ♂.

Socii very long, pending, ribbon-like, gradually narrowing. Tuba analis long and tubular or spindle-shaped. Sacculus denticulate, not densely bristled. Transtilla, a simple narrow band, or a broader band with median point on upper edge. Aedeagus, a short and thick hook. Signum, a thin long horn upon a dilated base. Fore wing in male with a kind of costal fold formed of closely appressed hair-scales. Veins 3 and 4 stalked, veins 7 and 8 stalked or separate. Hind wing with veins 3 and 4 stalked, 6 and 7 closely approximated towards base or long-stalked, with discoidal receding.

Type-species: *Spatalistis paryphaea* Meyrick, 1907.

A member of the tribe Tortricini, closely allied with *Trophocosta* Razowski, but considerably more specialized.

At present two species known, from Southern and Central India and from Northern Sumatra, respectively.

***Reptilisocia paraxena* spec. nov.**

[ παράξενος = queer]

(fig. 49, pl. 9 fig. 43, pl. 19 fig. 93)

♂ 14 mm. Head and thorax whitish. Antenna glossy light ochreous. Palpus long, sinuate, strongly dilated by appressed scales, roughish only towards apex of median segment above; very pale ochreous, median segment laterally slightly dusted with orange. Abdomen pale ochreous.

Fore wing with veins 7 and 8 stalked; rather broad, truncate, costa along less than basal third with a costal fold of closely appressed ochreous hairs;

costa gently curved along basal and apical third, in middle almost straight, apex pointed and prominent, termen concave above, almost straight below. Pale ochreous, dusted with bright orange below basal half of costal fold, a patch beyond lower half of discoidal, an ill-defined transverse shadow half-way between cell and termen; dark fuscous suffusion above cell posteriorly and in posterior half of cell; a blackish mark on end of costal fold, more or less connected by dark suffusion with lower angle of cell; a blackish streak of raised scales obliquely across middle of cell, traces of bright orange suffused round spots on costa at  $2/3$  and  $5/6$ , respectively; apex and termen suffused with tawny-orange, with a metallic silvery spot before apex, resting on termen, preceded by a transverse straight series of smaller silvery dots, from about end of vein 9, to tornus. Cilia pale yellowish, a grey-fuscous patch opposite apex and in tornus, respectively.

Hind wing with veins 6 and 7 long-stalked, discoidal vein strongly receding; narrow, under 1, long-pointed, semipellucet on basal half and colourless, in cell, between cell and vein 1c, and beyond cell tinged coppery-pinkish, veins opaque, whitish, apex deeper ochreous. Cilia white, around apex touched with pale ochreous.

Male genitalia. Tegumen in middle deeply emarginate, at the sides forming ribbon-like socii, broad at base, gradually tapering into long slender points, reaching almost to base of aedeagus, thinly beset throughout with stiff bristles. Tuba analis long, straight, erect, spindle-shaped, with a simple, slightly narrowed and rounded base. Transtilla, a moderate band, dilated above and beneath laterally, in middle with a subsclerotic point. Valva oblong, not dilated, curved and pointed top curving downwards, sacculus sclerotic, short-denticulate, disc above this regularly long-bristled. Aedeagus large, hook-shaped, with complicated internal structure.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, holotype, genit. slide 10396.

A light-coloured species, resembling the common "*Spatalistis*" *cyanoxantha* Meyrick, but with longer palpi and very distinct genitalia. The unique specimen's right hind and left fore wing are damaged, but it is still sufficiently characteristic. It differs from the type-species chiefly by the minor differences of the genitalia and those of the neuration: in the fore wing veins 7 and 8 are stalked (instead of separate), and in the hind wing veins 6 and 7 are long-stalked (instead of closely approximated towards base).

## EPITYMBIINI

**Mimeoclysia strongylopa** spec. nov.

[στρογγύλος = round, ὤψ = eye]

(fig. 47, pl. 9 fig. 44)

♂ 13 mm. Head tawny, vertex pale ochreous at the sides, forehead with a strong flat transverse deep fuscous tuft projecting over face, face above dark brown, a smaller median transverse tuft, face below this pale. Antenna pale ochreous, pubescent. Palpi missing. Thorax tawny, patagia, tegulae and apex paler tawny. Abdomen dark brown-fuscous.

Fore wing oblong-subtriangular, considerably dilated, costa with thickened coarse scales along basal 3/5, slightly curved at base, faintly concave in middle, similarly convex at 3/4, apex pointed and moderately produced, termen sinuate above, broadly rounded on tornus. Light tawny, towards costa becoming light fuscous, on posterior half of wing becoming gradually lighter tawny-ochreous. Costal edge to 3/5 narrowly dark brown; a well-defined semioval costal spot at costal prominence (at 3/4), with a somewhat paler round central spot; this costal spot preceded and followed on costal margin by light ground colour; a small round dot on costa before apex, continued downwards by an ill-defined row of brown specks; an irregular small spot at 1/5 of disc 1/3 below costa, another larger well-defined round spot just before and above centre of wing; a slender subsinuate fascia from well below semioval costal spot, to tornus outwards-convex below; a few dark brown specks strewn over wing, some larger dots along dorsum. Cilia pale ochreous, with a median series of subsuffused dark-brown dots.

Hind wing glossy pale brownish. Cilia light greyish-fuscous, around apex more densely infuscated, throughout with a faint darker median suffused band and pale basal line.

Male genitalia. Tegumen slender, high and narrow. Uncus long and slender, top clavate, with long, downwards-directed bristles. Socii rather small, hyaline, pending and oval, thinly haired. Vinculum strong. Transtilla, a simple broad band. Valva rather slender, narrowed, costa rather broad, sclerotic, subclavate, top bristly. Sacculus characteristic: strongly sclerotic, about 1/4, top clavate-truncate, with a spoon-like small lobe above and below. Aedeagus thick, sclerotic, narrowed and down-curved at apex, with two terminal small prongs.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit, slide 10374.

A distinct species by the round central spot, well-defined costal patch and sclerotic base of the sacculus. It is closely allied to the type of the genus, *M. piridina* Diakonoff, from Java, but that has a minute central mark, suffused costal patch and a simple sacculus. A welcome second species to the until now monotypic genus, which has been attributed to the Cnephasiini, but rather is a characteristic epitymbiid.

#### ARCHIPINI

#### *Ulodemis* Meyrick, 1907

*Ulodemis* Meyrick, 1907, J. Bombay Nat. Hist. Soc., 17:736 (type-species, *Ulodemis trigrapha* Meyrick, by monotypy).

After my re-description of the genus (Diakonoff, 1939:176) some corrections have become necessary.

I am now satisfied that two distinct elements have been confounded and put together in that diagnosis; *Ulodemis* proper is characterised by the absence of a costal fold in the male and by the male genitalia with a long and slender uncus, narrow and down-curved, while the gnathos has a point, armed with several rigid and acute prongs, and the valva is broadly oval, with a characteristic field of dense bristles, occupying the upper basal fourth of the disc of valva; the sacculus usually is a narrow marginal ridge. The aedeagus is characteristically curved, with straightened ends and is not rectangularly bent.

The other taxon is described below, it is very similar to *Ulodemis* superficially, having almost the same neurulation, but the males may be recognised at once by the presence of a thickly elevated costal fold, absent in *Ulodemis* altogether, and by the male genitalia.

Besides the following corrections are necessary at the specific level.

*Ulodemis trigrapha* Meyrick, 1907, and *U. falsa* Meyrick, 1914 (J. Bombay Nat. Hist. Soc., 22:771), synonymised by me (Diakonoff, 1939:179), are distinct, as is shown by Clarke (1958, Meyrick's Types, 3:260, pl. 130, figs. 1c–1d and 2a–2b).

*Procalyptis chelophora* Meyrick, 1910 (Trans. Ent. Soc. London, 1910:431; Clarke, 1958, loc. cit.:188, pl. 94 figs. 2–2a), transferred by me to *Ulodemis* (1939:179, figs. 7H, 8G–J, 9H–J), is now removed to the new genus *Allodemis*, described below.

#### *Ulodemis hyalura* spec. nov.

[ ὕαλος = glass-like, οὐρά = tail]

(fig. 51, pl. 9 fig. 45)

♂ 21 mm. Head pale vinaceous; forehead with a round purple-black suffused spot. Palpus pale vinaceous-fulvous. Antenna of the same colour, fuscous-ringed, ciliations just under 1, scape in front mixed with ferruginous. Thorax pale vinaceous-fulvous, tegumen infuscated, all scales with pale edges. Abdomen pale whitish-ochreous, infuscated.

Fore wing oblong-truncate, gradually dilated, broadest before termen, cos-

ta with base curved, thence almost straight, apex rounded, thence gently concave, rounded below, little oblique. Pale vinaceous, transversely strigulated with dense fine strigulae, becoming paler posteriorly, with coarser strigulae along dorsum. Markings transversely strigulated with darker purplish, edged with pale. Basal patch from 1/5 of costa to dorsum before middle, edge indistinctly concave in middle, some seven dark purple vertical short striae above dorsum; central fascia from before middle to end of dorsum, moderately dilated downwards, well defined, anterior edge straight, below fold concave, posterior somewhat irregularly convex; both patch and fascia strewn with small purple spots; posterior half of wing paler fulvous-ochreous, towards middle of termen suffused with light ferruginous, strewn throughout with round deep purple small spots and points of diverse size more or less tending to form transverse series. Cilia dark brown, basal third blackish-purple, a narrow whitish basal line.

Hind wing rather dark fulvous-fuscous, with a bronze gloss, semipellucant, with cell 2 almost entirely transparent, between vein 1c and dorsum wing more densely scaled and more infuscated, a large, grey-fuscous pencil of long hair-scales from base of dorsum, reaching to tornus, tornus with a small rounded transparent and glossy lobe, projecting caudad beyond tip of pencil. Cilia concolorous, with a pale basal line.

Male genitalia. Resembling those of the type species, but differing thus. Uncus much longer, less curved, narrowed (in *trigrapha* clavate). Gnathos longer and stronger sclerotic, with some 4–5 long and strong obliquely projecting prongs and a long terminal cusp (no numerous small thorns as in *trigrapha*). Valva broadly rounded. Aedeagus less angulate.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 9045.

Also from CW Sumatra, Fort de Kock, 920 m, x.1922, (E. Jacobson), 1 ♂, genit. slide 23; 1 ♀, genit. slide 49.

The species is superficially quite similar to *U. trigrapha* Meyrick, except that the dorsal scale pencil in that species is light fulvous, concolorous with the hind wing, which does not possess a tornal projecting lobe, the dorsum being rather rectangularly truncate. Besides, the genitalia are distinct.

The tornal lobes of *U. hyalura* spec. nov. project beyond the tips of the dorsal pencils, are transparent and strongly shining, like two small, round and concave pieces of glass, a peculiarity, less distinct in older specimens and therefore overlooked by me earlier.

**Allodemis** gen. nov.

[ἄλλος = other, δέμυς = stature]

*Procalyptis* Diakonoff, (nec Meyrick, 1907), 1939, Zool. Med., 21: 162, figs. 5R–Q, 7D.

Head with dense, smoothly appressed scales. Ocellus concealed, not perceptible (perhaps devoid of any pigment). Haustellum developed. Antenna in male with scape sometimes elongate and flattened below, flagellum with basal joint deeply notched above, notch followed by a small transverse ridge or pecten, of diverse size, sometimes projecting forward, ciliate, ciliations under 1. Labial palpus long, exceeding eye twice its diameter, porrected, sinuate, median segment broad, on basal half smoothly short-scaled, towards apex strongly dilated by a long, rough, rising fringe of scales along posterior half of upper edge, terminal segment moderate, obtuse, exposed, slightly drooping. Thorax smooth. Abdomen normal. Posterior tibia roughish above and beneath by loosely appressed bristly hair-scales.

Fore wing oblong-subtruncate, gradually distinctly dilated, with a moderate, thickened semioval fold to 1/3, thence costa tolerably straight, apex rectangular, termen straight above, slightly prominent and rounded below, almost vertical. Vein 2 from slightly before 2/3, 3 from angle, 3–5 about equidistant, 7 and 8 stalked, 7 to termen, 11 from before middle, cell rather narrow, rounded posteriorly, chorda and median branch absent.

Hind wing sub-semioval, dorsum extended and rounded, tornus strongly rounded and prominent. Vein 2 from slightly beyond 2/3, 3 and 4 connate, seldom separate, 5 closely approximated at base, 6 and 7 closely approximated towards base.

Male genitalia. Tegumen robust. Uncus moderate, rounded or with a narrowed top, seldom longer, flat and angulate. Socius voluminous, oval, densely long-haired or long-scaled. Gnathos strong, arms gradually curved, point rather short, truncate or narrowed. Transtilla moderate, a single bow. Valva strong and fleshy, with strongly plicate surface and a densely long-bristled pulvinus, sacculus large, well-developed, about 1/4 width of valva, rounded-prominent towards apex below, prominence densely bristled. Aedeagus slender and long, bent before middle rectangularly, cornuti, a few long straight spines.

Female genitalia. Anapophyses longer than postapophyses. Sterigma sclerotic, T-shaped, actually broadly caliciform above. Ductus bursae simple. Corpus bursae ovoidal, signum with a large capitulum, basal plate extending far above as a flat sclerite and below, as a narrowed ridge. Bulla seminalis smaller than corpus bursae, originating from middle of ductus bursae.

Type-species: *Allodemis fulva* spec. nov. The gender of the generic name is feminine.

Nearest to *Ulodemis* Meyrick (type species, *U. trigrapha* Meyrick), and sometimes confounded with it, being very similar superficially, except the presence of the costal fold in the males, absent in *Ulodemis*; besides it is very distinct by the male genital characters; these are already discussed above for *Ulodemis*.

The head and neuration of the present genus are almost similar to those in *Ulodemis*, except that in the latter vein 3 of the fore wing in some species originates from well before the angle of cell.

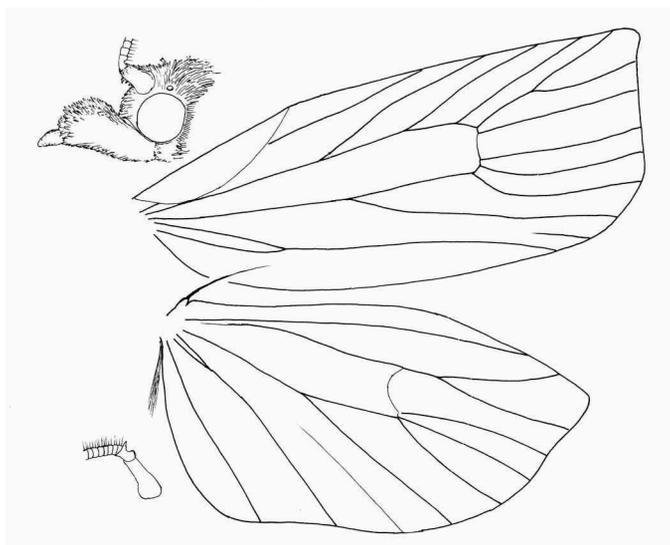


Fig. 50. *Allodemis fulva* sp. n., head and wing venation, ♂.

***Allodemis fulva* spec. nov.**

[*fulvus* = brownish-red]

(figs. 50, 52, 54, 55, pl. 9 figs. 47, 48)

♂ 22–24 mm (holotype, 24 mm). Head light ashy-grey, light fulvous in certain lights. Antenna with flagellum notched at base. Palpus pale fulvous, except basal segment, densely spotted with darker fulvous and grey-purple; terminal segment darker, vinaceous. Thorax light fulvous, dusted with pale ashy-grey, metathorax ochreous-white. Abdomen whitish-golden-ochreous, tergum infuscated along third fourth, anal tuft whitish-ochreous.

Fore wing gradually dilated, with a semioval thick fold to 1/3, thence costa straight, apex rectangular, termen straight above, slightly rounded-prominent below. Deep fulvous-brownish, glossy, transversely strigulated, except base of dorsum, with small irregular spots and scales, purplish, sometimes forming rounded, intraneural dots; these strigulae run transversely across costal fold and form more dense dusting over basal 3/4 of wing, this dusting more or less limited posteriorly by an oblique series of larger rounded dots, from well beyond middle of costa, to end of vein 2; beyond this series transverse strigulation finer and much less dense. Cilia deep reddish-fulvous with irregularly pale base, on end of dorsum cilia dark grey.

Hind wing pale golden-ochreous, glossy, with some prismatic reflections, posterior third suffused with fulvous, suffusion becoming darker posterad, and with a few scattered faint dark dots, being black marks of the underside showing through, dorsum whitish. Cilia glossy whitish-ochreous, slightly suffused with fulvous around apex, cilia along dorsum and in tornus bright fulvous, dull.

The male paratypes rather variable, paler and darker, most with reduced dark strigulation, some brighter reddish-fulvous or chestnut. Only the hind wing uniformly coloured and marked.

♀ 24 mm. Palpus longer, pale tawny. Fore wing with costa arched anteriorly, sinuate posteriorly, apex slightly projecting, more pointed, termen more sinuate. Head and thorax dull pale fulvous. Fore wing unicolorous lighter fulvous-tawny, glossy, with hardly perceptible fine darker fulvous dotting, rather more distinct beyond cell and dark along dorsal margin. Hind wing paler, whitish, apical fifth brighter reddish-fulvous. Cilia whitish, a subbasal streak around apex and along upper part of termen.

Male genitalia. Uncus spindle-shaped, moderately pointed. Large oval socius thinly long-haired. Transtilla moderately long, slender, convex above. Valva with sacculus concave at base, broadly rounded-prominent beyond base and densely long-bristled. Aedeagus more than rectangularly bent, apical part straight, cornuti, two straight narrow blades.

Female genitalia. As described with the genus above.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9041; 1 ♀, 5 ♂, paratypes. The same, Bivouac Three, 1810 m, 1 ♀, allotype, genit. slide 9042; 1 ♂, paratype.

The species is distinct by the reddish-fulvous tinge of the fore wings and by the fulvous cilia of the hind wings along dorsum and around tornus.

**Allodemis euhelias** spec. nov.

[εὐήλιος = sunny]

(figs. 58, 59, pl. 9 fig. 46)

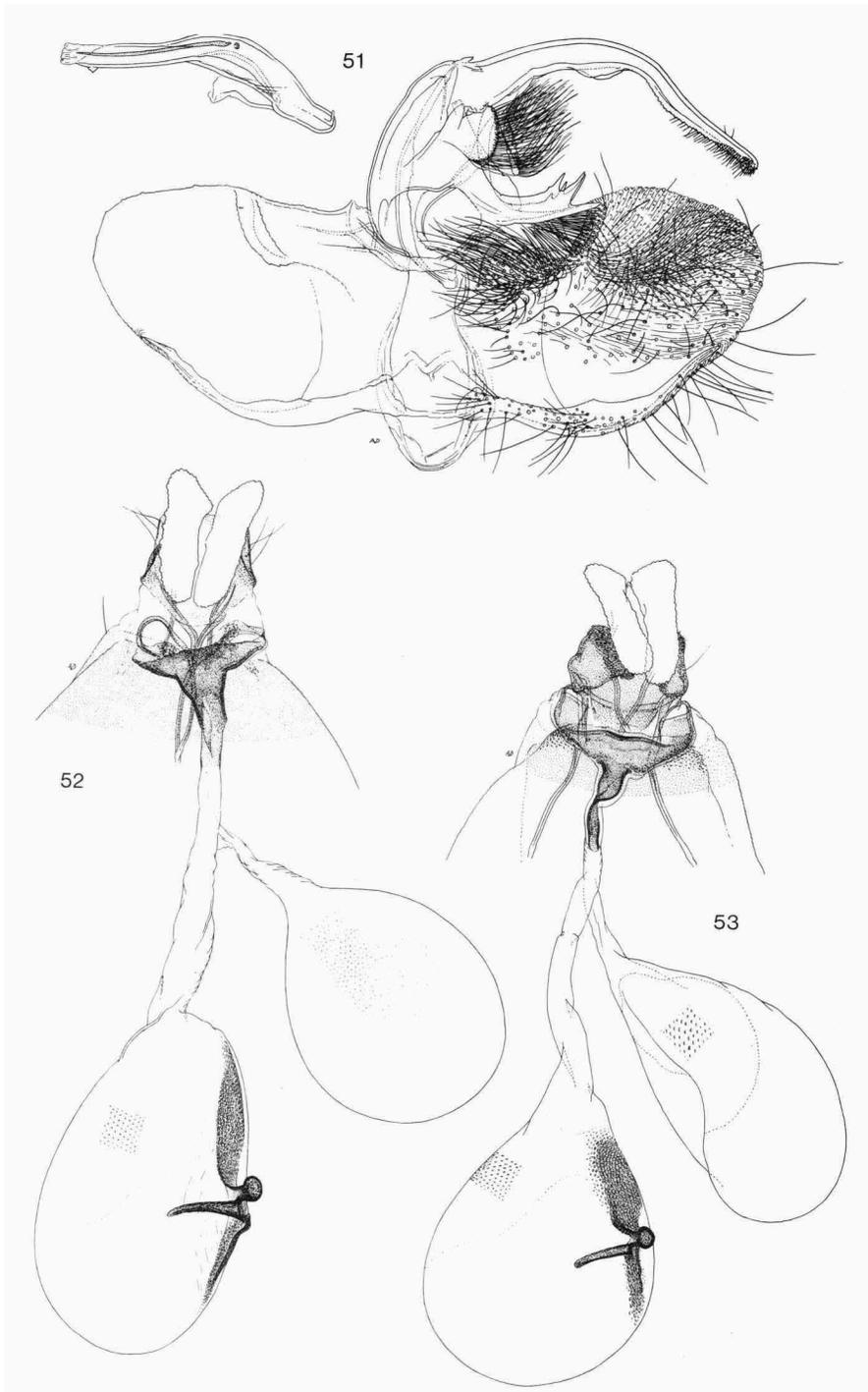
♂ 26 mm. Head tawny, vertex light ochreous. Antenna notched, tawny-ochreous, ciliations under 1, scape long, flattened below, with smooth scales. Palpus chestnut-brown; rather long, median segment triangular, with closely appressed scales, terminal segment moderately long. Thorax fulvous, apical half light ochreous. Abdomen dull, milky whitish-ochreous, anal tuft dark grey.

Fore wing rather broad, dilated, costa without fold, gradually curved throughout, apex rectangular, termen gently sinuate along upper third, rounded and moderately prominent below. Bright golden-ochreous, along anterior 2/3 slightly suffused with fulvous, posterior third not suffused, paler ochreous. Basal patch triangular, to 1/6 of costa, fulvous, to fold, posterior edge concave; central fascia from 1/3 of costa to dorsum well before tornus, well defined, tawny, lightly infuscated, edges partly marked with dark fuscous round dots; anterior edge gently concave and shallowly, coarsely serrate, posterior edge concave to upper edge of cell, thence rounded-prominent to middle, then outwards-oblique, by far not reaching tornus; costal patch moderate, tawny-ochreous, subtriangular, along costa from 2/3 to well before apex, anterior edge concave, with a dark fuscous marginal line, top merging into middle of central fascia, posterior edge suffused and ill-defined, emitting a straight series of blackish dots, parallel to those along posterior edge of central fascia, not reaching termen; these markings enclosing a rounded-lozenge-shaped patch of ground colour on middle of costa; dorsum with two oblong black spots, a larger at 1/3, not reaching to vein 1a + b, another at 2/3, posteriorly extending to tornus. Cilia (damaged), purplish.

Hind wing pale whitish-ochreous, with a silky gloss, towards apex tinged pale ochreous, hair-pencil below base of vein 1c light grey; dorsum thickened by dense long light ochreous hairs in a longitudinal roll open on upper side of wing. Cilia whitish, along dorsum, light ochreous, projecting pencil-like in tornus.

Male genitalia. Tegumen less robust than in the type-species. Uncus rather long and flat, forming a large hook, top notched. Socius oblong, very densely long-haired. Transtilla short, narrowed in middle, broad at the sides. Valva broadest in middle, sacculus thick and strong, dilated almost from base, top densely haired. Aedeagus pistol-shaped, rectangular, both halves slightly sinuate; cornuti, apparently a pair of long spines.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9039.



Figs. 51–53. Genitalia of *Ulodemis* and *Allodemis* g. n. 51, *U. hyalura* sp. n., ♂, holotype, left above, aedeagus; 52, *A. fulva* sp. n., ♀, allotype; 53, *A. dionysia* sp. n., ♀, allotype.

A distinctly marked and coloured species, without a costal fold and with a hooked uncus. Apparently it is less close to the preceding species and probably related to *Allodemis chelophora* (Meyrick) **comb. nov.**, from Malaya, erroneously placed by Meyrick in *Procalyptis* Meyrick (1910) and by the present author in *Ulodemis* (Meyrick) (Diakonoff, 1939:163, fig. 7D); that genus is differing by the presence of a costal fold and by the male genitalia.

**Allodemis dionysia** spec. nov.

[δΙΟΝΥΣΙΟΣ = belonging to Bacchus]  
(fig. 53, pl. 10 fig. 50)

♀ 13 mm. Head and palpus light fulvous, palpus projecting more than twice width of head beyond face, strongly dilated, triangular, face dusted with whitish. Thorax fulvous, with slight fuscous suffusion, tegula ferruginous. Abdomen pale ochreous-grey, venter pale ochreous.

Fore wing oblong-truncate, costa sinuate: strongly arched along basal half, gently concave posteriorly, apex rather pointed, prominent, termen distinctly sinuate, almost vertical. Deep ferruginous, here and there slightly paler, deep vinaceous, sparsely marked with very pale grey. Basal patch deep ferruginous-purple, ill-defined, to 1/4, edge faint, slightly serrate; the following band of ground colour slightly paler, both edges a little serrate, band gradually and slightly dilated downwards, on costa hardly traceable, downwards more and more marked with pale grey interrupted lines along edges and fragment of lines in middle, distinct on dorsum; central fascia again deep ferruginous-purple, slightly paler and then, deep vinaceous, in disc, dark again towards dorsum, posterior edge indefinite, terminal part of wing becoming paler vinaceous with veins and a broad terminal band suffused dark fuscous-purple; costal patch long, triangular, rather depressed and rounded top to stalk of 7 and 8, patch edged throughout with pale grey, this edge becoming more distinct and narrower towards costa, anteriorly, below and posteriorly obscured with purple ground colour; a few pale grey short parallel strigulae strewn here and there between veins well before termen. Cilia deep vinaceous-purple.

Hind wing semipellucent light fuscous-grey, apical third becoming suffused with light vinaceous, deeper vinaceous towards apex.

Female genitalia. Rather similar to those of *A. fulva*, but with sterigma more sclerotized, especially laterally, colliculum narrower, dark edged and abruptly ending. Sclerotic base of signum anteriorly shorter but broader, posteriorly, smaller.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♀, holotype, genit. slide 9102.

A dark vinaceous-purple unique female, differing too strongly by colouring and markings from males of the following *A. stegopa* spec. nov. to unite them, so that I prefer to keep the female separated, pending discovery of more material.

***Allodemis stegopa* spec. nov.**

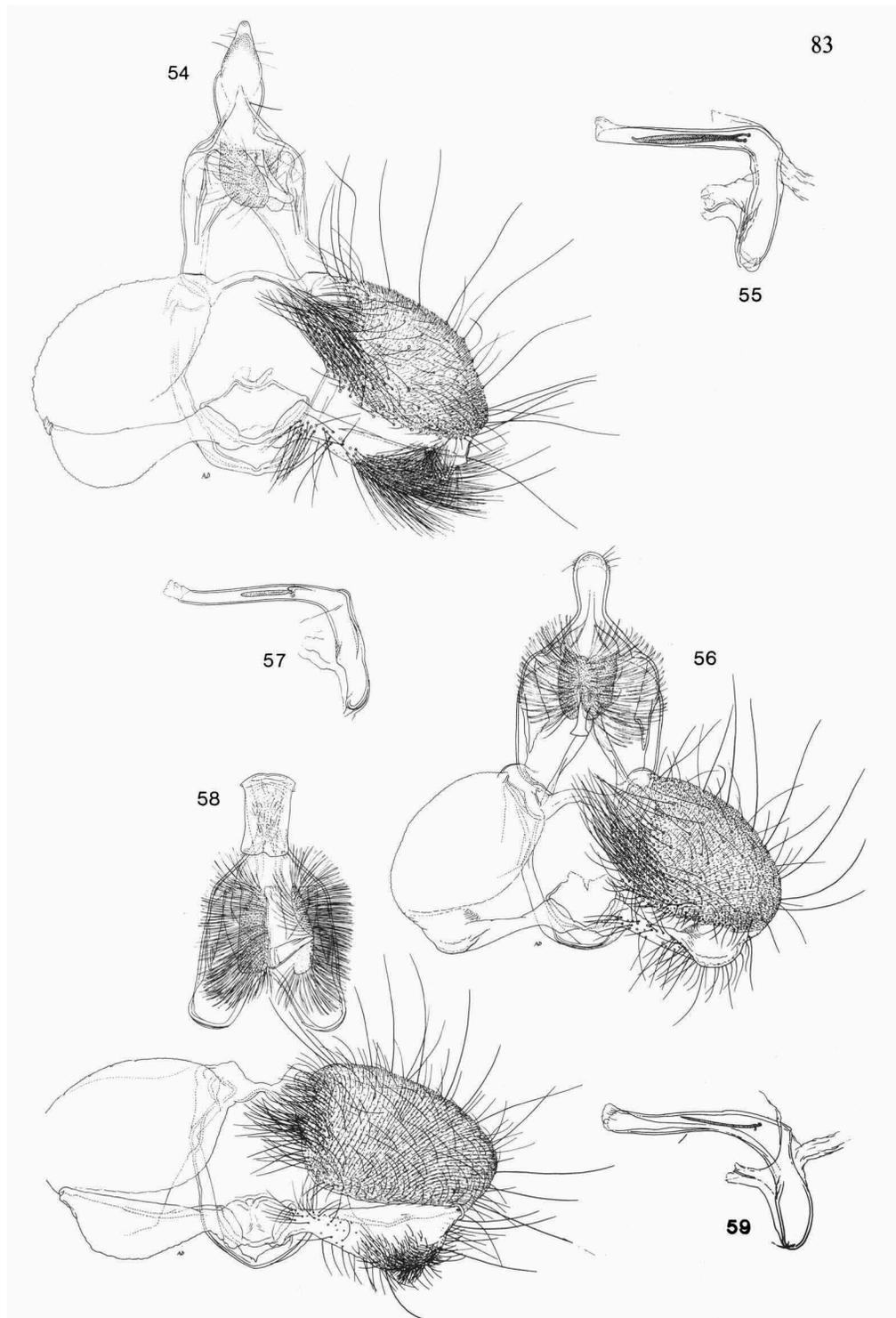
[στεγάζω = to protect, ὤψ = eye]

(figs. 56, 57, pl. 10 fig. 49)

♂ 20–21 mm. Head tawny, mixed with purplish, strewn with pale grey. Ocellus posterior, large, triangular, flat, leaden coloured. Antenna notched, transverse ridge rather long, triangular, projecting forward; flagellum slightly thickened, tawny, ciliations almost 1. Palpus thickened with dense, loosely appressed scales, roughish along edge, towards apex above; light tawny, finely dotted with purplish, terminal segment dark grey, with a paler base. Thorax purplish-tawny. Abdomen glossy silvery-white.

Fore wing rather narrow, gradually dilated, costa arched at base, with a broad fold to 1/3, straight posteriorly, gently prominent in middle, apex obtusely pointed, moderately projecting, termen slightly sinuate above, vertical. Chestnut-brown, with a slight bronze gloss, strewn with numerous suffused dark purple dots and points, basal 2/5 of wing dark fuscous-purplish, strongly dusted with pale ashy-grey, outer edge of this dusting from 1/4 of costa, outwards-oblique to before middle of fold, reaching halfway towards dorsum, followed posteriorly by a deep brown, not pale-dusted band from 2/5 of costa to and along posterior half of dorsum; an oblong, pale orange spot along base of dorsum, transversely striated with suffused reddish-fulvous striae; a rounded pale ochreous spot on middle of dorsum, reaching above fold, irregularly parted by several vertical fulvous marks; some deeper chestnut-brown suffusion along costa in apex, and along termen; in one paratype pale ashy colour extending over costal half of wing. Cilia deep fulvous-purple with a faint and narrow pale median and a basal line.

Hind wing whitish, on posterior half becoming tinged pale ochreous, towards edge in apex and along upper part of termen suffused with fulvous, on middle of terminal edge, with blackish; upper half of cell to midway towards apex bluish, being black dusting of underside showing through. Cilia pale ochreous, glossy, around apex and along upper part of termen, with a fulvous suffused subbasal band, becoming dark grey around apex; cilia along dorsum thick and brushy, on upper side pale ochreous, on under side fulvous mixed with blackish and fulvous, in tornus angularly projecting.



Figs. 54–59. Male genitalia of *Allodemis* g. n., holotypes. 54. *A. fulva*, sp. n.; 55, the same, aedeagus; 56, *A. stegopa*, sp. n.; 57, the same, aedeagus; 58, *A. euhelias*, sp. n.; 59, the same, aedeagus.

Male genitalia. Tegumen larger than in the type-species. Uncus smaller, moderately clavate, top rounded. Socius densely long-scaled, scales narrow. Gnathos concealed, top slender, slightly dilated transversely, chisel-shaped. Transtilla shorter and thicker. Valva with sacculus narrower, less strongly rounded, less densely haired. Aedeagus rectangularly bent, apical part gently sinuate; cornutus, one moderate blade.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, holotype, genit. slide 9044; 1 ♂, paratype. The same, Bivouac Two, 1430 m, 1 ♂, paratype.

A distinct species, by darker colouring and dorsal pale spot, as also by the dark, thickened dorsal cilia in the hind wing. Allied to the type-species.

***Allodemis chelophora* (Meyrick) comb. nov.**  
(fig. 60, pl. 10 fig. 52)

*Procalyptis chelophora* Meyrick, 1910, Trans. Ent. Soc. London, 1910: 431 (Malay States, ♂); 1912, Lep. Catal., 10:13; 1913, Genera Ins., 149:18. Diakonoff, 1939, Zool. Meded., 21:163 (transf. to *Ulodemis*). Clarke, 1958, Meyrick's Types, 3:188, pl. 94 figs. 2–2a. *Ulodemis chelophora*; Diakonoff, 1939, Zool. Meded., 21:179, figs. 5H, 5M, 5N, 7H.

The male may be redescribed as follows.

♂ 20 mm. Head pale ochreous-grey, face creamy with a central grey spot. Palpus long, porrected, almost twice diameter of head, extended and broadest in middle, upper edge of median segment convex, with rough projecting hairs, lower edge almost straight, smooth; creamy-grey, grey above, posterior half laterally becoming dark fuscous towards tip. Thorax pale tawny-grey. Abdomen deep bronze-fuscous, pleurae paler.

Fore wing oblong-subrectangular, with a thick costal fold almost to 1/3, costa almost straight, apex subobtuse, hardly prominent, termen moderately sinuate, slightly projecting and rounded below middle. Pale ochreous, costal fold grey, with a silky gloss, surrounded by slight brownish suffusion, extending posterad in cell and strewn with irregular slightly darker brownish suffused spots; a gently curved rectangular series of similar dots, from costa just beyond middle, to termen above tornus, hardly concave anteriorly; top of wing beyond this strewn with a few similar but paler and smaller dots; a row of transverse small brownish marks along termen. Cilia fuscous-grey (imperfect), darker around tornus and dorsum.

Hind wing pale grey-creamy, tornus slightly rounded-prominent, otherwise not modified. Cilia pale grey, with a subbasal darker band, cilia along dorsum light tawny-orange, projecting and forming slender pencils at tornus.

Sumatra sept., Deli, Dolok Merangir, 150 m, 8.vii.1967 (E. Diehl), 1 ♂, genit. slide 8962.

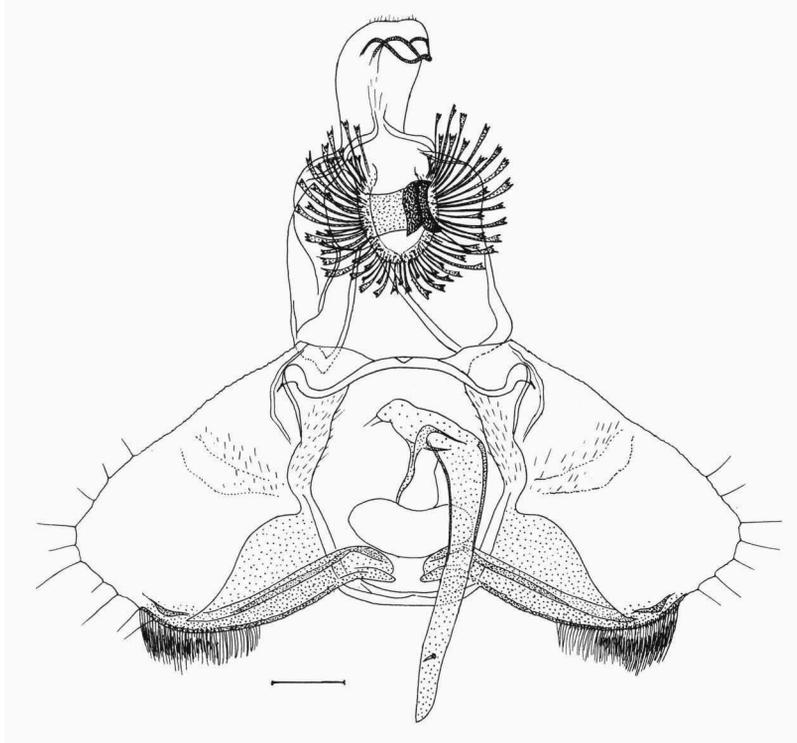


Fig. 60. *Allodemis chelophora* (Meyrick) comb. n., ♂, genitalia (after Diakonoff, 1939).

**Lumaria minuta** (Walsingham)

- Tortrix pusillana* Walker, 1863, List Lep. Ins., 28:328 (Ceylon), nec *Phalaena Tortrix pusillana* Denis & Schiffermüller, 1775, Schm. Wiener Gegend: (nom. praeocc.). Walsingham, 1887, in Moore, Lep. Ceylon, 3:493 (Ceylon). Cotes & Swinhoe, 1889, Catal. Moths India: 697, no. 4751.
- Capua minuta*; Walsingham, 1900, Ann. Mag. Nat. Hist. (7) 5:484 (Japan). Meyrick, 1912, Lep. Catal., 10:9; 1913, Genera Ins., 149:24.
- Capua probolias* Meyrick, 1907, J. Bombay Nat. Hist. Soc., 17:977 (Ceylon, India).
- Capua pusillana*; Meyrick, 1912, Lep. Catal., 10:9; 1913, Genera Ins., 149:24.
- Epagoge pusillana*; Diakonoff, 1941, Treubia, 18:410 (Java, Sumba); 1947, Tijdschr. Ent. 88 (1945):342; 1948, Treubia, 19:499 (Bali).
- ?*Epagoge minuta*; Obraztsov, 1955, Tijdschr. Ent., 98:224 (valid name, *pusillana* praeocc.); 1957, *ibid.*, 100:518, no. 61.
- Lumaria minuta*; Diakonoff, 1976, Zool. Verh., 144:112, figs. 82, 95, 97.

Distribution. Ceylon, India, Nepal, Java, Bali, Japan.  
Mt. Bandahara, Bivouac Two, 1480 m, 1 ♂.

**Asteriognatha** gen. nov.[ἀστειρον = star, *gnathos* = median appendix of tegumen]

Head with appressed scales, face very densely short-scaled, forming an obtuse prominence on forehead. Ocellus posterior, little pigmented. Haustellum developed. Labial palpus moderately long, slightly ascending, median segment with smoothly appressed short scales, hardly rough along lower edge, hardly curved and scarcely dilated at base; terminal segment very short, obtuse. Thorax smooth, (rather defaced posteriorly). Posterior tibia with bristly, appressed hair-scales above and beneath, flattened ventrally. Abdomen normal.

Fore wing rather narrow, oblong, gradually dilated, with a very narrow costal fold to before middle; apex of wing obtusely pointed, termen almost straight, little oblique, vein 1b furcate at base, 2 from beyond 2/3, 3 from before angle, 4 from angle, approximated to 5, 7 separate, to termen, (in type species) or 7 and 8 stalked (in *metriotera*), 11 from before middle. No veins in cell.

Hind wing 3/4, without cubital pecten, anal veins A1 and A2 developed, A3 fold-like, 2 from 2/5, 3 and 4 connate from angle, 5 closely approximated at base, 6 and 7 closely approximated towards base, 7 to apex, 8 free from base.

Male genitalia. Tegumen high, narrowed above, sides strongly concave and forming a cylinder, almost closed below middle, forming an opening above, through which partly protrudes the gnathos. Uncus erect-cordiform (or inverted-cordiform). Gnathos either more or less asteroid, or X-shaped. Socius, a short, densely bristled knob. Transtilla rather broad, in middle accolade-like. Vinculum very short. Valva oblong-suboval, sacculus short, hairy, cucullus oval; disc of valva with a median longitudinal thick tumescence, densely hairy. Aedeagus pistol-shaped, robust, thick at base. Cornuti, a sheaf of thick spines.

Type-species: *Asteriognatha cyclocentra* spec. nov.

A novel, peculiar form, of a problematic generic affinity, although distinctly belonging to the Archipini. The asteroid gnathos is peculiar. Superficially the type-species reminds one of some cnephasiine or even an olethreutine.

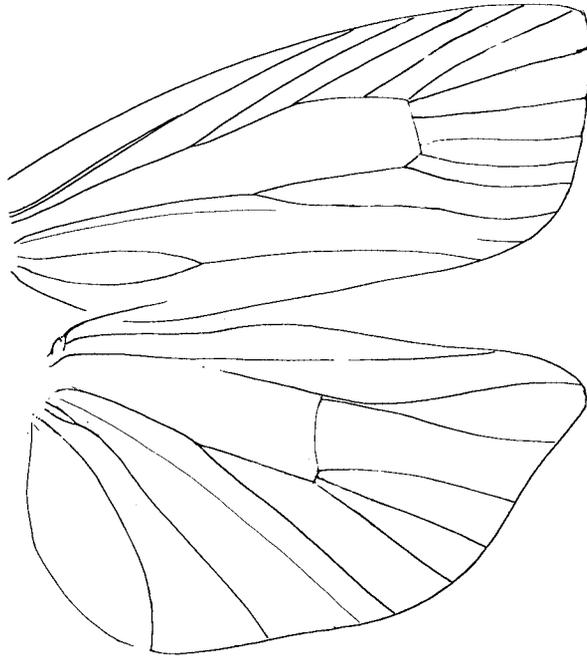


Fig. 61. *Asteriognatha cyclocentra* sp. n., wing venation, ♂.

***Asteriognatha cyclocentra* spec. nov.**

[κύκλος = circle, κέντρος = centre]

(figs. 61, 64, pl. 10 fig. 54)

♂ 20 mm. Head whitish-grey with a silky gloss, projecting tuft of dense scales on forehead parted vertically by a thin black line. Antenna pale fuscous, scape greyish, top paler; ciliations under 1. Palpus whitish-grey. Thorax pale grey, posterior half and tips of tegulae apparently white (defaced). Abdomen glossy pale ochreous-fuscous.

Fore wing with veins 7 and 8 separate; whitish-ochreous, costal edge slightly deeper ochreous, markings fuscous-brown. Base of costa with a dark streak, followed by paler transverse marks, indistinct by still paler marginal suffusion; a subtrapezoidal depressed moderate mark on costa before middle, lower edge irregularly suffused and slightly extended fore and aft; costal patch elongate-triangular, rather depressed, from just before 2/3 to well before apex, becoming paler posterad and including some five marginal dark dots; a large oblong semioval ring in disc, from below upper edge of cell to below fold and before middle of wing to 3/4, upper edge of ring formed by a straight thick bar, lighter brown posteriorly, anteriorly dark and emitting a

suffused connection from basal end to medio-costal spot; lower edge of ring obliquely semi-oval, broadest below lower angle of cell, here connected with 4/5 of dorsum by a suffused oblique projection; a row of round interneural dots rather before termen, from below vein 7 to above fold, with a wedge-shaped spot between veins 4 and 6; tips of veins with minute dots. Cilia concolorous, with a submedian band of dark small bars.

Hind wing semipelluculent bronze-fuscous, darker in cell, paler towards costa, dorsal area opaque fuscous. Cilia pale fuscous, a pale ochreous basal line.

Male genitalia, as described with the genus above, with the uncus erected-cordiform, the gnathos as follows: with arms split from beyond base into two pairs of sideways directed, pointed processes and a median pair, interconnected in middle, with a short obtuse process at that point, then separated again in a pair of pending hooks, curving forwards.

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♂, holotype, genit. slide 9059.

A pale, slightly damaged specimen, superficially resembling some eucosmid or olethreutid, but with surprising genital characters. Its actual position is not quite certain without the knowledge of the female characters.

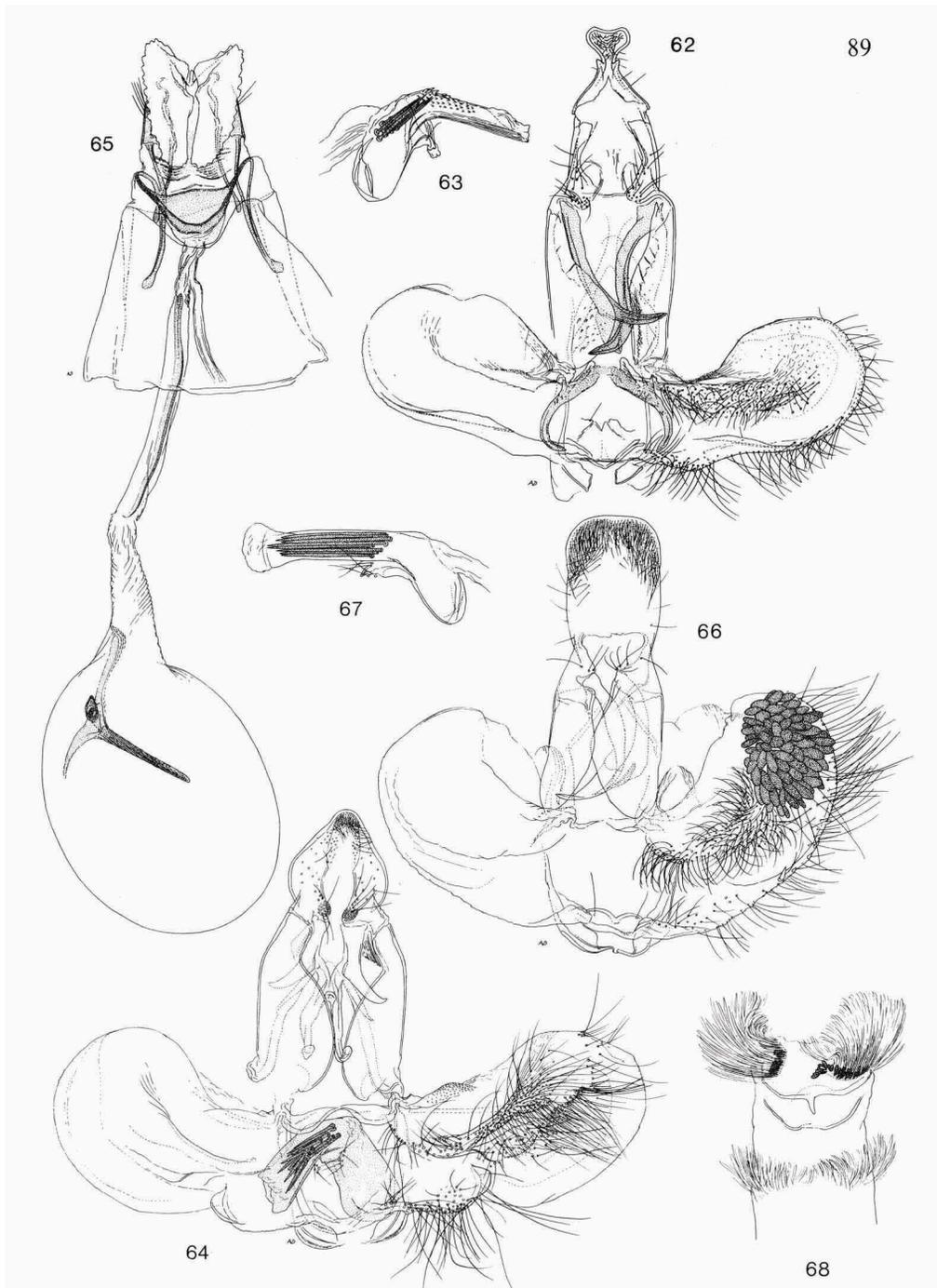
***Asteriognatha metriotera* spec. nov.**

[μετριοτερός = humbler]

(figs. 62, 63, pl. 10 fig. 53)

♂ 16.5 mm. Head pale ochreous, tuft on vertex roughly projecting over forehead. Antenna brownish, ciliations 1/4, dense. Palpus pale ochreous, mixed with grey. Thorax light ochreous, mixed with tawny. Abdomen glossy whitish-ochreous, appearing greyish in certain lights.

Fore wing with veins 7 and 8 stalked; oblong, broadest at 2/3, costa gradually curved throughout, apex obtusely pointed, termen gently convex, hardly sinuate above, slightly oblique. Pale ochreous-whitish, markings brownish. Costa with a narrow dark brown streak along 1/4, a small such line at 2/3, costal patch subtriangular, strongly depressed, from 3/5 to before apex, followed by a minute subapical point; an oblong-oval mark in centre of disc, from just below upper edge of cell to below fold, occupying over 1/3 of wing length, narrowed anteriorly, posteriorly open and including an excentric spot of ground colour; upper branch of this mark becoming paler posterad, lower connected posteriorly with a faint pale greyish quadrate patch on end of dorsum; a series of faint short strigulae obliquely across termen, becoming dark dots along dorsum; a clavate dark blotch before termen below middle; a few irregular small marks scattered over wing. Cilia whitish, apical half faintly infuscated.



Figs. 62–68. Genitalia of Archipini, types. 62, *Asteriognatha metriotera* sp. n., holotype, ♂; 63, the same, aedeagus; 64, *A. cyclocentra* sp. n., ♂, holotype; 65, *Notiocleipsis synnoa* sp. n., ♀, allotype; 66, *Phaenacropista compsa* sp. n., ♂, holotype; 67, the same, aedeagus; 68, the same, coremata.

Hind wing semipelluculent bronze-grey, glossy. Cilia concolorous, with a whitish basal band.

Male genitalia, as described with the genus above, gnathos long and X-shaped, uncus erect-cordiform, with narrow base; aedeagus with a very broad basal half, apical half scobinate above.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 9127.

Superficially very similar to *D. cyclocentra* spec. nov., but smaller, with an X-shaped, instead of asteroid gnathos and with other distinct features of the genitalia.

### **Neocalyptis affinisana** (Walker)

*Tortrix affinisana* Walker, 1863, List Lep. Brit. Mus., 28: 328. Walsingham, 1887, in Moore, Lep.

Ceylon, 3: 493. Cotes & Swinhoe, 1889, Cat. Moths India: 696, no. 4746.

*Capua affinisana*; Meyrick, 1912, Lep. Catal., 1: 10 (emend.); 1913, Genera Ins., 149: 15; 1914, Supplementa Ent., 3: 47; in De Joannis, 1930, Ann. Soc. ent. France, 97: 709; 1934, Iris, 48: 29. Caradja & Meyrick, 1935, Mater. chines. Provinzien: 48.

*Epagoge affinisana*; Diakonoff, 1941, Treubia, 18: 213; 1941, Treubia, 18: 411; 1947, Tijdschr. Ent., 88 (1945): 342; 1948, Bull. Mus. Hist. Nat., 20: 342.

*Epagoge affinisana*; Diakonoff, 1952, Verh. Naturhist. Mus. Basal, 6: 144. Obratsov, 1955, Tijdschr. Ent., 98: 224.

*Neocalyptis affinisana*; Diakonoff, 1976, Zool. Verhand., 144: 99.

Distribution. Widely distributed over South Asia, but it is uncertain whether all records pertain to the same species.

Food plants. Widely polyphagous.

Mt. Bandahara, Bivouac One, 810 m, 4 ♂. Soldok, low country, 1 ♂.

### **Notiocleipsis** gen. nov.

[νότιος = south, *Cleipsis* = generic name]

Head with loosely appressed scales on vertex, thick short scales between bases of antennae, separated by a narrow, gully-like stripe along forehead from face, with roughish short scales above, smooth below. Ocellus posterior. Haustellum short. Antenna short-ciliate in male, thinner, pubescent, in female. Palpus rather long, porrected, projecting beyond face less than diameter of eye, median segment with short and dense scales, slightly roughish along edge, posterior half distinctly dilated, terminal segment short, obtuse and porrected. Thorax smooth. Posterior tibia moderately thickened with closely appressed hair-scales, roughish along lower edge.

Fore wing oblong-subtruncate, moderately broad, costa curved at base,

straight posteriorly, apex rounded-rectangular, termen little sinuate. Vein 1b furcate over 1/3, 2 from 2/3 of cell, 3 from before angle, 4 and 5 very close at base, 7 and 8 stalked, 7 to termen, 9–11 almost equidistant, 11 from beyond middle, veins in cell absent.

Hind wing without cubital pecten, vein 2 from 2/3, 3 and 4 short-stalked, 5 approximated, 6 and 7 stalked.

Male and female genitalia as described with the type species.

Type-species: *Notiocleptis synnoa* spec. nov.

A rather puzzling form, apparently nearest allied to the Holarctic *Cleptis* Guenée, but the male genitalia are too different for allowing inclusion in that genus. The broad uncus, massive, rising labides, broad and rounded, simple valva, combined with straight aedeagus, provide these differences.

When trying to ascertain the position of the present form, the author has much profited by the study of the elaborate illustrations of the species of *Cleptis* in two parts of a recent world-wide revision of the genus by Razowski. However, it may be remarked in passing, that he disagrees with certain conclusions of Dr. Razowski, who attributed to that genus several apparently heterogeneous elements. Especially the inclusions of the quite characteristic genus *Mochlopyga* Diakonoff, offending the evidence of the male genitalia of three species of that genus, is quite surprising.

***Notiocleptis synnoa* spec. nov.**

[συννός = earnest]

(figs. 65, 69, 71, 72, pl. 10 figs. 55, 56)

♂ 14 mm. Head purplish, vertex partly dark grey. Antenna light ochreous, scape purplish. Palpus porrected, dark brown, median segment hardly roughish along edge, moderately slender, towards top dilated, terminal segment exposed, short, obtusely pointed. Thorax light tawny-ochreous. Abdomen glossy ochreous-tawny, venter pale ochreous.

Fore wing oblong-subtruncate, costa with a moderate fold to before middle, apex rounded, termen hardly sinuate, little oblique. Pale tawny-ochreous, regularly strigulated with transverse undulate fine brownish lines, partly ill-defined. Markings well-defined, deep purple, slightly marbled with dark grey. Base of costa with some four transverse strigulae and a short suffusion; a small oblong spot just beyond 1/3 of costa; costal patch semioval, more or less elongate, from slightly before 3/4 to before apex; about three transverse strigulae before termen darker, more distinct, ending on termen, irregularly zig-zag. Cilia glossy golden-ochreous, a narrow median band of brownish dusting.

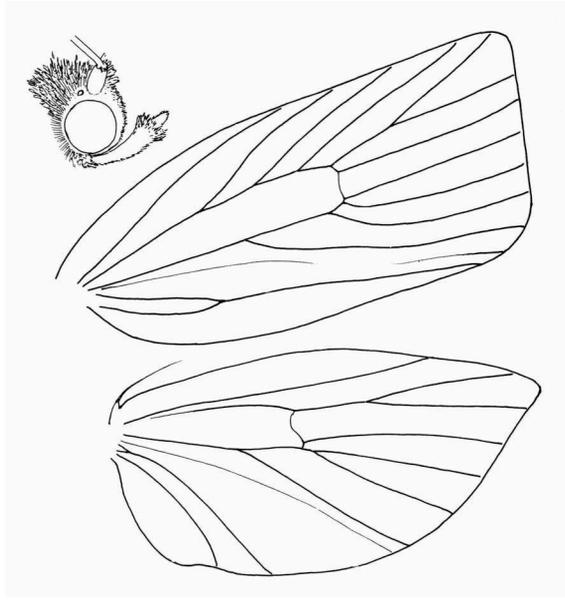


Fig. 69. *Notioleptis synnoa* sp. n., head and wing venation, ♂.

Hind wing semipelluculent brownish-fuscous with a silky gloss and slight prismatic reflections. Cilia golden-ochreous, except along base, slightly infuscated.

♀ 16 mm. Similar to the male but slightly more suffused with tawny, base of costa not suffused, only with four dark strigulae; median costal mark small and narrow, with an indistinct suffusion below. Otherwise as male.

Male and female genitalia, as described with the genus above.

Mt Bandahara, Bivouac One, 810 m, no. 23, 1 ♂, holotype, genit. slide 9058, 1 ♀, allotype, genit. slide 10347, 10 ♂, paratypes.

A pale tawny species, finely dusted with transverse minute brownish striae, costal markings blackish-brown.

***Isodemis stenotera* spec. nov.**

[στενότερος = narrower]

(pl. 11 fig. 57, pl. 21 fig. 100)

♂ 18 mm. Head light with vertex and scapes of antenna orangeish-fulvous, forehead and face whitish, middle of forehead with a suffused small fulvous mark. Palpus slender, long, obliquely rising almost as high as upper edge of eye. Pale ochreous, median segment gently suffused with fulvous towards

top, this little dilated. Thorax fulvous, symmetrically mixed with paler fulvous-ochreous, tegulae also paler. abdomen dark fuscous-brown, anal tuft blackish-fuscous.

Fore wing oblong, rather narrow, costa with a large fold, lower edge triangularly extended to middle of wing breadth, posterior side longer than anterior, reaching almost to  $2/3$ , moderately curved throughout, apex subobtusate, termen gently sinuate, almost vertical. Chestnut-fulvous, partly edged along light markings and striped between veins posteriorly, with deep ferruginous, markings pale fulvous, partly well-defined, posteriorly partly edged with glossy whitish. Costal fold pale fulvous-pinkish-ochreous, this colour extending to well before fold, lower edge rounded, rather suffused; this light patch on middle of costa obscured by a semioval brown suffused spot; a gradually curved, suffused, guirland-like streak of deep ground colour, from beyond base of dorsum, thence above and parallel to dorsum, then curving obliquely upwards and merging in a large deep patch of ground colour on posterior half of wing; these dark streak and patch delimiting a trapezoidal patch on dorsum before middle, pale fulvous-ochreous, edged above and partly posteriorly with whitish, anterior angle continued along dorsum to before its base, this patch gently infuscated except edge; a longitudinal curved band from end of costal fold below costa, running slightly downwards to well before upper  $2/5$  of termen, there furcating, with upper narrowed branch to apex, lower branch sinuate, curving downwards, to tornus and becoming less distinct except along edges; this band paler, being edged throughout on both sides with glossy whitish and strewn with scales of this colour; a faint pale ochreous line, sinuate, from about lower angle of cell, running parallel to lower edge of band, between veins 3 and 4 to their middle. Cilia ferruginous mixed with chestnut.

Hind wing semipellucid dark fuscous, becoming paler on basal third, veins darker, costa as far as vein 6 suffusedly marbled with light orangeish. Cilia grey fuscous, glossy, with a pale basal line.

Male genitalia. Resembling those of the type species, *I. serpentiana* (Walker), but valva with a broad, truncate, fleshy top (not narrowed), aedeagus with two equally long, not undulating, but gradually pointed cornuti (in *serpentiana* cornuti unequal, the long one undulate).

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♀ (without abdomen).

Central West Sumatra, Fort de Kock, 980 m, 1925 (E. Jacobson), 1 ♂, holotype, genit. slide 10410.

Very similar to the type-species, described from Borneo, but with markedly narrower fore wing with much paler costal fold and trapezoidal, instead of triangular dorsal spot and by distinct genitalia of the two sexes.

**Phaenacropista** Diakonoff, 1941

*Phaenacropista* Diakonoff, 1941, Treubia, 18: 387 (type-species, *Schoenotenes cremnotoma* (Meyrick), ♀, Java).

The diagnoses of this genus should be slightly extended, in order to include the following species, closely allied to the type species, at the time available only in the female sex:

Fore wing with cell gradually narrowing towards posterior end (as also in the type species), with upper and lower posterior angles not distinct; therefore vein 6 apparently originating from upper angle of cell, veins 7 and 8 from before that angle, while it is vein 4, seemingly originating from the lower angle of cell, and vein 3 originating distinctly before that angle.

Hind wing with veins 3 and 4 stalked, or connate, from angle, 5 closely approximated, veins 6 and 7 also connate, vein 6 running to apex (in type-species) or to below apex.

The male genitalia are characteristic, having a dense group of modified, jet-black large scales on the posterior half of the disc of valva.

**Phaenacropista compsa** spec. nov.

{κοιψός = elegant}

(figs. 66, 67, 68, pl. 11 fig. 58)

♂ 15.5 mm. Head pale ochreous; face rather prominent. Antenna pale ochreous, ciliations 1. Palpus rather long, porrected, triangular; light fuscous, top of median and whole apical segment pale ochreous. Thorax light ochreous suffused light brownish, collar and patagia light ochreous. Abdomen glossy golden-ochreous, paler towards base.

Fore wing oblong-subtruncate, costa without a costal fold, gradually considerably curved throughout, less so posteriorly, apex rather obtuse, termen hardly sinuate, almost vertical. Pale ochreous, rather dull, markings well-defined deep brown. Anterior third of costa with three or four small dots; a small longitudinal streak from beyond base of wing, below base of vein 12; central fascia indicated by an inverted-trapezoidal moderate dark spot on 2/5 of costa, outwards-oblique, cut by upper edge of cell, and by a more oblique, narrow transverse fascia from below and before costal spot, gradually quickly dilated downwards, to middle of costa, with anterior edge gently concave posterior suffused below, extending to tornus; one or two points on middle of costa; costal patch moderate, oblong-oval, from 2/3 to well before apex, emitting beyond middle of lower edge a straight dark line to termen above tornus, extended by paler, fuscous suffusion to termen, almost obliterate between

veins 7 and 8; a narrow dark marginal line around apex. Cilia pale ochreous, glossy, with thin suffused median dark brown line interrupted between veins.

Hind wing unicolorous pale fulvous-fuscous with a silky gloss, edge narrowly brighter glossy. Cilia concolorous.

Male genitalia. Tegumen wide, rolled into a tube around gnathos. This curved, robust, long. Uncus broad and flat. Socius small, parietal. Valva fleshy, rounded, with a median depressed ridge covered with dense fine hairs, and towards end, with jet-black large and flat modified scales. Aedeagus pistol-shaped, cornuti, a sheaf of long spines. Abdomen with dense coremata upon 7th sternite and another wreath of coremata, upon 6th segment.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 9100; 2 ♂, paratypes.

The distinctly marked, elegant species is closely related to the type-species, *P. cremnotoma* (Meyrick), in spite of the presence of coremata and modified scales upon the valvae of the present species.

**Petridia** gen. nov.

[πετρόεις = stone, ἰδέσθαι = appearance]

Head with appressed scales. Ocellus posterior. Haustellum moderate. Antenna ciliate in male, ciliations 1. Labial palpus moderately long, slender, rather curved, slightly sinuate and porrected, median segment smoothly short-scaled, in male; thicker and with a small loose tuft at apex above, in female; terminal segment short, smooth, pointed. Thorax without a crest. Posterior tibia with loosely appressed hair-scales above.

Fore wing broad, with a costal fold in male, costa strongly curved anteriorly, straight posteriorly, apex subobtusely, termen gently sinuate above, moderately rounded beneath, little oblique. Vein 1b furcate at base, 2 from beyond middle, 3 from angle, separate from 4, 7 separate, to termen, 11 from before middle of cell.

Hind wing without a cubital pecten, broad, sub-semioval, slightly over 1; vein 2 from 2/3, 3—5 separate and equidistant at base, 5 curved at base, 6 and 7 short-stalked in male, longer stalked in female.

Male genitalia. Tegumen moderate, rather broad. Uncus rather broad, slightly narrowed above middle, top rounded. Socii, a few parietal bristles. Gnathos strong and long, moderately curved, hook simple. Valva broad, rather short, simple, not fleshy but leathery, costa concave, outer edge broadly rounded, sacculus moderately sclerotic, with a subapical, obtuse hook; pulvinus absent, bristles only in a longitudinal median narrow band. Transtilla

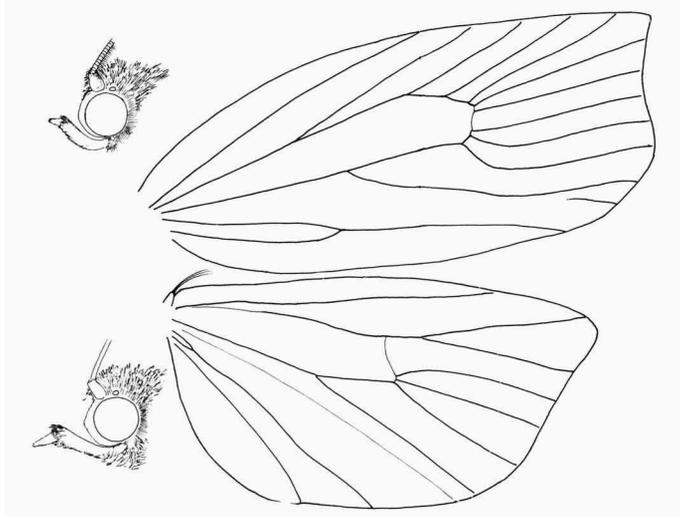


Fig. 70. *Petridia latypus* sp. n., head and wing venation, ♀.

strongly narrowed in middle; labides, hemispherical concave sclerites, without any spines. Aedeagus sub-pistol-shaped, towards apex dorsally with two series of spikes. Cornuti, a sheaf of long spines.

Female genitalia. Ostium, a sclerotic funnel, only partly separated from a ring-like moderate colliculum. Ductus bursae simple, abruptly projecting to the left above, just below the origin of ductus bullae; rather broad throughout. Corpus bursae moderate. Signum single, a strong curved dagger, serrate and with a strong capitulum.

Type-species: *Petridia latypus* spec. nov. The gender of the generic name is feminine.

The genus is structurally allied to the Palaearctic *Choristoneura* Lederer, but judging from the male genitalia, it seems to be nearer to *C. sorbiana* Hb. than to the type-species, *C. diversana* Hübner. A still closer relative may be *Electraglaia* Diakonoff from Nepal; to this we thought of assigning the present species first. But a considerable number of discrepancies, though minor in character, compel us to erect this new genus. These discrepancies chiefly are: quite different facies, longer and curved, smooth labial palpus, separate veins 3 and 4 in the hind wing, not fleshy valva without any trace of a pulvinus, simple hook of the gnathos and peculiar internal spikes of the aedeagus, in the present genus. The female genitalia are somewhat more similar, but the ductus bursae is without a sclerotic cestum and the signum is "Isotenes-like", viz., serrate, in *Petridia*. The striking superficial similarity of the type-species

with the species of *Isotenes* Meyrick is another point of difference with *Electraglaia*. From the *Clepsis* group of genera (where *Isotenes* belongs) the present form may be separated at once by the absence of armed labides, as well as by a simple valva.

***Petridia latypos* spec. nov.**

[ λατύπος = stone cutter]

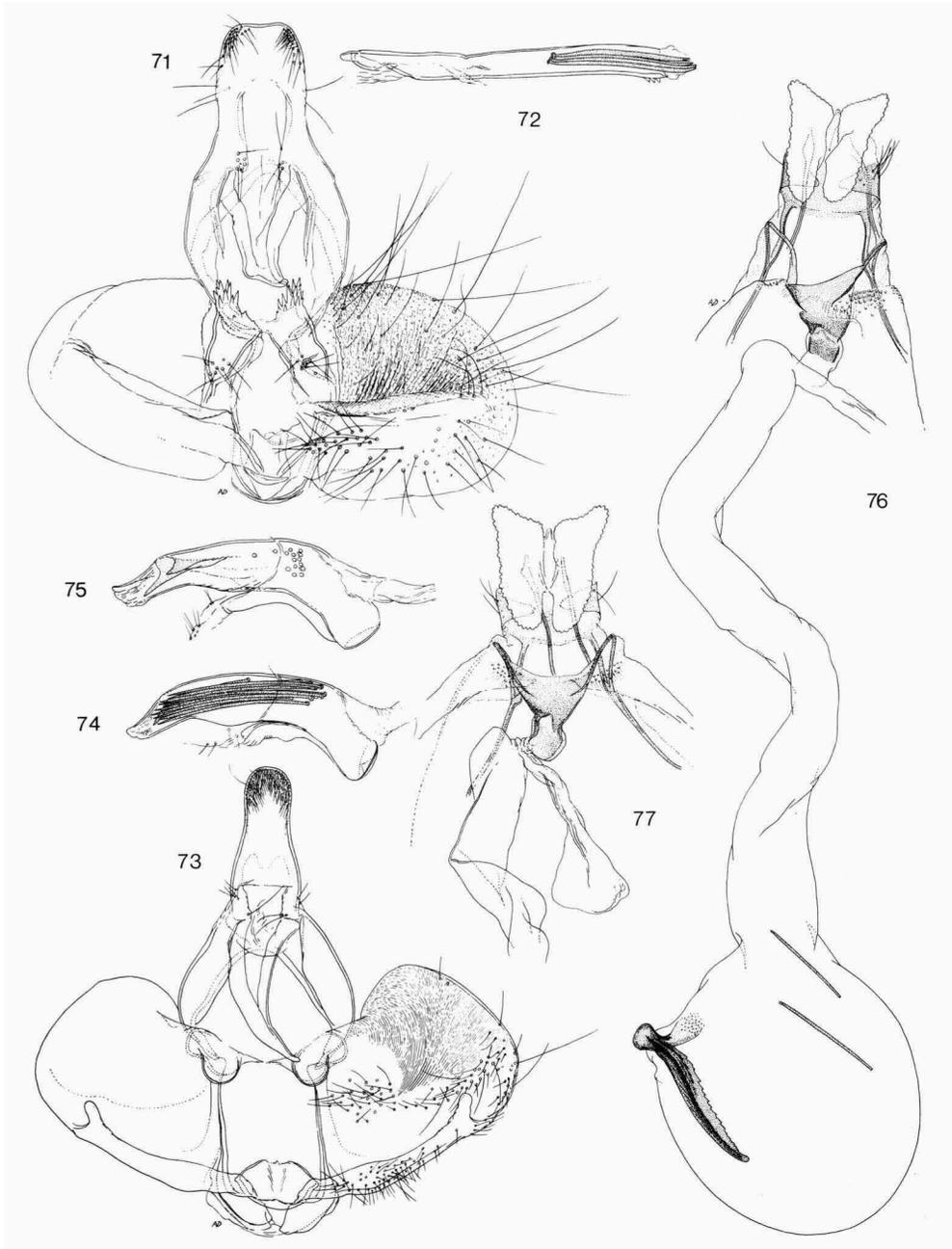
(figs. 70, 73–77, pl. 11 figs. 59, 60)

♂ 20 mm. Head whitish, mixed with pale grey. Antenna ochreous-greyish, scape dark grey. Palpus grey, basal segment and top of median, white. Thorax dark grey, posterior half greyish-white. Abdomen glossy white, anal tuft touched with grey-ochreous.

Fore wing broad, subtruncate, with a costal fold, costa curved anteriorly, straight posteriorly, apex subobtusate, termen slightly sinuate above, moderately curved below, little oblique. Glossy white, all veins narrowly brownish-grey, markings light grey, dusted or spotted with blackish. Basal patch to  $\frac{1}{3}$  of costa, edge very irregular and strongly concave, marked with black on costa with a quadrate suffused spot, from below this to fold with a group of black roundish dots, slightly extending posterad beyond basal patch; this basal patch extending posterad along dorsum and there light grey, transversely striped with darker grey; central fascia blackish, moderately broad, slightly outwards-oblique, interrupted in cell, and slightly dilated towards dorsum, its edges rather irregular throughout; costal patch grey, dotted black, well-defined, triangular, from  $\frac{2}{3}$  to well before apex, with anterior edge faintly convex, posterior faintly concave; numerous light fuscous transverse strigulae between veins all over the wing; less numerous, rather suffused grey dots in transverse indistinct rows: along closing veins, connected with top of costal patch; two parallel rows from posterior edge of costal patch, to tornus, in middle of wing congested into a more or less distinct darker oval patch; an oblique row of dots from lower angle of cell towards tornus. Cilia white, basal half with a series of black bars.

Hind wing white, gradually becoming infuscated from beyond anal area, towards apex. Cilia glossy white.

♀ 24 mm. Thorax dark grey, tegulae paler. Fore wing less distinctly strigulated along and between veins, the markings therefore more distinct. Basal patch black, its upper half obliterate except some 3–4 black marks along costa, its lower half so forming a black patch along dorsum from well beyond base to before tornus, its upper edge acutely projecting towards last black



Figs. 71–77. Genitalia of Archipini. 71, *Notiocleptis synnoa* sp. n., ♂, holotype; 72, the same, aedeagus; 73, *Petridia latypus* sp. n., ♂, holotype; 74, the same, aedeagus; 75, aedeagus of no. 10360; 76, the same, ♀, allotype; 77, the same, paratype no. 10361.

costal spot, thence deeply excised, so as to form a conspicuous white oblong-oval patch, directed towards, but reaching halfway, between fold and dorsum; central fascia more oblique, originating with a dark bluish-grey spot just before middle of costa, pale grey slightly dusted with purplish from vein 11 to lower edge of cell, narrowed below spot, abruptly dilated below vein 10 over posterior half of cell, below cell gradually becoming darker by purplish, then black, suffusion, extending over anterior half of breadth of fascia; posterior edge of dark suffusion twice with a half-circular excision, ending with a slender vertical mark on end of dorsum; termen suffused with leaden-grey, a purplish-black vertical suboval mark before middle of termen. Otherwise as male. Cilia as in male, but basal half barred with leaden-grey, cilia around apex suffused with leaden.

Hind wing as in male, fuscous suffusion only along posterior third. Cilia white with a pale grey subbasal band.

Male and female genitalia, as described with the genus above.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 10360; 1 ♂, paratype, genit. slide 9104; 1 ♀, allotype, genit. slide 10361, 6 ♀, paratypes. Bivouac Three, 1810 m, 1 ♀, paratype, genit. slide 9126.

A rather large species, treacherously similar to the species of *Isotenes* Meyrick, but, surprisingly, with completely different genitalia, referring the species at once to "higher" Archipini, viz. in the vicinity of *Electraglaia* Diakonoff, as elaborated above.

However closely resembling an *Isotenes*, *latypos* may be recognized superficially by the costal patch which is grey, with numerous black dots; that patch in *Isotenes* species (provided they are not rubbed), is almost invariably formed of four equally sized quadrate spots: one central, on costa, of pale ground-colour, flanked by two dark grey ones (basal angles of triangle) and finally, the fourth, apical spot, usually brown.

#### **Cryptomelaena** gen. nov.

[ κρυβῶ = to conceal, μέλας = black ]

Head with a loosely rising large tuft on vertex, forehead and face convex, with very short, almost smooth scales. Ocellus posterior. Haustellum developed. Antenna in male slightly thickened, ciliate, ciliations 1/2, scape subclavate. Palpus rather long, projecting beyond head the width of eye, median segment dilated, roughish along lower edge and at apex, terminal segment about 1/4 of median or less, short-scaled, subclavate, obtuse. Thorax smooth. Abdomen normal, posterior tibia with loosely sub-appressed scales above and beneath.

Fore wing rather long, moderately dilated, costa arched and prominent beyond base in male, gradually curved anteriorly, almost straight posteriorly in female, apex obtusely pointed, termen almost straight and moderately oblique in male, sinuate and less oblique in female. Vein 1b furcate, 2 from beyond middle, 3 from angle, 4 slightly closer to 5 at base, 7 separate to termen, 11 from middle, chorda and median branch absent in cell.

Hind wing  $1\frac{1}{4}$ , broadly subtrapezoidal, without a cubital pecten, vein 1c well developed throughout, 2 from beyond  $\frac{2}{3}$ , 3 and 4 close, but separate, 5 approximated at base, 6 and 7 stalked.

Underside of both wings in male with smoothly appressed, small, dense scales, concealing neuration and with a jet-black androconial patch, oblong-oval, with irregular edge, occupying about the second fourth of cell and slightly extending over its edges above and beneath, similar on the underside of fore wing and upperside of hind wing, in rest of wings apparently overlapping.

Male genitalia. Tegumen moderate, very broad and concave, with sides triangularly projecting. Uncus robust, almost rhomboidal, apical edge with short and dense bristles. Gnathos strong, angulate, top projecting forward. Vinculum small. Valva ovoidal, very large, reaching almost to base of uncus, higher than broad, formed of three petal-shaped, subconcentric parts, inner strongly concave and finely plicate; sacculus short, slender, about  $\frac{1}{2}$ , bristly, as is lower half of edge of median "petal". Aedeagus short, broad, with a narrowed and split top, cornuti, two sheafs of stout spines of diverse length.

Female genitalia. Ostium wide, colliculum short, a wide tube with two sclerotic rings. Ductus bullae from end of colliculum, corpus bullae large, ovoid. Ductus bursae huge, pear-shaped, posterior half gradually dilated, strongly plicate longitudinally and sclerotic, anterior half rounded, simple. Signum, a strongly dentate massive horn upon a small basal plate.

Type-species: *Cryptomelaena dynastes* spec. nov.

A peculiar novel form, apparently combining rather heterogenous elements in the genitalia of the both sexes: the male with *Homona*-like genitalia, but an almost Cochylid robust and simple, heavily armed aedeagus; and the female with a characteristic dentate signum, reminding one rather of a Palaearctic *Aphelia*, but with an unusual sclerotic corpus bursae, again resembling a cochylid! It is therefore not easy to decide upon the relationship of this genus. A *Homona* affinity seems to be predominant (with the aedeagus and the signum puzzling).

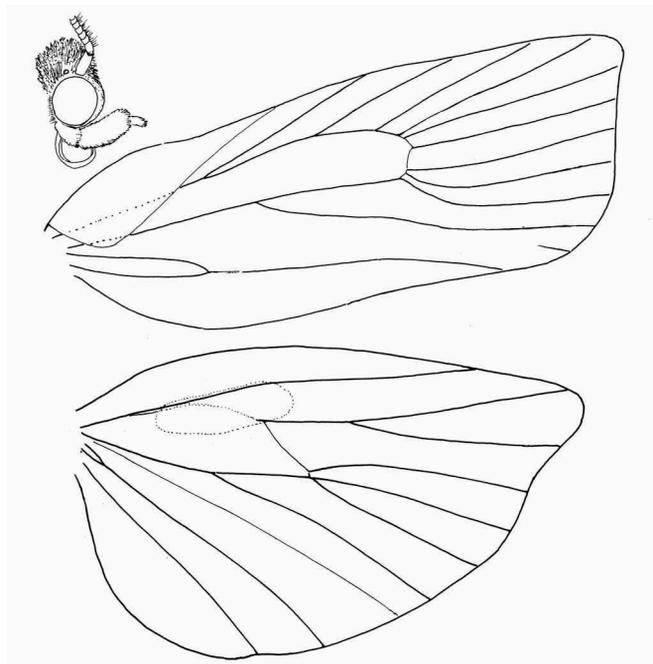


Fig. 78. *Cryptomelaena dynastes* sp. n., head and wing venation, ♂.

***Cryptomelaena dynastes* spec. nov.**

[δυναστής = ruler]

(figs. 78, 79, 82, 85–88, pl. 11 figs. 61–62)

♂ 28–30 mm (holotype 30 mm). Head deep chestnut-brown, big tuft on vertex rather fuscous. Antenna with scape deep chestnut, flagellum pale ochreous, minutely ciliate, not thickened. Palpus subporrect, gently ascending, rather straight, basal segment whitish-ochreous, median segment dilated, apex roughish and rounded or truncate, chestnut-brown, terminal segment slender, moderate, not dilated, tip truncate, chestnut with slightly paler base. Thorax with anterior half whitish-ochreous, gradually suffused with smoky grey anteriorly, posterior half light grey. Abdomen pale ochreous, gently becoming infuscated posterad, venter pale ochreous with a median ventral row of some four black rhomboidal spots and a more distant fifth big suffused anal rhomboidal patch.

Fore wing oblong-subtruncate, with a closely appressed large costal fold to middle; costa abruptly and rather angularly prominent beyond base, distinctly concave beyond this, to middle, thence tolerably straight, apex obtusely pointed, termen straight, oblique. Whitish-ochreous, glossy, markings diverse

tinges of chestnut. A small, semioval fuscous spot on base of costa, followed on costal edge with pale pinkish suffusion; central fascia occupying less than second fourth of costa, to above middle of wing well-defined, deep chestnut, both edges parallel, outer convex, moderately oblique; lower part of fascia abruptly paler, more oblique, to posterior third of dorsum; costal patch oblong-subtriangular, from well beyond middle of costa to before apex, anterior edge convex, posterior subconcave, longer top acute; a partly interrupted light chestnut narrow suffusion along termen between ends of veins 3–7, preceded by a deep chestnut subcrescentic preterminal mark between 4–6; a chestnut spot between central fascia and tip of costal patch; a faint bluish triangular suffused patch on second fourth of dorsum to fold, often ill-defined; small dark marks scattered over basal 1/4 of wing, so as to form incomplete chestnut marbling; underside of wing with a jet-black androconial spot rather above middle and along about second fourth, obliquely oval, with rafty edges, faintly showing through on the upper side as greenish suffusion. Cilia glossy whitish-ochreous, with a suffused submedian brownish band, except around apex, and irregular brownish bars and blotches.

Hind wing pale golden-ochreous, glossy around broad margin, dull in middle, posterior third blotched with pale fuscous (markings of underside showing through). Underside with a jet-black suboval androconial spot well beyond base, between lower edge of cell and vein 8 (in repose apparently exactly coinciding with the androconial spot on the fore wing). Cilia glossy whitish-ochreous, with a faint irregular subbasal brownish line.

♀ 27–29 mm. Similar to the male but differing thus. Fore wing broader, costa gradually arched at base, almost straight posteriorly, termen gently sinuate. Pale ochreous, rather more ochreous-tawny by numerous minute transverse short strigulae, markings paler unicolorous fuscous-tawny, becoming paler downwards. Basal patch large, over 1/6 of costa, edge little sinuate, to middle of dorsum; central fascia narrower, parallel, gradually dilated along lower half, on dorsum edges parallel and outer concave; costal patch larger; other markings tolerably similar to those in male.

Hind wing similar, but narrower and evenly glossy.

Male and female genitalia, as described with the genus above.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9035; 2 ♂, paratypes. Bivouac Three, 1800 m, 1 ♀, allotype, genit. slide 9036; 1 ♂, 1 ♀, paratypes.

A large, rather narrow-winged, elegant species.

**Chiraps phaedra** spec. nov.

[ φαειδρός = glad ]

(figs. 83, 84, pl. 11 fig. 63)

♂ 19 mm. Head grey-fuscous, forehead darker grey, face light tawny, below whitish. Antenna moderately thickened, short-ciliate. Palpus moderately long, subcorrect, median segment rather slender, dilated towards top with appressed scales; pale greyish-ochreous, an oblique longitudinal reddish streak from base along upper edge, thence to below apex; terminal segment grey tipped with whitish, rather short. Thorax rather light fuscous-tawny, collar in middle whitish. Abdomen dark bronze-fuscous.

Fore wing strongly dilated, apex long, produced, costal gently sinuate, with a fold to before middle, termen strongly sinuate, rounded-prominent below, long, slightly outwards-oblique. Costal fold tawny-grey, apical fourth of wing, from middle of costa to termen above tornus, fulvous-whitish, appearing pale bluish; anterior edge of this colour suffused, sinuate; remainder of wing suffused with ferruginous, with darker ferruginous veins. Markings dark purplish and ferruginous. Costal patch rather small, semioval and well-defined, deep purple, paler in middle on costa edge, preceded by fuscous suffusion on costa; costal fold edged below by thick light fulvous-fuscous scales; a group of irregular purplish dots before and below costal patch; faint transverse ferruginous striae, pale edged, a short one well before middle of dorsum, a long stria well beyond middle; an excurved, outwards-oblique ferruginous streak from middle of vein 6 to tornus; a minute purple triangular dot on costa before apex, followed by a subapical purple line, traversing angle of wing and running along termen to tornus; extreme apex purplish in certain lights.

Hind wing dark purple, glossy, below vein 1c becoming glossy bronze. Cilia glossy, concolorous.

Male genitalia. Tegumen rolled longitudinally, partly enclosing gnathos; this is strong with long slender arms and a long point. Socii ill-defined, parietal, with a few long hairs. Uncus bifid to the base, its shape intermediate between that in *alloica* Diakonoff and *chalcotypa* Meyrick. Tuba analis well developed. Labis rounded and smooth. Valva higher than broad, the narrow upper third membranous, naked and rounded, limited below by a simple hairy ridge. Aedeagus little curved; cornuti, a sheaf of some seven long spines and a separate, single, larger spine; vesica with alveolate structure.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 9095.

More or less intermediate between the two other known species, from Java and China, respectively, distinct by the smooth labis and the valva, constricted and naked along its upper third.

**Homona Walker**

Except the five species of *Homona* Walker, with two new synonyms, all recorded from the Atjeh Region below, including the three new species, also the following eight species belong to the present genus:

*Ericia aestivana* Walker, 1866, Catal. Lep. Ins. Brit. Mus., 35: 1803. (New Guinea, Philippine Islands).

*Homona mermerodes* Meyrick, 1910, Proc. Linn. Soc. N.S. Wales, 35: 213 (Solomon Islands, New Guinea, Queensland).

*Homona phanaea* Meyrick, 1910, Proc. Linn. Soc. N.S. Wales, 35: 215 (Solomon Islands, New Guinea, Kei Islands). The identity of this species should be verified.

*Cacoecia salaconis* Meyrick, 1912, Exot. Microlep., 1: 15 (Philippine Islands). Pl. 12 fig. 63, pl. 20 figs. 95–96a.

*Homona trachyptera* Diakonoff, 1941, Treubia, 18: 38, pl. 1 fig. 4 (New Guinea).

*Homona scutina* Diakonoff, 1948, Treubia, 19: 507, fig. 25 (Java).

*Homona umbrigera* Diakonoff, 1952, Verh. Naturf. Ges. Basel, 63: 145, fig. 11, from the Sumba Island, is left in the genus tentatively; it might require a new genus.

*Archips dicaeus* Diakonoff, 1968, U.S. Nat. Mus. Bull., 257: 26, figs. 43, 505, 506 (Philippine Islands).

***Homona brachysema* spec. nov.**

[βραχυς = short, σεμα = marking]

(figs. 89, 90, pl. 11 fig. 64)

♂ 20.5 mm. Head pale tawny-vinaceous, forehead and face blackish-purple. Antenna short-ciliate, ciliations 1/2. Palpus rather short, ascending, appressed to face, smoothly short-scaled, basal segment rather swollen, median oblong, subspindle-shaped, rather flat laterally (concave on the inner side), lower edge with a very short roughish fringe, terminal segment short, rounded; pale tawny-vinaceous, median segment towards top and terminal segment entirely, suffused with dark fuscous-purplish. Thorax pale vinaceous-grey. Abdomen covered with glossy pale fuscous-grey, long and rough scales, above becoming whitish on pregenital segment, anal tuft dark grey. Hind tibia smooth, whitish-ochreous.

Fore wing broad, dilated, costa moderately curved along anterior half, gently concave along posterior, straight before apex, apex obtusely pointed, termen rather sinuate, hardly oblique. Pale greyish-vinaceous, markings dark



Figs. 79–84. Genitalia of Archipini. 79, *Cryptomelaena dynastes* sp. n., ♂, holotype; 80, the same, aedeagus; 81, the same, uncus in ventral aspect, of paratype no. 10345; 82, the same, ♀, allotype; 83, *Chiraps phaedra* sp. n., ♂, holotype; 84, the same, aedeagus.

brown. Basal patch strongly reduced to a streak along base of costa and a triangular-V-shaped small mark across fold at 1/4, with a point above it, half-way towards costa; central fascia narrow, slightly outwards-convex, formed by a semioval spot on costa beyond 1/3, hardly touching an oblique oval spot below this, across upper half of cell, not touching an oblong-oval fasciate mark from 3/4 of lower edge of cell, descending across lower angle of cell to beyond 2/3 of dorsum, strongly narrowing downwards; costal patch, a streak along costa from just beyond middle to 5/6, almost black above, becoming paler downwards, lower edge irregularly excavate and partly suffused; an oblique, almost straight preterminal streak, not connected with posterior angle of costal patch, clavate above, narrow below, running to end of vein 3; a roundish spot in apex, preceded by a minute costal transverse mark; all terminal vein endings, except that of vein 3, with dark small points each; termen slightly infuscated along upper half. Cilia glossy light grey-fuscous, with a pale basal line.

Hind wing rather dark fuscous with a purplish tinge, semipellucet (pale bases of scales), dorsum as far as vein 1c pale ochreous, this vein with loose, spreading long fuscous hairs on upper side, denser along basal half. Cilia as in fore wing.

Male genitalia. Resemble those of *H. salaconis* (Meyrick) (pl.20 fig. 95) but differ as follows. Gnathos much heavier and thicker, especially at the point; valva with the dorsal half voluminous and plicate, but ventral half broader, with almost rounded-rectangular top of sacculus, much broader and less prominent; its internal edge more concave. Aedeagus quite different, shorter, less angulate, apex along lower side strongly serrate (in *salaconis* this edge completely smooth).

North Sumatra, Atjeh Region, Alas Valley, Balelutu, 320 m (J. Krikken), 1 ♂, holotype, genit. slide 10391. Mt. Bandahara, Bivouac One, 1 ♂, genit. slide 9106, paratype.

A species of the *H. salaconis* (Meyrick) group, distinct by the genitalia.

**Homona difficilis** (Meyrick)  
(pl. 13, fig. 80, pl. 20 figs. 96b, 97)

*Cacoecia difficilis* Meyrick, 1928, Exotic Microlep., 3: 456. Clarke, 1955, Meyrick's Types, 1: 116.

*Homona difficilis*; Diakonoff, 1948, Treubia, 19: 509.

*Archips difficilis*; Clarke, 1958, Meyrick's Types, 3: 39, pl. 19 figs. 3–3b.

*Cacoecia permutata* Meyrick, 1928, Exotic Microlep., 3: 457. **Syn. nov.**

*Archips permutata*; Clarke, 1958, Meyrick's Types, 3: 44, pl. 22 figs. 4–4b.

Distribution. Borneo, Java. Philippine Is., Andaman Is.

Mt. Bandahara, Biouac Four, 2430 m, 1 ♂, genit. slide 10394.

Male genitalia are characterised by a rather short, broad uncus, an expanded, delicately membraneous valva, with a voluminous costa portion, densely long-haired, and a rather sclerotic sacculus, with a broadly triangular, pointed harpe. The aedeagus is simple, sclerotic, pistol-shaped, the orifice with an obtuse upper lip and a pointed, sclerotic lower lip.

I am satisfied that *Cacoecia permutata* Meyrick is a junior synonym.

[**Homona salaconis** (Meyrick) comb. nov.]  
(pl. 12 fig. 65, pl. 20 figs. 95, 96a)

*Cacoecia salaconis* Meyrick, 1912, Exotic Microlep., 1: 5 (Philippine Ids.); 1912, Lep. Catal., 10: 22; 1913, Genera Ins., 149: 25. Clarke, 1955, Meyrick's Types, 1: 275.

*Archips salaconis*; Clarke, 1958, Meyrick's Types, 3: 47, pl. 23 figs. 3–3c (wings, genitalia ♀ type figured). Diakonoff, 1968, U.S. Nat. Mus. Bull., 257: 24, figs. 14–15, 27, 101, 502–504 (Philippine Ids., ♂ ♀ figured, redescribed).

*Cacoecia spilotoma* Meyrick, 1921, Zool. Meded., 6: 148 (Celebes). **Syn. nov.**

*Archips spilotoma*; Diakonoff, 1968, U.S. Nat. Mus. Bull., 257: 26.

*Cacoecia xanthochroma*; Wileman & Stringer, 1929, The Entomologist, 62: 65 (Luzon, Mindanao). Diakonoff, 1968, U.S. Nat. Mus. Bull., 257: 24 (syn. of *salaconis*).

Distribution. Philippine Islands; Celebes.

Having dissected and studied the Meyrick's holotype of "*Cacoecia*" *spilotoma* from Celebes, a male in the Leiden Museum, "Celebes, Bonthain, ♂" (in Lucassen's hand, Snellen Collection), genit. slide 10412, "Type" (small green label), I am satisfied that it is but the opposite sex of "*Cacoecia*" *salaconis* Meyrick of which the type, a female, is in the British Museum, from the Philippine Islands. In Leiden there is a large series of *spilotoma* from Celebes, with a single female that is entirely similar to that type of the Philippine *salaconis*. On the other hand, *H. brachysema* spec. nov., is a closely allied, but distinct species, immediately discernible by the serrate tip of the aedeagus.

**Homona anopta** spec. nov.

[ἀνοπτός = unseen]

(pl. 12 fig. 68, pl. 21 figs. 98, 99)

♀ 26 mm. Head light ochreous, suffused with ferruginous (partly defaced). Palpus light fulvous, basal segment white. Antenna pale fuscous, thinly ringed with darker. Thorax fulvous, densely mixed with blackish-purple large scales (partly rubbed), collar and tegulae dark purple. Abdomen dark brown.

Fore wing broadly oblong, costa arched at base, straight posteriorly to the

end, apex subobtuse, shortly prominent, termen sinuate above, obliquely rounded beneath, slightly oblique, almost vertical. Pale golden-ochreous, rather glossy, more than basal half of wing suffused with duller light fulvous, edge from just before middle of costa, to end of dorsum, oblique and rather straight along upper half, strongly convex along lower, but nowhere well defined; this suffusion gradually becoming deeper anterad; about basal fifth of wing dusted, then suffused with dark ferruginous-purplish, edge of this colour oblique and indefinite; costal edge to about 1/6 suffused with dark ferruginous, from slightly beyond middle narrowly suffused with deep fulvous, extreme apex and upper third of termen touched with deeper ochreous, a minute fulvous line (obliterate in right wing) from below costa before apex curved and descending obliquely to middle of termen. Cilia glossy light fulvous opposite base, gradually turning very pale ochreous along lower half of termen.

Hind wing very pale yellow, tinged orangeish towards apex. Cilia whitish-ochreous, a narrow, fulvous-orange subbasal line around apex, turning pale orange below end of vein 5 to tornus, tips of cilia around apex infuscated.

Female genitalia. Sterigma unusually large, seventh ventrite sclerotic, except laterally, posterior edge deeply excavate for the ostium, flanked by rounded, aciculate tumescences. Ostium with a large, hollow hexagonal lamella postvaginalis, with a dark edge, top prominent; ostium proper shallow, continued by folds of a small colliculum, extending only over the half of ductus width. Ductus bursae very long, with a couple of coils and a slender long cestum. Signum, a long dagger upon a rounded, finely scobinate basal plate, deeply corrugated in middle.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♀, holotype, genit. slide 10400.

A rather albinistic female, rather resembling that of *H. coffearia* Nietner, but discernible at once by the differently shaped fore wing with posteriorly straight, not at all sinuate costa and, therefore, a much shorter apex. The ostium is characteristically that of *Homona*, but the development of the sterigma is quite unusual.

### ***Homona encausta* (Meyrick)**

(pl. 10 fig. 51)

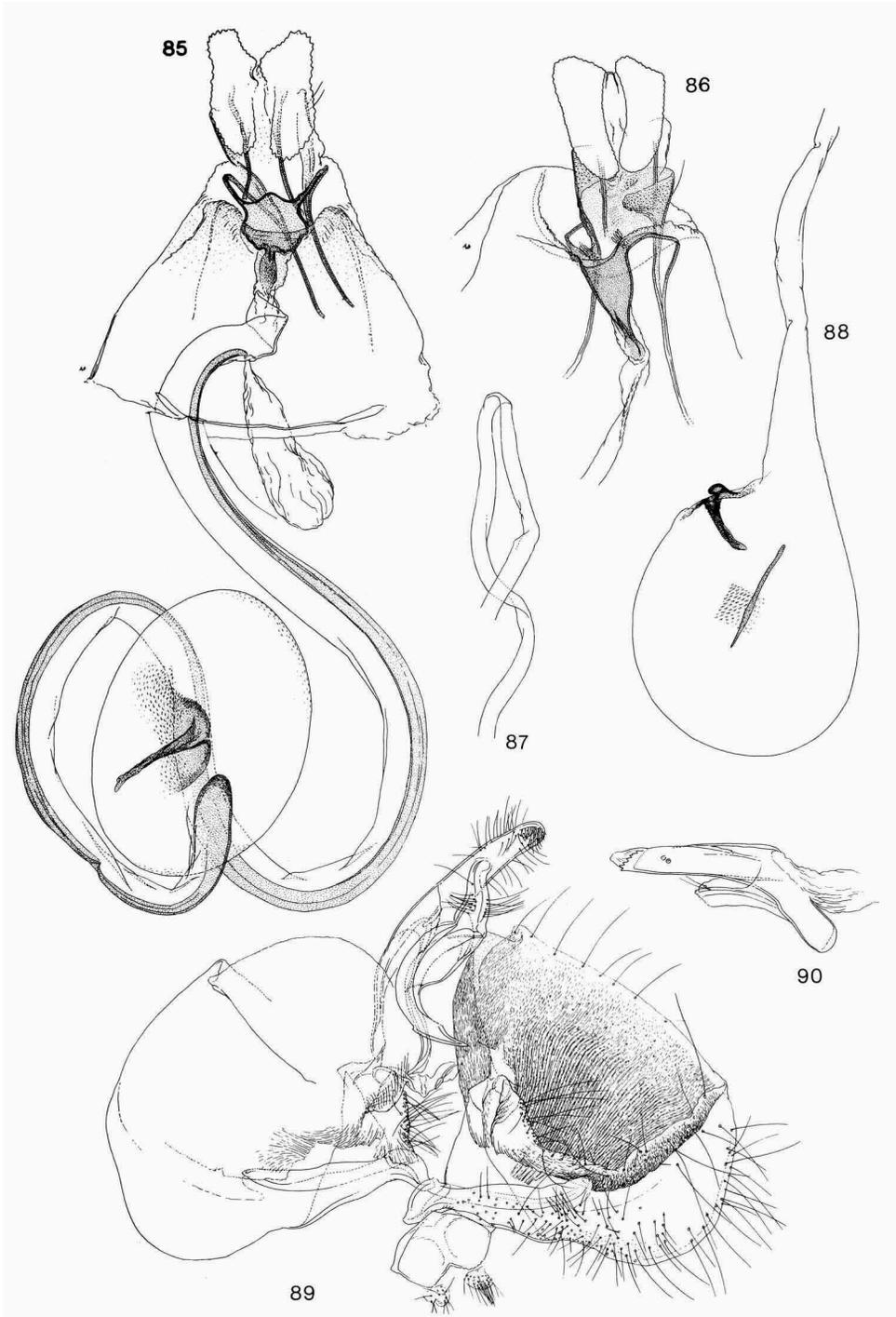
*Tortrix encausta* Meyrick, 1907, J. Bombay Nat. Hist. Soc., 17: 725; 1912, Lepid. Catal., 10: 22; 1913, Genera Ins., 149: 25. Clarke, 1955: 125.

*Archips encausta*; Clarke, 1958, Meyrick's Types, 3: 59, pl. 19 figs. 4–4b. Diakonoff, 1968, U.S. Nat. Mus. Bull., 257: 27, 28, fig. 44; 1976, Zool. Verh., 144: 83 (*encaustus*).

Distribution. Ceylon. Nepal. Philippine Islands.

Food plants. Unknown.

Mt. Bandahara, Bivouac One, 810 m, 2 ♂.



Figs. 85–90. Genitalia of Archipini. 85, *Capua coenotoca* sp. n., ♀, holotype; 86, *Cryptomelaena dynastes* sp. n., ♀, holotype; 87, the same, part of ductus bursae; 88, the same, bursa; 89, *H. brachysema* sp. n., ♂, holotype; 90, the same, aedeagus.

**Homona despotis** spec. nov.

[δεσπότης = ruler]

(pl. 12 fig. 67)

♀ 23 mm. Head light ferruginous. Antenna light ochreous-fuscous, ringed above with dark brown. Palpus light ochreous-orange, median segment slightly suffused along upper half with ferruginous. Thorax deep chestnut-brown and ferruginous, patagia orange-tawny. Abdomen purple-brown, venter pale yellow.

Fore wing broad, little dilated, costa strongly sinuate throughout, being arched along less than anterior half, deeply concave along more than posterior half, apex produced and falcate, obliquely rounded, termen deeply excavate along upper fourth, strongly rounded-prominent below this. Light orange-fulvous, and rather dull, middle of wing slightly infuscated; markings of diverse tinges of ferruginous. Basal patch indicated on upper half only, deeper chestnut-fuscous, reaching over 1/6 of costa, posterior edge indicated by a dark concave oblique stria to vein 11; transverse fascia indicated by a moderate, irregularly clavate oblique mark from 1/3 of costa, to upper half of cell before middle of wing, stalk slightly sinuate, top subquadrate with irregular projections; this mark narrowly dark-edged and filled out with chestnut and fuscous; posterior half of costa with four ferruginous oblong marks, third of these shorter, fourth, a small wedge; apex filled out with ferruginous reticulation; similar rather irregular and fine reticulation edging three anterior costal marks below and forming a darker blotch opposite terminal excavation, emitting a curved darker fascia before and parallel to termen, to termen above tornus; this reticulation traversed by several zigzag lines from subapical and apical spots, leaving two round spots of pale ground colour between ultimate dark costal dots; some three irregular striae descending unto tornus; remainder of wing with numerous faint transverse strigulae; termen with a row of small dark triangular dots on ends of veins, preceded by round pale, dark-centred spots along entire termen. Cilia orange-fulvous.

Hind wing deep coffee-brown, dull, costa creamy. Cilia golden-orange around apex and along termen, dark brown in tornus, light ochreous with dark base, along dorsum.

Female genitalia. Lobi anales elongate, concave, very gradually narrowed. Eighth segment, a simple, sclerotic high collar. Ostium shaped as a large and long sclerotic funnel with lower end abruptly narrowed, surrounded by a hyaline thick wall. Ductus busae very long and slender, with a narrow, rod-like cestum along upper half. Corpus bursae simple. Signum, a moderate hook, with a depressed capitulum. [Two cornuti in the bursa slender, straight, spear-like].

Mt. Bandahara, Bivouac Two, 1430 m, no. 24, 1 ♀, holotype, genit. slide 9101.

A large, brightly coloured species, with intricately shaped fore wing, with exaggerated curves and characteristic ostium. Perhaps belonging to the *H. encausta* group.

### **Homona coffearia** (Nietner)

*Tortrix coffearia* Nietner, 1861: Observations on the enemies Coffee Tree in Ceylon: 24; Coffee Tree, its enemies, observ. nat. history of enemies Coffee Tree in Ceylon: 24; 1880, ibidem, new ed.: 16. Guérin, 1864, Rev. et Magas. de Zool., 1864: 64. Walsingham, 1887 in Moore, Lep. Ceylon, 3: 494. Cotes & Swinhoe, 1889, Catal. Moths India: 696, no. 4747.

*Homona coffearia*; Meyrick, 1912, Lep. Catal., 10: 15; 1913, Genera Ins., 149: 19, pl. 2 fig. 30; 1932, Exotic Microlep., 4: 253. Fletcher, 1914, South Ind. Ins.: 452, fig. 330; 1917, Proc. 2nd. Ent. Meet.: 20, 28; 1919, Second Hundred Notes Ind. Ins.: 143; 1921, Mem. Dept. Agric. India Ent., 6: 35; 1932, Imp. Counc. Agr. Res., Mon., 2: 14. Du Pasquier, 1932, Principales maladies paras. théier, caféier en Extr. Or.: 406B, fig. Diakonoff, 1939, Zool. Med., 21: 124, 165, 168, figs. 4A, 4C, 4F, 6F–G; 1939, Rec. Indian Mus., 41: 231; 1947, Tijdschr. Ent., 88: 342; 1948, Bull. Mus. Hist. Nat., 20: 344; 1948, Treubia, 19: 504, 506, figs. 22, 27; 1952, Verh. Naturf. Ges. Basel, 63: 208. Matsumura, 1931, Illustr. 6000 Ins Japan: 1067, fig. Esaki, 1932, Icon. Ins. Jap.: 1450. Inoue, 1954, Check List Lep. Japan: 87. Kawabe, 1964, Kenkyu to Hyuron, biann. rep. Hosei School, 11: 17 seq. Issiki, 1957, in Icon. Het. Jap. col. nat. (1, 21: 77, pl. 13 figs. 389–390. Okano, 1959, in Icon. Ins. Jap. col. nat. edita: 265, pl. 177 figs. 5a, 6. Simon Thomas, 1962, Bull. Econ. Affairs, Agr., 1: 33, 89. Diakonoff, 1976, Zool. Verh., 144: 78.

*Homona fasciculana* Walker, 1863, List Lep. Ins. Brit. Mus., 28: 427.

*Pandemis menciana* Walker, 1863, l.c.: 310; Cotes, 1896, Indian Mus. Notes, 3(4) no. 4. Meyrick, 1912, Lep. Catal., 10: 15; 1913, Genera Ins., 149: 19; 1932, Exotic Microlep., 4: 253.

*Godana simulana* Walker, 1866, List Lep. Ins. Br. Mus., 35, Suppl. 5: 1801.

*Cacoecia simulana*; Warren, 1888, Proc. Zool. Soc. London: 337. Cotes & Swinhoe, 1889, Catal. Moths India: 695, no. 4741.

*Capua fasciculana*; Walsingham, 1900, Lep. Oxon., 2: 275.

*Capua menciana*; Walsingham, 1900, Ann. Mag. Nat. Hst., (7)5: 482.

*Homona menciana*; Meyrick, 1910, Trans. ent. Soc. Londo.: 432; 1912, Lep. Catal., 10: 15; 1913, Genera Ins., 149: 19. Fletcher, 1921, Mem. Dept. Agric. India, Ent., 6: 37; 1932, Imp Counc. Agric. Res., Sci. Mon., 2: 14.

*Homona coffearia menciana*; Meyrick & Caradja, 1934, Iris, 48: 29.

*Homona coffearia* forma *menciana*; Meyrick & Caradja, 1935, Mater. chinens. Prov.: 49; 1937, Iris, 51: 173.

?*Tortrix fimbriana* Walker, 1869, Charact. undescr. Lep. Het.: 101.

Distribution. Throughout tropical South Asia. Nepal.

Food plants. Widely polyphagous. Especially injurious on the Tea Shrub (“Tea Tortrix”).

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂. Bivouac One, 810 m, 9 ♂. Tanah-Merah, 200 m, 1 ♂. Soldok, low country, 1 ♂. Balelutu, low country, 2 ♂.

**Dynatocephala** gen. nov.

[ δυνατός = strong, κεφαλή = head]

Superficial structure and wing neuration exactly similar to *Homona* Walker, 1863 (type-species *H. fasciculana* Walker = *Tortrix coffearia* Nietner, 1861), but with characteristic, aberrant male genitalia: with a broad, not narrowed tegumen, uncus broad and depressed, rounded-triangular, strongly bristled at the sides, without separate socii, gnathos with long point, as long as arms, transtilla with a median process, valva higher than broad, with a projecting end of sacculus, not sclerotic. Aedeagus straight, top slightly clavate, with long point below, cornuti, two groups of aciculae and two long flat blades.

Type-species: *Homona cruenta* Diakonoff, 1976.

The strongly aberrant male genitalia compel me to the separation of this form from the genus *Homona*, where I put it originally, and assign it to a new genus. Unfortunately still no females are available.

**Dynatocephala cruenta** (Diakonoff) comb. nov.

(figs. 91a–c, pl. 12 fig. 70)

*Homona cruenta* Diakonoff, 1976, Zool. Verh., 144: 76, fig. 80 (♂, Nepal).

Distribution. Nepal (Kathmandu Valley, 1600–1800 m).

Mt. Bandahara, Bivouac Two, 1430 m, 1 ♂, genit. slide 10393; Bivouac Four, 2430 m, 2 ♂, genit. slide 10392.

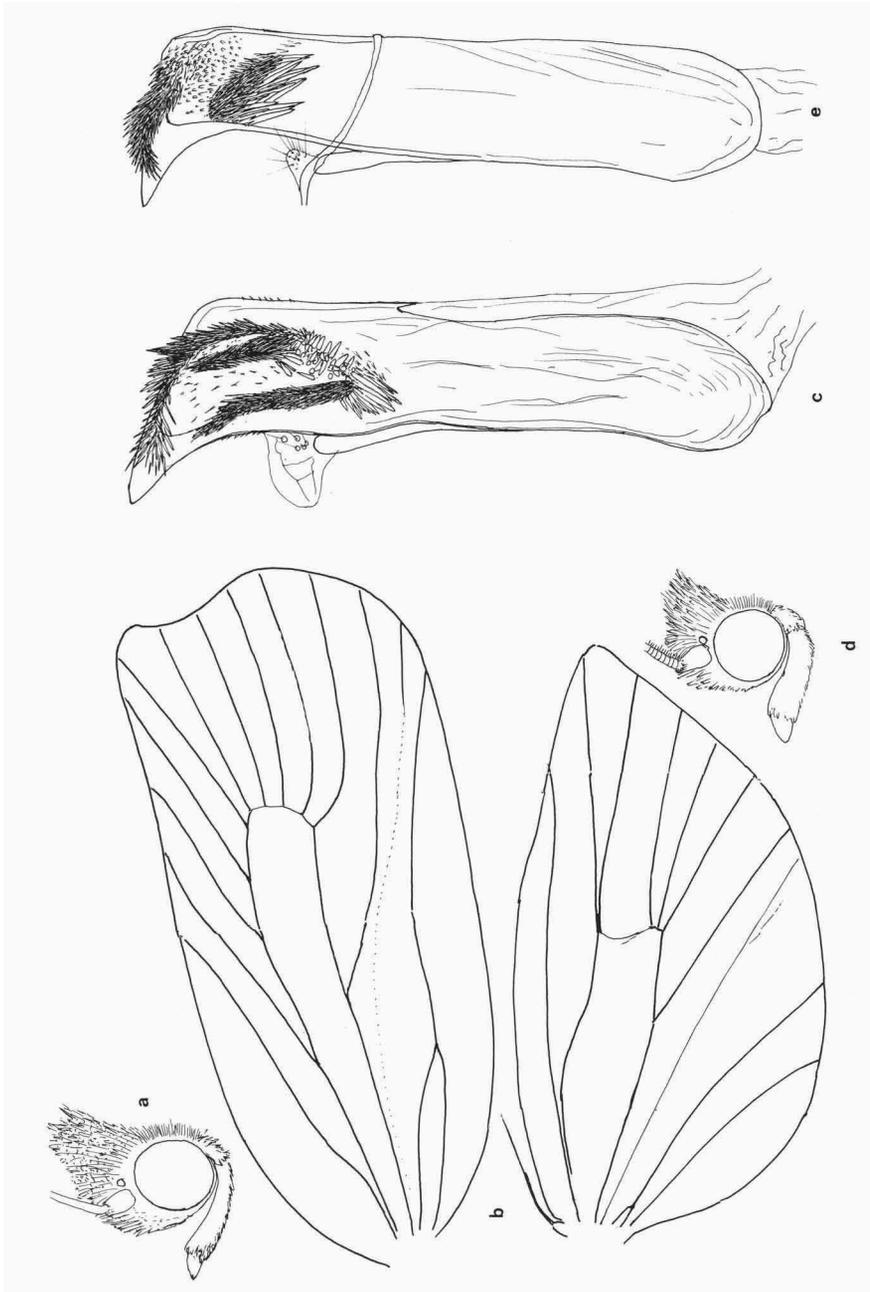
The three male specimens differ from the type by rather less bright vinaceous-purple colour, broader and shorter costal patch and more greyish hind wing. However, the genitalia are so similar that I am not able to find any tangible subspecific differences.

**Dynatocephala erebenna** spec. nov.

[ έρεβεννός = gloomy]

(figs. 91d, e, pl. 12 fig. 69, pl. 22 fig. 104)

♂ 20 mm. Head and thorax vinaceous-grey, dusted with darker, tegula darker purplish, face below pale ochreous. Palpus slender, slightly sinuate, ascending; pale ochreous-tawny, top of median segment and entire terminal segment except apex more darkly infuscated. Abdomen dark brown-purple or bronze-brown, venter whitish. Posterior tibia thickened with rather smoothly



Figs. 91 a—e. *Dynatocephala* g. n., males: heads, wing venation and aedeagi. a. *D. cruenta* (Diakonoff), with head above; b. the same, wing venation; c. the same, aedeagus; d. *D. erebenna* sp. n., head; e. the same, aedeagus.

appressed scales, brushy below anteriorly, less so above posteriorly; whitish-tawny, above chestnut.

Fore wing oblong-truncate, without a costal fold, costa irregularly curved anteriorly, slightly prominent beyond base and with a larger, rounded but still slight prominence before middle, concave thence, apex subrectangular, termen sinuate above, broadly rounded and prominent below, slightly outwards-oblique. Vinaceous-grey with slight anthracite tinge and soft gloss, with some slight bluish hue in certain lights. Markings limited, deep ferruginous. A large rather rounded deep ferruginous-brown patch on dorsum just beyond base, extending above middle of wing, on dorsum to before 1/3, outer edge posteriorly marked with a thin darker ferruginous zigzag stria, sometimes absent, above continued halfway towards costal edge; central fascia from 2/5 of costa, posterior edge almost straight, to before 3/5 of dorsum, upper third of fascia rather narrow, gently outwards-concave, deep anthracite, edged on both sides with deep ferruginous, rather oblique; lower 2/3 of fascia very broad, posterad indefinite, suffused with blackish, this suffusion reaching beyond end of cell; anterior edge with partly double dark ferruginous somewhat irregular line, edged on both sides and partly interrupted by light ochreous minute hair-scales arranged horizontally; costal patch indistinct, oblong-semioval, vinaceous-brownish, followed by a somewhat sinuate deep purple transverse stria from costa well before apex, to end of vein 3, thence marginal, to tornus; a small purple costal dot just before apex; lower half of wing in middle sometimes suffused with blackish. Cilia vinaceous-fuscous, with basal half blackish, glossy tips pale ochreous.

Hind wing rather dull dark fuscous, costa broadly whitish, dorsum with a conspicuous pale ochreous dense pencil from base laying along wing margin to above tornus. Cilia blackish, along dorsum and in tornus, tawny.

Male genitalia. Resembling those of the type-species but with uncus larger, higher conical, with shorter and thinner bristles, its base remaining visible. Gnathos with a longer point, sacculus longer, less sinuate, base narrower. Aedeagus with a single subapical patch of longer spines (in *cruenta* three patches of diverse spines), white apical spine patch is almost similar to that in *cruenta*.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 9061; 6 ♂, paratypes, genit. slide 9130.

### **Archips seminubilus (Meyrick)**

*Cacoecia seminubila* Meyrick in Joannis, 1930, Ann. Soc. ent. Fr., 98: 711 (Tonkin).

*Cacoecia micaceana*; Diakonoff, 1941 (nec Walker, 1863); 1976, Zool. Verh., 144: 85 (partim), fig. 79 (aedeagus).

*Archips seminubilus*; Razowski, 1977, Acta zool. cracov., 22: 127, figs. 103, 104.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, genit. slide 10405.

***Capua coenotoca* spec. nov.**

[κοινότοκος = of the same origin]

(fig. 85, pl. 12 fig. 72, pl. 22 fig. 103)

♀ 20 mm. Head pale ochreous-whitish. Palpus moderate, slightly curved and ascending, flattened, rather appressed to face; smoothly scaled, terminal segment short, pointed. Thorax ochreous (imperfect). Abdomen fuscous-ochreous.

Fore wing oblong-oval, rather long, costa arched at base, thence a trifle concave, then faintly convex, apex pointed and prominent, termen sinuate, vertical. Light ochreous, touched with orangeish, veins finely darker, entire wing with very fine brownish network; posterior half of costa narrowly suffused with brownish almost to apex; a narrow regularly curved line from middle of that suffusion to just before tornus; a brownish suffusion along dorsum from beyond base, with an irregular slightly outwards-oblique triangular patch well beyond middle, rising above fold. Cilia glossy golden-ochreous, slightly infuscated, tips more suffused towards apex.

Hind wing pale golden-ochreous, tinged yellowish towards apex, basal half rather infuscated. Cilia glossy ochreous-whitish, on end of costa suffused with dark grey.

Female genitalia. Seventh ventrite moderately sclerotic. Sterigma not modified, posterior edge of ventrite strongly excised in middle. Ostium little sclerotic, with narrow dark and strong edges, upper accolade-shaped, concave at the sides, projecting upwards and convex in middle, sides concave along upper half, lower half rounded and prominent above, irregularly narrowing below; colliculum, darkly sclerotic, finely denticulate. Ductus bursae long, cestum ribbon-shaped from soon below colliculum, gradually dilated, twice coiled, end broadly oval and rounded. Signum dagger-like, base dilated, upon a large, little sclerotic, denticulate basal plate.

Mt. Bandahara, Bivouac One, 810 m, 1 ♀, holotype, genit. slide 10346.

A sparsely marked species, with the neuration almost congruent with that of *C. lissochrysa* Diakonoff, from Nepal, with other external characters rather similar, except a longer terminal segment of palpi, broader fore wing and longer cestum.

**Capua oxycelis** spec. nov.

[ὀξεύς = acute, κηλίς = spot]

(pl. 12 fig. 71)

♂ 14 mm. Head creamy white. Antenna light fuscous, ciliations under 1. Palpus long, porrected, slightly downcurved, twice diameter of eye, median segment light golden-fuscous, smooth-scaled, basal and apical segments creamy. Thorax glossy light fuscous mixed with darker fuscous. Abdomen pale fuscous, glossy.

Fore wing broad, strongly dilated, suboval, costa strongly curved along basal 3/4, little curved posteriorly, apex rounded-prominent, termen sinuate above, rounded below, oblique. Costa with a rather broad fold to beyond middle; basal fourth suffused and transversely marked with brownish-fuscous, gradually becoming paler upon creamy colour; a blackish-brown oblong spot, irregularly extended below to middle of disc, preceded and followed by a small dark bar; three rather large, oblong marginal dark brown dots, last well before apex; an ill-defined semioval brownish spot interconnected with the three ultimate costal dots, together forming rather darker costal patch; a broad transverse blotch of fuscous-grey suffusion, occupying entire wing to about 4/5, anteriorly including an oblong pear-shaped oblique spot of whitish ground colour, inwards-oblique, from below costal fold, towards dorsum beyond base, not reaching this, lower end rounded, edges well defined; this pale spot with a dark brown streak just before and parallel to its posterior margin, narrowed above, interrupted below edge of costal fold; posterior edge of dark blotch well defined, from top of costal patch to end of fold, below regularly rounded; terminal area silvery-whitish, its posterior half with two almost vertical brown striae and a thicker marginal stria around apex and along termen, not quite reaching tornus. Cilia glossy light golden ochreous, basal half brighter and with a row of suffused brown spots not reaching base.

Hind wing pale greyish-ochreous, glossy, faintly marbled with fuscous, on apical third more densely infuscated. Cilia glossy pale grey with a narrow creamy basal line.

Male genitalia. Similar to those of *C. vulgaris* Meyrick, *chloraspis* Meyrick, and other species of this natural group. Socius rather large, finely long-haired. Gnathos large and robust, with strong arms and an acute short point. Transtilla strong, semioval. Sacculus very characteristic, sclerotic, with a straight acute apical prong and a vertically rising subapical dentoidal one. Aedeagus long, gradually but slightly curved, sclerotic, top with a slender apical spike at the right side.

Mt. Bandahara, Bivouac Four, 2430 m, 1 ♂, holotype, genit. slide 10404; two males, paratypes.

Superficially very similar to *C. chloraspis* Meyrick from Bengal, but immediately discernible by the genitalia, with oblong uncus and bicuspidate sacculus (in *chloraspis* uncus much broader, sacculus, a single, pending prong).

To my considerable surprise, the shape of the top of this sacculus, a very important specific feature, is so similar to the European type-species, *Capua vulgana* Fröhlich (= *favillaceana* Hübner) as to be almost alike; the armature of the top of the aedeagus, however, shows immediately considerable difference between the two species.

***Clepsis platytera* spec. nov.**

[πλατύτερος = broader]

(figs. 92–94, pl. 13 fig. 74)

♂ 14.5 mm. Head pale tawny, a transverse tuft on forehead tipped with blackish, face pale tawny. Palpus pale ochreous, median segment coarsely dusted with blackish, apex mixed with black below, terminal segment grey with a pale tip. Antenna pale tawny, scape with a subapical blackish suffused ring. Thorax pale tawny, suffused with grey, more so anteriorly, tegulae mixed with grey. Abdomen pale vinaceous, tergum slightly infuscated, with darker fuscous blocks between segments.

Fore wing broad, subtruncate, costa with a flatly appressed fold to middle; arched along basal half, sinuate and concave posteriorly, apex subobtusate, termen slightly sinuate above, oblique. Pale creamy-ochreous, finely dusted all over with greyish, markings dark brown, some filled out with grey. Costal fold densely suffused with grey at base, along edge of wing with four minute brown marks, end with a subtriangular spot across its width of fold, continued across wing by faint ochreous suffused fascia, moderate, dusted by greyish-brown and irregularly marked along both edges with irregular rows of dark brown small spots, on lower half with a few transverse streaks, especially along fold; costal patch regularly semioval, top to vein 7, patch dark brown, including a pair of round leaden-grey spots traversing patch from edge to edge on each side of a narrow parting line; a slender straight brown line from lower edge of patch beyond its middle, running slightly outwards-obliquely to tornus; a dark costal point before patch, a pair of dark grey larger spots, one above, another below apex; a subtriangular brown spot on dorsum beyond base, a grey shadow on lower half of wing, from central fascia halfway towards termen, edge outwards-oblique; several irregular dark brown points all over the wing, tending to form parallel inwards-oblique transverse series; some brown dusting from top of dorsal spot to middle of central fascia, so delimiting a high, semioval pale patch of ground colour along about second

fourth of dorsum. Cilia ochreous, a submedian blackish band, narrowly semioval, about 4/5 width of fore wing, evenly fuscous-brownish, with a golden gloss, veins darker fuscous. Cilia light fuscous with two slightly darker bands and an ochreous basal line.

Male genitalia. Tegumen moderately broad. Uncus clavate, also rather broad, top slightly concave. Socii slender, pending and rather short, each with less than ten small bristles. Gnathos slender. Vinculum, a narrow rod. Labides large, subrhomboidal, broad at base, tips narrow, long-dentate, a dark granule on inner side. Anellus very small. Aedeagus elongate-pistol-shaped, with a small thorn below orifice.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 10389.

The species is distinct superficially by the broad fore wings, as compared with the hind wings and internally, by the peculiarly shaped labides.

**Isotenes inae** Diakonoff  
(fig. 99)

*Harmologa miserana* Fletcher, 1921, Mem. Dept. Agric. India, Ent., 6: 41 (nec Walker, 1863).

*Isotenes miserana*; Diakonoff, 1941, Treubia, 18: 390; ibidem: 402; 1947, Tijdschr. Ent., 88 (1945): 340.

*Isotenes inae* Diakonoff, 1948, Treubia, 19: 493, figs. 3, 18–21. Simon Thomas, 1962, Med. Econ. Zaken, Landbouwk. secr., 1962, 1:36, 89. Diakonoff, 1976, Zool. Verh., 144: 71.

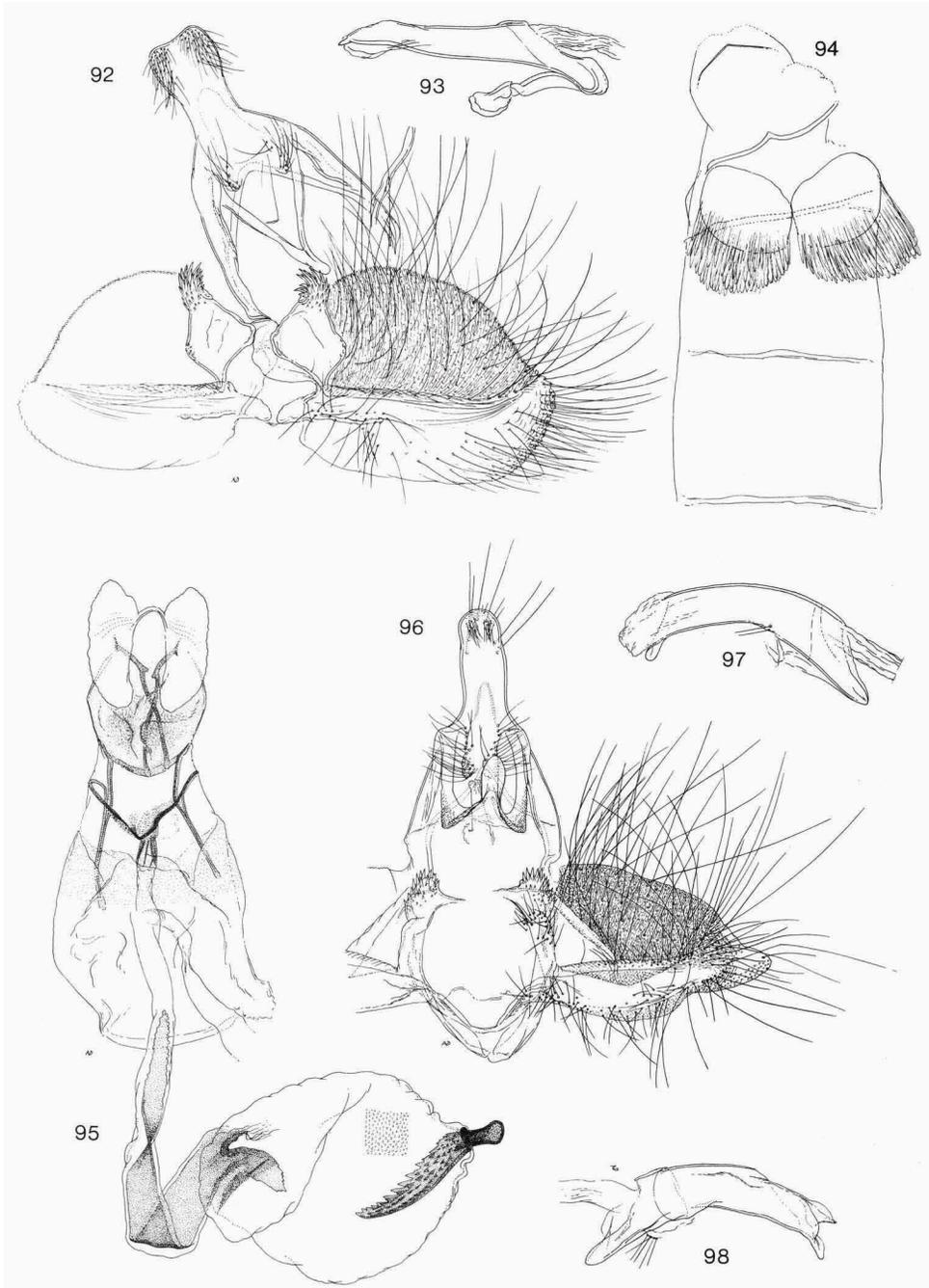
Distribution. Java; Sumatra; Assam; Nepal.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♂, genit. slide 10365.

**Isotenes anisa** spec. nov.  
[ἀνίστος = different]  
(fig. 95, pl. 13 fig. 73)

♀ 20 mm. Head ashy grey, vertex at the sides and face pale grey. Palpus light grey mixed with whitish: basal segment white, lower half of basal part of median segment white, upper side with a dark grey streak, on posterior half dilated and running along lower part of the there expanded segment, this mixed with whitish; terminal segment light grey, whitish below. Thorax dark cinereous, anteriorly more obscured by dark fuscous suffusion, centre of thorax spotted with black. Abdomen dark ashy-grey, venter whitish, corethrogyne fuscous.

Fore wing oblong, moderately broad, costa strongly curved at base, less curved posteriorly, apex subobtuse, termen hardly sinuate above, little roun-



Figs. 92–98. Genitalia of Archipini. 92, *Clepsis platytera* sp. n., ♂, holotype; 93, the same, aedeagus; 94, the same, ventral aspect of the top of abdomen, with coremata of the II ventrite; 95, *Isotenes anisa* sp. n., ♀, holotype; 96, *Adoxophyes acrocindina* sp. n., ♂, holotype; 97, the same, aedeagus; 98, the same species, aedeagus of genit. slide 10399.

ded below, moderately oblique. Pale grey, markings darker grey and rather brownish-grey. Basal patch ill-defined, on costa to 1/6, on dorsum to middle, edge indicated by a faint narrow line; patch on costa with three dark grey suffused spots, first small, basal; costal edge suffused with dark grey (in paratype a dark grey large subbasal patch, rising from dorsum above fold to middle of disc, absent in holotype); central fascia complete, moderate, along upper half narrowly edged with brownish-grey, anterior edge with a triangular prominence below costa, thence indefinite, fascia extending posterad as a light grey suffusion to before tornus, slightly reticulate with darker fuscous; posterior half of costa with four dark fuscous very irregular marks, last one preapical, second and third united below by another darker brown spot (these three forming together the costal patch); posterior third of wing with three strongly sinuate transverse dark streaks more or less interrupted or constricted by veins, not quite similar in right and left wing, grey suffusion in apex and along termen as far as end of vein 3. Cilia very pale grey, along costa with four dark bars opposite spots, along termen with a median series of small suffused grey dots.

Hind wing pale glossy grey, touched with darker towards apex. Cilia concolorous.

Female genitalia most resembling those of *I. inae* Diakonoff, but with a broader complete collar-like 9th ventrite, a V-shaped edge of seventh segment, a longer colliculum. Cestum is shorter and broader, ending in a deeply cleft fold in bursa, with two, instead of three prominences. Signum more curved.

Mt. Bandahara, Bivouac Three, 1810 m, 1 ♀, holotype, genit. slide 9123; 1 ♀, paratype.

A larger and more grey, less brownish species than *I. inae*, also differing by the genitalia.

***Adoxophyes acrocindina* spec. nov.**

[ἀκρον = top, κινδύλιος = dangerous]

(figs. 96–98, pl. 13 figs. 75, 76)

♂ 12 mm. (Head missing). Thorax pale ochreous, anterior third fulvous. Abdomen pale ochreous.

Fore wing broad, suboblong-truncate, costa with a fold to just beyond 1/3; strongly curved along basal half, almost straight posteriorly, apex subrectangular, termen rather straight above, broadly rounded below. Pale yellowish-ochreous, strewn with dark brown scales; costa suffused with brighter och-

reous transversely strigulated with pale grey; central fascia from 1/3 of costa to 2/3 of dorsum, almost entirely obliterate in middle, on costa with a tawny semioval spot, suffused with dark brown at ends, on dorsum with a subquadrate bright fulvous-chestnut spot, mixed with ferruginous; costal patch formed of a dark brown, rather semipelluculent suffusion as far as vein 8, anterior edge indicated by a dark brown line slightly sinuated below, from before 3/4 of costa to just above tornus, posterior edge formed by a similar line, from just before apex to end of vein 5, thence marginal, to below end of 3; veins inside patch irregularly dusted brown anteriorly, to extending anterior edge; dorsum more dusted with not dense purplish scales. Cilia (rubbed) pale ochreous.

Hind wing very pale, whitish-fuscous. Cilia concolorous.

Male genitalia. Tegumen moderate, narrowed. Uncus rather broad, not clavate. Socii rather long and slender. Gnathos arms moderately angular below. Labides with rather small spines. Valva triangular, with a horizontal and an oblique vertical fold. Aedeagus moderate, gradually moderately curved and dilated towards base, apex with a sclerotic oblique and obtuse thorn before lower edge at the right side.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 10378.

Belongs to the trivial *A. privatana* (Walker) group, but is distinct by the unusually armed aedeagus.

#### ***Adoxophyes melia* Clarke**

(pl. 13 figs. 77, 78)

*Adoxophyes melia* Clarke, 1976, Insects Micrones., 9: 133, fig. 60, pl. 12 figs. c, d, e, f, g, h.

Distribution. Southern Mariana Is.

Food plants. Widely polyphagous.

Mt. Bandahara, Bivouac One, 810 m, 1 ♀, genit. slide 10395. Bivouac Two, 1 ♂, genit. slide 10402.

The species belongs to the *A. fasciculana* group of species, judging from the genitalia of the two sexes. Dr. J.F. Gates Clarke kindly compared the above pair of specimens with his typical material.

#### ***Adoxophyes fasciculana* (Walker)**

*Tortrix ?fasciculana* Walker, 1866, List Lep. Het. Brit. Mus., 35: 1785 (Ceram).

*Adoxophyes fasciculana*: Meyrick, 1910, Proc. Linn. Soc. N.S. Wales, 35: 209; 1912, Lep. Catal., 10: 14 (*asciculana*, err. typ.); 1913, Genera Ins., 149: 18. Diakonoff, 1941, Treubia, 18: 34; 1952, Verh. Ned. Ak. Wet., Nat., (2)49(1): 155; 1958, Beitr. Ent., 8: 118; 1961, Ann. Soc. ent. France, 130: 51, figs. 3-4; 1968, U.S. Nat. Mus. Bull., 259: 41, fig. 482. Clarke, 1976, Insects

- Micronesia, 9: 129, fig. 59, pl. 11, figs. g, h; pl. 12 figs. a, b (liter., distrib.).  
*Homona fasciculana*; Roonwal & Bhasin, 1954, Indian Forest Bull. (n.s.), 171, Ent., 2: 19.  
*Tortrix luzonica* Sauber, 1902, in Semper, Schmett. Philipp. Ins., 2: 703, pl. 5 figs. 9–10 (larva).  
*Adoxophyes epipepla* Lower, 1908; Trans. Roy. Soc. S. Austral., 32: 318.  
*Adoxophyes cyrtosema* Meyrick, 1886, Trans. Ent. Soc. London, 1886: 276; 1912, Lep. Catal., 10: 14; 1913, Genera Ins., 149: 18 (syn. of *fasciculana*). Diakonoff, 1948, Beitr. Ent., 8: 118, pl. 1 fig. 1. Lin, 1958, Acta Ent. Sinica, 8: 293, pl. 1 figs. 1–7, pl. 2 figs. 8–12, pl. 3 figs. 13–20, pl. 4 figs. 21–23. Clarke, 1958, Meyrick's Types, 3: 20, pl. 10 figs. 1–1b. Diakonoff, 1961, Ann. Soc. Ent. France, 130: 54. Lin, 1964, Acta Ent. Sinica, 13: 145.

Distribution. Tonga, Fiji, China, Singapore, Great Sunda Is., Celebes, Moluccan Is., Solomon Is., New Hebrides, d'Entrecasteaux Is., New Guinea, Sudest Is., Trobriand Is., St. Matthias Is., New Ireland, New Hannover, St. Aignan Is., Philippine Is., E Caroline Is., Marshall Is., Kusaie I.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, 1 ♀. Bivouac Two, 1430 m, 1 ♂. N. Sumatra, Alas Valley, Balelutu, 320 m, 1 ♂. N. Sumatra, Alas Valley, Kutatjane, Tanah Merah, 200 m, 1 ♂.

**Scotiophyes hemiptycta** spec. nov.

[ἡμι = half, πτυκτός = folded]

(figs. 102–104, pl. 14 figs. 81, 82)

♂ 15–15.5 mm. Head with face strongly concave, below with a concave small tuft over palpi, light vinaceous-grey, forehead slightly darker, tuft on face whitish; scape dilated with scales, light greyish mixed with vinaceous, a small angular tuft in front towards apex. Palpus snow-white or pale ochreous, upper edge towards apex suffused with tawny. Thorax with anterior third dull ashy-grey touched with tawny, in middle with a blackish-ferruginous suffused band, posteriorly tawny. Abdomen light ochreous at base, dorsum slightly infuscated, anal tuft large, light ochreous with a blackish dorsal spot at base.

Fore wing with 3 from almost 3/4, 4 and 5 short-stalked from angle, 6 out of stalk of 7+8 near base; wing broad, truncate, anterior half of costa oblique, with a narrow, rolled but not appressed costal fold to middle, pale greyish, costal edge deep ferruginous; costa beyond fold prominent, then concave, apex pointed, termen gently sinuate, rather outwards-oblique, tornus being prominent. Variably marked: a large suffused chestnut-brown or orangeish basal patch between costal fold and fold of wing, rounded below, sometimes marbled darker, becoming paler and suffused downwards; posterior edge of this patch well-defined, outwards-oblique to about vein 7; remainder of wing light ochreous-vinaceous or pale ochreous-tawny, with veins faintly darker; costal patch fuscous, narrow, elongate-semioval, from beyond costal prominence to before apex, on costal edge containing a pair of indistinct

marks of ground colour; several sparse small dark posterior ferruginous striae in irregular transverse rows, especially along posterior edge of basal patch and anterior edge of costal patch, so accentuating the pale short band of ground colour between them. Cilia deep tawny-vinaceous, pale tawny in tornus.

The most variegated paratype with upper part of basal patch and costal patch suffused deep brownish-purple, also dorsum suffused with ferruginous, costal patch broadly surrounded by pale whitish-grey-vinaceous colour.

Hind wing pale golden-ochreous, glossy, whitish towards base, a suffused fuscous-tawny small streak along apex of costa, a slight similar suffusion along margin of termen before tornus. Cilia pale whitish-ochreous, glossy, with a regularly interrupted subbasal fuscous narrow band and infuscated tips around apex, a deep grey-fuscous suffusion extending over cilia along lower half of termen as far as tornus, connected with the above-mentioned marginal suffusion.

♀ 18—19 mm. Head with face normal, flat, without a tuft, pale ochreous. Palpus as in male. Thorax light chestnut. Abdomen slightly more infuscated above, paler beneath.

Fore wing with vein 3 from well before angle, 4 and 5 separate, 5 and 6 converging posterad, 6 almost connate with stalk of 7 + 8, longer than in male, broadly suboval, costa arched to beyond middle, thence concave, apex more pointed and prominent, termen deeply sinuate above, strongly rounded-prominent, below and outwards-oblique. Tawny-orangeish, slightly paler in centre, markings suffused blackish-fuscous. Anterior third of costa with four ill-defined vertical strigulae; central fascia from before middle of costa, not reaching centre of disc, paler below, end rounded and slightly turned outwards; costal patch fasciate, marginal, along costal concavity, above with a few points of ground colour, below with some blackish points and a short appendix. Cilia as in male.

Hind wing as in male, except that costal suffusion is reduced.

Male genitalia. Tegumen pyramidal, very broad. Uncus with a triangular base, point slender, bristly. Socii double: a group of parietal bristles and a semioval free tumescence at base of gnathos. This slender, V-shaped, pending, with a strong point. Valva extremely voluminous, semioval, bristly, sacculus, a hooked fold. Aedeagus moderate, little curved. Cornuti, a dense sheaf of short spikes.

Female genitalia. Ovipositor lobes long, narrowed in middle, lower half slender. Apophyses almost equal. Sterigma, a simple aciculate sclerite. Ostium round, with a large V-shaped lamella postvaginalis. Ductus bursae with thickened refracting wall, with a single sclerotic coil with fine structure; lower half



Figs. 99–101. Genitalia of Archipini. 99, *Isotenes inae* Diakonoff; 100, *Borneogena antigrapha* Diakonoff, ♂; 101, the same, ♀, metalotype.

of ductus hyaline. Corpus bursae large, ovoidal. Signum one, a thick thorn with obliquely extended basal plate.

Mt. Bandahara, Bivouac One, 810 m, 1 ♂, holotype, genit. slide 9046, 1 ♀, allotype, genit. slide 9038; paratypes, 11 ♂, 1 ♀, genit. slide 9037 ♂.

A sexually dimorphous species, little resembling an *Adoxophyes*, as Meyrick once thought as little, in fact, as does the type species, *S. faeculosa* (Meyrick), attributed by him to *Adoxophyes* originally. The female characters that become known are most welcome, supporting my view of the genus being remote from *Adoxophyes* and indicating a rather close relationship with the peculiar genus *Borneogena* Diakonoff, not understood by me before.

***Borneogena antigrapha* Diakonoff**  
(figs. 100, 101, pl. 13 fig. 79, pl. 14 figs. 83, 84)

*Borneogena antigrapha* Diakonoff, 1941, *Treubia*, 18: 404, fig. 1, pl. 18 fig. 5 (♂).

Distribution. Central East Borneo.

♀, metalotype, 23 mm. (further specimens 16–22 mm). Head light fulvous. Palpus whitish, upper edge throughout suffused with light fulvous. Thorax slightly deeper fulvous. Abdomen brownish-fuscous.

Fore wing oblong-oval, little dilated, basal half of costa broadly arched, with a projecting marginal tuft of scales beyond middle, thence strongly concave, apex strongly falcate, termen with upper half deeply concave in middle strongly triangularly projecting, below this strongly oblique and gradually rounded. Light fulvous, becoming slightly deeper fulvous towards costa, slightly dusted with darker reddish-chestnut and sparsely marked with dark ferruginous-chestnut transverse irregular strigulae, triangularly dilated on costal margin and inequally spaced; a pale grey oblique rectangular patch from costa just beyond middle, on costal margin including projecting marginal tuft, this with one or two transverse darker grey lines; pale patch slightly dusted with darker grey on costa, gradually becoming paler downwards (in paratype preceded and followed on costa by darker ferruginous costal end of central fascia and a crescentic costal patch, respectively, corresponding with the costal dark marks in male); three well-defined straight margins of patch narrowly edged with chestnut; an irregular, interrupted and undulate chestnut line from a roundish dot before anterior lower angle of grey patch, to dorsum beyond middle, hardly outwards-oblique; an oblong-rectangular pale greyish patch along dorsum before middle, sides slightly converging upwards, preceded by a thick, followed by a slender chestnut streak; irregular more or less

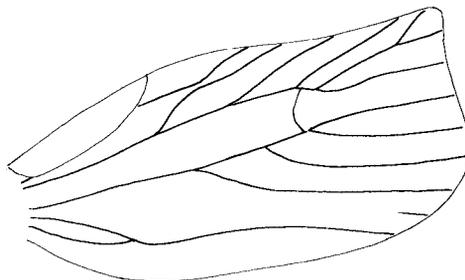


Fig. 102. *Scotiophyes hemiptycta* sp. n., ♂, venation of right fore wing.

interrupted and irregularly zigzag chestnut transverse lines across posterior half of wing and a faint terminal line. Cilia glossy whitish-ochreous, along upper half of termen with a ferruginous subbasal fascia, around apex, terminal prominence and in tornus, greyish-fuscous (so exaggerating the sinuations of the wing!).

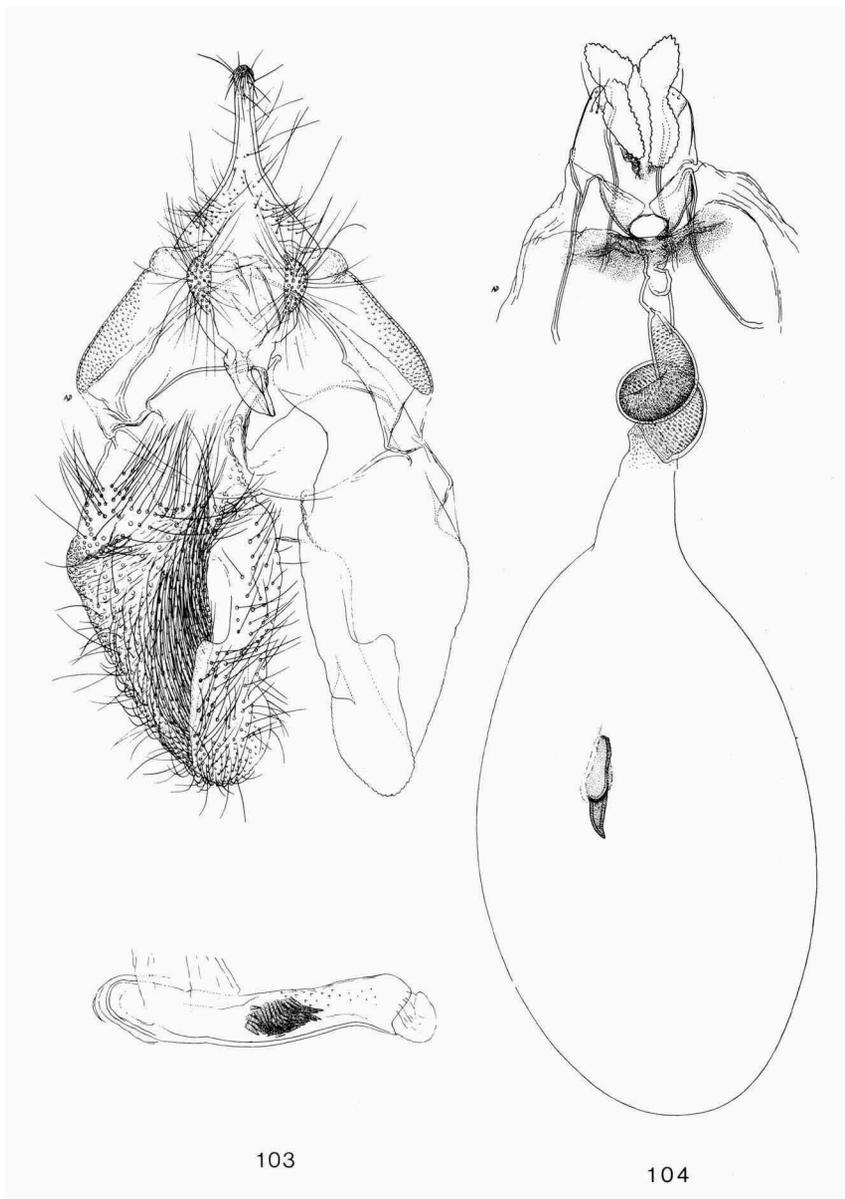
Hind wing  $2/3$  length and  $3/4$  width of the fore wing, oblong, with apex, termen and dorsum forming a broad continuous curve, costa thinly scaled, rather concave, with in middle, a depressed pencil of thin grey scales, corresponding with a thick oval brush of similar dark fuscous-grey stiffly raised hairs, occupying median third of costa. Cilia glossy, concolorous, with a darker grey subbasal line.

Female genitalia. Lobi anales rigidly swollen, bristly. Below ovipositor a fleshy, aciculate and large, transversely-oval tumescence, apparently swollen eighth segment, around ostium; seventh segment represented as a peculiar sterigma proper, being a large cordiform sclerite with free edges, with a large oval transverse pseudo-ostium, aciculate along margin (in which fits the swollen eighth segment). Postapophyses very long. Anapophyses slightly shorter. Ductus bursae rather wide, simple, coiled once; signum, a small hollow thorn, without basal plate.

Mt. Bandahara, Bivouac One, 810 m, 1 ♀, metalotype, genit. slide 10330; 6 ♂, 2 ♀, genit. slides 9060 ♂, 9097 ♀.

The females look rather different from the holotype, because of the unusual, deeply sinuate termen of the fore wing, and its pronounced pale markings, and by the modified hind wing of the female, but general facies, the neuration and the costal markings are similar, so that I am satisfied that the sexes belong together.

So unusual are the male genitalia and the neuration that I was dubious, when first describing the species exactly 40 years ago, whether the single holotype was a tortricid at all. It is gratifying to find now that the female is an equally peculiar insect.



Figs. 103–104. *Scottiophyes hemiptycta* Diakonoff, 103, male genitalia; below, aedeagus; 104, female genitalia, metalotype.



EPITYMBIINI

48. *Mimeoclysia strongylopa* sp. n.

ARCHIPINI

- |  |  |
|--|--|
| 49. <i>Ulodemis hyalura</i> sp. n.               | 67. [ <i>H. salaconis</i> (Meyrick)]               |
| 50. <i>Alloodemis fulva</i> g. & sp. n.          | 68. <i>H. anopta</i> sp. n.                        |
| 51. <i>A. euhelias</i> sp. n.                    | 69. <i>H. encausta</i> (Meyrick)                   |
| 52. <i>A. dionysia</i> sp. n.                    | 70. <i>H. despotis</i> sp. n.                      |
| 53. <i>A. stegopa</i> sp. n.                     | 71. <i>H. coffearia</i> (Nietner)                  |
| 54. <i>A. chelophora</i> (Meyrick)               | 72. <i>Dynatocephala cruenta</i> (Diakonoff) g. n. |
| 55. <i>Lumaria minuta</i> (Walsingham)           | 73. <i>D. erebenna</i> sp. n.                      |
| 56. <i>Asteriognatha cyclocentra</i> g. & sp. n. | 74. <i>Archips seminubilis</i> (Meyrick)           |
| 57. <i>A. metriotera</i> sp. n.                  | 75. <i>Capua coenotoca</i> sp. n.                  |
| 58. <i>Neocalyptis affinisana</i> (Walker)       | 76. <i>C. oxycelis</i> sp. n.                      |
| 59. <i>Notioleptis synnoa</i> g. & sp. n.        | 77. <i>Clepsis platytera</i> sp. n.                |
| 60. <i>Isodemis stenotera</i> sp. n.             | 78. <i>Isotenes inae</i> Diakonoff                 |
| 61. <i>Phaenacropista compsa</i> sp. n.          | 79. <i>I. anisa</i> sp. n.                         |
| 62. <i>Petridia latypus</i> g. & sp. n.          | 80. <i>Adoxophyes acrocindina</i> sp. n.           |
| 63. <i>Cryptomelaena dynastes</i> g. & sp. n.    | 81. <i>A. melia</i> Clarke                         |
| 64. <i>Chiraps phaedra</i> sp. n.                | 82. <i>A. fasciculana</i> (Walker)                 |
| 65. <i>Homona brachysema</i> sp. n.              | 83. <i>Scotiophyes hemiptycta</i> sp. n.           |
| 66. <i>H. difficilis</i> (Meyrick)               | 84. <i>Borneogena antigrapha</i> Diakonoff         |

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Fig. 1 (left). Soldok in the Alas Valley, porters returning from the ascent of Mt. Bandahara. Fig. 2 (middle). Forest canopy in Bivouac One. Fig. 3 (right). Malaise trap in the forest near Bivouac One.



Fig. 1 (left). Open facies in the forest above Bivouac Two, at ca 1500 m altitude. Fig. 2 (middle). Forest canopy near Bivouac Three. Fig. 3 (right). Gnarled forest near Bivouac Four.

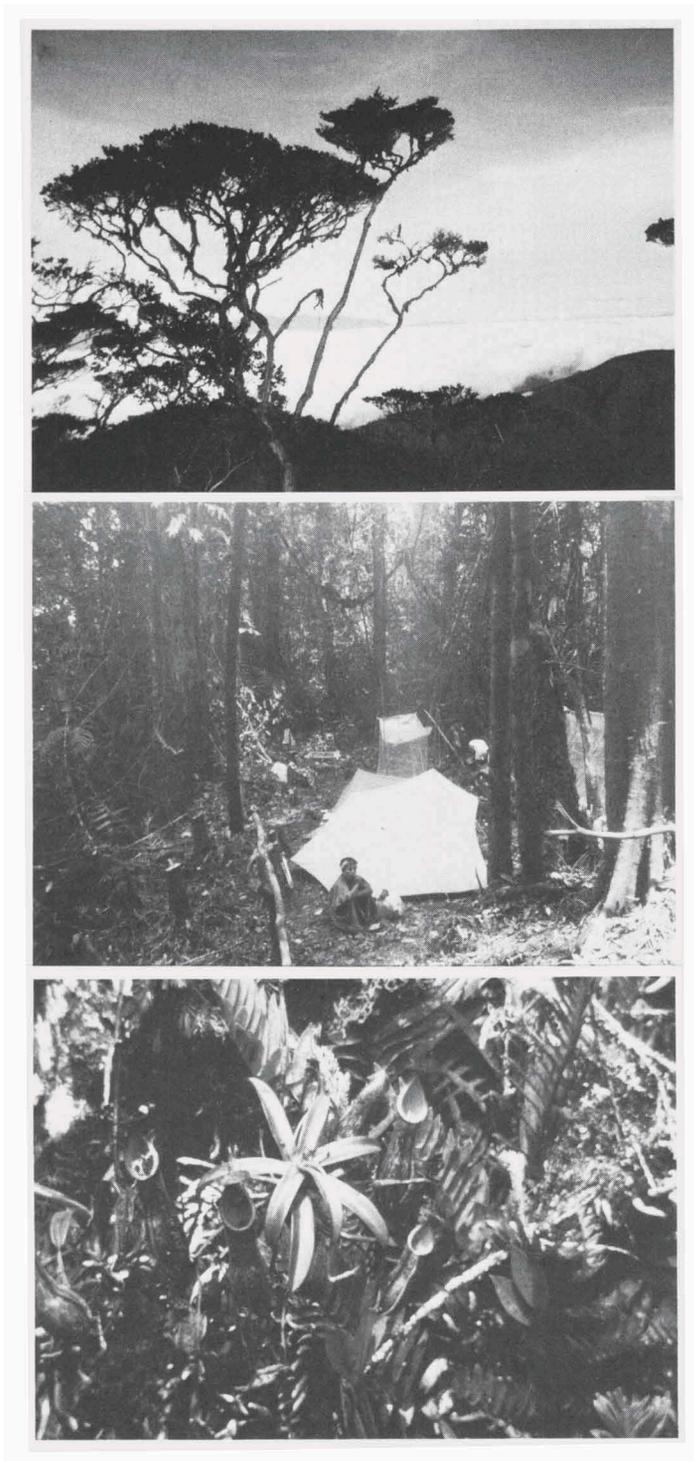


Fig. 1 (upper). View from Bivouac Four upon the clouded Alas Valley. Fig. 2 (middle). General view of Bivouac One. Fig. 3 (lower). Close-up of herb layer vegetation, with *Nepenthes*, at Bivouac Four.

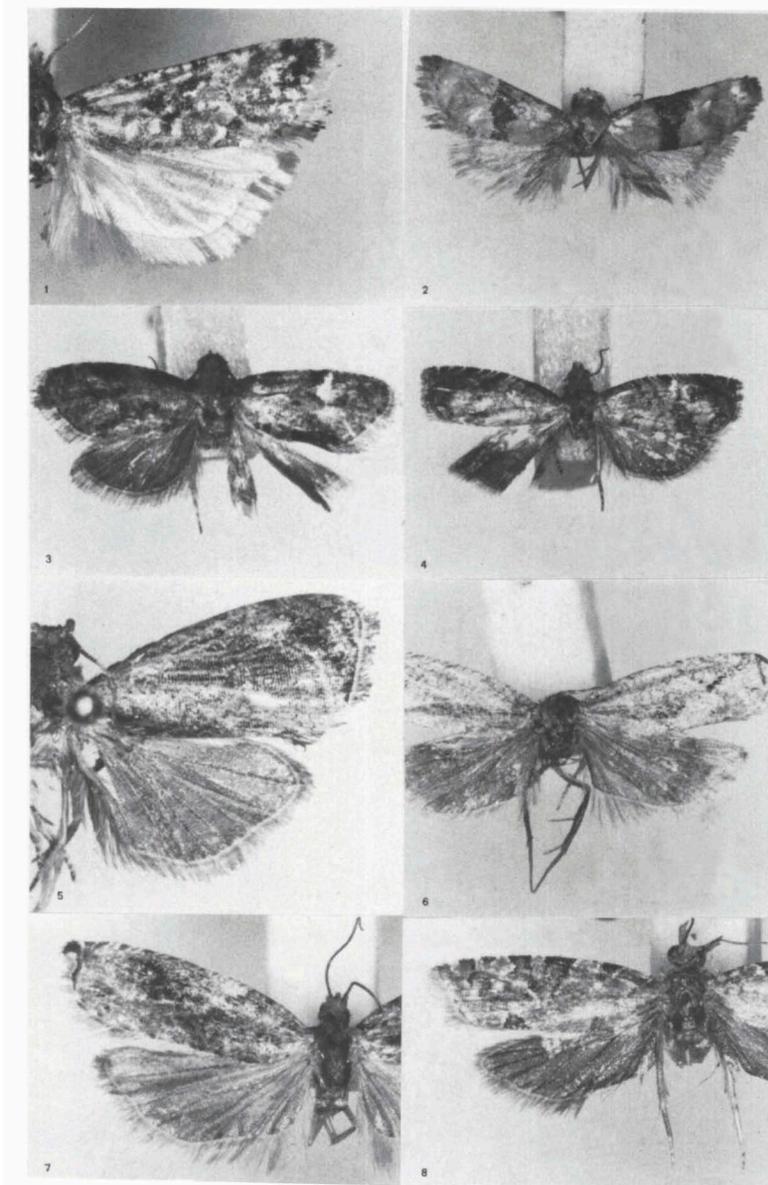


Fig. 1. *Eupoecilia sumatrana* sp. n. Fig. 2 *E. anebrica* sp. n. Fig. 3. *Pammene isocampta* Meyrick.  
 Fig. 4. *Grapholita diaphorotorna* sp. n. Fig. 5. *Cryptophlebia aniacra* sp. n. Fig. 6. *Rhopobota hypomelas* sp. n. Fig. 7. *R. bostrichus* sp. n. Fig. 8. *Peridaedala triangulosa* sp. n.

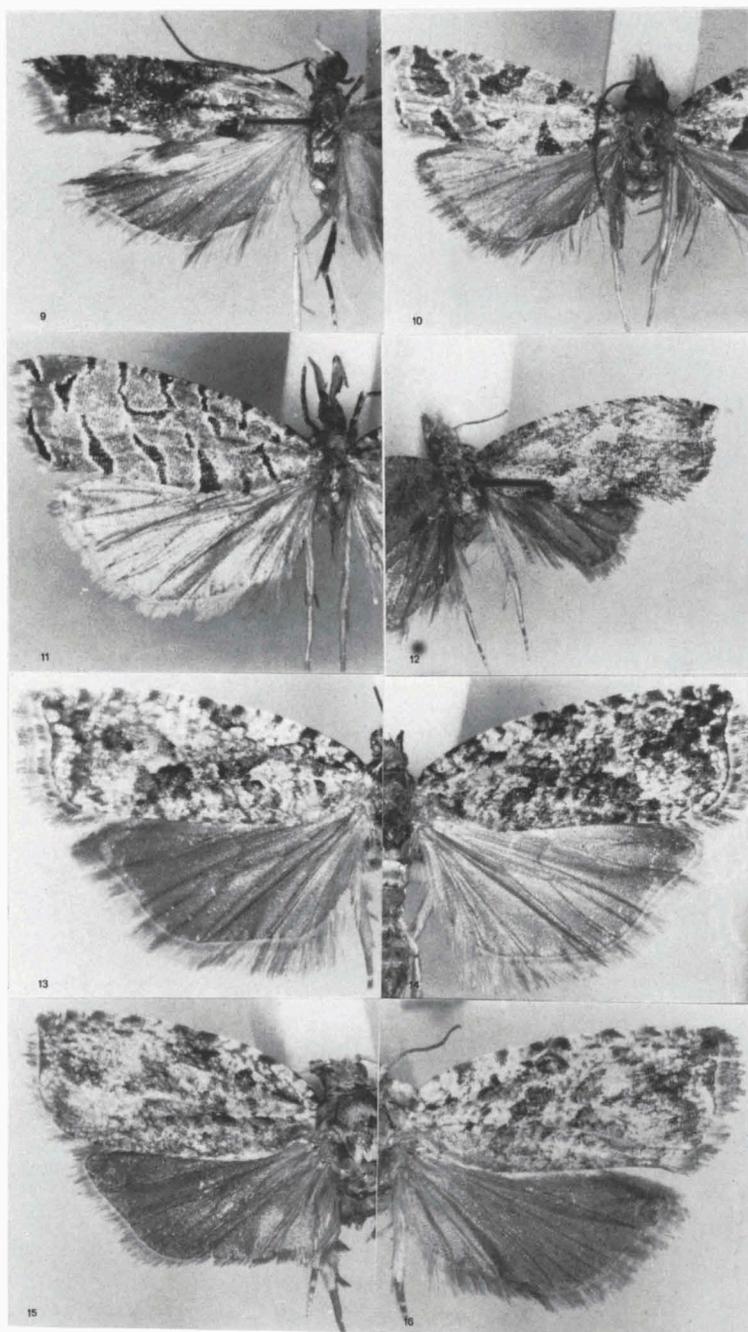


Fig. 9. *Peridaedala thesauophora* sp. n. Fig. 10. *P. enantiosema* sp. n. Fig. 11. *P. beryllina* (Meyrick), ♀. Fig. 12. *Epinotia (Asthenia) munda* sp. n. Fig. 13. *Assulella lithocosma* sp. n., ♂. Fig. 14. The same, ♀. Fig. 15. *A. archaea* sp. n. Fig. 16. *A. anoechtoteria* sp. n. (Java).

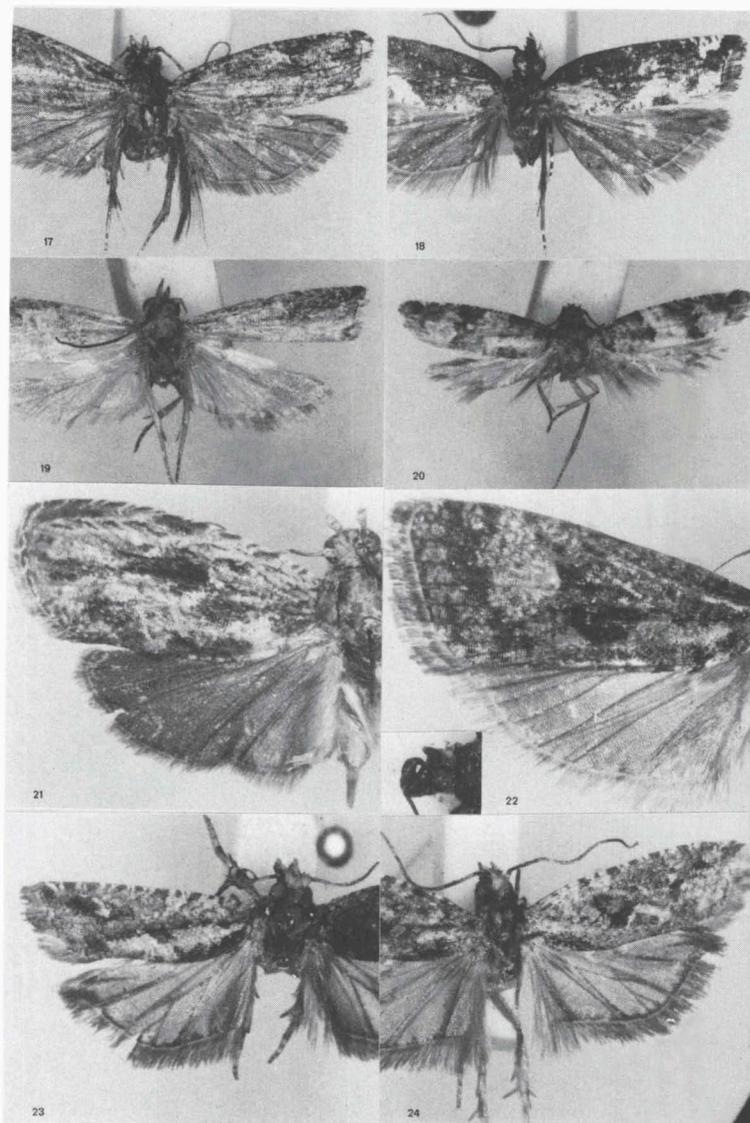


Fig. 17. *Hérmenias pachnitis* Meyrick, ♂. Fig. 18. *H. dnophera* sp. n. Fig. 19. *H. metaspra* sp. n. Fig. 20. *Epinotia (Steganoptycha) araea* sp. n. Fig. 21. *Anoecophysis branchiodes* (Meyrick), ♂. Fig. 22. *Cryptasasma (Allobrachygonia) bellicosa* sp. n.; cut: head laterally. Fig. 23. *Dolichurella viridimicans* g. & sp. n., ♂. Fig. 24. The same, ♀.

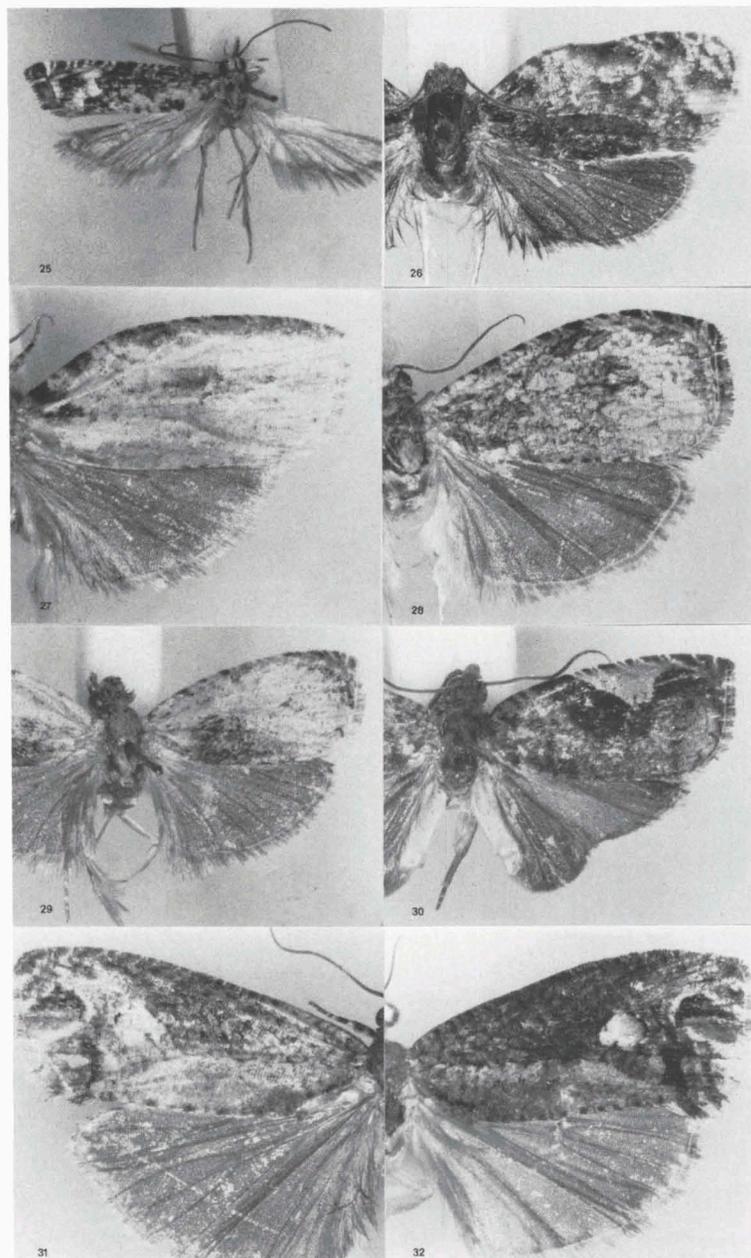


Fig. 25. *Epinotia (Asthenia) clasta* sp. n. Fig. 26. *Phaecasiophora (P.) caelatrix* sp. n. Fig. 27. *P. (P.) decolor* sp. n. Fig. 28. *Sycacantha rotundata* sp. n. Fig. 29. *S. crocamicta* Diakonoff. Fig. 30. *Statherotis antisema* Diakonoff. Fig. 31. *Arcesis anax* sp. n., ♂. Fig. 32. The same, ♀.

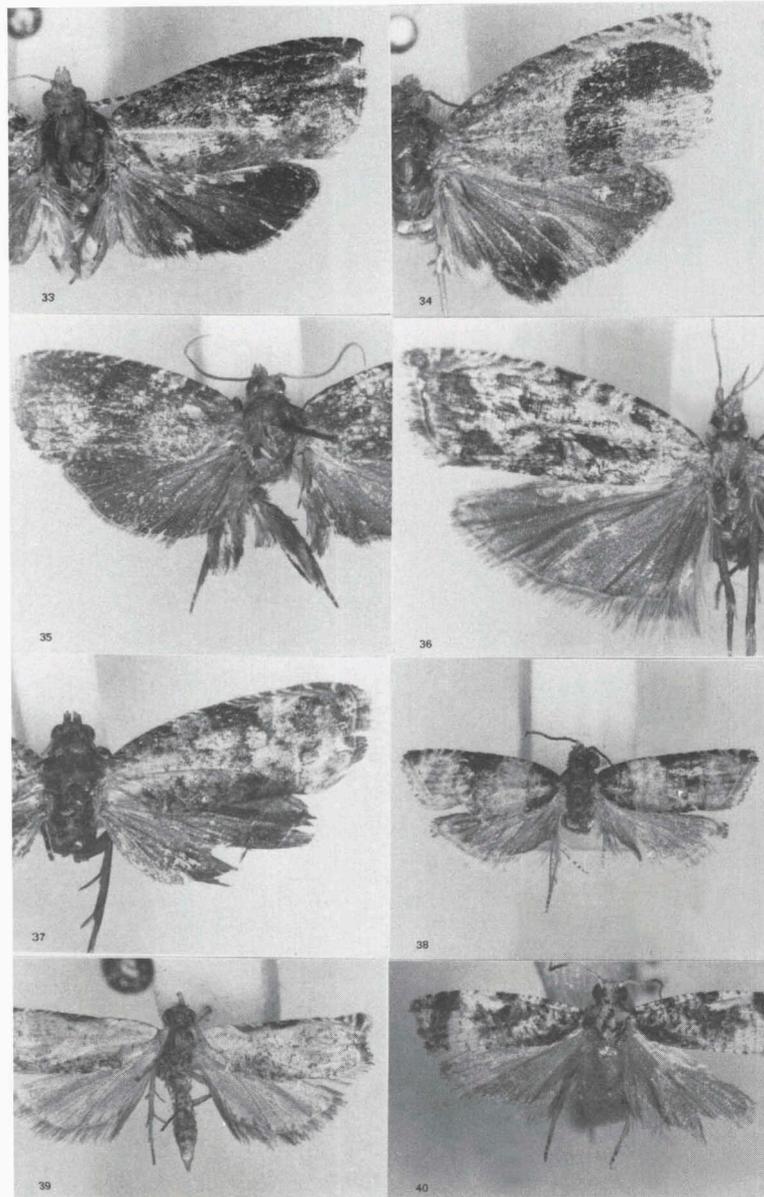


Fig. 33. *Neopotamia cathemacta* sp. n. Fig. 34. *Apsidophora purpurorbis* Diakonoff. Fig. 35. *Socioplana idicopoda* sp. n. Fig. 36. *Rhopaltriplasia macrorhis* sp. n. Fig. 37. *Dudua perusta* sp. n. Fig. 38. *Olethreutes (Loxoterma) nomas* sp. n. Fig. 39. *Balbidomaga dorophora* sp. n. Fig. 40. *Phricanthes eutrachys* (Diakonoff), holotype.

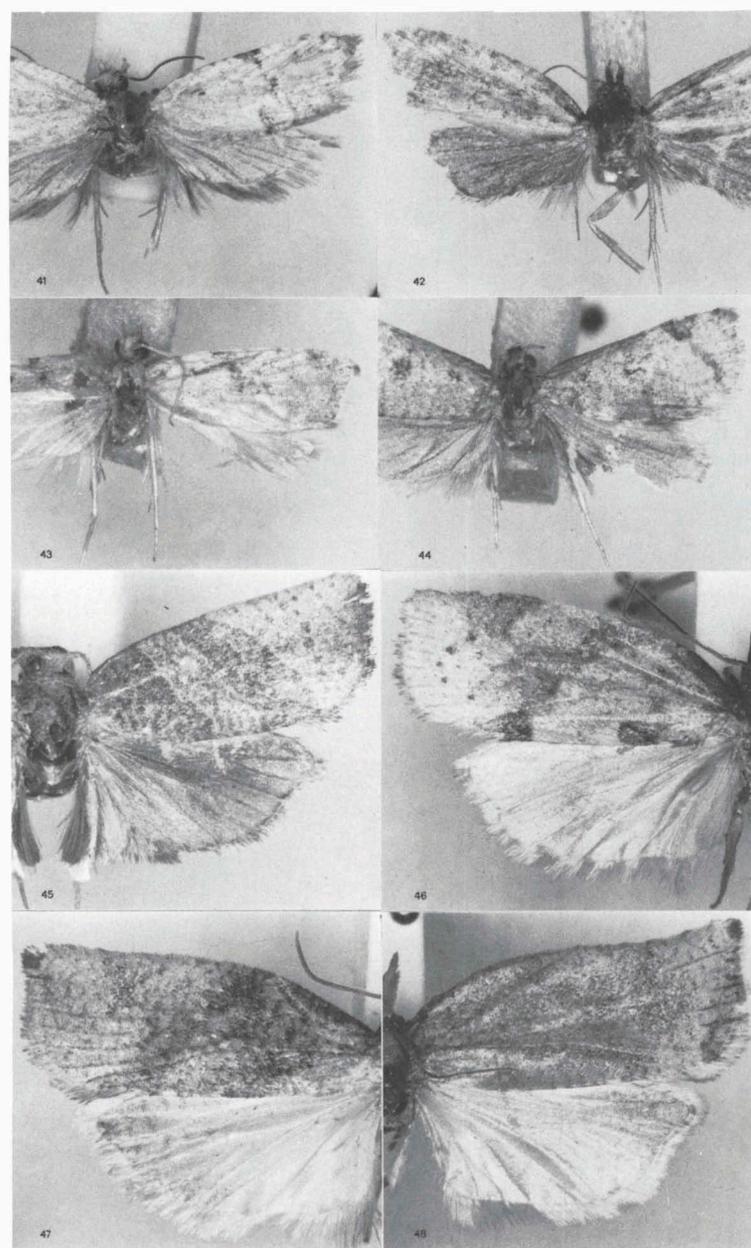


Fig. 41. *Protarchella acheenensis* sp. n. Fig. 42. *Lopharcha conia* sp. n. Fig. 43. *Reptilisocia paraxena* sp. n. Fig. 44. *Mimeoclysia strongylopa* sp. n. Fig. 45. *Ulodemis hyalura* sp. n. Fig. 46. *Allodemis euhelias* sp. n. Fig. 47. *A. fulva* sp. n., ♂. Fig. 48. The same, ♀.

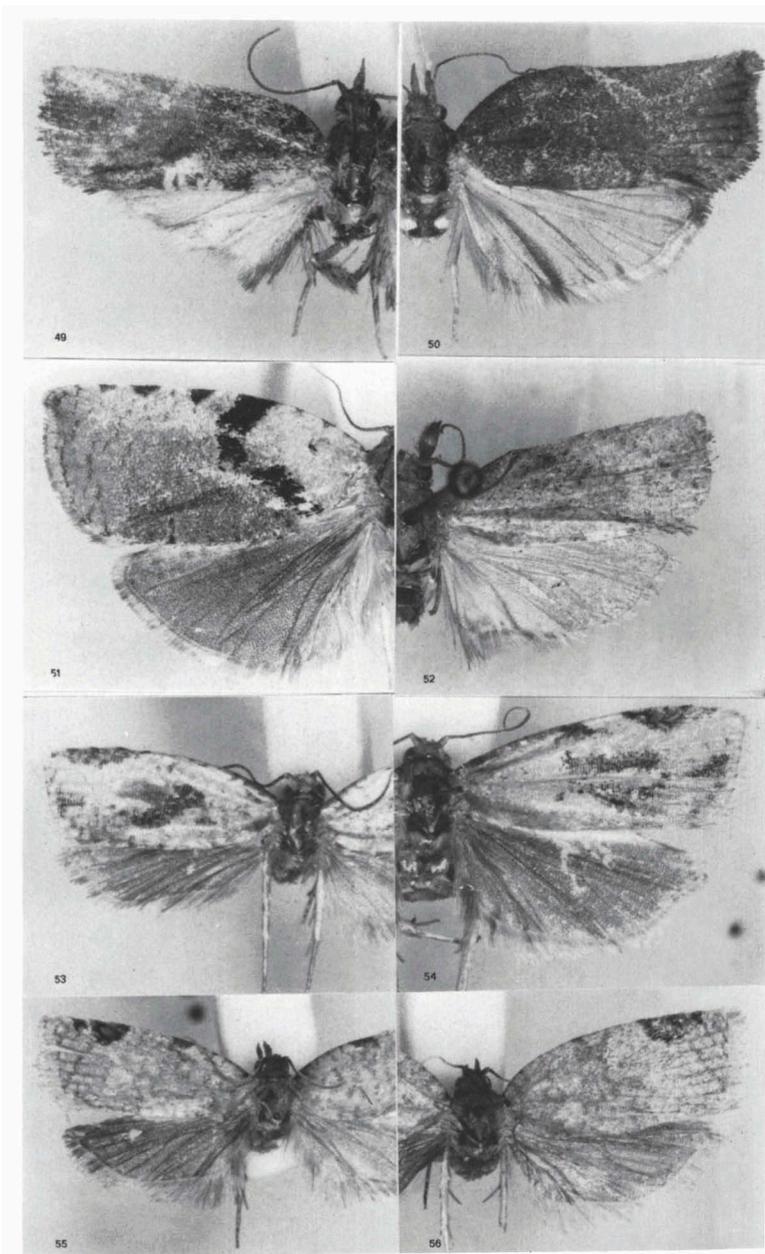


Fig. 49. *Allodemis stegopa* sp. n. Fig. 50. *A. dionysia* sp. n. Fig. 51. *Homona encausta* (Meyrick), ♂. Fig. 52. *Allodemis chelophora* (Meyrick). Fig. 53. *Asteriognatha metriotera* sp. n. Fig. 54. *A. cyclocentra* sp. n. Fig. 55. *Notiolepsis synnoa* sp. n., ♂. Fig. 56. The same, ♀.

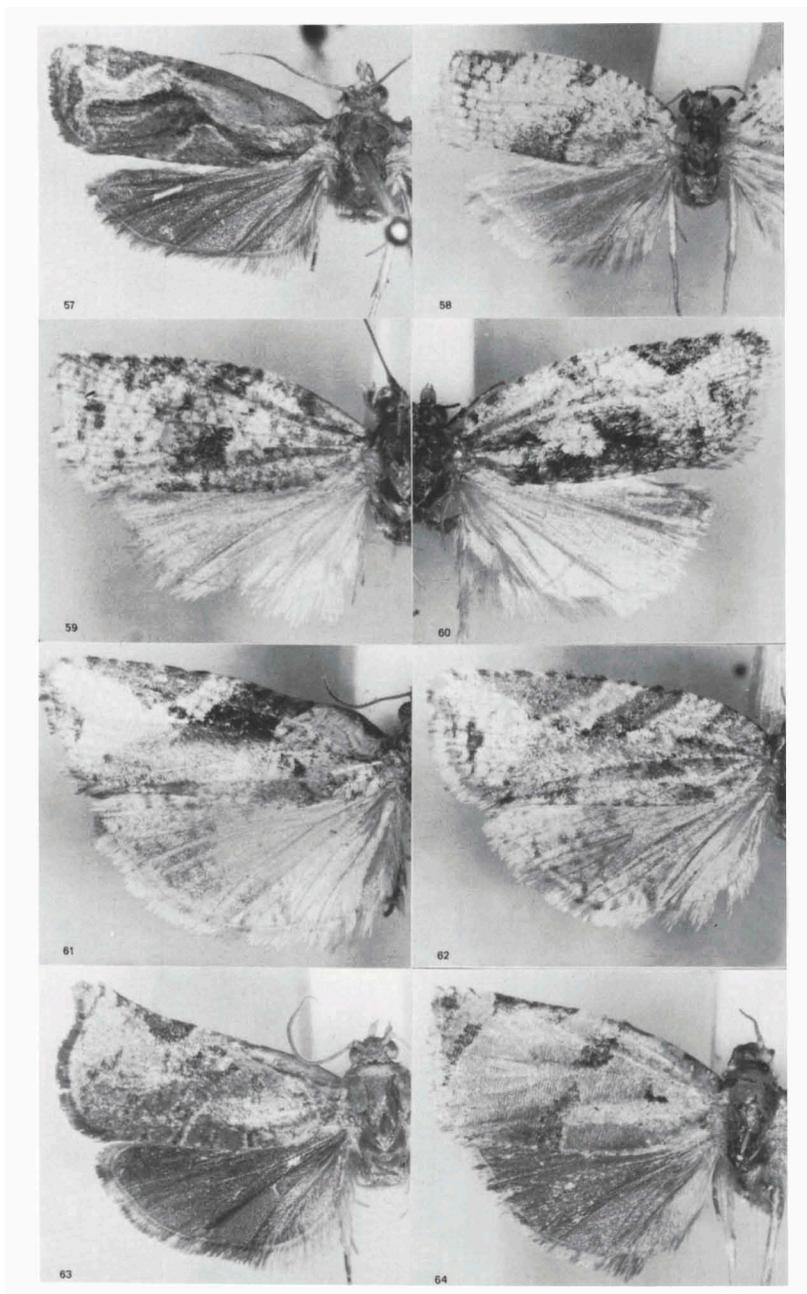


Fig. 57. *Isodemis stenotera* sp. n. Fig. 58. *Phaenacropista compsa* sp. n. Fig. 59. *Petridia latypos* sp. n., ♂. Fig. 60. The same, ♀. Fig. 61. *Cryptomelaena dynastes* sp. n., ♂. Fig. 62. The same, ♀. Fig. 63. *Chiraps phaedra* sp. n. Fig. 64. *Homona brachysema* sp. n.

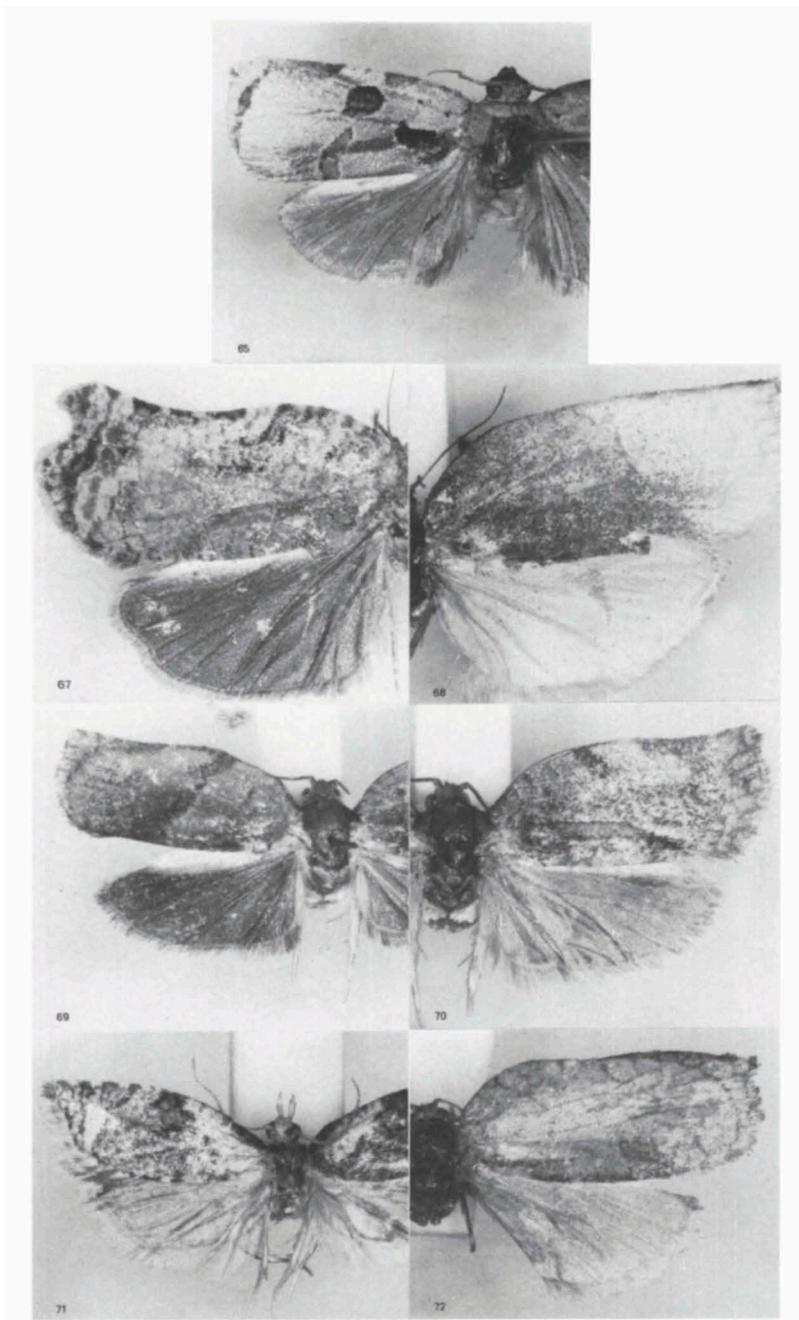


Fig. 65. *Homona salaconis* (Meyrick), Celebes, ♂, holotype (Leiden Museum). Fig. 67. *H. despotis* sp. n. Fig. 68. *H. anopta* sp. n. Fig. 69. *Dynatocephala erebenna* sp. n. Fig. 70. *D. cruenta* (Diakonoff). Fig. 71. *Capua oxycelis* sp. n. Fig. 72. *C. coenotoca* sp. n.

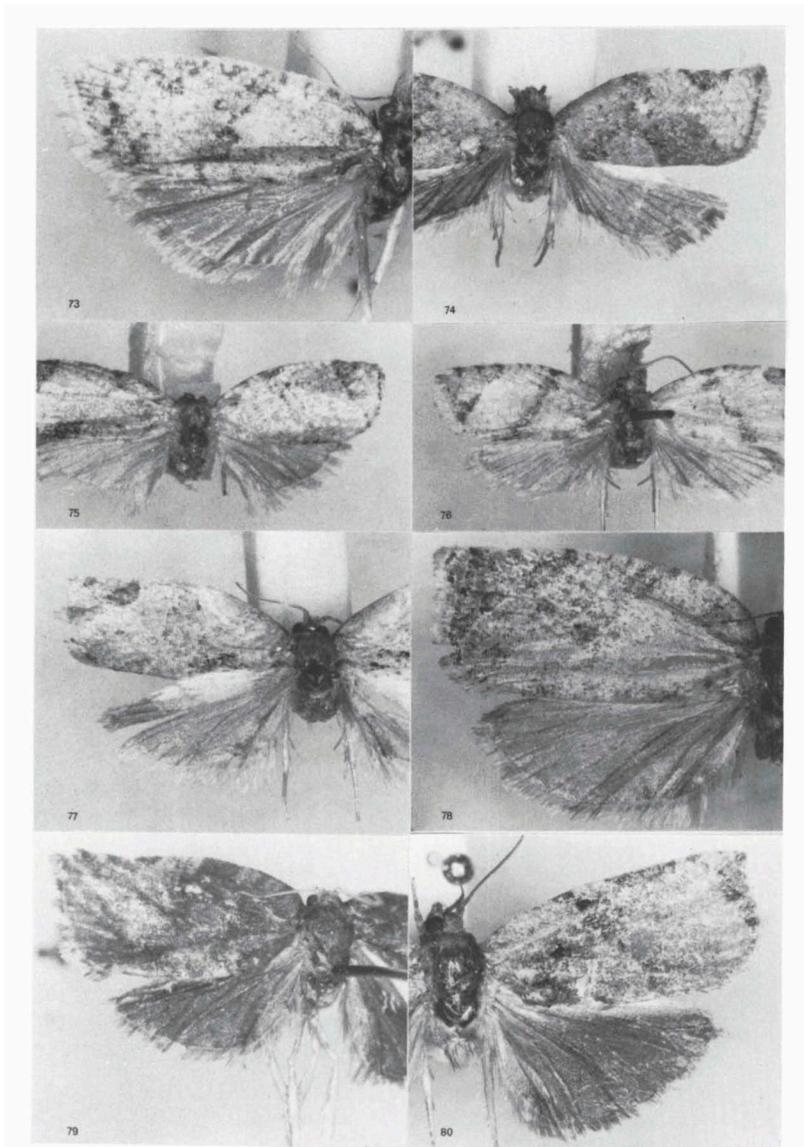


Fig. 73. *Isotenes anisa* sp. n. Fig. 74. *Clepsis platytera* sp. n. Fig. 75. *Adoxophyes acrocindina* sp. n., ♂, holotype. Fig. 76. The same, ♀, paratype. Fig. 77. *A. melia* Clarke, ♂. Fig. 78. The same, ♀. Fig. 79. *Borneogena antigrapha* Diakonoff, holotype, Borneo. Fig. 80. *Homona difficilis* (Meyrick), ♂.

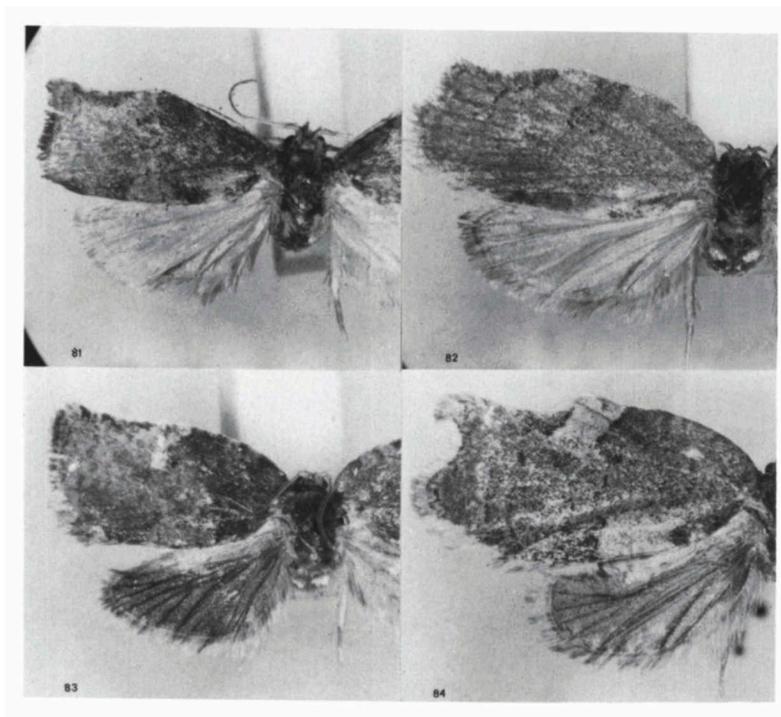
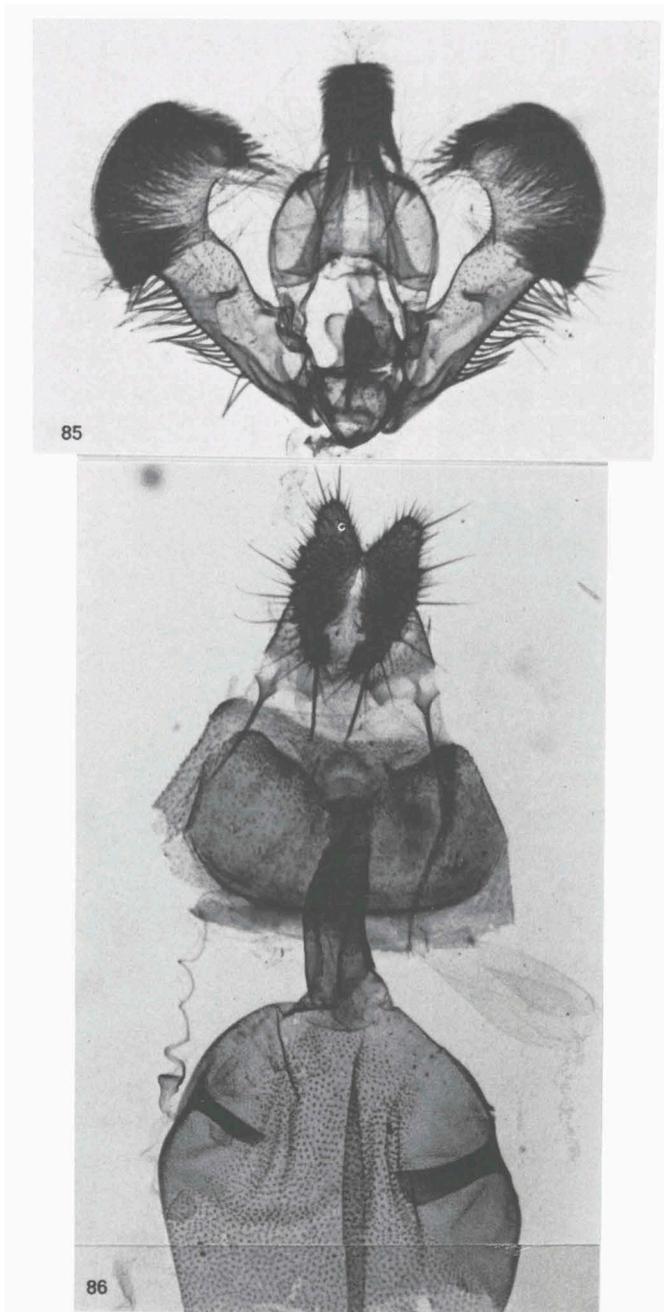
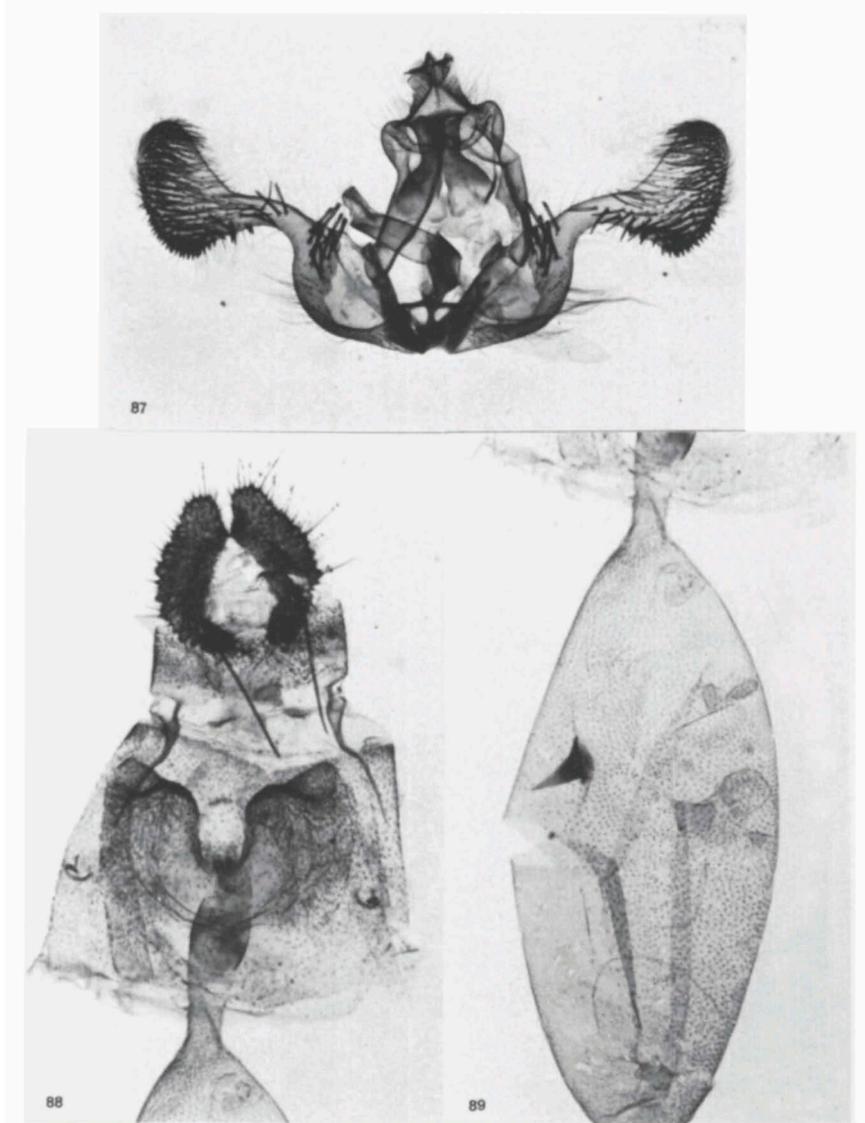


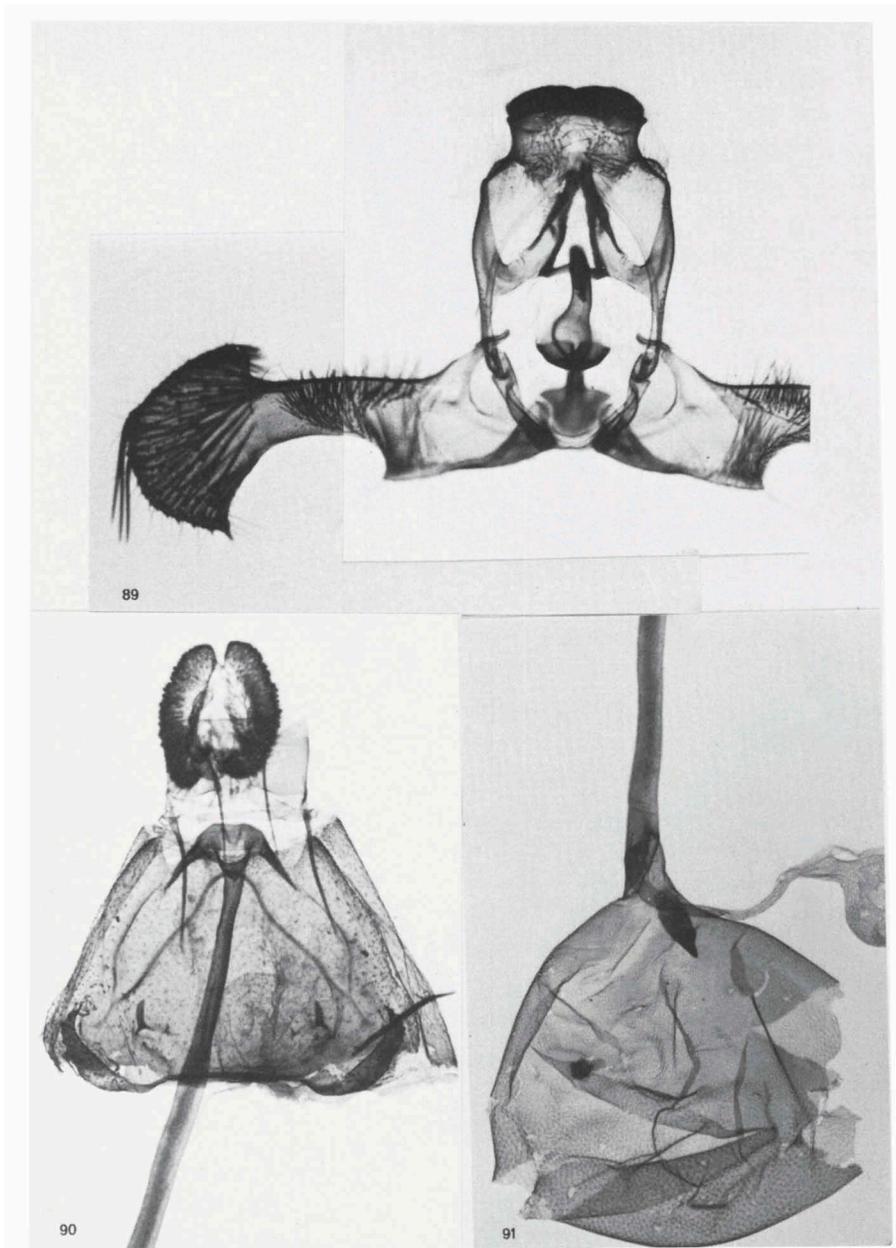
Fig. 81. *Scotiophyes hemiptycta* sp. n., ♂. Fig. 82. The same, ♀, metalotype. Fig. 83. *Borneogena antigraha* Diakonoff, ♂, Atjeh. Fig. 84. The same, ♀, metalotype.



Genitalia of Eucosmini, holotypes. Fig. 85. *Rhopobota hypomelas* sp. n., ♂. Fig. 86. *Peridaedala triangulosa* sp. n., ♀.



Genitalia of *Peridaedala beryllina* (Meyrick). Fig. 87. ♂, CW Sumatra, Fort de Kock, genit. slide 10397. Fig. 88. The same species, metalotype ♀ (Java), sterigma and ovipositor. Fig. 89. The same, bursa, genit. slide 10392.



Genitalia of *Assulella litigosa* (Meyrick). Fig. 89. ♂, holotype. Fig. 90. ♀, paratype. Fig. 91. The same, bursa. (By the courtesy of the Trustees of the British Museum (Natural History)).

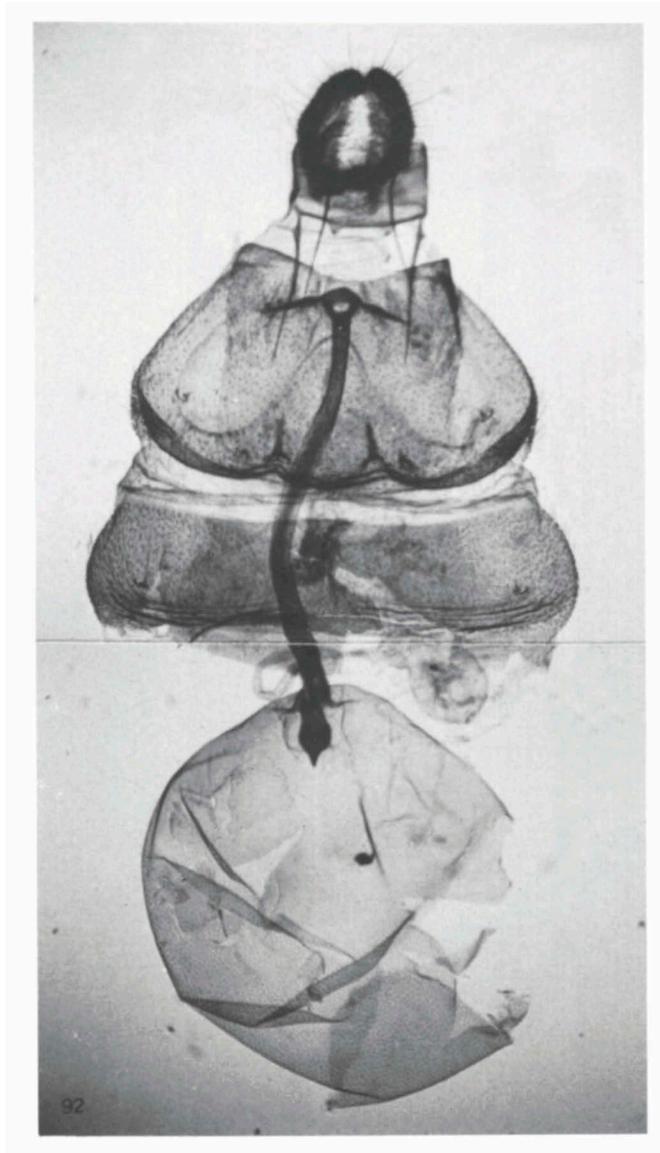
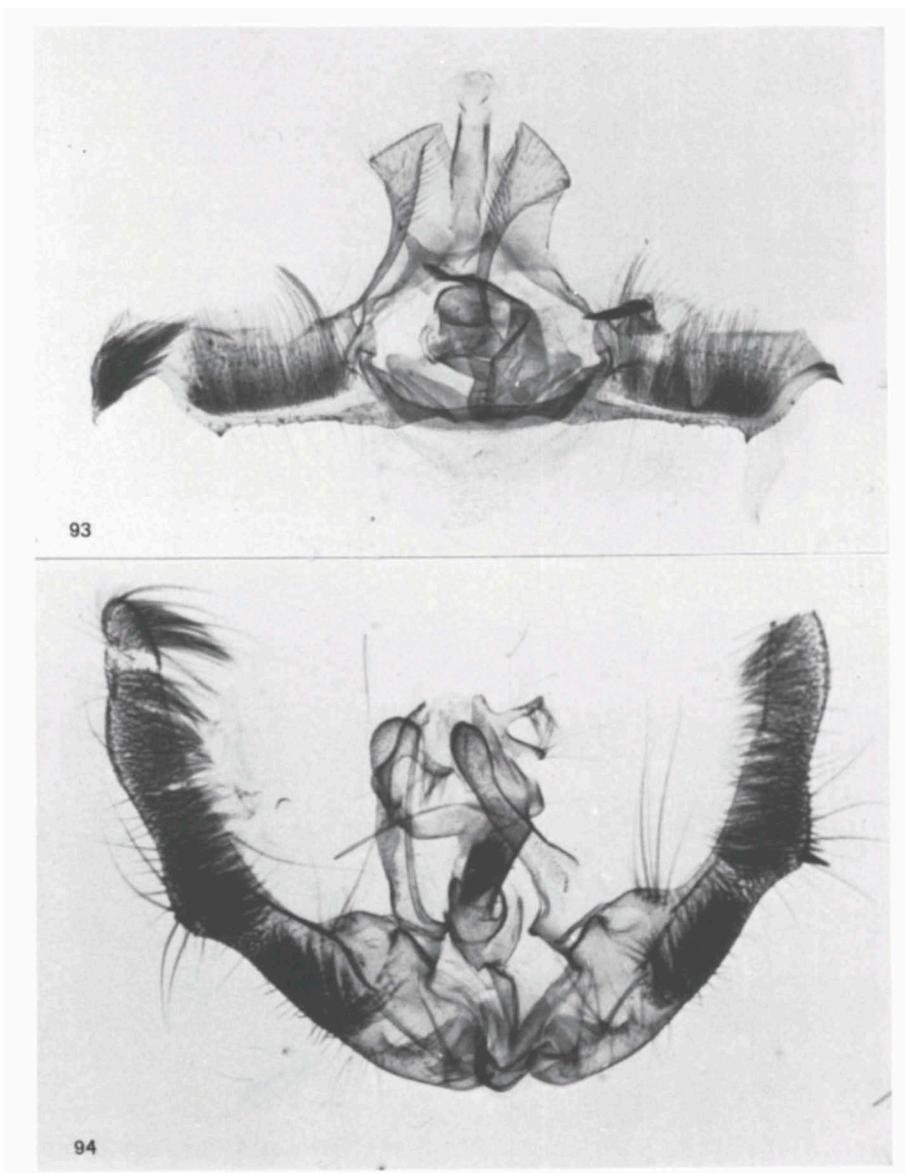
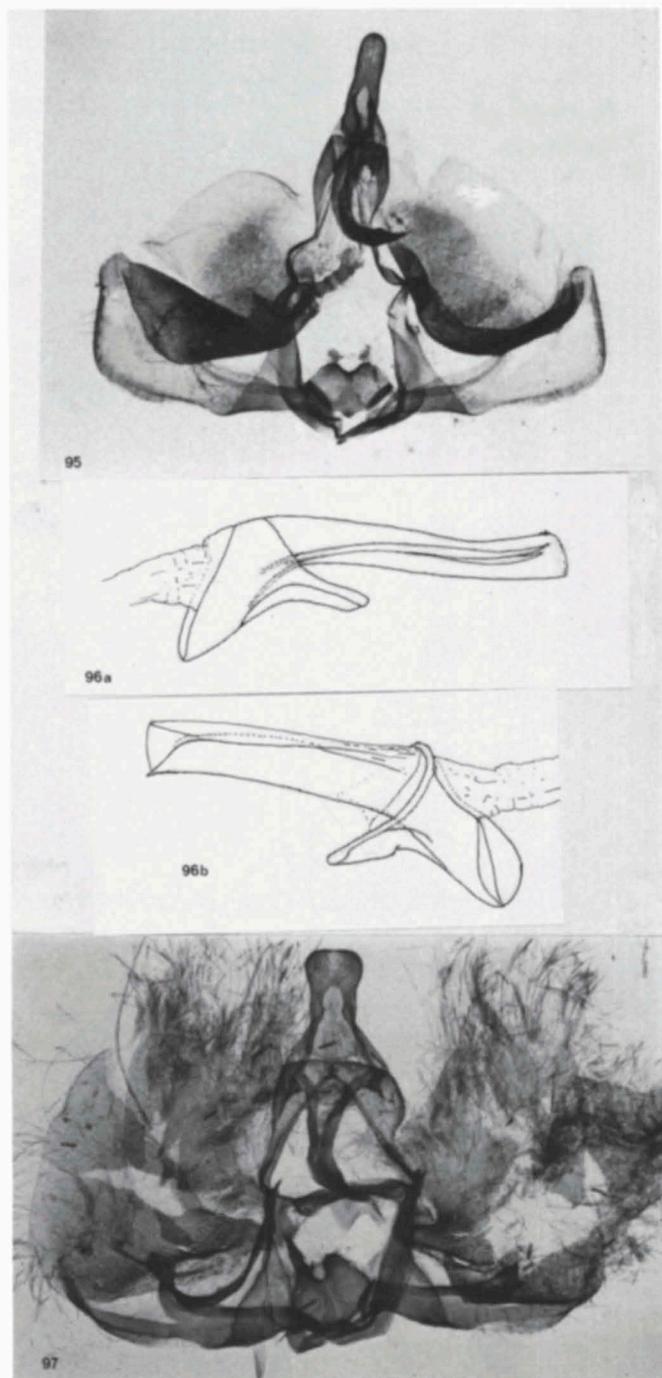


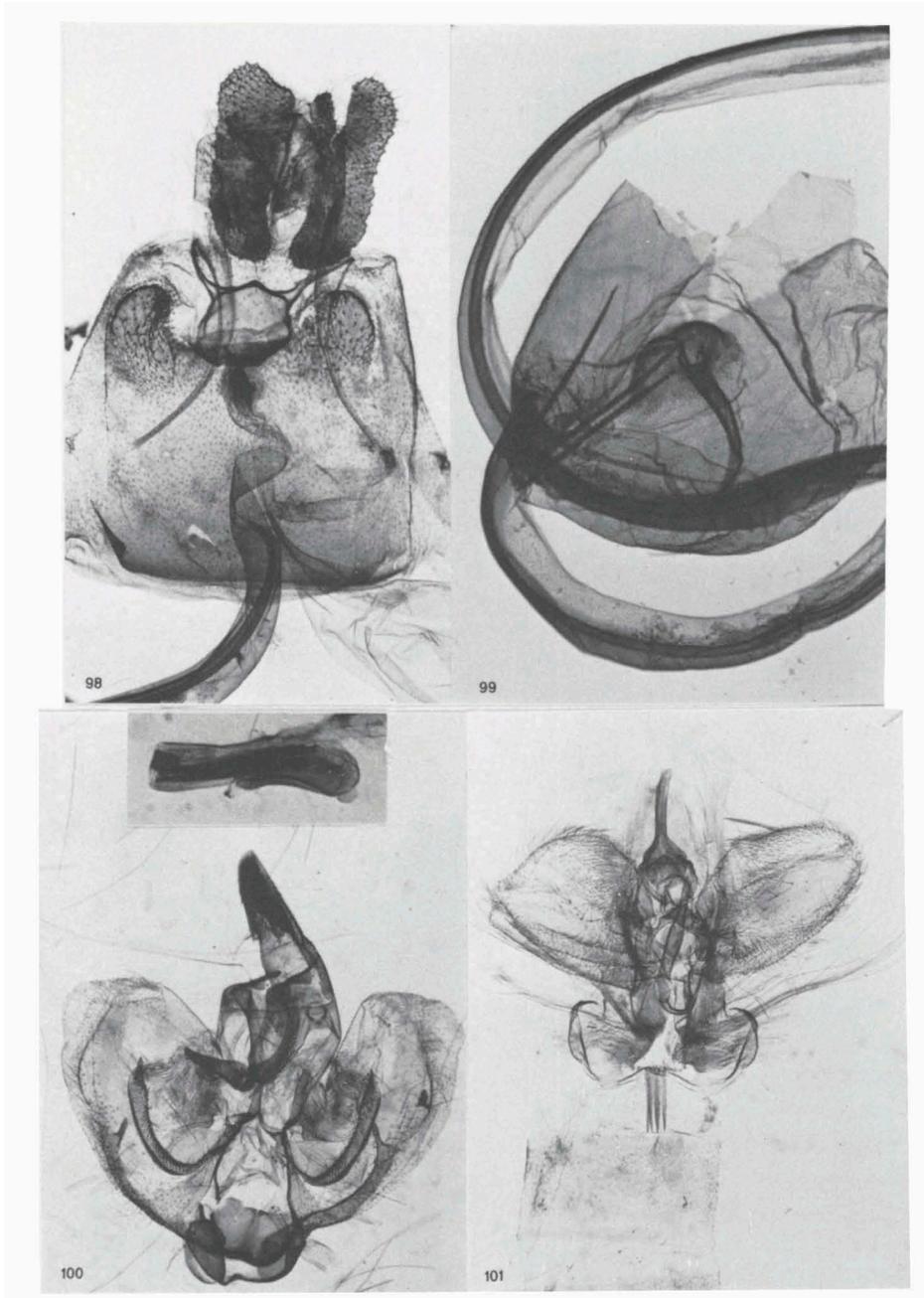
Fig. 92. Female genitalia of *Assulella lithocosma* sp. n., holotype.



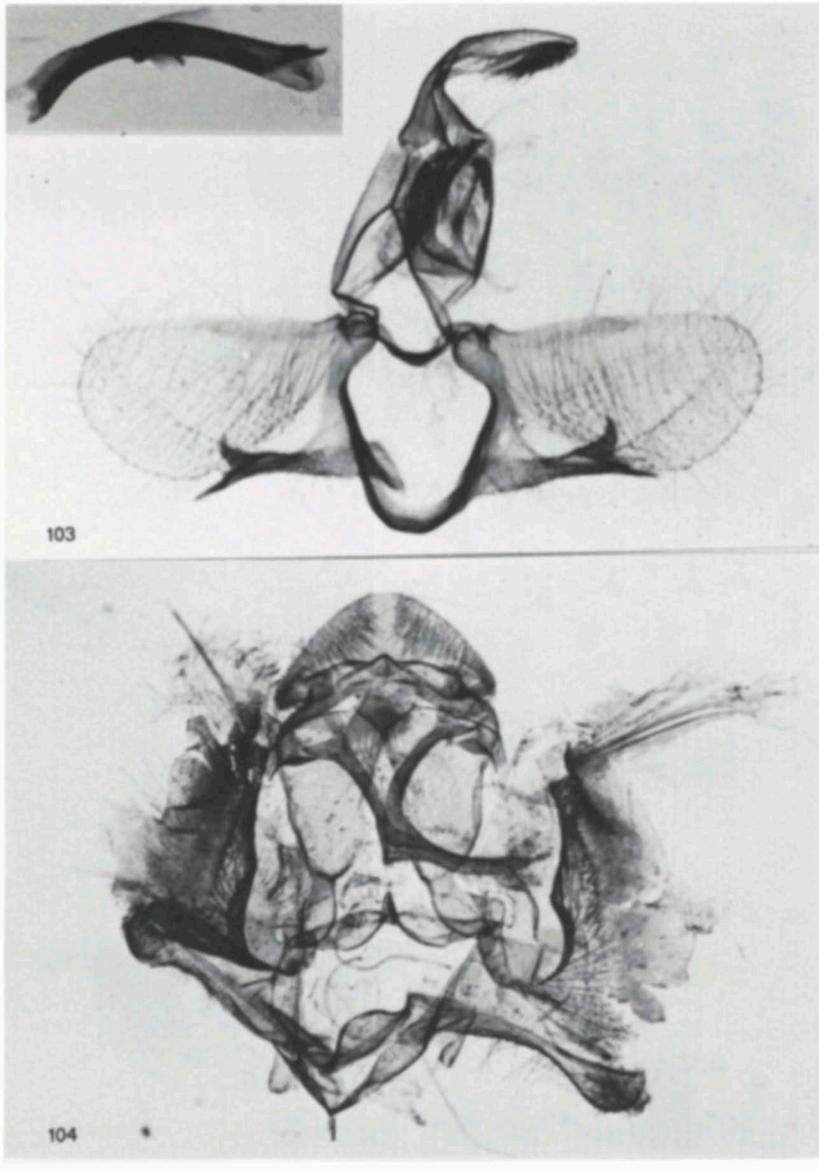
Male genitalia of Tortricidae. Fig. 93. *Reptilisocia paraxena* sp. n., holotype. Fig. 94. *Sycacantha rotundata* sp. n., holotype.



Male genitalia of *Homona* Walker. Fig. 95. *H. salaconis* (Meyrick), genit. slide 10412. Fig. 96a. The aedeagus of the same specimen, more magnified. Fig. 96b. *H. difficilis* (Meyrick), the aedeagus, the same magnification as no. 96a. Fig. 97. *H. difficilis*, the same specimen, less magnified.



Genitalia of Tortricidae, holotypes. Fig. 98. *Homona anopta* sp. n., ♀. Fig. 99. The same, bursa. Fig. 100. *Isodemis stenotera* sp. n., ♂, with above, aedeagus. Fig. 101. *Lopharcha conia* sp. n., with mensis ventralis and coremata, ♂.



Male genitalia of Tortricini, male holotypes. Fig. 103. *Capua coenotoca* sp. n. with above, aedeagus. Fig. 104. *Dynatocephala erebenna* sp. n.