

NOTES AND DESCRIPTIONS OF MICROLEPIDOPTERA (I)

(7th Paper on Indo-Malayan and Papuan Microlepidoptera)

by

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(Paseroean, Java).

To Prof. Dr J. C. H. DE MEYERE, my teacher, from whom I have learnt so much about insects and their study, this paper and the ones to follow, are sincerely dedicated by the author.

The Microlepidoptera of the Malayan Archipelago are very little known. Borneo, Celebes, the Lesser Sunda Islands, the Moluccas and other islands of this group have a very interesting fauna, not only from a faunistic point of view, but also from a zoogeographic one. Very little material, however, of the Microlepidoptera has been collected from these vast islands.

Java forms an exception as it has been the cultural and scientific centre of the Netherlands Indies for a long time. A considerable collection of Microlepidoptera, almost exclusively from this island, was collected some years ago. This was probably brought together under the direction of SNELLEN in the Netherlands and is now preserved in the Leiden Museum. SNELLEN, himself, described but a few species from this collection. The first important contribution towards the study of Microlepidoptera in Java was provided by MEYRICK, who obtained representative specimens of the species for study from the Leiden Museum, and described many of them in "Zoologische Mededeelingen van 's Rijksmuseum te Leiden", vol. 6 & 7, 1921 and 1922, respectively.

Later on important material was reared in the course of years at the Institute for Plant Diseases (Instituut voor Plantenziekten) at Buitenzorg, chiefly by Dr KALSHOVEN. These were described by MEYRICK in "Exotic Microlepidoptera". Nevertheless our knowledge of the fauna of this island is at a very rudimentary stage.

In the much larger, but little cultivated island of Sumatra only two collectors have searched more or less systematically for Microlepidoptera. They are Dr JACOBSON of Fort de Kock on the West coast and Dr FULMEK of Medan on the East coast.

Dr JACOBSON told the author that he had sent to Mr MEYRICK from Fort de Kock many specimens of Microlepidoptera, all well mounted and labelled by himself. Only a few of them have been described in "Exotic Microlepidoptera". What has been the fate of the remainder is not known.

New Guinea enjoys much attention from many sides at the present time; the faunists have also been working there. Large collections have been brought together during the last years, especially by the Netherlands-American Expedition of 1938 - 1939, and these collections are now in the course of being studied.

There remain, however, immense parts of the Archipelago from where few or no data at all on the micro's are available, and where much still remains to be done in the way of collecting work.

The intention of the author is to give, in a series of papers, descriptions of new species of Microlepidoptera and also to record those formerly described. The species are from different parts of the Netherlands Indies, chiefly from Java. They will be dealt with systematically within the families, but no fixed sequence of families can be made with publication as this will depend upon the progress of the study and the degree, to which it will be influenced by the difficulties experienced through lack of literature and of material for comparison from neighbouring countries. In the present paper one family, five genera, and twenty-five species are described as new.

The author is greatly indebted to his collector, Mr A. M. R. WEGNER of Nongkodjadjar, Java, an experienced and enthusiastic collector, who generously put all his material at the author's disposal. This material forms the base of the present study. His special thanks are also due to Dr P. VAN DER GOOT, Director, and to Dr L. G. E. KALSHOVEN, Chief Entomologist of the Institute for Plant Diseases, Buitenzorg, Java, who sent much material for study including paratypes of MEYRICK and left many duplicates in the author's collection; to Prof. Dr W. ROEPKE of Wageningen, Netherlands and Dr L. FULMEK, of Vienna, Austria, who kindly put their collections at the author's disposal; to Mr M. A. LIEFTINCK, Director of the Zoological Museum, Buitenzorg, Java, and to Mr J. B. CORPORAAL, Keeper of Entomology, Zoological Museum, Amsterdam, Netherlands, for their kind help with the material and information, especially in the way of literature. Furthermore he is grateful to his correspondents for their generous help with collecting and information. In the first place to Dr L. J. TOXOPEUS of Buitenzorg, whose special hobby is collecting micro's for the author; to Dr J. WESTENBERG of Batavia; to Dr J. G. BETREM, Entomologist of the Experimental Station of Central and East Java at Semarang; to Mrs E. FERMAN-STOFFEL and Dr J. H. G. FERMAN of Cheribon and to many others in Java, and also to Mr J. C. VAN DER MEER MOHR of Brastagi and to Dr A. P. VAN DER LAAN of Medan, in Sumatra.

The types, if not otherwise recorded, are in the Buitenzorg Museum.

PHALONIADAE.

Only one representative of this family has been recorded from the Archipelago until present. Now I am able to add 4 new species.

Phalonia sphaenophora nov. spec. (pl. 17 fig. 1 - 2).

σφήν = a wedge, φερω = to bear.

♂ 7,5 - 8 mm, ♀ 8,5 - 9,5 mm. Head ochreous-whitish, above eyes ochreous. Palpi ochreous. Thorax whitish-ochreous, along fore edge ochreous-brownish or brown. Abdomen grey, with a whitish gloss. Forewings elongate, rather narrow, costa scarcely arched, apex subacute, termen slightly rounded, oblique. Light ochreous-whitish, with a bright gloss, markings light and dark ochreous-brownish, sometimes with a greenish tinge in certain lights. Costa suffused brownish from base to fascia; transverse fascia inwardly oblique, dilated triangularly in middle, beginning with a small dark brownish-ochreous, quadrate blotch on costa just beyond middle, its inner edge below this blotch slightly convex, oblique, running to $\frac{2}{5}$ of dorsum, its outer edge considerably angulated in middle of disc, this angulation reaching end of cell, and pointing towards middle of termen; below this angulation the outer edge of transverse fascia is slightly concave, very inwardly oblique and runs to dorsum before middle; transverse fascia having thus the shape of a small quadrate on costa and an oblique wedge below this, narrowed beyond $\frac{2}{5}$ of dorsum; the lower half of this wedge is sometimes suffused brown, especially in middle of disc, forming a conspicuous triangle; its outer angle on end of cell bearing a dark brown, suffused dot; in one specimen transverse fascia unicolorous brown. Costal patch on $\frac{5}{6}$, narrowly erect, fascia-like, ochreous-brownish on costa, lighter and indistinct below, continued by a small strigula in disc to termen above tornus. Two minute, transverse costal markings before and one beyond costal patch, a rounded blotch in tornus and a short, obliquely-triangular patch on base of dorsum dull, light brownish-ochreous; dorsum with a row of blackish-brown dots, sometimes indistinct; in male a few dark-brown scales on disc before tornus. Cilia bright ochreous. Hindwings transparently ochreous-greyish, with grey veins, cilia ochreous-whitish, with a sharp, greyish antemedian line, suffused greyish on apex.

Genitalia ♂ (pl. 17, fig. 1). Tegumen bulbate at base, erected above, saccus small, indistinct. Valva membranous, narrow, sacculus very short. Socii erect, long and strong, dentate and bristled apically. Transtilla with a very long and strong median projection, produced into a sharp point. Aedoeagus hinged, elongate, rather narrow, with a long spine below orifice, cornutus one large thorn (Slide No. 252 D, paratype).

♀ (pl. 17, fig. 2). Ovipositor lobes small, elongate. Ostium small. Limen with two curved rims at the sides, and long bristles towards middle. Ductus rather long, bursa pear-shaped, moderate, signum a few transparent dentations, scarcely perceptible (Slide No. 249, paratype).

E a s t J a v a, Pasoeroean, 5 m, 6-22.V.1940, at light (author). 2 ♂, 3 ♀.

Genus **Clysiana** FLETCHER 1940.

Clysia HÜBNER, Verz. europ. Schmett., p. 409, 1826 (praeocc.).

Clysiana FLETCHER, Entomologists Record, vol. 52, p. 17, 1940.

The male genitalia of the Javanese species of this genus, which are known to me at present, show a direct relation with the British species, the genitalia of which are figured by PIERCE (Genit. Brit. Tortr., pl. X, 1922). Some of the former possess also a very peculiar structure, already known in *Sparganothis pilleriana* SCHIFF., an European species (PIERCE, l.c., pl. X), viz.: socius extended at base to a narrow projection, pointing ventrally, or drooping. For these projections I propose the name of socioli.

Clysiana opisthodonta nov. spec. (pl. 17 fig. 3, 5).

ὄπισθεν = hind, ὀδόντις = a tooth.

♂ 12 mm, ♀ 11 - 13 mm. Head and thorax light yellowish-ochreous or pale ochreous, tegulae suffused anteriorly with reddish-fuscous. Palpi light yellowish-ochreous or pale ochreous, suffused laterally with light reddish-brownish, except at apex of medial joint. Abdomen grey, tinged dark brown before apex, anal tuft light ochreous. Forewings elongate, narrow, costa little curved towards extremities straight in middle, apex acute, curved, slightly projecting in ♀, termen gradually sinuate, oblique. Light ochreous, partially suffused with reddish-ochreous and dark leaden-grey tinged with lilac. Markings reddish-ferruginous and blackish; some 4 suffused, more or less indefinite undulate and sometimes interrupted transverse fasciae: reddish-ochreous, first beyond base, 4th beyond middle of wing; a large, erect-ovate suffusion of the same colour in tornus, reaching across wing to upper angle of cell, solved posteriorly in a series of short, suffused irregular vertical streaks from tornus to apex. Costa suffused dark leaden-grey from base to $\frac{3}{5}$, this suffusion paler and dilated along its posterior half, dotted blackish throughout; small, cloudy lilac-grey suffusion and a few black scales on termen below apex; a few black scales on middle of closing vein; two suffused greyish dots on posterior part of costa; a sharply-edged, outwardly curved, wedge-shaped spot on $\frac{2}{5}$ of dorsum, reaching just above fold, deep reddish-ferruginous, edged at the sides and suffused on lower half with dark brown; minute black points on dorsum before and beyond this; a small, oblique-triangular, elongate patch on dorsum at $\frac{3}{4}$, mostly absent; one ♀ (from Sindanglaja) without any dorsal markings, densely retinate throughout brownish-ochreous; in ♂ dorsal patch broader and shorter. Cilia light ochreous or whitish-ochreous, irregularly tipped greyish along lower half of termen. Hindwings pale brownish-grey or grey, veins dark grey; cilia pale grey, with lighter base and a dark grey antemedian line.

Genitalia ♂ (pl. 17, fig. 3). Tegumen broadly triangular, deeply indent at the top; socii rather short, bristled; socioli very long, chitinised, with curved, acute points. Sacculus bowed, rather strong. Valva subtrapezoid, costa at base and sacculus along anterior $\frac{2}{5}$ thickened, the latter angularly bent. Transtilla strong, with dilated extremities and a long, chitinised central projection, which is slightly indent at the top, with short scobinations on each side. Aedoeagus elongate-ovoid, cornuti a small anterior patch of short dentations and a posterior

group of some 3 huge spines and a central area of short dentations with a sinuate, dense sheaf of moderate spines (Slide No. 257 D, holotype).

♀ (pl. 17, fig. 5). Ostium a narrow split with dorsal wall covered with minute verrucae, a triangular, somewhat chitinised projection below these. Limen: two triangular plates touching one another in middle, their upper edge excavate. Bursal wall with a rather large area covered with strong dentations chitinised and plicate above middle; on lower part: a chitinised plate with a few short dentations at the bottom, and a curved patch of long, curved spines on the wall opposite, ending in a chitinised body (perhaps a part of the male cornutus) (Slide No. 255 D, paratype).

West Java, Sindanglaja, 1100 m, end of IX.1930 (Dr J. WESTENBERG). Mt. Gede, Tjibodas, 1400 m, 18.XII.1940, flying in dense undergrowth of tea-plantation at the edge of forest (author). 1 ♂, 3 ♀. Distinct by dorsal patch.

***Clysiana engelinae* nov. spec.** (pl. 17 fig. 4).

♂ 14 mm. Head, thorax and palpi ochreous, the latter suffused outwardly with pale brownish. Abdomen greyish, anal tuft pale ochreous. Forewings elongate, rather narrow, costa slightly curved at the extremities, straight in middle. Pale ochreous, on anterior half faintly suffused brighter ochreous. A large elongate-triangular patch on costa, running from about $\frac{1}{5}$ to $\frac{3}{5}$, dark brown, transversely strigulated with somewhat shining, reaching to cell, leaden-grey streaks; its point somewhat projected, dull dark brown, reaching to fold; costa darkly suffused from patch to base, dotted black throughout; termen with some black, oblique strigulae; dorsum dotted black; a few black scales in disc posteriorly. Cilia pale ochreous, tipped black (damaged). Hindwings and cilia pale ochreous, with a faint antemedian line.

Genitalia ♂ (pl. 17, fig. 4). Tegumen triangular, narrowed above, socii projecting, hairy. Socioli strong, rather long, somewhat curved at apex, thinly bristled. Saccus moderate, bowed. Valva moderately broad, rather abruptly narrowed towards apex. Costa and sacculus indistinct, the latter angularly bent. Transtilla strong, unpaired, with a central projection, dentate on each side, emarginate at the top. Aedoeagus ovoid, cornuti three patches of huge, narrow and short spines respectively (Slide No. 258 D, type).

West Java, Mt. Gede, Tjibodas, 1400 m, 17.XI.1940 (Mrs E. FERMAN-STOFFEL and Dr J. H. G. FERMAN). 1 somewhat damaged specimen, but distinct by markings and genitalia: Intermediate between *opisthodonta* nov. spec. and *reliquatrix* MEYR., but can be distinguished by absence of dorsal marking and by black-tipped cilia.

***Clysiana reliquatrix* (MEYR., 1928)** (pl. 17 fig. 6-7).

Clysia ambiguella MEYR., Zool. Meded. Mus. Leiden, vol. 6. p. 145, 1921.

Clysia reliquatrix MEYR., Exot. Microl., vol. 3, p. 436, 1928.

The description of this rather common species was drawn from two specimens with incomplete transverse fascia, from West Java; therefore it is redescribed below.

♂ 9 - 11,5 mm, ♀ 8 - 12 mm. Head and palpi light ochreous-yellowish, medial joint of the latter scattered with brown at base; antennae with scape light ochreous, flagellum ringed dark brown. Abdomen greyish-ochreous, suffused with grey posteriorly, anal tuft light ochreous. Forewings elongate, rather narrow, especially in male, dilated posteriorly, costa scarcely arched at base, slightly concave in middle, little rounded posteriorly, apex subacute, termen slightly sinuate above in ♀, almost straight in ♂, very oblique. Light ochreous and bright ochreous-yellowish, markings metallic blackish-grey and dark blackish-ochreous. Costa suffused blackish from base to fascia; central fascia more than twice as broad on costa as on dorsum, with anterior edge slightly concave, from $\frac{1}{4}$ of costa to beyond $\frac{2}{5}$ of dorsum; its outer edge almost straight, oblique, from somewhat beyond $\frac{1}{3}$ of costa to dorsum beyond middle; metallic blackish-grey, scattered with a few whitish, shining scales, with a spindle-shaped, dull spot in middle, just reaching costa with its acute top, on dorsum half as broad as the entire fascia: dark blackish-ochreous, with three suffused, blackish horizontal bars (sometimes indistinct): on upper and lower margin and in middle of discal cell, blackish scales on dorsum from about $\frac{1}{4}$, ending before termen in a minute, blackish triangle; stripes of blackish-brownish suffusion between veins along upper $\frac{2}{3}$ of termen, sometimes melted into a round, suffused patch above middle of termen; apex suffused reddish-ferruginous. Base of wing not reaching central fascia, dorsum before tornus and an elongate transverse spot in disc posteriorly, touching tornus, continued below costa towards apex and connected with costa by two narrow fasciae: bright yellowish-ochreous. In one ♂ specimen central fascia limited to an semiovate patch on costa not reaching half across wing. Cilia light ochreous, with three blackish dots on costa posteriorly, the largest before apex. Hindwings light greyish-ochreous to ochreous-grey, cilia whitish-ochreous with a broad, suffused, grey antemedian line.

Genitalia ♂ (pl. 17, fig. 6). Tegumen broad, cupshaped. Valva rather broad, narrowed apically, sacculus short, thickened. Saccus moderate. Socii slender, acute, bristled at base. Transtilla strong, in middle produced into two arms, fused together and spined above, with angulate projections at the lower side of extremities. Aedoeagus large, stout, with a slender, acute projection at the upper margin of orifice, cornuti a patch of short thorns and 3 patches of strong, short spines (Slide No. 248 D).

♀ (pl. 17, fig. 7). Ovipositor lobes elongate, slender. Dorsal wall of ostium covered with minute bristles. Limen: two subtriangular plates, not connected in middle. Bursal wall with dentate vesiculations at base, strongly chitinised and plicate above middle, densely dentate below, dentations forming stellate patch in middle (Slide No. 251 D).

E a s t J a v a, Tengger Mts: Nongkodjadjar, 1300 m, 12.III - 2.VI.1940; Pogal, 800 m, 8.V.1940. (A. M. R. WEGNER); Mt. Semeroe, southern slope: Ranoe Daroengan, 820 m, 6.X.1940 (author). 12 ♂, 16 ♀.

Clysiana wegneri nov. spec. (pl. 17 fig. 8-9).

♂ 9-10 mm., ♀ 11 mm. Head and palpi light ochreous-yellowish, thorax somewhat darker, brownish tinged in ♀. Forewings with costa scarcely arched at base, apex pointed in ♂, bluntly pointed in ♀, termen slightly sinuate, oblique. Abdomen brownish at base, greyish-ochreous in middle, grey posteriorly; anal tuft light ochreous-yellowish. Light ochreous-yellowish, suffused with light greyish-brown, mixed with glossy, silvery-shining scales. Costa suffused brownish-grey from base to fascia, with a brownish dot in middle; in ♂ this suffusion darker, without dots. Transverse fascia in ♀ narrow, from $\frac{2}{5}$ of costa to $\frac{1}{2}$ of dorsum, concave anteriorly, little oblique, indicated by a dark brown patch on costa, light greyish-brown or ochreous in disc, dilated below fold, on dorsum twice as broad as on costa, an indistinct, transverse row of greyish-olive suffused spots on base; preterminal area with such spots along costa and termen, darker on costa; a large, round, greyish-olive spot in disc before middle of termen; a black dot in middle of transverse vein; a few such dots on termen below apex, apex with a conspicuous, black spot, extending over apical cilia, dorsum with a dark brown suffusion on base of fascia, followed by a few black dots. In ♂ discal markings less distinct (but all of them can be found back when comparing with a ♀), except black discal spot; brownish and blackish dots along dorsum, termen and posterior $\frac{1}{2}$ of costa, apex less distinctly black. Cilia light ochreous-yellowish, with an ochreous median line, black at apex. Hindwings thinly scaled, darker on veins, grey, brownish tinged towards apex. Cilia greyish, with a darker antemedian line and whitish base.

Genitalia ♂ (pl. 17, fig. 8). Tegumen rather broad, dentate and bristled at the top. Saccus small. Valva elongate, narrow beyond the top of sacculus. Sacculus broad, chitinised, with a thorn at the top. Socii narrow, clavate, far from each other, with minute apical dentations. Transtilla broad, with a large, triangular projection in middle, bearing 5-6 short, curved hooks; small chitinised ribs at the extremities. Aedoeagus short and stout, chitinised towards orifice, cornuti: a comb of 4-5 huge spines and a single large spine opposite these; vesica covered throughout with small dentations. (Slide No. 253 D).

♀ (pl. 17, fig. 9). Ovipositor lobes elongate, moderately broad. Above ostium an asteroid patch of petal-shaped verrucae, minutely haired along upper margin, turning into a short dentation below. Limen chitinised, with densely dentate thickenings at the sides. Bursal wall not chitinised at base, with an oblique patch of thorns below this, covered with irregular groups of thorns (Slide No. 254 D).

E a s t J a v a, Nongkodjadjar, 1300 m, 12.III. - 19.IV.1940, at light (A. M. R. WEGNER); Mt. Andjasmoro, Djoenggo, 1100 m, 3.XII.1940 (author) 6 ♂, 3 ♀.

TORTRICIDAE.

The difficulty of attributing the species of this family to their respective genera has — with some exceptions — been realised already by many authors.

The vagueness and variability of most of the generic characters makes the recognition of genera difficult. Short generic diagnoses by previous authors are sometimes rather uncertain, as they can be applied very well to more than one totally different genera.

I believe that genital characteristics will prove to be a safe guide. However, the present state of our knowledge of this chapter of the systematics of Lepidoptera is very fragmentary.

The principle of figuring the wing-neuration and the profile of the head of the genotype, used by me formerly (Zool. Meded. Mus. Leiden, vol. 21, p. 111, 1939), appears to be useful for further study. However, my key to the genera published in that paper leaves some things to be desired, as, sometimes, the characteristic of configuration of veins, regarding their origin from out the discal cell, is to a certain extent subject to variation within a single genus.

ZACORISCIDES.

Zacorisca stephanitis MEYR., 1912.

Zacorisca stephanitis MEYRICK, Exot. Microl., vol. 1, p. 5-6.

Chresmarcha stephanitis, DIAKONOFF, Zool. Meded. Mus. Leiden, vol. 21, p. 143, 1939.

West Java, Mt. Gede, Tjibodas, 1400 m, 13.IV. - VI.1940 (Dr L. J. TOXOPEUS, BRUGGEMAN filii). 2 ♀. This is the most western habitat of this brightly coloured group of the genus, which is typically Papuan. The present species is described from Flores and is also known to me from Mt. Kinabalu, North Borneo. *Z. stephanitis* has no close allies at all in the Javanese fauna. This fine species flies at daytime along the edge of mountain forest.

Isotenes miserana (WALK., 1863) (pl. 18 fig. 1 - 2).

Teras miserana WALKER, List Lep. Het. Brit. Mus. 28, p. 301.

Harmologa miserana, MEYRICK, Proc. Linn. Soc. N.S. Wales, 35, p. 270, 1910.

Isotenes miserana, DIAKONOFF, Treubia vol. 18, p. 390, 1941.

Genitalia ♂ (pl. 18, fig. 1). Scopa ventralis moderate, mennis ventralis little bent, narrow. Tegumen strong, with narrow base, dilated above. Saccus strong, short, indent in middle. Valva large, rather narrow, costa unarmed, rounded, sacculus narrow, ending in an auricular, verrucate flap, which is a differentiation of the disc of valva; at the place of valvula a small comb of bristle-hairs. Uncus large, broad, with a dorsal dilatation, its apex rounded, bristled below. Cornuti small, narrow. Transtilla paired: two combs of strong teeth, each with a long projection centrally. Gnathos strong, curved, with a huge, sharp apical club. Anellus strong, rounded-triangular. Aedoeagus angulate, pistol-shaped, its top pointed, with a large, triangular projection below orifice, cornuti some 10 spines (broken off in mount, only bases remain. Slide No. 226 D).

♀ (pl. 18, fig. 2). Ovipositor lobes moderate. Aedoeagus strong, rather short. Limen little curved, narrowed in middle. Ostium narrow, verrucate.

Colliculum small, with a slit ventrally. Cestum a strong, coiled band, dilated below, its lower end with an undulate edge. Bursa large, pear-shaped, its narrowed top projecting through the lower coil of the ductus. Signum large, with a rounded capitulum, and a broad densely serrate blade (Slide No. 227 D).

West Java, Mt. Gede, Tjibodas, 1400 m, 31.XII.1937; 27.II - 18.XII. 1940. (Dr L. J. TOXOPEUS, author), Poentjak, 1450 m, 11.VI.1939 (Dr J. WESTENBERG). East Java, Tengger Mts., Nongkodjadjar, 1300 m, 22.I. - 18.IX. 1940 (A. M. R. WEGNER). Mt. Andjasmoro, Djoenggo, 1100 m, 3.XII.1940 (author). Idjen Mts., Ongop-ongop, 1850 m, V.1924 (Dr K. W. DAMMERMAN). 18 ♂, 24 ♀.

A rather variable species with regard to size and markings. This is the only representative of the subfamily *Zacoriscides*, which is widely distributed outside the Papuan region: it is known from East Australia, Formosa, Boeroe, Java, Sumatra, Tonkin and Assam. A list of food-plants of the rather polyphagous species is given elsewhere in this periodical (Treubia, vol. 18, p. 390, 1941).

CACOECIADES.

Borneogena nov. gen. (fig. 1).

Head with appressed scales. Antennae ciliate in ♂, ciliations over 1. Palpi short, semi-ascending, from base to apex of medial joint fringed with short, projecting scales beneath, terminal joint short, smooth. Proboscis short. Thorax with appressed scales, without crest. Forewings without costal fold, smooth; cell very narrow, running obliquely upwards posteriorly, its edges straight, parallel. 1 with a long furca, 3 abruptly curved upwards at base, from angle, almost connate with 4, 5 closely approximated towards base, 6 from the middle of stalk of 7 and 8, 7 to termen, 9 from the same stalk before the origin of 6, 10 from before angle, 11 from before middle of cell. Hindwings rather short, without cubital pecten, 3 and 4 connate, from angle, 5 closely approximated towards base, 6 and 7 stalked, 8 straight, from base to just above apex.

Genotype *antigrapha* nov. spec., ♂.

An interesting, novel form, probably a development of *Epagoge*. Genitalia show considerable specialisation.

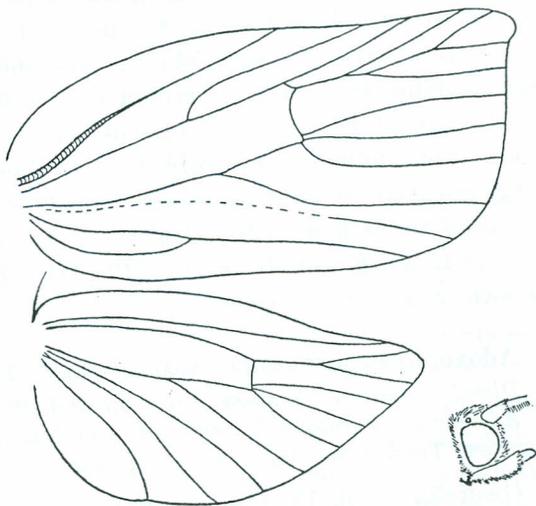


Fig. 1. *Borneogena antigrapha*, n. g., n. sp., ♂: wing-venuration and head.

Borneogena antigrapha nov. spec. (fig. 1, pl. 18 fig. 5).

ἀντί = before, *γράφω* = to mark.

♂ 16 mm. Head and thorax dark ferruginous-brown, mixed with fuscous, the former fuscous between antennae. Palpi slender, rather smooth, whitish-ochreous, suffused along upper edge with brown. Antennae pale ochreous. Abdomen ferruginous-brown, with a bronzy shine, light ochreous from below, anal tuft large, brownish-ochreous. Forewings broad, truncate, little dilated posteriorly, costa curved anteriorly, slightly sinuate posteriorly, apex rounded, termen scarcely sinuate above, rounded beneath. Brown shining purple, cloudly suffused and mixed with ochreous-yellowish on apical $\frac{1}{3}$. A subquadrate, dark brown, shining purple blotch on $\frac{2}{5}$ of costa, oblique, continued in disc by an indistinct fascia pointing towards tornus; brown suffusion in centre of base; a short mark along costa at $\frac{2}{3}$, followed by two small, inwardly oblique bars on costa posteriorly; middle of costa with a broad, oblique yellowish-ochreous fascia, suffused with olive-whitish, not reaching $\frac{1}{3}$ of disc, connected posteriorly with ochreous-yellowish apical suffusion, with a minute, brown medial streak on costa; a narrow, terminal, ochreous-yellowish fascia; centre of disc and dorsum posteriorly shining purple in certain lights. Cilia ferruginous-brownish, white on termen above tornus with yellowish basal half. Hindwings dark greyish-brown, dull; cilia lighter, with a dark brown antemedian line.

Genitalia ♂ (pl. 18, fig. 5). Scopa asbent. Tegumen very strong, semi-spheroid, with bowed arms, dilated and densely haired on lower half, ending above in strong, spheroid knobs. Saccus small. Valva small, narrow, with dense, long bristles, with ribs and fold at base and apex, sacculus chitinised, also folded longitudinally, with a median projection. Uncus swollen up, triangular, bristled, pointed. Socii absent. Gnathos paired, with chitinised lateral projection at base, anus broad, short, curved. Transtilla membranous, straight. Anellus strong, elongate. Aedoeagus small, curved, with dilated base and two short projections at the upper edge of orifice. Cornuti absent (Slide No. 269 D, type).

Central East Borneo, 12.VIII.1925, No. 23 (H. C. SIEBERS) 1 specimen. Suggests a *Cacoecia*.

Adoxophyes privatana (WALK., 1863) WALS., 1900 (pl. 18 fig. 3, 8).

Dichelia privatana WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 328.

Adoxophyes privatana WALSINGHAM, Ann. Magaz. Nat. Hist. (7), vol. 5, p. 481 - 482. DIAKONOFF, Treubia vol. 18, p. 378 - 379, 1941.

Genitalia ♂ (pl. 18, fig. 3). Of very large size. Scopa two huge brushes of hairs, *mensis ventralis* membranous. Tegumen strong, elongate. Saccus rather large, bowed. Valva large, semioval, with gradually rounded apex, covered with long hairs forming a formidable anal tuft; saccus rather broad, thickened, preceded by a longitudinal discal fold (which is shorter but closer to saccus than in following species). Uncus long, rather narrow, clavate, emarginate at apex, little bristled. (In specimen figured somewhat damaged). Gnathos strong, dilated towards extremities, its point short, chitinised, rounded.

Socii membranous, elongate. Transtilla strong, probably paired, knobs with large dentations at the top, touching each other by median, rounded projections. Anellus strong, with a short projection below. Aedoeagus long, rather narrow, cornuti a sheaf of long spines (Slide No. 260 D. Size of studied specimen 17 mm; compare the following species).

♀ (pl. 18, fig. 8). Ovipositor lobes elongate. Limen a bowed rod, emarginate in middle. Ductus with a moderate colliculum, very long, rather narrow. Bursa rounded, with a strongly curved signum, connected with a folded plate, which supports the orifice of ductus (Slide No. 262 D).

Female genitalia show very little difference between this and the following species, except the size of colliculum, and the shape of signum.

West Java, Dramaga near Buitenzorg, \pm 250 m, 10.IX.1937; bred from leaves of *Thea sinensis* (Dr J. VAN DER VECHT). Buitenzorg 250 m, bred from leaves of *Croton* (Dr W. ROEPKE). Tjikopo, 700 m, 11.V.1940 (SOEKARNO). Mt. Gede, Tjibodas, 1400 m, 31.XII.1937 (Dr L. J. TOXOPEUS). Central Java, Mt. Slamet, Toewel, 900 m, 28.III.1940, sitting on leaves of *Melia azedarach* tree ¹⁾. 5 ♂, 6 ♀.

Note. *Melia azedarach*, a tree, very often planted in Java along roadsides, seems to be especially well fitted as a foodplant of different species of Tortricina. In Toewel I found on a single young tree the leaves of which were rolled up, spun and badly damaged, numerous specimens of *Eucosma koenigiana* FELD., of the present species and also of *A. melichroa* Low., *Cacoecia atrolucens* DIAK. and *Syndemis ser-pentinana* WALK. (see below) sitting on the leaves and flying around.

Adoxophyes nemorum nov. spec. (pl. 18 fig. 4, 7).

♂ 15,5 - 17,5 mm. Head, palpi and thorax light ochreous, the latter with a dark ferruginous, transverse row of raised scales before hind extremity. Abdomen pale greyish-ochreous anteriorly, suffused with grey towards apex, anal tuft large, pale golden-ochreous. Forewings oblique along costal fold — which is broad, ciliate along discal edge and narrows gradually towards end — almost straight posteriorly, apex slightly rounded, almost rectangular, terminally sinuate above, rounded beneath, vertical. Pale ochreous, more or less scattered with light brown and pinkish. Markings rather light coffee-brown with a lilac tinge and dark ferruginous-brown. Basal area indicated by a semi-circular, dark ferruginous-brown patch on dorsum from beyond base to about $\frac{2}{5}$, its top reaching fold; central fascia with a small, brown, triangular patch on end of costal fold, from thence reaching to $\frac{3}{5}$ of dorsum, somewhat emarginate posteriorly below costa, narrow, not very distinct, pale brown or pinkish, narrowly edged darker; a ramification from about lower $\frac{1}{3}$ of its posterior edge, as broad as the fascia itself, rather angularly bent, sometimes gradually curved at $\frac{1}{3}$, from thence obliquely to tornus; costal patch formed by a furcate fascia: anterior ramus from $\frac{2}{3}$ of costa to termen above tornus, either gradually sinuate, or rather straight and then very slightly angularly projecting below costa, posterior ramus little oblique, from costa before apex: brownish, suf-

¹⁾ Named by Dr C. G. G. J. VAN STEENIS.

fused coffee-brown on costa, lighter, tinged pinkish below, darkly edged and strigulated on veins; the arms about as broad as central fascia; a greyish suffusion on base of costa and on cilia of costal fold; all fasciae minutely edged with pale ochreous; suffused, dark brown dots in apex. Cilia pale golden-ochreous, infuscated in apex, minutely barred with dark brown on basal half in tornus. Hindwings pale ochreous-whitish at base, faintly suffused greyish towards dorsum, ochreous towards apex, veins and edge of wing suffused more densely greyish-ochreous.

♀ 17-21 mm. Head, thorax and palpi ochreous-brownish, the latter with terminal joint dark brown. Abdomen golden-ochreous-greyish, suffused grey above. Forewings broadest beyond middle, somewhat narrowed again posteriorly, costa strongly curved anteriorly, almost straight posteriorly, apex rounded, termen slightly sinuate, rounded beneath, somewhat outwardly oblique. Ochreous, gradually suffused with light brown. Markings suffused light brown. Base of costa with some 5 transverse strigulae; transverse fascia from $\frac{2}{5}$ of costa to $\frac{3}{5}$ of dorsum, very narrow, slightly outwardly curved along central half, shortly triangularly dilated on costa; ramification from about lower $\frac{2}{3}$, curved at base, then obliquely to dorsum before termen, thus more vertical than in ♂; another, scarcely narrower fascia from before $\frac{3}{5}$ of costa to termen above tornus, almost straight, somewhat dilated along lower half; costa beyond this suffused with light brown, two more or less distinct, oblique, transverse series of brown elongate dots, another such series tending to form a narrow strigula before apex, and along termen. Cilia and hindwings as in ♂.

Genitalia ♂ (pl. 18, fig. 4). Scopa ventralis two large brushes of hairs. Mensis ventralis membranous. Tegumen strong, elongate. Saccus strong, triangularly pointed. Valva large, membranous, bearing a large brush of long hairs; costal marge gradually curved, costa indefinite; sacculus rather broad, thickened, preceded by a longitudinal, discal fold. Uncus long, strong, curved, little dilated and bristled in middle below apex, truncate. Gnathos strong, dilated at the extremities, its curved point short, rounded. Socii membranous, moderate, drooping. Transtilla strong, almost paired, premedian knobs dentate. Anellus cordiform. Aedoeagus pistol-shaped, rather long and small, socii a group of a few large spines (Slide No. 261 D, paratype, size of the insect 16 mm).

♀ (pl. 18, fig. 7). Ovipositor lobes elongate. Limen bowed, emarginate and curved in middle. Ductus very long and narrow, with a small colliculum. Bursa spheroid, signum strongly curved, dilated at base to a folded plate, connected with the end of ductus (Slide No. 264 D., paratype).

West Java, Mt. Gede, Tjibodas, 27.II - 5.V.1940 (Dr L. J. TOXOPEUS); 17.XI.1940 (Mrs E. FERMAN-STOFFEL and Dr J. H. G. FERMAN); 10.XII.1940 (author). All specimens collected at light. Intermediate between *privatana* WALK. and *fasciculana* WALK., very nearly allied to the first. The differences are: ♂ genitalia, which are much larger in *privatana* (mounts of ♂ specimens of comparable size figured at the same enlargement), much narrower fasciae in forewings

of both sexes, longer costal fold in ♂ (in *privatana* scarcely to $\frac{1}{3}$ of costa) and less angulated anterior edge of apical patch. Very probably also dark specimens occur and might be collected at light.

Adoxophyes perstricta MEYR. 1928.

MEYRICK, *Exot. Microlep.*, vol. 2, p. 453 - 454. DIAKONOFF, *Treubia* vol. 18, p. 379, 1941.

West Java, Bandoeng, 750 m, 6.I.1940; bred from spun leaves of *Filicium decipiens*. Central Java, Mt. Slamet, Toewel, 900 m, 28.III.1940; on leaves of *Melia azedarach* ¹⁾. East Java, Soerabaja, 15.VIII.1939 (author). 4 ♂, 2 ♀. „Java”, 1 ♂ (Dr W. ROEPKE).

Neocalyptis nov. gen. (fig. 2).

Head with rough and dense scales on vertex, face rather smooth. Palpi rather short, porrected, with rough, short scales, medial joint little dilated posteriorly, terminal joint moderate. Proboscis moderate. Thorax without crest. Abdomen moderate. Forewings without costal fold, elongate-rectangular, moderately broad, without scale-tufts, costa shortly ciliate from beyond middle to apex. 1 with a moderate furca, 2 from about $\frac{2}{3}$ of cell, 3 considerably from before angle, 4 and 5 approximated towards base, 6 parallel, 7 and 8 stalked, the stalk sometimes coincident with 9, 7 to termen; discal cell rather short. Hindwings without cubital pecten, 2 from $\frac{2}{3}$ of lower edge of cell, 3 and 4 stalked, from angle, 5 approximated towards base, 6 and 7 shortly stalked; discal cell to about $\frac{1}{2}$ of wing.

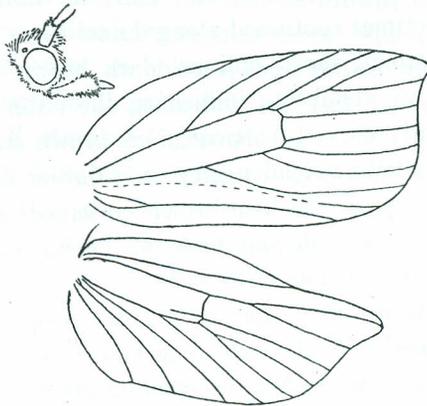


Fig. 2. *Neocalyptis telutanda*, n. g., n. sp., ♂: wing-venuration and head.

Genotype *telutanda* nov. spec., ♂.

Correlated with *Adoxophyes* MEYR., *Procalyptis* MEYR. and ancient forms of *Epagoge* HÜBN.

Neocalyptis telutanda nov. spec. (fig. 2, pl. 18 fig. 6).

ꦠꦺꦭꦸꦠꦤ꧀ (= tēloe, Javan.) = three, ꦠꦤ꧀ꦢꦩ꧀ (= tandā) = a mark.

♂ 10,5 - 12,5 mm. Head with vertex dark brown; side tufts ochreous, face ochreous with a dark brown transverse line in middle. Palpi rather narrow, basal joint dark brown; medial joint with basal $\frac{2}{3}$ dark brown, apical $\frac{1}{3}$ dilated with moderate projecting scales above and beneath, ochreous; terminal

¹⁾ Named by Dr C. G. G. J. VAN STEENIS.

joint ochreous, speckled with dark brown below apex. Thorax and patagia dark brown anteriorly, brownish-ochreous posteriorly. Abdomen brownish-grey, suffused dark grey posteriorly, anal tuft light ochreous. Forewings with costa considerably curved anteriorly, straight posteriorly, slightly curved again before apex, apex obtuse-pointed, somewhat curved, termen slightly sinuate above, rounded beneath, somewhat oblique. Pale ochreous, faintly tinged with yellowish, speckled and transversely strigulated with leaden-grey and a few dark brown scales, this strigulation especially distinct on posterior $\frac{1}{4}$ of wing. Markings dark brown. A rounded-triangular, oblique, small patch on $\frac{2}{5}$ of costa; costa before this with two small, triangular dots, alternating with two strigulae; a few strigulae beyond this patch; costal patch elongate-semiovate, of a regular shape, from $\frac{3}{5}$ to about $\frac{6}{7}$ of costa, well defined; it is well or not connected below with an erect-triangular, angulate patch, with top resting on termen above tornus, its inner edge oblique, straight, forming the continuation of inner edge of costal patch, its upper edge horizontal, its outer edge vertical, sometimes connected by a narrow strigula with the posterior end of costal patch, its colour brown, dark brown on veins; an indistinct grey suffusion on base of wing, sometimes continued along dorsal $\frac{1}{2}$ of wing, transversely strigulated darker; an indistinct, short, oblique, dark brown streak or row of dots on upper half of disc at about $\frac{1}{5}$, indicating the outer edge of basal area, sometimes a short, slightly curved, vertical, dark brown streak on dorsum before tornus, continued by indistinct leaden-grey strigulation across wing. Cilia light ochreous with an interrupted blackish-brown antemedian line. Hindwings brownish-grey, cilia light grey with pale base on dorsum and tornus, light ochreous with a greyish antemedian line elsewhere.

Genitalia ♂ (pl. 18, fig. 6). Scopa dorsalis very large, forming two dense brushes of moderately long hairs; at the base of each a narrow projection with long bristles at the top; mensis ventralis and dorsalis moderate, narrow, bowed. Tegumen large, elongate, its pedicels dilated below. Saccus very short, indent in middle. Valva moderate, semicircular, densely bristled; sacculus broad, swollen up, somewhat chitinised. Uncus rather short, curved, its projecting top narrow, rounded. Socii moderate, densely covered with long bristles. Gnathos long, strong, curved, with a sharp point. Transtilla paired, forming two lateral projections, densely covered with spines; a shorter lobe at base of these covered with hairs (this is perhaps the modified peniculum). Anellus small. Aedoeagus straight, long, with rounded base and an oblique orifice, projecting into a point above, crowned with some short thorns. Cornuti not perceptible (Slide No. 231 D, paratype).

East Java, Tengger Mts., Nongkodjadar, 1300 m, 12.II - 29.X.1940, at light. Pogal, 800 m, 8.V.1940. (A. M. R. WEGNER). West Sumatra, Fort de Kock, 920 m, IX.1921 (Dr E. JACOBSON). 6 ♂. In the Sumatra specimen the patch on $\frac{2}{5}$ of costa is connected by a minute strigula with a brownish suffusion on dorsum before tornus.

Neocalyptis rotundata nov. spec. (pl. 19 fig. 2).

♂ 11 mm. Head, thorax and abdomen brownish-ochreous, face dark brown, palpi brownish-ochreous with a brown streak on the outer side. Forewings with costa little arched anteriorly, straight from $\frac{2}{3}$ to apex, apex little rounded, termen slightly oblique, scarcely concave above, rounded beneath. Ochreous, suffused ferruginous-brown or greyish-brown and lilac-grey, scattered with brown scales. Markings ferruginous-brown and dark brown. Basal area indicated by a brownish suffusion and two dark brown, transverse streaks: on costa and in $\frac{1}{3}$ of disc. A dark brown patch on $\frac{1}{3}$ of dorsum in centre suffused blackish reaching $\frac{1}{3}$ across wing, its upper edge horizontal, posterior edge concave, upper angle sharply projecting. Transverse fascia complete, rather oblique, dilated at lower half, its anterior edge well-defined, from $\frac{2}{5}$ of costa to beyond $\frac{1}{2}$ of dorsum, ferruginous-brown, dark brown on costa and along anterior edge; posterior edge suffused below $\frac{1}{3}$ of disc, in one specimen connected with costal patch by an indefinite light brownish-grey suffusion on upper half of disc, gradually excavate on upper half, arched and ill-defined on lower half, reaching tornus; costal patch moderate, elongate-semispheroid, ferruginous-brown, connected below with a brownish-grey, preterminal, triangular area which is scattered dark brown on veins; its anterior edge: an oblique, dark brown striga from the middle of apical patch to before termen above tornus, its posterior edge parallel to termen, dark brown; a small streak of groundcolour remaining between this and termen; its acute point not reaching termen. A grey suffusion on dorsal half of basal area, dark brown dots on costa; terminal half of wing scattered with dark brown on veins; a minute dark brown strigula around apex. Cilia ochreous with a brownish postmedian line. Hindwings ochreous-greyish, dorsal third and apex suffused grey; brown on veins. Cilia light ochreous with a grey antemedian line.

Genitalia ♂ (pl. 19, fig. 2). Scopa ventralis very large, cordiform, with two elongate-ovate, basal thickenings, densely covered with long scales. Mensis ventralis angulate. Scopa dorsalis a haired ¹⁾, large sack, supported along lower edge by a bent mensis dorsalis. Tegumen small, elongate. Saccus very short, rounded. Valva small, broadly semioval, sacculus little thickened, with a narrow, rod-like chitinisation. Uncus short, triangular, with a long, curved apical projection, which is narrowed at base. Socii large, club-shaped. Gnathos large, strong, curved, acutely pointed. Transtilla paired: two rounded pads, spined above, lower lobes (peniculi?) covered with long bristles. Anellus small, rounded. Aedoeagus rather short, little curved, narrowed towards apex, its orifice inwardly oblique, with acute point below. Cornuti a dense sheaf of strong spines (Slide No. 228 D, paratype).

South Sumatra, Lampong, Wai Lima, XI - XII 1921 (KARNY). East Java, Mt. Semeroe, southern slope, Ranoe Daroengan, 820 m, 6.X.1940 (author). 3 ♂. Allied to the preceding, but larger; can be easily distinguished

¹⁾ In mount all scales removed.

by the shape of basal and costal patch. Sumatra species more ochreous tinged. Type in Leiden Museum.

Epagoge retractana (WALK., 1863) MEYR., 1908 subsp. **invalidana** (WALK. 1863).

Tortrix retractana WALKER, List Lep. Het. Brit. Mus. vol. 28, p. 322.

Tortrix invalidana WALKER, ibidem, p. 327, 1863.

Epagoge invalidana, MEYRICK, J. Bomb. Nat. Hist. Soc., vol. 18, p. 617, 1908. DIAKONOFF, Zool. Meded. Mus. Leiden, vol. 21, p. 165, 1939.

West Java, Paroengkoeda, 500 m, 24 - 30.VII.1937, 1 - 24.V.1939 (Dr J. WESTENBERG). East Java, Mt. Ardjoeno, Tretes, 900 m, IX.1939 - 2.II.1940 (author) 13 ♂, 4 ♀. The Javanese representatives of this species have the transverse fascia in forewings obliterated and can therefore be regarded as a distinct subspecies. The typical form is known to me only from India and Ceylon.

Epagoge pusillana (WALK., 1863).

Tortrix pusillana WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 328.

Capua minuta WALSINGHAM, Ann. Magaz. Nat. Hist., (7), vol. 5, p. 484, 1900.

Capua pusillana MEYRICK, in WYTSMAN, Gen. Insect., vol. 149, p. 35, 1910.

West Sumatra, Fort de Kock, 920 m, I.1922 (Dr E. JACOBSON, from the collection of the Leiden Museum). South Sumatra, Lampongs, Wai Lima, XI - XII.1921 (KARNY & SIEBERS). West Java, Sindanglaja, 1100 m, 15 - 30.I. - 15 - 30.IX.1938; Paroengkoeda, 500 m, 1.V.1939. (Dr J. WESTENBERG). East Java, Mt. Ardjoeno, Tretes, 900 m, 2.II.1940. Mt. Semeroe, southern slope, 820 m, 27.VI.1939, 27.I.1940. 6 ♂, 11 ♀.

Epagoge xanthomitra nov. spec. (pl. 19, fig. 4).

ξανθός = yellow, μίτρα = a turban.

♂ 11 - 11.5 mm. Head ochreous-fuscous, face darker. Palpi dark brown or fuscous-brownish. Antennae dark brown at base, greyish posteriorly, lighter ringed. Thorax dark blackish-brown, mixed with bright fuscous. Abdomen dark bronzy-grey, anal tuft bronzy-grey. Forewings rather narrow, without fold, costa moderately curved anteriorly, apex rounded, termen scarcely sinuate, oblique. Shining leaden-grey, scattered with bright fuscous. Markings fuscous, mixed and suffused with blackish. Basal area tinged with pale ochreous, irregularly, roughly suffused and mixed with fuscous, except a moderately broad area edging transverse fascia anteriorly; the fascia complete, moderately broad, rather oblique, from beyond $\frac{2}{5}$ of costa to before $\frac{3}{5}$ of dorsum, bright fuscous, suffused with blackish especially along costa and above middle of disc; wing beyond this fascia darker and shining brighter leaden grey, than before it. Costal patch moderate, elongate-triangular, with three black dots on costa, interrupted between these by two oblique, rounded patches of groundcolour, the inner one sometimes connected with medial area, in that case separating from the costal patch a transverse, little oblique, wedge-shaped streak, reaching

halfway across wing; another, broader, fuscous streak from lower edge of costal patch, almost vertical above, curved below parallel to tornus and sometimes just touching transverse fascia above dorsum; an oblique blackish grey dot on costa before apex, a narrow, curved strigula before upper half of termen, followed by an indistinct row of blackish points before terminal edge; a terminal row of irregular, blackish, suffused blotches, more or less connected with each other. Cilia dark grey, basal $\frac{2}{3}$ suffused with whitish-grey, tips pinkish-ochreous, or greyish-whitish except on apex and tornus. Hindwings pale to dark bronzy-greyish-brown, somewhat darker on veins. Cilia greyish or dark greyish-brown, with a dark antemedian line and whitish base

Genital apparatus ♂ (pl. 19, fig. 4). Scopa absent. Tegumen moderate, erect. Saccus rather strong, thickened, somewhat angulate. Valva elongate-semioval, apex rounded, sacculus scarcely indicated. Uncus with a curved, truncate point, bristled beneath. Socii moderate, drooping. Gnathos with narrow long arms and a broad, bicorn point. Transtilla a slightly curved broad bar with blunt dentations along inner edge. Anellus erect-rectangular. Aedoeagus short, somewhat angulated, sharply pointed. Cornuti not perceptible (Slide No. 273 D, paratype).

East Java, Tengger Mts., Kletak, 2000 m, 17.X.1940 (A. M. R. WEGNER) 2 specimens. Allied to *pusillana* WALK.

Epagoge affiniانا (WALK., 1863).

Tortrix affiniانا WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 328.

Capua affiniانا, MEYRICK, in WYTSMAN, Gen. Insect., vol. 149, p. 15, 1910.

West Java, Paroengkoeda, 500 m, 24 - 30.VII.1937. Mt. Gede, Sindanglaja, 1100 m, 15 - 30.IX.1938 (Dr J. WESTENBERG). East Java, Mt. Ardjoeno, Tretes, 900 m, 15.I - 3.II.1940 (author). Tengger Mts., Nongkodjadjar, 1300 m, 20.III - 27.XI.1940. (A. M. R. WEGNER); Mt. Semeroe, southern slope, Ranoe Daroengan, 820 m, 6.X.1940 (author). Idjen Mts, Ongop-ongop, 1850 m, V.1924 (K. W. DAMMERMAN).

Epagoge vulgaris (MEYR., 1921).

Capua vulgaris MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 145.

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 20.II - 30.IV.1939. (A. M. R. WEGNER); Mt. Andjasmoro, Djoenggo, 1100 m, 3.XII.1940 (author). 4 ♂, 9 ♀.

Epagoge pigra (MEYR., 1921).

Capua pigra MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 146.

West Java, Mt. Gede, Tjibodas, 1400 m, VIII.1929; 18.XII.1940 (author). 3 ♂, 3 ♀.

Homona coffearia (NIETN., 1861).

Tortrix coffearia NIETNER, Obs. Enemies Coffee Tree in Ceylon, p. 24.

Homona fasciculana WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 425, 1863.

Pandemis menciana WALKER, t.c. p. 310, 1863.

Godana simulana WALKER, l.c., vol. 35, p. 1801, 1866.

Capua menciiana WALSINGHAM, Ann. Magaz. Nat. Hist. (7), vol. 5, 482 - 483 (1900).

Homona menciiana MEYRICK, Trans. Ent. Soc. 1910, p. 432, 1910.

Homona coffearia, MEYRICK, in WYTSMAN, Gen. Insect., vol. 149, p. 19, pl. 2, f. 30, 1913. DIAKONOFF, Treubia vol. 18, p. 379, 1941.

East Sumatra, Medan, 100 m, 24.V.1938 (Dr A. P. VAN DER LAAN). West Java, Dramaga near Buitenzorg, 300 m, 10.IX.1937 (Dr J. VAN DER VECHT), bred from leaves of *Thea sinensis*. Buitenzorg (Dr W. ROEPKE). Tjikopo, 700 m, 16.VI.1940 (SOEKARNO). Mt. Gede, Sindanglaja, 1100 m, 15 - 30.IX.1938 (Dr J. WESTENBERG). Tjibodas, 1400 m, 8.V. - 18.XII.1940 (Dr L. J. TOXOPEUS, author). (WALSH). Tengger Mts, Nongkodjadjar, 1300 m, 19.II.1936 (A. M. R. WEGNER). Mt. Semeroe, Ranoe Daroengan, 820 m, 6.X.1940 (author). Moluccas, North Halmahera, Tobelo, 0 m, 18.IV.1939 (Dr L. J. TOXOPEUS). 6 ♂, 6 ♀.

***Homona coffearia* (NIETN.) subsp. *wetan* nova.**

ᨀᨁᨂᨃᨄᨅᨆᨇᨈᨉ (= wetan, Javan.) = east.

♂ 15 - 20 mm. Pale or light ochreous, more or less suffused with greyish, sometimes strigulated with dark brown; markings pale tawny to dark ferruginous-brown, very variable. Often a pale form with a dark greyish-ferruginous costal fold, other markings indefinite, except the base of transverse fascia and costal dots. Distinct from typical form by much paler hindwings and especially by the shape of forewings: much narrower, apex much more projecting, termen less rounded. ♀ (1 specimen obtained in Nongkodjadjar) not differing from type and therefore recorded above.

East Java, Tengger Mts, Nongkodjadjar, 1300 m, 19.II - 22.IX.1940, on lamp (A. M. R. WEGNER). Mt. Ardjoeno, Soember Brantas, 1921 (WALSH). Idjen Mts., Kendeng, 1400 m, VI.1924 (K. W. DAMMERMAN), 23 ♂. This seems to be the East Javan subspecies. Originally regarded as a new species; genitalia show, however, no difference from the typical form.

***Homona picrostacta* MEYR., 1921.**

MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 146. DIAKONOFF, Treubia vol. 18, p. 379 - 380, 1941.

East Java, Paseroean, 5 m, 16.V. - 22.VII.1940, at light (author). 18 ♂. Very variable species, with forewings from light ochreous to dark ferruginous, suffused blackish. It seems not to be possible to catch the females at light.

***Homona amphigona* MEYR., 1936.**

MEYRICK, Exot. Microl., vol. 5, p. 60. (Type, ♂, in Vienna Museum).

North East Sumatra, Medan, 100 m, 21.I.1924. (Dr L. FULMEK). Bred from leaves of *Solanum*. 1 ♂. Veins 7 and 8 in forewings are shortly stalked. I possess a photograph of a ♂ of this species from MEYRICK's collection in the British Museum; that ♂ specimen was placed there under the name of *Cacoecia salaconis* MEYR. 1912; the latter species was described from the Philippines after one ♀ (also in British Museum). I did not study the neuration of MEYRICK's ♂ specimen, but according to the photograph, which corresponds in all details

with my ♂ of *amphigona*, there is little doubt that MEYRICK's ♂ of *C. salaconis* (which is not cited in the description of that species, neither recorded later on), is a ♂ of *H. amphigona*.

Perhaps *amphigona* is the same as *H. fatalis* MEYR., 1936, which name, in that case, would antedate.

Cacoecia expansa nov. spec. (pl. 22 fig. 6).

♂ 19 - 22 mm. Head ferruginous, face mixed with ochreous. Palpi ochreous-ferruginous, paler at base. Thorax dark bronzy-brown or dark ferruginous. Abdomen ochreous, suffused with dark brown posteriorly, anal tuft greyish-ochreous. Forewings long, narrow, considerably dilated posteriorly, costal fold narrow, not reaching $\frac{1}{3}$ of wing, concealing long and rough light ochreous scales, costa moderately curved to before middle, strongly sinuate posteriorly, apex rounded, distinctly projecting, termen sinuate above, broadly rounded and outwardly projecting beneath. Light ferruginous-lilac, tinged ochreous, turning orange-ochreous in certain lights, suffused with dull golden-ferruginous or deep ferruginous-purple. An elongate patch of dark crimson-purple suffusion on base of dorsum and on basal scale-projection; base of costa and of disc suffused with lilac and purple-grey; the entire basal area edged by golden-ferruginous suffusion from before $\frac{1}{4}$ of dorsum to beyond $\frac{1}{4}$ of disc above fold; central fascia indefinite: a deep violet, suffused patch on end of fold connected with an outwardly oblique golden-ferruginous suffusion along upper and lower edge of cell, the latter continued by a more or less interrupted brownish-ochreous suffusion, sometimes dilated on fold, with middle of dorsum; no distinct costal patch, but a narrow-ovate golden ferruginous streak from about $\frac{1}{3}$ to $\frac{4}{5}$ of costa, scattered with minute glistening blueish scales; its posterior end connected by a narrow, vertical striga with a curved-wedge-shaped rather broad golden-ferruginous-brownish preterminal blotch running from about vein 6 to tornus; the narrow striga above mentioned preceded by a patch of leaden-grey, glossy scales; an elongate, narrowed below, dark reddish-ferruginous transverse preapical patch, broadly edged by blackish-leaden, except on costa; this leaden edges flowing together above middle of termen and connected along the latter to tornus by light lilac glossy fascia; a reddish-ferruginous apical dot, two blackish discal dots at about $\frac{2}{3}$; indistinct pale-ferruginous narrow transverse strigulae on disc and dorsum. Cilia ferruginous, darker and suffused with blackish-purple towards apex, brownish-greyish towards tornus, with a small black bar on dorsum. Hindwings with costal half ochreous-orange, dorsal half brownish-greyish, cilia bright orange at apex turning pale greyish towards dorsum.

Genitalia ♂ (pl. 22, fig. 6). Scopa ventralis: a fan of dense scales, mensis ventralis: an ovate-moonshaped, membranous plate. Tegumen elongate, moderate. Saccus strong, a little angulate. Valva rather short, erect, membranous, densely haired apically. Socii indefinite: two rows of short hairs. Gnathos a narrow but strong knob, angulate beyond middle and forming a narrow, strong

point. Transtilla weak, narrow, semi-membranous, slightly sinuate, curved at the extremities. Anellus rounded. Aedoeagus strong, pistol-shaped, cornuti not perceptible (Broken off. Slide No. 274D).

West Java, Mt. Gede, Tjibodas, 1400 m, 6-25.IV.1940. (Dr L. J. TOXOPEUS). 2 specimens. Smaller specimen entirely suffused with dark ferruginous-purple, with markings less definite.

Closely allied to *micaceana* WALK., but a little larger and distinct by wing-shape, by costal and apical markings, and also by the shape of gnathos, which is narrower, with a much longer point.

***Cacoecia micaceana* (WALK., 1863).**

Cacoecia ? WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 314.

Cacoecia micaceana DIAKONOFF, Treubia vol. 18, p. 286-387, 1941.

East Sumatra, Medan, 100 m, 24.V.1938 (Dr A. P. VAN DER LAAN).
West Sumatra, Fort de Kock, 920 m, XI.1921, 1924, 1925 (Dr E. JACOBSON).
West Java, Buitenzorg (Dr W. ROEPKE). Paroengkoeda, 500 m, 24-30.VII.1937 (Dr J. WESTENBERG). Bandoeng, 700 m, 24.XII.1940 (author). Central East Borneo, near Long Petak, 1200 m, 15.X.1925 (H. C. SIEBERS). 7 ♂, 4 ♀.

***Cacoecia micaceana* (WALK.) var. *machlopis* (MEYR., 1912).**

Cacoecia machlopis MEYRICK, Exot. Microl., vol. 1, p. 4.

Cacoecia micaceana WALKER var. *machlopis*, DIAKONOFF, Zool. Meded. Mus. Leiden, vol. 21, p. 173, 1939; Treubia vol. 18, p. 387, 1941.

West Java, Mt. Gede, Tjibodas, 1400 m, 6.IV.1940 (Dr L. J. TOXOPEUS) 1 ♀.

***Cacoecia atrolucens* DIAK., 1941.**

DIAKONOFF, Treubia, vol. 18, p. 384, 386.

West Java, Mt. Gede, Sindanglaja, 1100 m, 15-30.IX.1938 (Dr J. WESTENBERG). Tjibodas, 1400 m, VIII.1921; 28.III-18.XII.1940 (Dr L. J. TOXOPEUS, author). Mt. Malabar, Tjinjireoan, 1700 m, XII.1909 (Dr H. W. VAN DER WEELE, in collection of Leiden Museum). Central Java, Mt. Slamet, Toewel, 900 m, on a young *Melia azedarach* tree (author). East Java, Tengger Mts, Nongkodjadar, 1300 m, 22.I-26.VIII.1940 (A. M. R. WEGNER). Mt. Semeroe, Ranoe Daroengan, 820 m, 6.X.1940 (author), at light. 29 ♂, 22 ♀.

***Cacoecia seditiosa* MEYR., 1921.**

MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 147. DIAKONOFF, Treubia vol. 18, p. 382-384, 1941.

West Java, Mt. Gede, Sindanglaja, 1100 m, 15-30. IX.1938. (Dr J. WESTENBERG). East Java, Mt. Andjasmoro, Djoenggo, 1100 m, 3.XII.1940; Mt. Semeroe, southern slope, 700 m, bred X.1940 from flowers of a Composite plant (author). 3 ♂, 2 ♀.

***Cacoecia seditiosa* MEYR. subsp. *orientalis* nova.**

♂ 16-16,5 mm. Can be distinguished from the typical form by light-ochreous groundcolour and dark brown or greyish markings, without any tinge

of pink, purple or ferruginous colouring, which is so typical for the West Javanese form (type). The preterminal patch, connecting costal patch with termen is strongly reduced, only a few horizontal strigulae and the dark edges remaining.

East Java, Tengger Mts, Nongkodjadar, 1300 m, 5.V. - 27.XI.1940, at light (A. M. R. WEGNER). 5 specimens. Markings suggest *criticana* KENN. Genitalia appear to be identical with the typical form.

Cacoecia tabescens MEYR., 1921.

MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 147. DIAKONOFF, Treubia vol. 18, p. 382, 1941.

North East Sumatra, Medan, 100 m (Dr L. FULMEK). Bred from leaves of *Cajanus indicus*. 1 ♀. West Java, Batavia, ± 5 m, 15.I. - 5.VI.1940 (Dr J. WESTENBERG). 1 ♂, 1 ♀.

Cacoecia spilotoma MEYR., 1921.

MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 148.

North Celebes, Minahassa, 1921 (P. J. VAN DEN BERGH LZN). North East Celebes, Paloe, Sidoanta, 1500 m, VII.1937 (KALIS). 22 ♂, 1 ♀.

Phaenacropista cremnotoma (MEYR., 1936) DIAK. 1941 (pl. 19, fig. 1).

Schoenotenes cremnotoma MEYRICK, Exot. Microl., vol. 5, p. 62 (♂).

Phaenacropista cremnotoma, DIAKONOFF, Treubia, vol. 18, p. 389—390, f. 2D-F (genitalia ♀).

Genitalia ♂ (pl. 19 fig. 1). Scopa ventralis elongate, forming two lateral brushes of long scales preceded by patches of black scales. Mensis ventralis bowed, with a short projection in middle. Mensis dorsalis a membranous sack, densely scaled, mesis ventralis not perceptible. Tegumen broad, semispheroid. Saccus small. Valva broad, elongate, curved, costa concave, sacculus dentate along margin, with a conspicuous, curved spine in middle. Uncus rather large, hooded, rounded at the top. Socii absent. Gnathos large, strong, curved, with a huge point. Transtilla an elongate, narrow rod. Anellus rather broad. Aedoeagus pistol-shaped, with broad base, dilated towards orifice, its top truncate. Cornuti a sheaf of long spines. Ductus ejaculatorius long, vesiculus seminalis elongate. Each valva bears a patch of short, black scales (Slide No. 229 D).

East Java, Mt. Ardjoeno, Tretes, 900 m, 15.I.1940. Tengger Mts., Nongkodjadar, 1300 m, 17.II - 6.IV.1940, at light (A. M. R. WEGNER). Mt. Semeroe, southern slope, Ranoe Daroengan, 820 m, 27.VI.1939 (author). 4 ♂, 1 ♀.

This interesting species has been described after 1 ♂, bred at Buitenzorg from the leaves of tea-plant. Recently, I have been able to describe the female also from West Java (Sindanglaja), from the same food-plant. The recovery in 3 variable places in the mountains of East Java shows that this native, possibly polyphagous species is at present in the stage of migration from some plant of the secondary rain-forest to cultivated crop: in this case the tea-plant.

Genus *Catamacta* MEYR. 1911.

MEYRICK, Tr. N. Zealand Inst., vol. 43, p. 81. In WYTSMAN, Gen. Insect., vol. 149, p. 9, 1910.

TURNER, Tr. Roy. Soc. S. Austr., vol. 40, p. 504, 1916.

DIKONOFF, Zool. Meded. Mus. Leiden, vol. 21, p. 175-176, ff. 5T-S, 71, 1939.

As stated by the author when studying the genotype, *C. provocata* MEYR., in the British Museum, the diagnosis of this genus had to be changed a little, as the veins 3-5 in hindwings of the genotype mentioned are not closely approximated, according to MEYRICK, but rather remote from each other (3 from angle); they are, however, not so far remote and not parallel as in *Paraselenia* MEYR. which latter genus still remains distinct. It can be distinguished from *Thrinophora* MEYR. by the absence of a thoracic crest and entirely different habitus.

Although the following species possesses rather slender palpi, I place it in this genus in consequence of the configuration of veins in both fore and hindwings, which are exactly like those of *provocata*, except vein 11, which originates not beyond but before middle of cell.

Catamacta dihamma nov. spec. (pl. 20 fig. 2).

$\delta\acute{\upsilon}\omicron$ = two, $\acute{\alpha}\mu\mu\alpha$ = a band.

♀ 15 mm. Head, thorax and palpi dark bronzy-grey, the latter suffused with ferruginous towards apex. Abdomen ochreous, mixed with bronzy-brown, anal tuft lighter. Forewings moderately broad, dilated posteriorly, broadest at about $\frac{2}{3}$, costa gradually curved from base to apex, apex rounded, termen almost straight, considerably oblique. Light ochreous-grey, suffused with pale pink on base and at apex. A little oblique, transverse fascia, triangularly dilated below, well-defined, light ochreous-grey, tinged with pinkish, mixed with white above middle, slightly strigulated with grey below, anterior edge from before $\frac{2}{3}$ of costa to about $\frac{1}{4}$ of dorsum, slightly inwardly oblique, outer edge from $\frac{2}{5}$ of costa to middle of dorsum; a second transverse fascia from $\frac{3}{5}$ of costa towards $\frac{4}{5}$ of dorsum, narrowed at costa, from below costa to before dorsum equally broad, white, suffused on lower $\frac{1}{4}$ with brownish-greyish, not reaching dorsum; both fasciae edged dark brown, preceded and followed by reddish-fuscous suffusion, space between the fasciae also reddish-fuscous, suffused brownish-grey on dorsum; preterminal area with a broad, suffused grey, transverse band strigulated with brown, followed by a narrow, whitish, transverse fascia, edged posteriorly by a minute, brown, vertical strigula from below costa to lower $\frac{1}{4}$ of termen, somewhat undulate in middle; apical area beyond this and costa posteriorly pale pinkish. Cilia dark brownish-grey. Hindwings brownish-grey, apex suffused pinkish-fuscous; cilia grey with light basal line.

Genitalia ♀ (pl. 20, fig. 2). Ovipositor lobes long, narrow, gradually dilated above. Ostium large, supported by two erect-triangular plates at the sides and a strongly chitinised limen, which is curved at the sides, emarginate in middle, and forms a tubular funnel, continued by slightly chitinised broad upper part

of ductus, which might be a colliculum; ductus below very narrow, long. Bursa irregularly-spheroid, signum absent (Slide No. 265 D, type).

Central East Borneo, near Long Petak, 1200 m, 17.X.1925, No. 172 (H. C. SIEBERS). 1 specimen.

Ulodemis trigrapha MEYR.

MEYRICK, J. Bombay Nat. Hist. Soc., vol. 17, p. 736, 1907. DIAKONOFF, *Treubia* vol. 18, p. 389-390, 1941.

Sumatra, Bandar Baroe, 7.X.1925, at light (Dr L. FULMEK). 1 ♂, 1 ♀. West Java, Mt. Gede, Tjibodas, 1400 m, 18.XII.1940 (Dr L. J. TOXOPEUS) 1 ♀.

Ulodemis pullatana (SNELL. 1901) MEYR. 1921 (pl. 19, fig. 8).

Tortrix pullatana SNELLEN, Tijdschr. v. Entom., vol. 44, p. 68, pl. 5, f 3.

Homona pullatana, MEYRICK, in WYTSMAN, Gen. Insect., vol. 48, p. 19, 1913.

Ulodemis pullatana, MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 149, 1921.

Genitalia ♀ (pl. 19, fig. 8). Ovipositor lobes considerably dilated apically. Ostium large, with a triangularly funnel-shaped chitinisation, ending in a weak, small colliculum. Ductus rather long, narrow. Bursa large, pear-shaped, signum a large thorn, with a long, sideways turned capitulum, bursal wall with a strong, broad plate above and a narrow plate beneath base of signum (Slide No. 272 D).

West Java, Mt. Gede, Tjibodas, 1400 m, I. - 18.XII.1940 (Dr L. J. TOXOPEUS, Dr J. H. G. FERMAN, author). 3 ♂, 6 ♀.

Ulodemis idjen nov. spec. (pl. 19, fig. 7).

ꦲꦶꦗꦺꦤ (idjén, Javan.) = lonely.

♀ 16 mm. Head, thorax and palpi light cinnamon-brownish-ochreous, medial and terminal joints suffused darker towards apex. Abdomen shining pale ochreous, suffused with dark grey towards apex. Forewings elongate-ovate, costa strongly curved anteriorly, almost straight posteriorly, apex rounded, termen slightly sinuate, rounded beneath. Light cinnamon-brownish-ochreous, slightly suffused with darker cinnamon-brownish towards base. Markings suffused and little distinct, cinnamon-brown, with coffee-brown dots and short streaks. Basal fascia suffused and narrow, from before $\frac{1}{4}$ of costa obliquely to fold, dilated above the latter to a cloudy, indistinct suffusion, marked along anterior edge by small interrupted transverse streaks, ending just beyond fold; transverse fascia rather narrow, curved, from $\frac{1}{3}$ of costa to $\frac{2}{3}$ of dorsum, along upper half both sides distinct, marked by short, suffused, dark brown, elongate, transverse dots, its lower half almost twice as broad, edged anteriorly by suffused, dark brown patches, almost touching each other and forming a slight grey suffusion on base of transverse fascia; its posterior edge suffused and indefinite, costal patch on $\frac{3}{5}$ of costa, little distinct, triangular, suffused posteriorly, a curved series of elongate dots along its anterior edge running to termen above tornus; wing beyond this row darker suffused with cinnamon-

brownish. Cilia pale cinnamon-ochreous (damaged). Hindwings pale ochreous-brownish, suffused greyish along terminal and dorsal part, suffused brownish on apex; cilia whitish-ochreous, with a narrow, grey basal line (damaged).

Genitalia ♀ (pl. 19, fig. 7). Ovipositor lobes moderate, dilated above. Limen a broad band, dilated towards middle, in its centre a moderately broad ostium, connected with the beginning of the ductus by a spheroid funnel, which is slightly constricted at the extremities. Ductus dilated at base, constricted beyond, membranous, rather broad. Colliculum indistinct: a small chitinisation; cestum absent. Bursa elongate-pearshaped, large; signum a large thorn, with a sideways turned capitulum, connected above with a large, below with a narrow chitinous plate in bursal wall (Slide No. 268 D, paratype). Differs from *pullatana* SNELL. by spheroid funnel of the ostium.

E a s t J a v a, Idjen Mts., Ongop-ongop, 1850 m, V.1924 (K. W. DAMMERMAN). 2 specimens. Distinct by cinnamon-brown colouring, without ferruginous tinge, which is characteristic for all other *Ulodemis* species, and by the genitalia. Nearest to *pullatana* SNELL.

Ulodemis pangerango nov. spec. (pl. 20, fig. 1).

ᐱᐱᐱᐱ ᐱᐱᐱᐱ (= pangerango, Sundan.) = a prince.

♂ 26-30 mm. Head and palpi dark ferruginous, more or less suffused grey. Thorax ferruginous-greyish, suffused with ochreous posteriorly. Abdomen pale ochreous, sometimes suffused with greyish, second segment with a large, elongate-ovate, transverse patch of velvety, purplish-black scales on tergum, a much smaller patch on tergum of segment 3; sometimes a large suffusion on basal part of abdomen instead. Forewings without costal fold, costa considerably curved from base to apex, especially anteriorly, apex rounded, termen more or less sinuate above, rounded beneath, slightly oblique, light ochreous-reddish, ochreous, reddish-ferruginous or brownish-grey, regularly speckled with blackish dots throughout, sometimes darker on veins. Markings suffused ferruginous-pinkish in general suffusion of wing and indistinct. Costal half of wing base suffused along costa to $\frac{1}{4}$, across wing to fold, from there a strigulate, interrupted and rather indistinct, transverse streak to $\frac{1}{3}$ of dorsum; central fascia broad, oblique, curved, its anterior edge from before $\frac{2}{5}$ of costa to almost $\frac{2}{3}$ of dorsum, curved, somewhat undulate, its posterior edge from costa before middle concave to cell, from there considerably convex to dorsum before tornus, the fascia along its lower $\frac{2}{3}$ being $1\frac{1}{2} \times$ as broad as along upper $\frac{1}{3}$; costal patch somewhat suffused posteriorly, triangular, from $\frac{3}{5}$ of costa to before apex, its top with a suffused, oblique projection, reaching halfway across wing; an interrupted transverse strigula on dorsum halfway between basal and central fascia; wing speckled throughout with blackish dots, tending to form curved, transverse series, especially distinct and large along anterior edge of markings. Cilia rather short, ochreous to dark grey, mixed with ferruginous, pale-tipped. Hindwings light whitish-ochreous, somewhat

suffused ochreous on apical $\frac{1}{3}$, a narrow patch along dorsum and dorsal cilia pitchy-black; cilia elsewhere pale ochreous-whitish.

Genitalia ♂ (pl. 20, fig. 1). Scopa ventralis two long brushes of hairs. Mensis ventralis membranous, paired. Tegumen strong, elongate. Saccus strong, somewhat pointed in middle. Valva short, rounded; costa membranous, but dilated at base. Sacculus very strongly chitinised, serrate along inner edge towards apex. Uncus large, curved, spatulate, densely bristled above, its base narrow. Gnathos strong, with a long, curved hook. Socii elongate, large, densely covered with narrow, hairshaped scales. Transtilla a narrow, strongly chitinised bar (in mount broken). Anellus cupshaped, emarginate, strong. Aedoeagus pistol-shaped, posterior part very long, narrow, base dilated. Cornuti some 3 long spines. (In mount broken off. Slide No. 259 D, paratype).

West Java, Mt. Pangerango, Lebak Saät, 2400 m, 1.III - 27.XII.1940. Summit of Mt. Pangerango, 3000 m, 26.XII.1940 (W. GROENEVELDT, A. DE VOS). 5 ♂. Very interesting species, distinct by absence of costal fold. The female, which is not known so far, is undoubtedly of very large size.

Syndemis axigera nov. spec. (pl. 19, fig. 3, 5).

♂ 11 mm. Head and vertex ferruginous-brown. Thorax greyish-brown, patagia ochreous. Palpi ferruginous-brown, mixed with dark brown above. Forewings with a rather broad costal fold to $\frac{2}{5}$, costa scarcely curved anteriorly, angulate in middle, straight posteriorly, apex little rounded, termen oblique. Reddish-ochreous mixed with ferruginous-brown, markings ferruginous-brown and dark brown. Costal fold mixed with brown; an elongate, bright ochreous suffusion on base of dorsum; transverse fascia rather oblique, with well defined anterior edge from beyond $\frac{1}{3}$ of costa to about $\frac{1}{2}$ of dorsum, excavate above $\frac{1}{2}$ of disc; posterior edge well-defined on upper $\frac{1}{3}$ of disc, suffused and extended to before tornus below: ferruginous-brown, on costa and along anterior edge dark brown; costal patch an oblique triangle with truncate top: ferruginous-brown with dark brown sides; a transverse, elongate-ovate suffusion before tornus connected by dark brown dots and strigulae with costal patch and tornus; terminal area bright ochreous, a narrow streak on costa before termen brownish; dark brown, elongate, transverse patches along termen. Cilia bright ochreous with a medial line of dark brown dots around tornus. Hindwings grey with base of costa whitish; cilia grey with light basal line. Abdomen dark grey. Legs brownish-ochreous mixed with brown, tarsi brown.

♀ 12 mm. Head ferruginous-brown, vertex ochreous-brown; palpi brown, medial joint brownish-ochreous towards apex above. Thorax with a dark brown suffused transverse fascia running over its middle and over tips of tegulae; tegulae and anterior half of thorax ferruginous-ochreous, posterior half brown. Forewings with costa little curved anteriorly to $\frac{1}{2}$, almost straight posteriorly, apex little obtuse, termen scarcely convex, very oblique, dorsum

straight posteriorly, considerably arched at base. Ochreous, tinged lilac-greyish, markings ferruginous and dark brown. A patch in middle of disc before base of wing; transverse fascia ferruginous, dark brown on costa and in middle, with dark brown dots along edges on upper half, narrow, rather oblique, with anterior edge sharply defined from $\frac{1}{3}$ of costa to $\frac{3}{5}$ of dorsum, twice slightly indent: above middle of disc and above dorsum; its posterior edge from before $\frac{1}{2}$ of costa, distinct to middle of disc, indent there, on lower half forming a greyish, triangular suffusion, along dorsum reaching tornus; transverse fascia remembering thus an axe upside-down, almost interrupted in middle by a streak of groundcolour; costal patch dark ferruginous-brown with lilac shine, semioval, its apex a little oblique, slightly angulate; a row of dark brown, short, transverse blotches along apex and upper half of termen; another such row from tornus towards costal patch, reaching halfway across wing, connected with costal patch by minute, interrupted, light brown strigulae; a short, dark-brown streak on dorsum before tornus; basal area regularly covered with interrupted, transverse, brownish strigulae, forming distinct dark patches on costa and dorsum; dark brown dots on costa beyond middle; terminal half of wing marked brownish on veins. Cilia brownish-grey, with base and a patch on tornus brownish-ochreous. Hindwings ochreous-greyish, basal half of costa light ochreous; cilia grey with light ochreous base. Legs ochreous with tibiae and tarsi dark brown. Abdomen brownish-grey, dark grey towards apex, anal tuft ochreous.

Genitalia ♂ (pl. 19, fig. 3). Scopa ventralis very large, consisting of two rounded lateral lobes, bearing a projection at the top anteriorly and a triangular, central, lower lobe, supported by an angulate mensis ventralis. Scopa dorsalis: a rounded plate, mensis dorsalis (in figure at the left) a circular chitination with two basal projections. Tegumen moderate, elongate, its pedicels narrow, strongly chitinated. Saccus strong, short. Valva rounded-erect, bristled, sacculus darkly chitinated, broad, bristled rod, sharply pointed. Uncus short and broad, its point curved, elongate, furcate. Socii large, elongate, densely bristled. Gnathos narrow, with curved point. Transtilla paired: a projection on each side, densely spined at the top. Anellus small. Aedoeagus broad, with rounded base, straight, its orifice oblique, produced below into a long, sharp spine. Cornuti a sheaf of strong spines (Slide No. 235 D, paratype).

♀ (pl. 19, fig. 5). Ovipositor lobes seem to be obliterated (as they are not perceptible in both specimens studied). Anapophyses short and narrow, limen a membranous band, narrowed in middle. Ductus very short, colliculum small, little chitinated. Bursa large, erect, signum large, with a rounded capitulum and a long inward thorn, almost as long as the diameter of the bursa (Slide No. 236 D, allotype).

West Sumatra, Fort de Kock, 920 m, I-XI. 1920-1922 (Dr E. JACOBSON). 3 ♂, 1 ♀. Holo- and allotype in Leiden Museum. A distinct species, perhaps nearest to *pusillana* Wlk.

Syndemis axigera subsp. **talina** nova.

တလီနီ (taliné, Javan.) = with a cord.

♂ 12 mm. Head and palpi ochreous, mixed with grey. Thorax ochreous, suffused in middle with grey. Abdomen dark grey, base pale ochreous, genital valves snow-white. Forewings with costal fold to beyond $\frac{2}{5}$, rather narrow; costa rather straight and oblique anteriorly bent at $\frac{2}{5}$, straight posteriorly, apex obtusely pointed, termen straight, oblique as in ♀ but more or less densely suffused with dark grey and brownish; costal fold grey; a dark suffused spot on middle of termen, a narrow dark grey suffusion along base of dorsum; central fascia reddish-ferruginous, light-edged, suffused along lower half posteriorly; costal patch dark brown, elongate-semiovate, large, connected by an indistinct, reddish strigulation with lower half of termen; posterior part of wing strigulated and suffused with ferruginous and pink, scattered with a few black dots. Cilia pale ochreous, mixed and suffused with dark leaden-grey and blackish towards tornus. Hindwings and cilia as in ♀.

♀ 13 mm. Head and thorax dark ochreous, patagia with brown scales apically. Palpi ochreous, suffused along lower edge with brown. Abdomen ochreous-grey, darker posteriorly, legs pale ochreous. Forewings with costa little curved anteriorly, straight before apex, apex slightly curved, acute, termen gently concave above middle, very oblique. Light ochreous scattered with a few dark brown scales; markings dark brown, somewhat suffused blackish. A small, suffused patch at base of wing on lower half; minute dark dots on base of costa; some three black dots on anterior half of dorsum, somewhat suffused with brownish; transverse fascia entire, rather well-defined, narrowed above middle of wing, triangularly dilated below, its inner edge from $\frac{2}{5}$ of costa to $\frac{3}{5}$ of dorsum, straight above, lower $\frac{2}{3}$ gently concave; outer edge slightly curved to above middle of wing, very oblique below, vertical on dorsum; dark brown, suffused with blackish at the extremities; costal patch on $\frac{4}{5}$ of costa, small, semiovate, dark brown, suffused with ochreous in its middle on costa, its edge well defined; small, elongate, oblique, suffused brownish spot below costal patch in middle of disc. Cilia ochreous, with a few dark brown scales, dark grey below tornus. Hindwings rather dark grey, lighter on upper half of base, cilia dark grey, suffused darker in middle, base pale ochreous.

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 9.V. 27.XI.1940 (A. M. R. WEGNER). At light. 6 ♂, 4 ♀. A complete description of both sexes seemed useful, as this subspecies is rather different from the typical form. The genitalia show no difference whatever (Slide ♂ No. 232 D, ♀ 233 D).

Syndemis serpentiana (WALK., 1863).

Ericia serpentiana WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 317.

North East Sumatra, Bandar Baroe, 9.X.1925 (Dr L. FULMEK).
Central Java, Mt. Slamet, Toewel, 900 m, 28.III.1940, on a young
Melia azedarach tree. East Java, Mt. Ardjoeno, Tretes, 900 m, 3.II.1940

(author). Tengger Mts., Nongkodjadar, 1300 m, 17.IV.-24.IX.1940 (A. M. R. WEGNER). Mt. Semeroe, Ranoe Daroengan, 820 m, 6.X.1940 (author). 14 ♂, 7 ♀.

Syndemis uniformis nov. spec. (pl. 19 fig. 6, 9).

♂ 12,5 - 14 mm, ♀ 14 mm. Palpi, dark grey, blackish apically; head, thorax and abdomen dark grey, vertex of head and patagia pale greyish, tinged with ochreous, anal tuft pale ochreous-greyish, glossy. Forewings narrow, without costal fold, costa considerably curved anteriorly, rather straight or slightly sinuate posteriorly, apex acute, termen slightly concave above, very oblique. Grey, sometimes slightly tinged with brownish, glossy shining. Markings ferruginous-brownish, indistinct: a shadow on $\frac{1}{4}$ of dorsum, an oblique, suffused, transverse fascia from $\frac{1}{2}$ of costa to $\frac{3}{5}$ of dorsum, interrupted on upper half of wing, rather broad below; veins marked with dark grey towards apex, indistinct dots and strigulae between veins posteriorly; in most cases these markings almost entirely obliterated, central fascia indicated by a pair of dark spots in disc. Cilia somewhat paler and duller. Hindwings grey, glossy, sometimes suffused dark grey towards apex, veins darker, cilia grey, with pale base and a darker antemedian line.

Genitalia ♂ (pl. 19, fig. 9). Scopa ventralis: two small, lateral scale-brushes; mensis ventralis rather straight, with a rounded projection in middle; 8th abdominal segment darkly chitinised. Tegumen erect, moderate. Saccus rounded, short. Valva rounded, short, sacculus very broad, chitinised. Uncus short, with a large club-shaped, rounded top. Socii indefinite. Gnathos strong, curved. Transstilla membranous in middle, forming two lateral, dentate pads. Anellus strong. Aedoeagus curved, its top produced into a long point. Cornuti a sheaf of long spines (Slide No. 234 D, paratype).

♀ (pl. 19, fig. 6). Ovipositor moderate. Anal segment chitinised. Apophyses strong. Limen a rather broad band with distinct upper and lower rim, a rounded, chitinised plate in middle, membranous at the sides, extremities of the limen chitinised again. Ostium ovate, ductus long, unarmed, except a little developed colliculum. Bursa rounded, signum absent (Slide No. 238 D, paratype).

E a s t J a v a, Tengger Mts, Tosari, 2000 m, 23.III.1940 (A. M. R. WEGNER). 6 ♂, 6 ♀.

CNEPHASIADES.

Mimeoclysia piridina DIAK., 1941 (pl. 20, fig. 6).

DIAKONOFF, Treubia, vol. 18, p. 194 - 195.

♂ 13,5 - 14 mm, ♀ 13,5 - 16 mm. Posterior half of abdomen in male dark brown, covered with rough, long hairs. ♀ Head, palpi and thorax darker than in male. Forewings with costa considerably curved at base, sinuate posteriorly, apex subacute, projecting, termen sinuate above, obliquely rounded and project-

ing beneath. Greyish-fuscous, indistinctly and minutely transversely strigulated with ferruginous-brownish, especially towards termen; some 5 dark brown, elongate dots on posterior half of costa, increasing in size posteriorly; a few dark brown scales in middle of disc before $\frac{1}{5}$ and on $\frac{1}{2}$ of wing length. Cilia paler greyish-fuscous, with light-ochreous base. Hindwings and cilia somewhat darker than in ♂.

Genitalia ♀ (pl. 20 fig. 6). Ovipositor lobes triangular, moderately broad. Ostium broad. Limen: strongly chitinised, strongly edged, elongate rods at the sides and a central plate with a rounded projection in middle. Colliculum a strong, incomplete ring. Ductus beyond this indistinct, gradually turning into bursa, which is strongly chitinised on upper half, partially covered with dentations, increasing in size downwards; lower half of bursa unarmed and membranous (Slide No. 243 D).

E a s t J a v a, Tengger Mts., Nongkodjadjar, 1300 m, and Toenggangan, 1400 m, 12.II.-27.XI.1940, at light (A. M. R. WEGNER). Mt. Andjasmoro, Djoenggo, 1100 m, 8.XII.1940 (author) 7 ♂, 8 ♀.

Pternozyga anisoptera nov. spec. (pl. 20, fig. 4).

♂ 13 mm. Head and palpi bright golden-ochreous, the latter rather long, dilated by rough scales above and beneath, median joint slightly tinged brown on base of upper and towards apex of lower side. Antennae long ciliated, ciliations $1\frac{1}{2}$. Thorax and patagia bright ochreous, mixed with brownish (damaged), abdomen dark greyish-brown, lighter at the sides, anal tuft golden-ochreous. Legs pale ochreous, tibiae and tarsi suffused blackish from above, articulations light-ochreous. Forewings without costal fold, strongly dilated posteriorly, costa gradually curved, apex acute, termen gently curved, oblique. Orange-ochreous and ochreous-whitish, speckled. A dark basal area to $\frac{1}{5}$ of costa, a suffused transverse fascia narrowed below, not reaching dorsum: dark brown, suffused reddish-ferruginous and orange below; a dark brown band along termen, broader above, with 4 oblique groups of shining-leadens, round spots; terminal edge slightly undulate; a short, longitudinal row of elongate, whitish spots before middle of termen, another one forming a curved fascia from $\frac{1}{3}$ of costa to upper half of termen; costal patch indicated by a bright orange-brownish patch; costa suffused blackish posteriorly, with 3 light strigulae on posterior $\frac{1}{4}$; dorsum below fold suffused orange-ochreous. Cilia pale ochreous-whitish, suffused blackish with pale base on apex, in middle of termen, and on tornus; a semioval, moderate tuft of blackish cilia on dorsum beyond middle. Hindwings glossy, golden-yellowish, suffused with dark brown along edge, in apex, on dorsum and slightly on veins posteriorly; cilia ochreous-yellowish, suffused with blackish-brown, with an interrupted, dark antemedian line.

Genitalia ♂ (pl. 20, fig. 4). Tegumen short and broad. Saccus rounded, small. Valva moderately broad, narrowed towards apex, costa thickened, sacculus moderate, projecting, scobinate at the top. Uncus dilated and deeply emarginate at the top, with a small, bristled knob in this emargination. Gnathos a broad,

curved plate, with curved, scobinate projections at the sides and a strongly edged excavation in middle. Socii strong, rounded. Transtilla short, broad, straight. Aedoeagus rather narrow, somewhat curved at base, scobinate towards apex, with a dilated, chitinised plate at apex. Peniculi small, triangular projections connected with each other by a chitinous plate. Cornuti not perceptible (Slide No. 246 D, type).

E a s t J a v a, Tengger Mts., Nongkodjadar, 1300 m, 4.III.1940. (A. M. R. WEGNER). 1 specimen, worn, but very distinct. Only one representative of this genus was so far known, described from British India.

Lopharcha nov. gen. (fig. 3).

λόφος = a crest, ἀρχαῖος = old.

Head with dense, rather short and smooth scales above, rough at the sides of vertex. Antennae evenly ciliated in male, ciliations $\frac{2}{3}$, scape moderate, densely scaled. Palpi rather short, ascending, basal joint moderate, medial joint broadly dilated by dense appressed scales projecting below and around apex, this joint flattened from above and from the sides, cubical, terminal joint moderate, narrow, subacute, drooping. Proboscis short. Thorax with a double posterior crest.

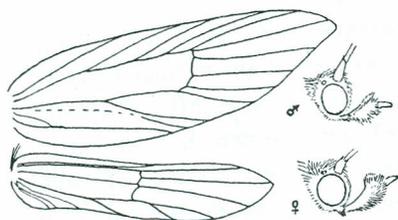


Fig. 3. *Lopharcha quinquestriata*, n. g., n. sp., ♂: wing-venuration ♀, head ♂, head ♀.

Abdomen with a large anal tuft in male. Forewings without scale-tufts (damaged), narrow, elongate, apex acute. 2 from about middle of lower margin of cell, 3 from angle, somewhat remote from 4, 4 - 7 remote from each other, parallel, 7 and 8 separate, 7 to costa, 8 from angle, 8 - 10 parallel, 10 from $\frac{2}{3}$, 11 from $\frac{1}{3}$ of upper margin of cell. Hindwings without cubital pecten, very narrow, about $4.5 \times$ as long as broad, apex acute, termen very oblique. 2 from before $\frac{2}{3}$, 3 and 4 stalked, from angle, 5 remote, parallel, from above middle of transverse vein, 6 and 7 separate, 7 to costa, 8 from base to about middle of costa.

Genotype *quinquestriata* nov. spec., ♂, ♀. Structurally allied to *Lophoprora* MEYR., but of uncertain affinity.

Lopharcha quinquestriata nov. spec. (fig. 3, pl. 30 fig. 3).

♂ 9 mm, ♀ 10,5 mm. Head leaden-greyish, mixed with whitish, face whitish, collar grey. Palpi dark grey, mixed with whitish. Thorax dark grey, mixed with whitish and brownish, posterior crests dark grey. Abdomen grey, banded whitish. Forewings with costa gently arched anteriorly, straight posteriorly, apex acute, termen somewhat sinuate above, very oblique, especially in ♂, tornus indefinite. Light yellow, suffused with brownish posteriorly, markings leaden-grey, mixed with blackish. Basal area dark leaden-grey, suffused with yellowish and black scales in middle, its outer edge rounded, from $\frac{1}{5}$ of costa to base of dorsum; three transverse fasciae: a vertical one on $\frac{1}{3}$, an inwardly oblique one from

$\frac{2}{3}$ of costa to dorsum beyond middle and another vertical one on $\frac{3}{4}$ of wing: leaden-grey, scattered with a few blackish scales on costa and dorsum; these fasciae have the shape of two triangles: one on costa and one dorsum, touching one another with the tops in middle of disc; apical area leaden-grey, with blackish transverse markings, its edge inwardly oblique; one or two black spots before this area on costa and dorsum. Cilia dark grey, with whitish base and tips, a broad antemedian and two narrow postmedian lines blackish. Hindwings grey, cilia grey with a narrow, whitish basal line.

Genitalia ♂ (pl. 20, fig. 3). Tegumen very small and slender; saccus a large, ovoid plate, with a rectangular, basal excavation. Uncus minute, narrow, curved, with long bristles at base. Valva large, elongate-ovate, gradually narrowed towards apex, costa indicated at base, broad, sacculus peculiar, very short, entirely isolated, covered with very long hairs. Transtilla and socii indefinite. Aedoeagus strongly chitinised, with a dilated top, cornuti (?) some 6 crochets. Juxta strong, rounded. (More material is necessary to read further peculiarities. Slide No. 242 D, type).

Genitalia ♀. Ovipositor lobes small, elongate, semilunar. Ductus moderately long, bursa elongate-pear-shaped, small, delicate, signum an elongate, scobinate plate. (Unfortunately the mount is lost by accident before an elaborate description and photograph were made).

E a s t J a v a, Tengger Mts, Nongkodjadjar, 1300 m, 25.III and 2.V.1940 (A. M. R. WEGNER). 1 ♂, 1 ♀. Both specimens in bad condition, but very distinct.

Drachmobola strigulata MEYR., 1910.

MEYRICK, Proc. Linn. Soc. N.S. Wales, vol. 35, p. 285.

E a s t J a v a, Tengger Mts., Kletak, 2000 m, 5.V.1940 (A. M. R. WEGNER). 1 specimen.

Genus **Diactenis** MEYR., 1907 (fig. 4).

The genus *Diactenis* MEYRICK was placed by this author in the family Tortricidae. When studying the genotype, *D. pteroneura* MEYR. 1907, I thought that this insect could scarcely be a Tortricid, as 1^o: it shows no traces of ocelli whatever and 2^o it possesses genitalia of a peculiar type, which was not known to me at that time in the family. To which of the other known families of Tortricina it must be attributed remained uncertain.

I put it preliminary in *Chlidanotidae* in spite of veins 8 and 9 in forewings being separate.

When discussing this matter, Mr T. BAINBRIGGE FLETCHER wrote to me that

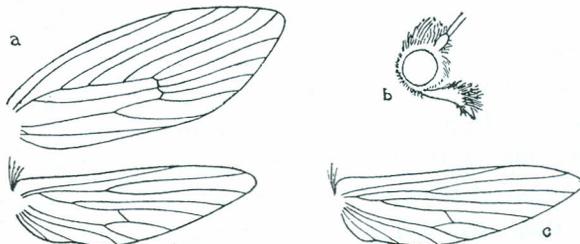


Fig 4. *Diactenis pteroneura* MEYR. ♀: a. wing-neruation, b. head. *D. haplozona* MEYR. ♀: c. neruation of hindwing.

he could not agree with my opinion and proposed to erect a new family for this genus.

A long series of specimens of the species, *Diactenis haplozona* MEYR. 1921, offered the opportunity to study this matter once more. In consequence of the discovery of *Proactenis*, gen. nov., which is intermediate between the present genus and *Schoenotenes* MEYR., I do not doubt any more that MEYRICK was right in regarding *Diactenis* as a Tortricid. The absence of ocelli in both *Diactenis* and *Proactenis* might be due to a considerable, secondary specialisation of both genera, while the neuriation of hindwings in *Diactenis* is not so puzzling now, as *Proactenis* forms a link between this genus and *Schoenotenes*.

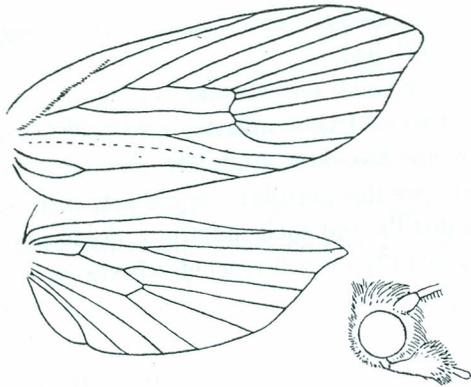


Fig. 5. *Proactenis sisir* n. sp. ♂, wing-neuriation and head.

The statement of MEYRICK that the discal cell in hindwings of the present genus is open between veins 5 and 6 is not correct. In reality (fig. 4a) the transverse vein is extremely oblique from origin to base of vein 4, the stalk of veins 6 and 7 originates from before middle (sometimes from before $\frac{1}{3}$: fig. 4c) of the distance between the stalk of 6 + 7 and the base of vein 4.

***Diactenis haplozona* MEYR., 1921** (fig. 4c, pl. 20 fig. 5, 7).

MEYRICK, Zool. Meded. Mus. Leiden, vol. 6, p. 149.

Genitalia ♂ (pl. 20, fig. 7).

Tegumen large and broad, saccus small, angulate, Valva rather small, abruptly narrowed beyond middle, a patch of crochets at the top, costa thickened, sacculus moderate, bristled. Uncus strong, with broad base, narrowed in middle, with a dilated bilobed and loosely haired apex. Gnathos strong, with two clavate projections at the top and two short dentations at their base on each side. Socii small, ovate. Transtilla a strong, sinuate rod, dilated at the extremities. Anellus small. Aedoeagus pistol-shaped, angulate, ending in a curved spine. Cornuti indefinite. (Slide No. 240 D).

♀ (pl. 20, fig. 5). Ovipositor small, narrowed towards apex, its lobes elongate. Anapophyses long. Ostium moderate, with minutely verrucate wall. Limen

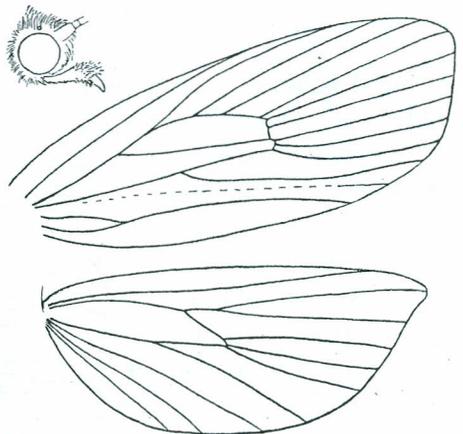


Fig. 6. *Schoenotenes synchora* MEYR. ♂, wing-neuriation and head.

indefinite. Ductus unarmed, membranous, long. Bursa is perceptible, with a long collum, reaching to $\frac{3}{4}$ of the length of ductus.

West Java, Mt. Gede, 1400 m, 18.XII.1940 (author). East Java, Tengger Mts, Nongkodjadar, 1300 m, 22.I-X.1940. (A. M. R. WEGNER). Southern slope of Mt. Semeroe, Ranoe Daroengan, 820 m, 21.I.1940 (author). Common at light. 26 specimens.

Proactenis nov. gen. (fig. 5).

Ocelli absent. Antennae in male ciliated, ciliations 1. Head with dense, roughly appressed scales. Proboscis moderate. Palpi moderate, porrected, medial joint dilated by rough projecting scales towards apex, especially long and expanded along upper edge, sometimes partially concealing terminal joint, which is slender, smooth, somewhat drooping. Thorax without crest. Forewings without costal fold, with small tufts of scales along veins, veins on underside of wing more or less edged with rows of scales. 3 from angle, 4 separate, approximated towards base, 5 - 7 almost parallel and equidistant, 7 separate, to termen. Discal cell narrowed posteriorly, with a complete parting vein from before base of 11 to above base of 5. Hindwings semipellucant: 1 to $\frac{2}{3}$, 2 from $\frac{5}{6}$ of cell, 3 from angle, 4 remote, 5 from lower $\frac{1}{3}$ of the distance between 4 and vertical posterior part of transverse vein, 6 and 7 stalked, from angle of cell, the latter abruptly and extremely narrowed and projecting posteriorly.

Genotype: *tricomma* nov. spec. ♂, ♀.

Intermediate between *Diactenis* MEYR. and *Schoenotenes* MEYR. A distinct and uniform genus. Differs by vertical upper part of transverse vein in hindwings; besides: from the first by much shorter veins in forewings, the discal cell being larger, by the origin of vein 5 in hindwings: in *Diactenis* from before upper $\frac{1}{3}$ to before $\frac{1}{2}$ of the distance between 4 and 6 + 7, and by broader hindwings and much larger size; from *Schoenotenes* by absence of ocelli and by neuration of hindwings; habitually the two genera are much alike. Distinct from *Proselena* MEYR. by scale-tufts in forewings and vein 3 in hindwings from angle, vein 5 remote from 4.

Besides the two following species also *centrosticta* DIAK. 1941, described as a *Schoenotenes*, belongs here.

Proactenis tricomma nov. spec. (pl. 20 fig. 9, pl. 21 fig. 1).

♂ 11 - 12 mm. Head dirty whitish. Palpi white, basal joint and half of medial joint dark brown, terminal joint tinged ochreous. Antennae dirty white, terminal half greyish. Thorax whitish, tinged greyish-ochreous. Forewings with costa little arched anteriorly, straight in middle, curved posteriorly, apex little rounded, termen oblique. Dirty white, tinged ochreous along costa, scattered with light brownish scales; markings dark brown. A round dot in $\frac{1}{5}$ of disc on $\frac{1}{3}$ of wing breadth, an elongate dot beyond $\frac{1}{2}$ of costa, connected by brownish suffusion with dorsum before tornus; a short oblique, transverse streak on $\frac{3}{5}$ of dorsum; in one specimen these dorsal markings form a brownish

suffusion on $\frac{3}{4}$ of dorsum, which is not connected with discal dot; minute dots along costa; interrupted, transverse, brownish strigulae on terminal area, the most distinct of them arched outwards; an indefinite brownish suffusion on base of costa. Cilia whitish, with an antemedian row of brown dots, distinct around tornus. Hindwings ochreous-greyish, dorsal $\frac{1}{3}$ grey, costa whitish. Abdomen brown, anal tuft greyish-ochreous. Legs whitish-ochreous, fore tibia and tarsus black.

Genitalia (pl. 20, fig. 9). Tegumen moderate. Saccus broad, rounded. Valva rather broad, spined apically, costa somewhat thickened at base, a dense patch of appressed bristles at apex; sacculus haired and thickened. Uncus triangularly narrowed above, its top bifid. Gnathos strong, with bowed arms and a straight, long point. Socii moderately long, narrow, hairy, drooping. Transtilla a sinuate V-shaped rod, with a long, curved and clavate projection on each side. Anellus rounded, small. Aedoeagus long, rather narrow, little curved. Cornuti not perceptible (Slide No. 224 D, paratype).

♀ (pl. 21, fig. 1). Ovipositor lobes narrow, dilated and projecting below (damaged). Anal segment with a triangular plate on each side. Anapophyses long. Limen a narrow, bowed rod and a thin, somewhat rippled plate. Ostium with lower margin curved, small. Ductus long, narrow. Bursa spheroid. Signum a stellate patch of small verrucae (Slide No. 245. D, allotype).

West Sumatra, Fort de Kock, 920 m, I - VI.1932 (Dr E. JACOBSON). 2 ♂, 1 ♀. Type in the Leiden Museum.

Proactenis sisir nov. spec. (fig. 5, pl. 21 fig. 2).

 (sisir, Javan.) = a comb.

♂ 12 - 14 mm. Head whitish, middle of crown suffused with dark brown; palpi broadly dilated by rough, projecting scales above and beneath, white at the inner side, at the outer side ochreous-whitish, densely suffused with dark brown, especially the medial joint. Thorax brownish-grey, patagia whitish, mixed with greyish-brown. Abdomen with base, apex, anal tuft and lower surface pale ochreous-whitish, suffused dark grey elsewhere. Forewings with raised scales on veins, elongate, costa gradually, moderately curved from base to apex, slightly depressed in middle, apex acute, termen slightly sinuate above, little rounded beneath, oblique. Dirty whitish, scattered with many minute, brownish scales; markings formed by raised scale-tufts on veins, interrupted between veins, ochreous, greyish-brown and dark brown. Costa on basal $\frac{1}{2}$ suffused and barred with dark greyish-brown; basal area indicated by a grey suffusion, reaching to $\frac{1}{5}$ of dorsum, its outer edge vertical from dorsum to $\frac{3}{4}$ of disc, connected here with a small, laying, C-shaped, dark brown mark, indistinct above this mark; an oblique, transverse fascia, beginning by a triangular, suffused, dark brown dot on costa before middle, consisting of an inwardly curved row of brownish-blackish dots on veins, reaching to middle of disc before $\frac{3}{5}$ of wing length, edged by ochreous suffusion; an almost vertical strigula on $\frac{1}{2}$ of dorsum reaching $\frac{2}{3}$ across wing and another, inwardly oblique

one from $\frac{4}{5}$ of dorsum, angularly bent above middle of wing, not reaching costa: ochreous-greyish, veins between these strigulae minutely dotted and scattered with greyish; a regularly curved, greyish, suffused striga, dotted blackish on veins, running from $\frac{3}{4}$ of costa to tornus; apical area striped ochreous-greyish on veins beyond this; edge of wing from $\frac{3}{4}$ of costa to tornus narrowly suffused grey, dotted with dark brown; dark brown dots on middle of dorsum. Cilia whitish, with a grey median line, suffused and barred with grey on basal half. Hindwings light grey, suffused with darker brownish grey on veins, on dorsum and along terminal and apical edge; cilia greyish or brownish, with a paler base and sometimes with a suffused, grey antemedian line. Legs pale ochreous-whitish, fore and middle tibiae and fore tarsi dark bronzy-brown.

Genitalia ♂ (pl. 21, fig. 2). Tegumen broad. Saccus rather broad, rounded. Valva moderately broad, its top rounded; a patch of long spines before outer edge. Costa thickened at base. Sacculus thickened and haired. Uncus broad at base, narrowed towards apex, bifid. Gnathos broad: curved arms and long, straight point. Socii elongate, hairy, drooping. Transtilla V-shaped, curved at extremities, dilated in middle; a membranous plate projecting above its middle, chitinised and serrate along upper margin. Anellus semicircular, moderate. Aedoeagus very long, narrow, little curved, with rounded-pointed apex (Slide No. 225 D, paratype).

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 8.IV.1934; 15.III-3.IV.1940. (A. M. R. WEGNER). 4 ♂. Closely allied to preceding species.

Schoenotenes paraptera MEYR., 1910.

MEYRICK, Tr. Entom. Soc. Lond., 1910, p. 433.

South Sumatra, Summit of Mt. Tanggamaes, 2100 m, 21.VII.1934 (Dr L. J. TOXOPEUS). 1 ♀. A large (21 mm) and fine specimen, tinged throughout with pale brownish. Veins 3 and 4 in hindwings connate.

Schoenotenes sychorda MEYR., 1908 (fig. 6).

MEYRICK, J. Bombay Nat. Hist. Soc., vol. 18, p. 620.

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 7.II.1940, at light (A. M. R. WEGNER). 1 ♂, Veins 3 and 4 in hindwings shortly stalked.

Schoenotenes nivis nov. spec. (pl. 20 fig. 8).

♂ 13,5-15,5 mm. Head and thorax white, mixed with light brownish-greyish. Palpi white, medial joint blackish along upper side, except at apex, where it is brownish laterally, terminal joint suffused brownish-greyish in middle. Abdomen white. Forewings with tufted, raised, double scale-rows along veins, thinly scaled between these, costa little curved at base, rather straight in middle, apex broadly rounded, ill-defined, termen broadly rounded, somewhat oblique. Snow-white, markings suffused with brownish-greyish, dotted with black. Black, short, transverse bars on costa, small dots along termen;

basal area with an indistinct, greyish suffusion, darker on costa, not reaching dorsum, a few black dots along outer edge on $\frac{1}{6}$ of disc; a greyish-brownish, rather narrow, oblique streak from before $\frac{1}{2}$ of costa, reaching to middle of disc at before $\frac{3}{5}$ of wing length, slightly dilated and rounded below, edged on costa by two black strigulae, dissolved in rows of black dots below costa; two transverse, vertical, black marks on $\frac{1}{2}$ of dorsum, preceded by a short, narrow, black streak in disc; two black costal dots: on $\frac{3}{4}$ and before apex, connected below by two suffused greyish striae, dotted black, forming obtuse triangle, connected by a very narrow, almost vertical strigula with a small greyish dot on dorsum before tornus; a small, vertical mark in tornus reaching halfway across wing; another such mark before apex; sometimes these markings more or less connected with each other by narrow, suffused strigulae. Cilia white, with an indistinct antemedian line. Hindwings pellucid, denser scaled on veins, white, with a golden shine, narrowly edged silvery-white, cilia white. Legs white, fore tibiae and tarsi suffused with blackish.

Genitalia ♂ (pl. 20, fig. 8). Tegumen strong. Saccus moderate, elongate-ovate. Valva moderate, abruptly narrowed and bristled beyond middle, costa and sacculus thickened, the latter with an apical spine. Uncus strong, with a clavate and somewhat bilobed top, lobes rounded, a large, curved ventral hook below top. Gnathos strong, broad, with a curved point and two rounded, hyaline lateral projections. Socii triangular, acute, chitinised, thinly haired. Transtilla small, narrowed in middle, scobinate, semimembranous. Anellus strong, curved, horse-shoeshaped. Aedoeagus little curved, broad, entirely moderately chitinised (Slide No. 237 D, type).

East Java, Tengger Mts., Nongkodjadar, 1300 m, 7.II. - 25.V.1940, at light (A. M. R. WEGNER). 7 ♂. Intermediate between *paraptera* and *synchorda* MEYR., genital apparatus distinct. Nearest to *paraptera* MEYR., but much smaller, wings much more elongate and narrowed. Veins 3 and 4 in hindwings approximated towards base.

Schoenotenes discreta nov. spec. (pl. 22 fig. 7 - 8).

♂ 14,5 mm, ♀ 14,5 - 15 mm. Head, palpi and thorax rather light mouse-grey, tips of scales on vertex white, palpi at base whitish. Abdomen light ochreous, suffused with greyish at the extremities, tinged yellowish in middle, anal tuft light greyish-ochreous. Forewings ovate, with costa considerably curved throughout, very little projecting beyond middle, apex broadly rounded and indefinite, termen a little curved above, almost straight in middle, rounded and projecting beneath, outwardly oblique. Lilac-greyish, cloudy suffused mouse-grey along costal half and edges of markings. Markings sharply edged, light mouse-grey, very faintly tinged brownish, narrowly edged whitish, regularly mixed with numerous small, whitish scales, speckled with regular black points. Basal area with some 6 black points, with curved and undulate edge from about $\frac{1}{7}$ of costa to about $\frac{1}{4}$ of dorsum, with a short, rounded projection below fold; a rounded erect patch at about $\frac{2}{5}$ of costa, not reaching halfway across wing, with 4

black points; a vertical transverse fascia a about $\frac{3}{5}$, narrow on costa, a little broader on dorsum, with deeply undulate edges, a dilatation above middle of disc dotted with black, enclosing a round patch of groundcolour; a transverse terminal blotch, narrow and interrupted along tornal edge to about vein 4, 3 times as broad before upper part of termen and before apex, narrowed again on costa, reaching to about $\frac{3}{4}$ of the latter, with undulate edges; sometimes its anterior end on costa separated, forming a round, whitish-edged dot with a black point; a row of black points along its anterior upper half and along termen to tornus; costa with cloudy dark leaden-grey bars, confluent towards apex, continued by a very narrow dark leaden-grey line along edge of wing to vein 4. Cilia: on costa throughout orange-crimson, elsewhere brownish-greyish, tipped white, with a broad dark leaden-grey basal band except on tornus. Hindwings dark golden-ochreous, suffused with dark grey towards dorsum and termen, dark brownish towards apex.

Genitalia ♂ (pl. 22, fig. 7). Tegumen broad, rather short, its pedicels moderately narrowed. Saccus rather large, projecting, rounded at the top. Valva elongate, narrow, concave, costa moderate, sacculus somewhat dilated at base, little distinct; an apical patch of rough, curved bristles and a discal crest of long hairs. Uncus broad at base, its tip curved, deeply furcate. Socii narrow, large, drooping. Gnathos strong, with a curved point, which is emarginate below. Transtilla a chitinous straight rod, with a triangular dilatation in middle of upper edge. Anellus peculiar: a deeply furcate plate. Aedoeagus very narrow and long, sinuate. Cornuti not perceptible. (Slide No. 275 D, paratype).

♀ (pl. 22, fig. 8). Ovipositor lobes narrow, elongate. Limen not chitinised: a wrinkled rim. Ductus very narrow, evenly chitinised along upper $\frac{1}{3}$, moderately long. Bursa very large, elongate-ovoid, thin-walled. Signum an elongate patch of short verrucae. (Not perceptible in the photograph, as in the specimen mounted the bursa is filled up by the spermatophore with a thick wall. Slide No. 276 D, paratype).

East Java, Tengger Mts., Nongkodjadjar, 5.V - 21.XI.1940 (A. M. R. WEGNER, at light). 3 ♂, 2 ♀. A very distinct and uniform species. Veins 3 and 4 in hindwings very shortly stalked, vein 5 connate with stalk.

PERONEADES.

Planostocha cumulata MEYR., 1907.

MEYRICK, J. Bombay Nat. Hist. Soc., vol. 17, p. 977.

East Java, Tengger Mts, Baoeng Fall, 800 m, 16.XI.1940; Nongkodjadjar, 1300 m, 5.V. - 27.XI.1940, at light (A. M. R. WEGNER). 2 ♂, 2 ♀.

Argyrotoza erythrites MEYR., 1928.

MEYRICK, Exot. Microl., vol. 3, p. 641.

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 28.I. - 24.III.1940, at light (A. M. R. WEGNER) 2 ♂, 1 ♀. Described from West Java (Mt. Gede).

A very variable species, sometimes with a black dot on $\frac{1}{4}$ of dorsum and two conspicuous, whitish discal dots edged with orange; one specimen without both these marks, but with tornal half of wing orange-brownish, grey elsewhere, the edge between these two areas running from about $\frac{1}{4}$ of dorsum to upper $\frac{1}{3}$ of termen.

***Spatalistis cyanoxantha* MEYR., 1907.**

MEYRICK, J. Bombay Nat. Hist. Soc., vol. 17, p. 979.

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 13.II - 27.XI.1940, at light (A. M. R. WEGNER). 4 ♂, 5 ♀.

***Eboda variabilis* nov. spec. (pl. 21, fig. 3 - 4).**

♂ 12 - 12,5 mm. Head and scape of antennae dark grey, face whitish; flagellum of antennae ochreous-greyish, suffused dark grey from above. Palpi whitish, medial joint suffused dark grey along upper side, terminal joint dark grey, except tip. Thorax and patagia edged anteriorly with dark grey, posteriorly dark ochreous or ochreous-yellowish, pink-tinged. Abdomen with basal 2 or 3 segments ochreous-yellowish, dark grey elsewhere, anal tuft pale ochreous mixed with greyish. Forewings with costa abruptly arched at base, bent on $\frac{3}{5}$, straight before and beyond this, apex pointed-obtuse, termen rather straight above, broadly rounded beneath. Very variable in colouring and markings. Bright ochreous, more or less tinged with pink and violet, or suffused with orange; costa, and apex dark leaden-grey, sometimes dotted with ferruginous, inner edge of grey colouring well-defined, running from middle of base of wing to below $\frac{3}{4}$ of costa, from here semicircularly bowed to termen above tornus; a more or less distinct dark grey, transverse fascia, narrowed in disc, from costa before $\frac{1}{2}$ to $\frac{1}{3}$ of dorsum, dilated along the latter to a suffusion along basal $\frac{1}{2}$ of wing, not reaching base; a transverse row of small, irregular, black scales in middle of wing, more or less edged with orange; basal $\frac{1}{2}$ of wing suffused with grey and yellowish or orange, transversely strigulated with ferruginous; posterior, almost circular area bright ochreous tinged with pink, dotted and retinate with dark brown, or violet with a light pink edge, in one specimen a large, oblique, semiovate black patch above end of fold; a few blackish dots on tornus. Cilia grey, with light base and a dark grey antemedian line. Hindwings dark grey, blackish on veins, with base whitish, semipellucet, except a blackish line along dorsum.

♀ 13 mm. Head and posterior edge of thorax bright brown, face lighter. Palpi whitish as in ♂, but with ochreous-brownish. Thorax lilac-greyish; abdomen light brownish-ochreous at base, greyish-brownish posteriorly. Forewings of the same shape as in ♂, greyish, suffused with pink and grey-violet; transverse fascia scarcely perceptible, wing before this darker; costa tinged with orange, dotted black; apex and termen suffused as in male but tinged with pink and dotted black; dark brownish dots on dorsum corresponding with indistinct, transverse, brownish strigulation in disc. Cilia ochreous-pink, a pink-

tinged antemedian line. Hindwings brownish-greyish, suffused darker towards apex; cilia pale ochreous-greyish with antemedian line.

Genitalia ♂ (pl. 21, fig. 3). Tegumen elongate, with narrow pedunculi. Saccus small. Valva with base of costa strongly chitinised, forming a semi-circular plate, edged by a row of 6-8 strong setae in the disc of valva; costa posteriorly membranous, bristled, bearing an extremely long digitus with a long seta at its base and another one before middle and bristles towards apex; saeculus thickened at base, with a dense row of long curved hairs, and ending into two broad projections: a ventral, densely bristled one, and a dorsal, smaller one, which bears a row of long setae along the edge; between these lobes and digitus a long, curved process, bristled at the top. Uncus small, triangular. Gnathos paired, its arms narrow, pointed, with a patch of bristles before middle. Socii two patches of bristles at the base of gnathos. Transtilla a trapezoid plate. Anellus V-shaped. Aedocagus large, broad, pointed. Cornuti 2 large spines (Slide No. 247 D, paratype).

♂ (pl. 21, fig. 4). Ovipositor lobes rounded at the top, projecting below. Two scaled plates at the side of anal segment. Limen: a broad transverse band with a cuspidate, verrucose projection in middle, in dilated extremity of which opens the small ostium. Ductus broad above, narrowed downwards, unarmed. Bursal wall shows a retinate structure. Signum absent (Slide No. 250 D, paratype).

East Java, Tengger Mts., Nongkodjadar, 1300 m, 24-26.VI.1940 (A. M. R. WEGNER). 2 ♂, 2♀.

***Tymbarcha translucida* nov. spec.** (pl. 21 fig. 6).

♂ 13-14 mm, ♀ 15 mm. Head and thorax pale whitish-yellowish (in ♀ tinged with olive-greyish), thorax with a transverse, blackish streak and a posterior crest with blackish tip. Palpi dirty whitish-ochreous, greyish in ♀, suffused with brownish-greyish towards apex, drooping. Abdomen pale yellowish-greyish, in ♀ dark grey posteriorly, shining. Forewings broader in ♀, with costa angularly projecting beyond middle, oblique anteriorly, excavate posteriorly, in ♂ with a fold to $\frac{2}{5}$, apex obtuse, termen short, sinuate, projecting below. ♂ pale ochreous-yellowish, suffused with ochreous-greyish and densely retinate and strigulated dark blackish-brown; greyish-ochreous spots: on $\frac{1}{2}$ and on top of fold, a suffusion of the same colour in middle of costa reaching almost to middle of disc and then obliquely to centre of cell; a streak of same colour along posterior $\frac{1}{3}$ of costa and on apex; a rather well defined, inverse-cordiform, pellucet, whitish spot below $\frac{2}{5}$ of costa, narrowly edged dark brown, with a raised tuft of black scales in indentation of its lower edge; dorsum below fold transversely strigulated, tornal part of wing coarsely retinate with dark blackish-brown; more or less distinct, oblique zigzag series of small streaks from here towards posterior part of costa; a dark line along fold and along lower cell-edge and vein 4 and dark edge of costal fold especially conspicuous. ♀ entirely suffused with pale olive-grey, of dark retination remain only a streak along base of vein 12,

a scale-tuft in middle of lower base of pellucet spot (which is larger and more triangular and is connected by a pale yellow fascia with a brownish streak on $\frac{2}{5}$ of costa), some cloudy strigulae in centre of base, a rather broad streak along fold to tornus and an oblique series of dots from middle of costa to tornus. Cilia pale ochreous, deep orange-ochreous on basal half, with two broad, suffused dark grey bars on lower part of termen and in tornus. Hindwings light ochreous in ♂, suffused with grey in ♀, basal half whitish, cilia pale ochreous or greyish with an antemedian shade.

Genitalia ♂ (pl. 21, fig. 5). Tegumen moderate, rather broad. Saccus a semicircular, thick bar. Valva elongate, curved, costa distinct but narrow, with large bristles posteriorly, sacculus thickened; densely bristled, with a truncate, curved apical projection; digitus long, rather broad, little narrowed apically, with 1 bristle. Uncus very short, indefinite, rounded, socii large, elongate, drooping, hairy. Anus supported by a short, broad tube. Gnathos (?) a long, drooping hook. Transtilla absent. Aedoeagus very short, pear-shaped, its top truncate. Cornutus one elongate, chitinous body (Slide No. 256 D, paratype).

♀ (pl. 21, fig. 6). Ovipositor lobes elongate-ovate, rather narrow, with well defined lower lobes. Ostium broad, circular, supported by a T-shaped body on each side. Ductus moderately broad, not chitinised. Bursa moderate, elongate-egg shaped. Signum absent (Slide No. 263, allotype).

West Java, Mt. Gede, Tjibodas, 1400 m, 17.XI.1940 (Mrs E. FERMAN-STOFFEL and Dr J. H. G. FERMAN). 18.XII.1940 (author). 2 ♂, 1 ♀. Closely allied to the Indian *T. cerinopa* MEYR.

Genus *Peronea* CURTIS.

The Palearctic species of this genus are notorious by their endless variations of colouring. Very probably their Indo-Malayan relatives will prove to vary in the same extent. As most of them have been described after a few specimens each, we are badly informed about this matter at present, which makes their discrimination difficult. A study of genital characteristics of MEYRICK's types has become highly necessary, as it is the only safe guide in this case.

Peronea epidesma (Low., 1901) MEYR. 1910.

Polylopha epidesma LOWER, Trans. Roy. Soc. South Austr., vol. 25, p. 71.

Oxygrapha porpacias MEYRICK, J. Bombay Nat. Hist. Soc., vol. 18, p. 625, 1908.

Peronea epidesma, MEYRICK, Proc. Linn. Soc. N.S. Wales, vol. 35, p. 292-293, 1910.

Central Java, Kedoengdjati, 50 m, bred from larva rolling leaves of "kalak" (*Anonaceae*), 13.VII - I.IX.1922 (Dr L. G. E. KALSHOVEN). 1 ♂, 2 ♀.

Peronea angustior nov. spec. (pl. 21 fig. 8).

♀ 15 - 17 mm. Head greyish-brown, scattered and mixed with light-greyish. Palpi dark greyish-brown, median and terminal joints mixed apically with light greyish. Antennae dark-brown, light-ringed. Thorax light greyish-lilac, ferrugi-

nous-blackish anteriorly; patagia edged whitish. Abdomen brownish, ringed light ochreous. Forewings narrow, elongate, costa gently, gradually arched anteriorly, apex acute, termen slightly sinuate above, very oblique. Fuscous, mixed with blackish-brown and with a few whitish-ochreous scales, transversely strigulated with shining, whitish-purplish fasciae. Three transverse, blackish bars on base of costa, alternating with light grey; basal area not reaching $\frac{1}{3}$ of wing, with shining, blue, transverse spots, edged by a thick, crested row of blackish-brown scales, mixed with ochreous-brownish, obtusely angulated above middle; another such crest straight, beyond middle of wing on dorsum, not reaching middle of disc; a brownish dorsal suffusion, shining purplish in some lights, its upper edge from above middle of basal area to before tornus, continued to apex by dark brown terminal suffusion, the latter interrupted by whitish, transverse strigulae: a pair in tornus and about 4 on termen; remaining obliquely-triangular costal area of groundcolour more or less conspicuous, fuscous, with about 3 entire and 5 costal transverse irregular fasciae, shining purplish-lead in some lights, the last of them short and broad, just before apex; the latter with a shining dash. Cilia ferruginous-blackish, slightly mixed with light-greyish, with a dark, antemedian line. Hindwings narrowly elongate-trapezoidal, dark fuscous, with lighter base; cilia dark fuscous.

Genitalia ♀ (pl. 21, fig. 8). Ovipositor lobes small, lower lobes well-developed. Limen a moon-shaped, membranous plate, with a narrow split in middle, being the ostium. Ductus membranous, unarmed, moderately long and broad. Bursa elongate-pearshaped. Signa two patches of fine bristles (Slide No. 266 D, paratype).

E a s t J a v a, Tengger Mts., Nongkodjadar 1300 m, 7.II and 29.IV.1940 (A. M. R. WEGNER). 2 ♀. This narrowly winged species is allied to *rapax* MEYR.

Peronea herbaecolor nov. spec. (pl. 21, fig. 7, pl. 22, fig. 2).

♂ 12 - 14 mm, ♀ 14 mm. Head and thorax olive-green, the latter with a blackish antemedian band of raised scales, double posterior crest blackish. Palpi with basal joint light ochreous, median joint broadly triangular, dark ferruginous-brown, scattered light-grey, terminal joint narrow, light grey, with a preapical dark ring in ♂. Antennae grey, ringed black, serrulations in ♂ minute. Abdomen ochreous-brown. Forewings with costa considerably arched anteriorly, straight posteriorly, apex acute, projecting, termen below apex straight, somewhat oblique. Metallic-green, mixed with olive-green, fuscous and lilac-grey, with 6 - 7 transverse rows of crests. Costal $\frac{2}{3}$ of wing green, with transverse, blackish crests and transverse, brownish strigulae between these; basal half of dorsum also green, with ferruginous-blackish and fuscous suffusion on base and an almost vertical, triangular patch of raised scales, reaching to disc above middle, fuscous, edged posteriorly by blackish, being the edge of basal area; posterior half of wing from $\frac{2}{3}$ of costa to before $\frac{1}{2}$ of dorsum, ferruginous-brown or dark fuscous, strigulated blackish, a few whitish scales between veins; two conspicuous, transverse fasciae, almost vertical,

greenish with lighter margins: first from tornus just above termen, reaching half across wing, acute above, second from termen above middle to costa before apex, acute below; both edged by blackish, forming black transverse markings: in tornus and on termen below half and below apex; preapical fasciae above-mentioned and three other ones on dorsum, shining lilac in some lights; apex blackish or fuscous, shining lilac. Cilia light grey, mixed with dark brown, blackish-brown on apex and below tornus: with light base and 4 blackish median lines. Hindwings dark fuscous-brownish, lighter anteriorly, glossy; cilia greyish-ochreous, brownish dorsally, with a brown antemedian line.

Genitalia ♂ (pl. 21, fig. 7). Scopa dorsalis a membranous, triangular flap. Scopa ventralis represented by two erectile pencils of long hairs, partially withdrawn in tubular folds of sternite. Tegumen small, short. Saccus small, rounded. Valva large, elongate-ovate, swollen up, densely haired, costa and sacculus indistinct. Uncus well-developed, but moderate, narrow, curved, dilated at apex. Socii moderate, drooping, covered with long, erect bristles. Gnathos strong, circular, with a long point. Transtilla broad, narrowed towards extremities, bristled. Anellus rounded. Aedoeagus very long, narrow, little curved, with a chitinous stylet at the top, serrate along one side; cornuti not perceptible (Slide No. 267 D, paratype).

♀ (pl. 22, fig. 2). Ovipositor lobes small, narrowed below. Limen a narrow, bowed band. Ostium split-shaped. Ductus long, narrow. Colliculum a clavate, short tube. Bursa rather small, spheroid-bootshaped. Signa two patches of fine bristles (Slide No. 271 D, allotype).

E a s t J a v a, Tengger Mts, Nongkodjadjar 1300 m, 24.II and 1.XI.1940 (A. M. R. WEGNER). ♂, ♀.

Peronea orthioterma nov. spec. (pl. 22 fig. 1).

ὄρθιος = steep, *τέρμα* = end marge.

♂ 14 mm. Head, palpi and tegulae dark blackish-blueish-brown, with some violet shine, tips of scales light, thorax blackish with a violet shine, posterior crest as tegulae; palpi rather long, terminal joint blackish. Abdomen brownish-grey. Forewings elongate, rather broad, somewhat dilated posteriorly, costa considerably arched from base to apex, especially anteriorly, apex somewhat projecting, acute, termen sinuate above, rather straight below, little oblique. Basal area on costa to before $\frac{2}{5}$, its edge indicated by a narrow black line, convex, somewhat rounded-projecting in middle, prolonged along dorsal wing-half, tornus and termen to apex; dark brownish-blackish, with 3 blueish-lead, triangular spots on dorsum not reaching halfway across wing, narrowly edged blackish on dorsal edge, a short, blackish streak above end of fold, an ovate, black patch in tornus edged with light whitish-ochreous anteriorly; 3 terminal, small, oblique, blueish-lead fasciae, narrowly edged with whitish-ochreous: just above tornus, below middle of termen and before apex, decreasing in width and length towards apex, alternating with suffused black streaks; the remaining

area from before $\frac{2}{5}$ of costa to before apex with gradually curved lower edge, reaching beyond half of wing breadth, semioval, light whitish-greyish tinged olive, scattered with olive posteriorly, 3 dense tufts of raised scales in disc blueish-leadene; apex blueish-leadene, a blackish dot before it. Cilia dark blueish-leadene, with a faint violet shine, tips of scales whitish, a narrow basal streak along termen pale-ochreous. Hindwings and cilia rather dark brownish-grey, faintly shining, the latter with a pale basal line.

Genitalia ♂ (pl. 22, fig. 1). Scopa dorsalis a membranous, triangular flap. Scopa ventralis two erectile pencils of long hairs, in resting position withdrawn into tubular folds of sternite. Tegumen small. Saccus small. Valva elongate, swollen up, pointed, haired. Costa and sacculus not perceptible. Uncus well developed, ending in a narrow hook. Socii large, drooping, covered with fine, long bristles. Gnathos moderate, with narrow arms and a stout point. Transtilla membranous, somewhat narrowed towards extremities, indistinct in middle. Anellus small, covered with weak dentations. Aedoeagus long, straight, rather broad. Cornuti absent (Slide No. 270 D, type).

East Java, Tengger Mts., Nongkodjadjar, 1300 m, 27.II.1940 (A. M. R. WEGNER, at light). 1 specimen. Allied to *expleta* MEYR.

Phricanthes flexilineana (WALK., 1863).

Sciaphila flexilineana WALKER, List Lep. Het. Brit. Mus., vol. 28, p. 345-346.

Phricanthes macroura LOWER, Trans. Roy. Soc. South Australia, 32, p. 322-323, (1908).

Peronea flexilineana, MEYRICK, Proc. Linn. Soc. N.S. Wales, vol. 35, p. 292, 1910. DIAKONOFF, Treubia vol. 18, p. 390, 1941.

North East Sumatra, Medan, 100 m (Dr L. FULMEK). West Java, Depok, 45 m, 26.XII.1920 (KARNY). 2 ♀.

MELANALOPHIDAE fam. nov.

The following genus shows a distinct affinity to the phylum Tortricina, but can be distinguished at once by the presence of a pecten on the scape of antennae, which feature is not known in any family of Tortricina. Roughish head, dilated palpi, configuration of veins, absence of cubital pecten in hindwings remind of Tortricidae, but the genitalia are of Eucosmid type. I propose therefore, to make it the type of a new family.

Melanalopha nov. gen. (fig. 7).

μέλας = dark, αλόφος = without a crest.

Ocelli present. Head with two large lateral fans of roughly appressed scales above, touching each other in middle of vertex, face with loosely appressed scales. Antennae about $\frac{2}{3}$, shortly ciliated, scape very short, with pecten. Palpi short, narrow, porrected, rather smooth, medial joint scarcely dilated at apex, terminal joint subacute, smooth. Proboscis almost vestigial. Thorax without crest,

smooth. Abdomen moderate, with a small anal tuft in male. Legs moderate. Forewings without scale-tufts, very broad, almost triangular; all veins separate, 1b with a moderate furca, 2 from beyond $\frac{1}{2}$ of lower margin of cell, 3 from angle, 3 - 6 remote, 4 - 7 almost equidistant, 7 separate, to termen, 8 from upper angle of cell, 8 - 11 parallel, 10 from beyond $\frac{2}{3}$, 11 from $\frac{1}{3}$ of upper margin of

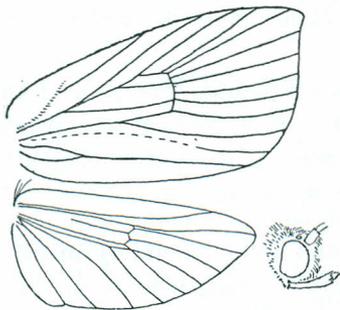


Fig. 7. *Melanalopha lathraea*, n. g., n. sp. ♀: wing-neuration and head.

cell, one parting vein from between 10 and 11 to between 6 and 7, another one from before base of 11 to between 4 and 5. Hindwings without cubital pecten, semiovate, 2 from beyond $\frac{3}{4}$, 3 from projecting angle of cell, connate with 4, 5 parallel, from below middle of cell, 6 and 7 separate, somewhat approximated and parallel along basal $\frac{1}{3}$, 7 to apex, 8 from base, approximated to upper margin of cell along basal $\frac{1}{2}$, diverging posteriorly, to costa before apex; two complete parting veins close and parallel to sides of cell, fragment of third between 5 and 6.

Genotype *lathraea* nov. spec.

This is a very strange genus, reminding as well of a broad-winged Glyphipterygid as of an Eucosmid.

Melanalopha lathraea nov. spec. (fig. 7, pl. 22, fig. 3 - 5).

λαθραϊος = mysterious.

♂ 8,5 - 9,5 mm, ♀ 9 - 10 mm. Head, palpi and antennae very dark blackish-brown, thorax and abdomen somewhat lighter, dark bronzy-brown. Forewings broad and short, costa gradually curved from base to apex, apex rounded, termen rounded, little oblique. Shining bronzy-greyish-brown, leaden-grey and purplish-shining in some lights, markings dull, dark ferruginous-bronzy. Basal area indicated by indistinct bronzy suffusion, a few dots of this colour on costa; transverse fascia rather narrow, about $\frac{1}{2}$ of costa outwardly oblique on upper half of wing, in ♂ not reaching further, in ♀ bowed more vertically below $\frac{1}{2}$ of disc, to about $\frac{3}{4}$ of dorsum, dark ferruginous-bronzy, apex from about $\frac{4}{5}$ of costa to middle of termen suffused with the same colour, anterior edge of this suffusion parallel to central fascia; terminal area minutely strigulated with whitish-greyish, a minute, interrupted preterminal strigula of the same colour; some 5 suffused whitish markings on posterior half of costa, alternating with black. Cilia blackish-bronzy. Hindwings dark grey, suffused blackish along apex, and termen; cilia grey, with a blackish antemedian line.

Genitalia ♂ (pl. 22, fig. 3). Tegumen deeply excavate from below and forming a bowed band. Saccus small. Valva elongate, clavate, excavate in middle of lower edge, spined at the top, with a series of shorter spines along margin; sacculus bristled and thickened. Uncus, gnathos and socii indefinite, the top of tegumen somewhat indent. Transtilla incomplete, two short lateral

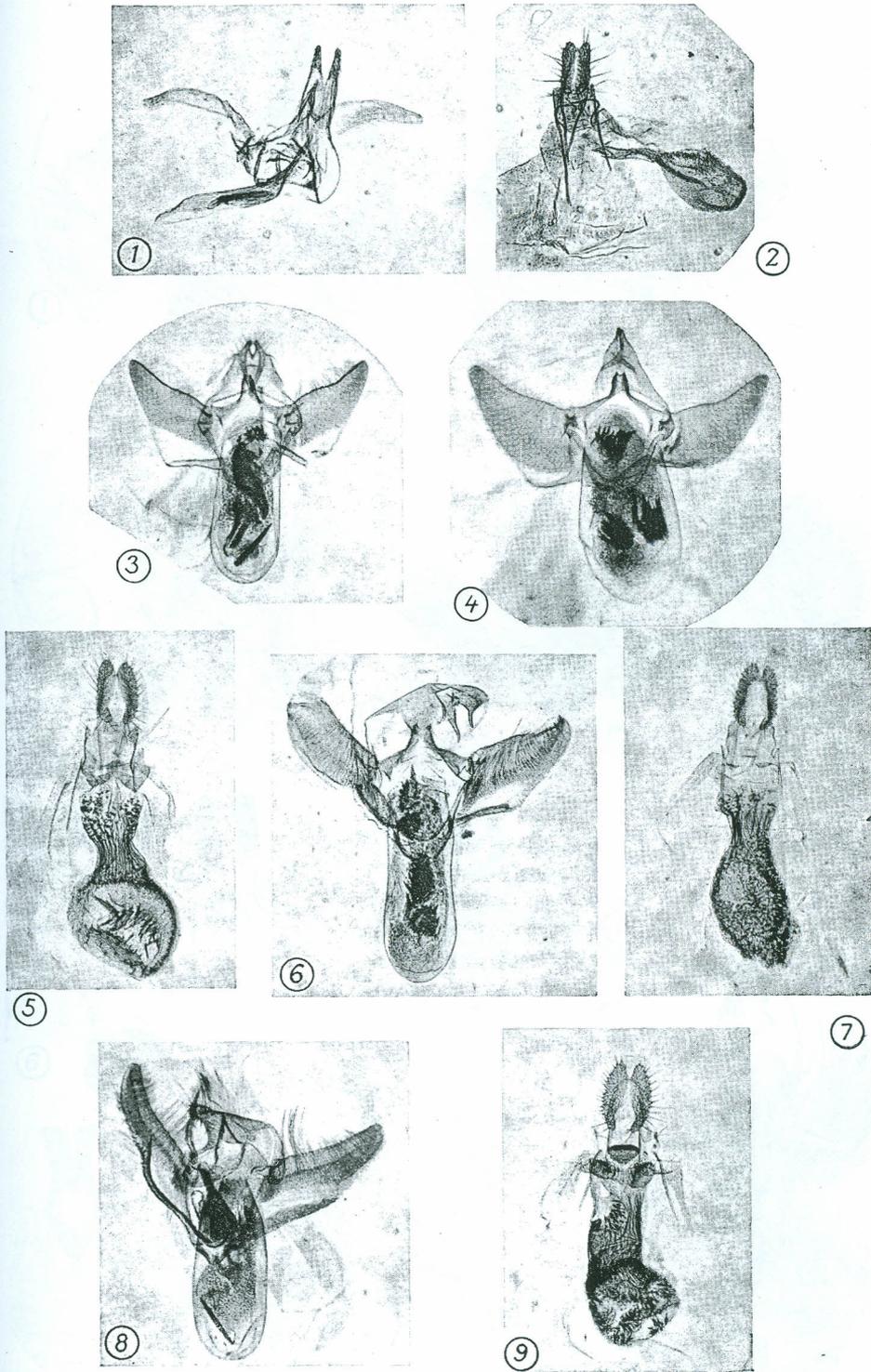
projections. Auriculae present below the base of these projections: chitinous flaps, each with a patch of long hair-bristles. Anellus strong. Aedoeagus hinged, pistol-shaped, with a long pediculum. Cornuti a sheaf of long spines. Abdomen with distinctly chitinised, dark coloured sternites and tergites on every segment. 1st abdominal segment possesses peculiar scale-brush and an ovate patch of pitchy black scales (pl. 22, fig. 4). The narrow scales show peculiar granular structure at their base. Very probably this is a scent organ (Slide No. 239 D, paratype).

♀ (pl. 22, fig. 5). Ovipositor lobes elongate, rather narrow, rounded at the top. Anapophyses darkly chitinised, but narrow and short. Ostium narrow. Limen: a small, triangular plate with thickened upper edge, a verrucose plate on each side. Ductus short, colliculum elongate, with a split at the fore side. Bursa with a conoid, chitinised and verrucate neck and a membranous, pear-shaped body. Signum absent (Slide No. 244 D, paratype; a spermatophore filling up the lower part of bursa, and a broken off cornutus of the male are perceptible).

E a s t J a v a, Tengger Mts, Nongkodjadjar, 1300 m, 8.V.1940. (A. M. R. WEGNER). 4 ♂, 3 ♀.

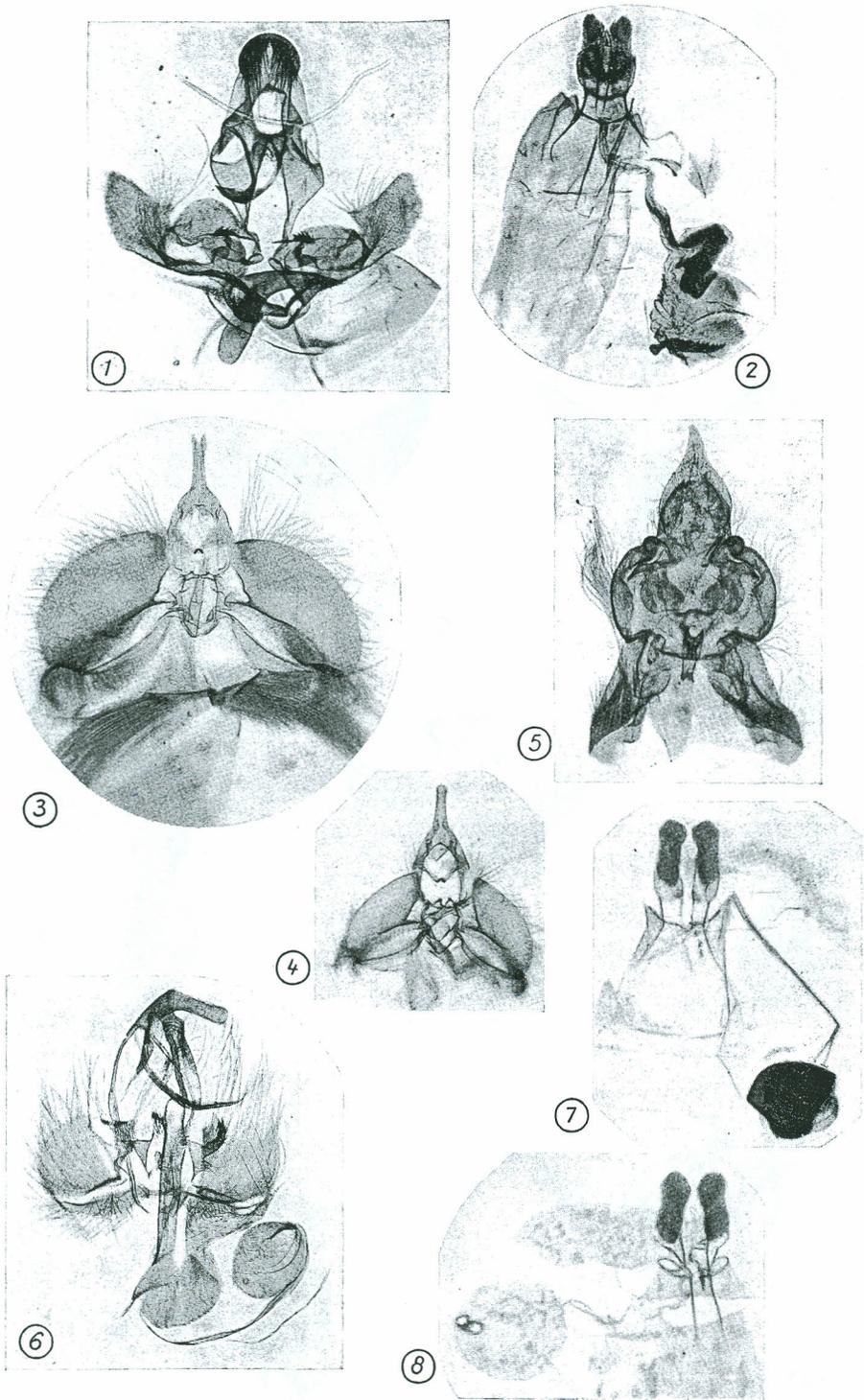
An obscure insect with the appearance of a *Pammene*.

Correction. — Readers of the author's previous paper in this Journal, Vol 18, Part 2, 1941, entitled "Tortricidae chiefly from the collection of the Institute for Plant Diseases at Buitenzorg", are invited to read on page 377: *Cerace triphaenella* instead of *Cerace triphanella*.



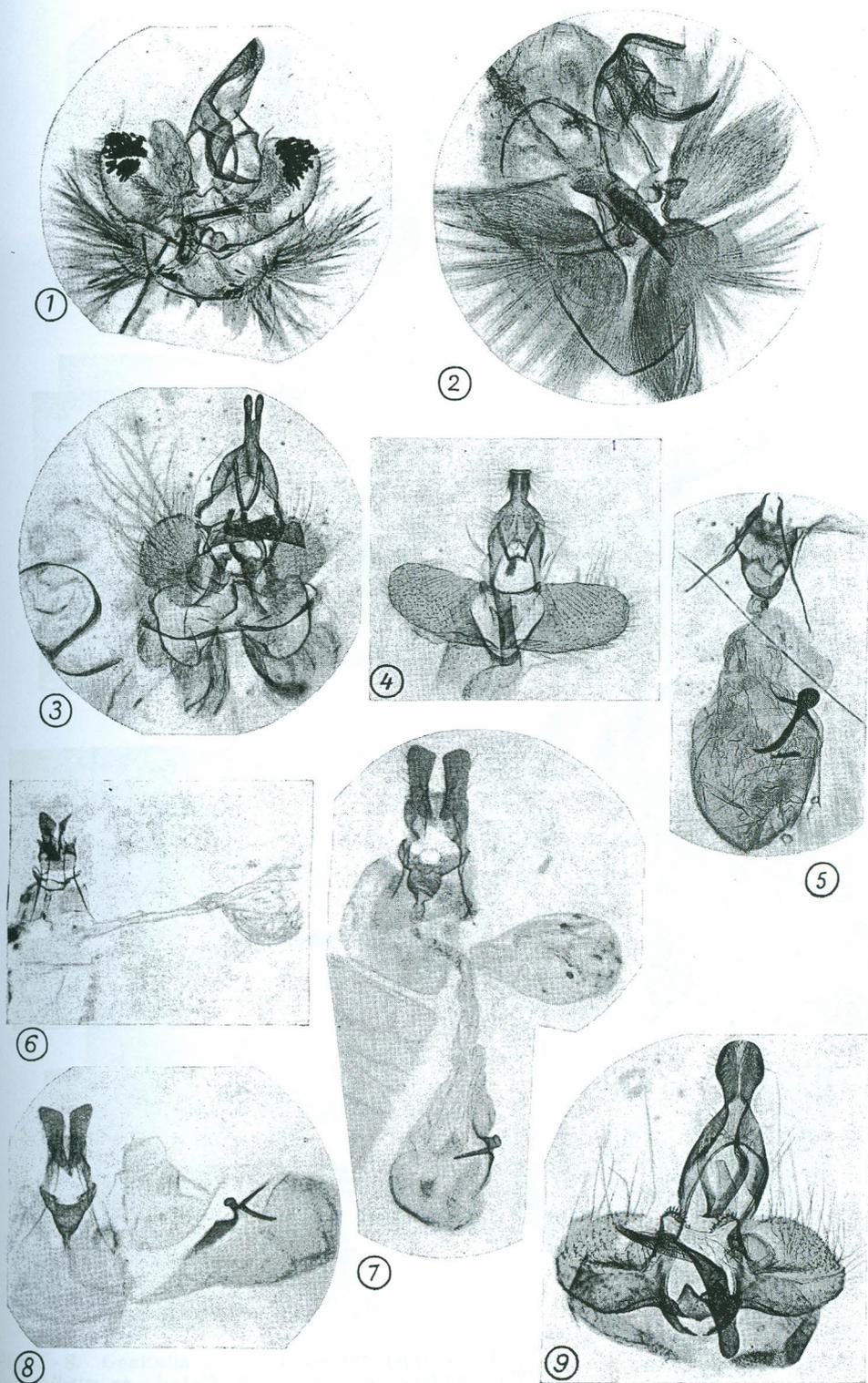
A. DIAKONOFF: Microlepidoptera I.

Fig. 1-9. Genitalia of: 1. *Phalonia sphaenophora* n. sp. ♂, 2. ♀; 3. *Clysiana opisthodonta* n. sp. ♂; 4. *C. engelinae* n. sp. ♂; 5. *C. opisthodonta* n. sp. ♀; 6. *C. reliquatrix* (MEYR.) ♂, 7. ♀; 8. *C. wegneri* n. sp. ♂, 9. ♀.



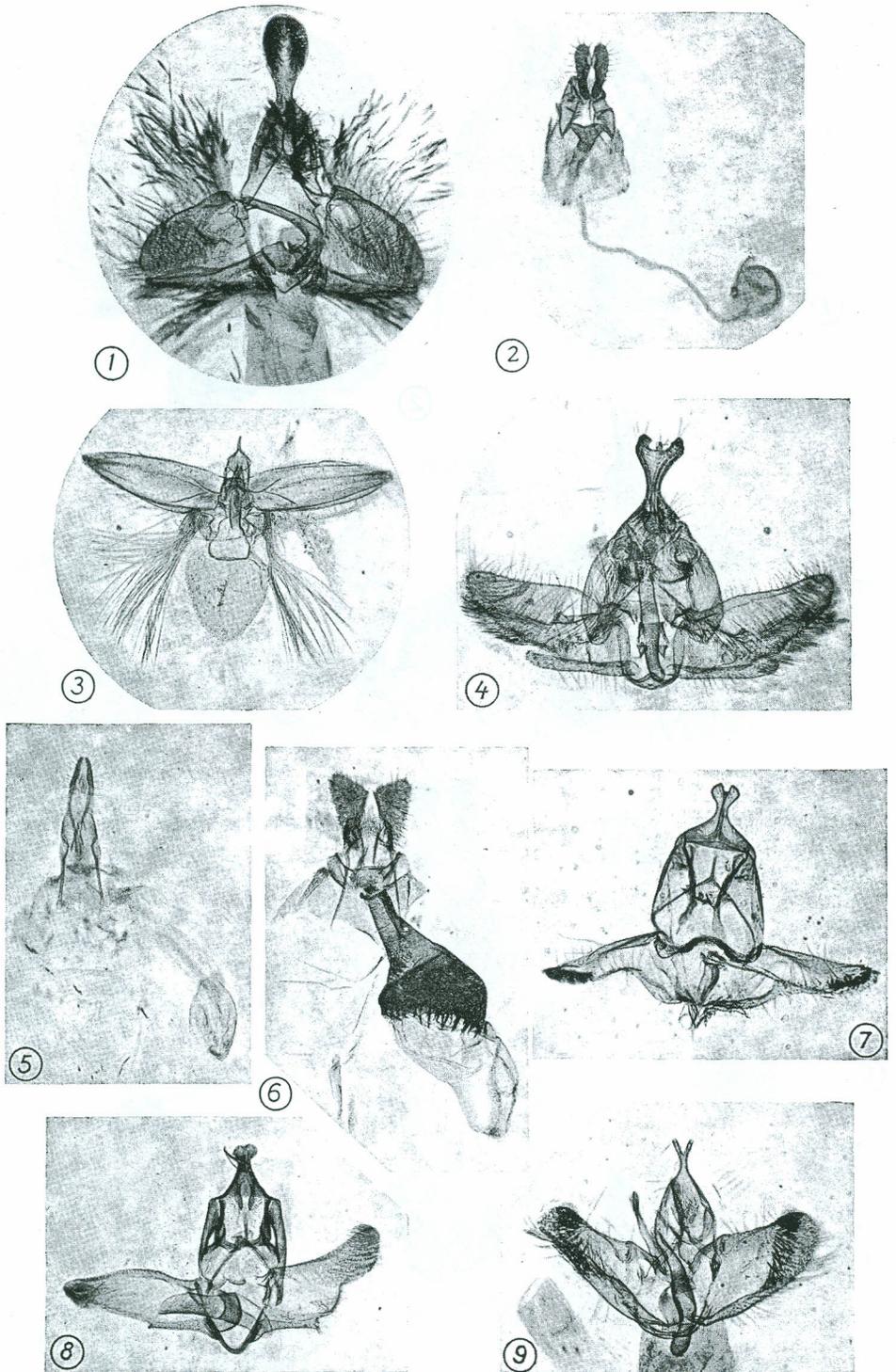
A. DIAKONOFF: Microlepidoptera I.

Fig. 1-8. Genitalia of: 1. *Isotenes miserana* (WALK.) ♂, 2. ♀; 3. *Adoxophyes privatana* (WALK.) ♂; 4. *A. nemorum* n. sp. ♂; 5. *Borneogena antigrapha* n. sp. ♂; 6. *Neocalyptis telutanda* n. sp. ♂; 7. *Adoxophyes nemorum* n. sp. ♀; 8. *A. privatana* (WALK.) ♀.



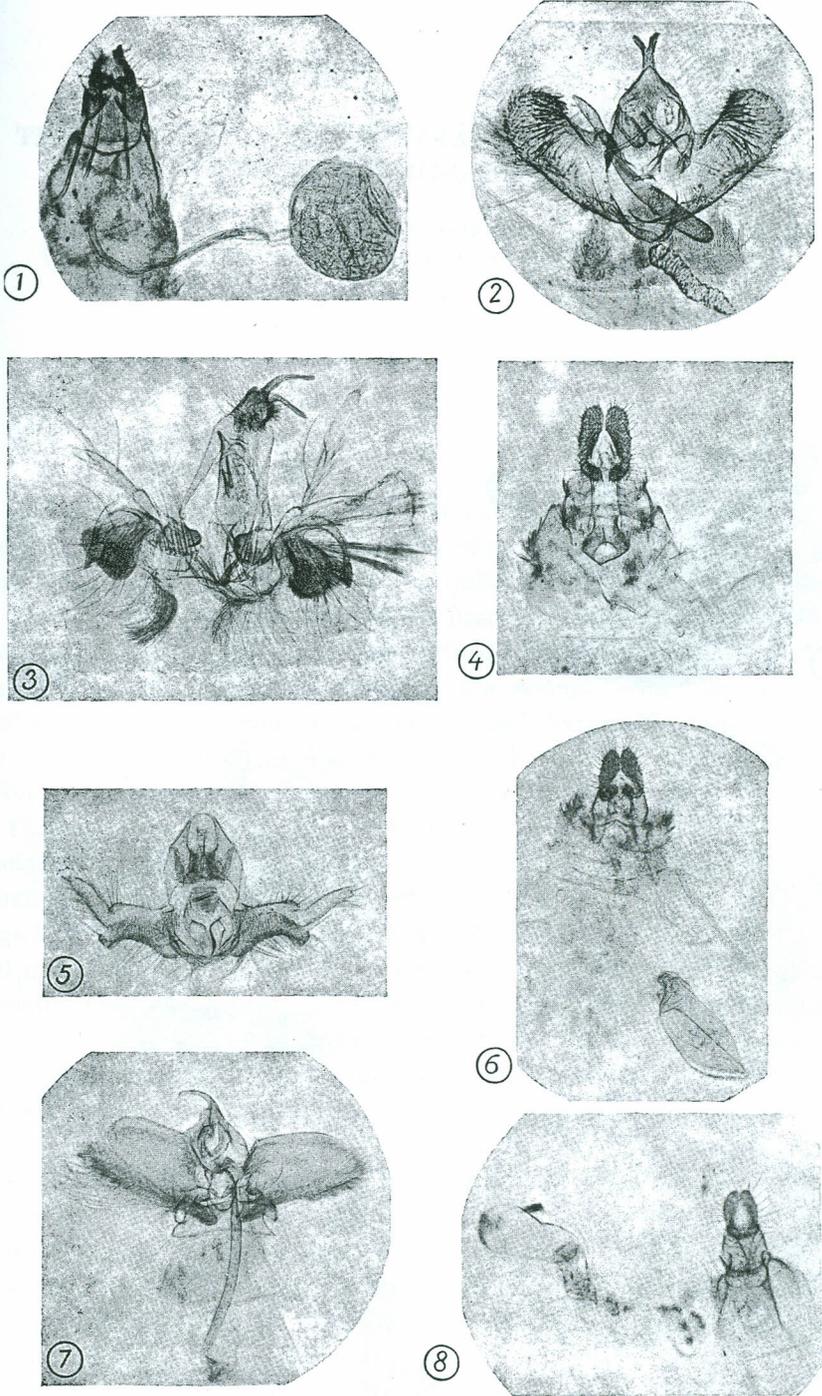
A. DIAKONOFF: Microlepidoptera I.

Fig. 1-9. Genitalia of: 1. *Phaenacropista cremnotoma* (MEYR.) ♂; 2. *Neocalyptis rotundata* n. sp. ♂; 3. *Syndemis axigera* n. sp. ♂; 4. *Epagoge xanthomitra* n. sp. ♂; 5. *Syndemis axigera* n. sp. ♀; 6. *S. uniformis* n. sp. ♀; 7. *Ulodemis idjen* n. sp. ♀; 8. *U. pullatana* (SNELL.) ♀; 9. *Syndemis uniformis* n. sp. ♂.



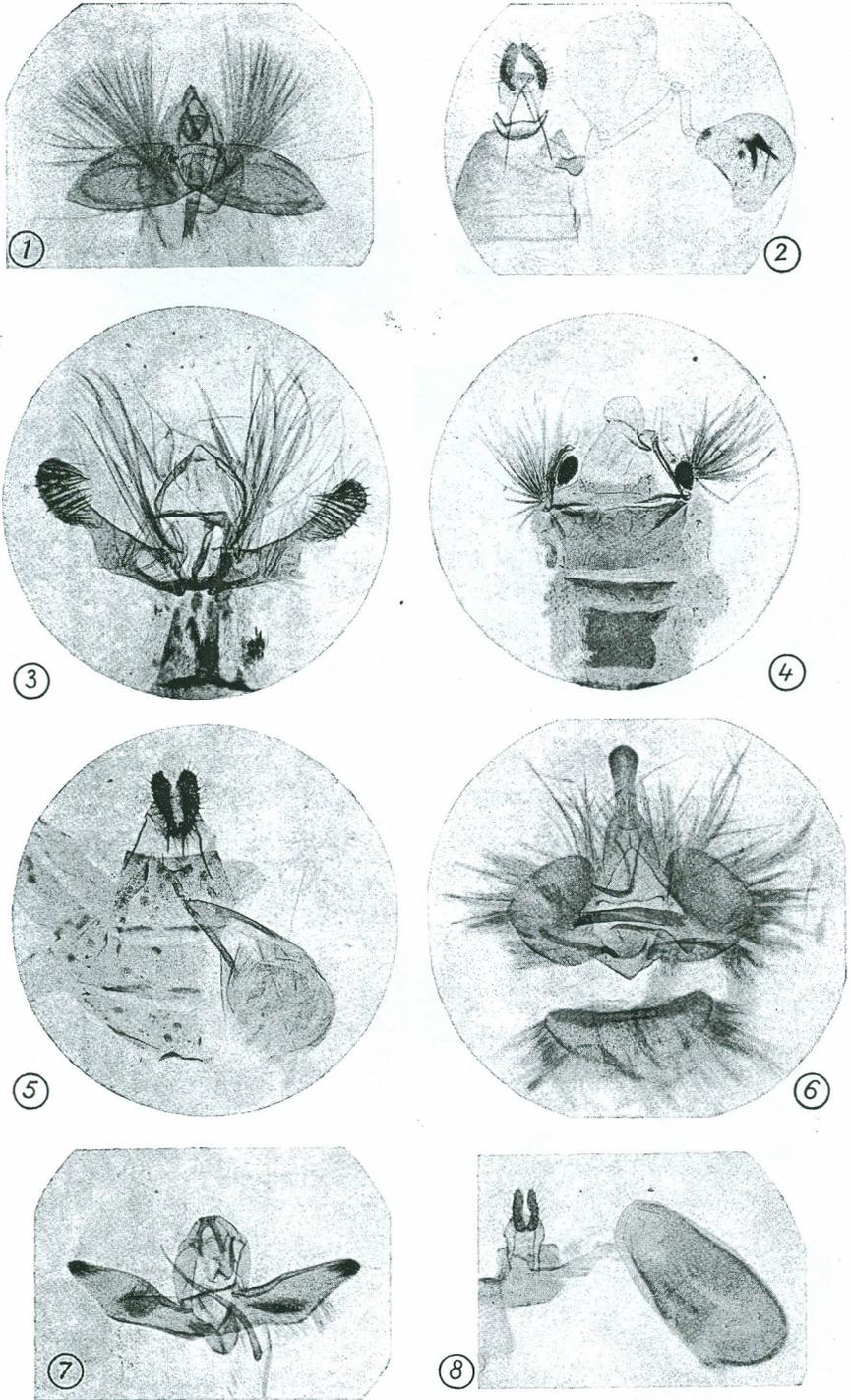
A. DIAKONOFF: Microlepidoptera I.

Fig. 1-9. Genitalia of: 1. *Ulodemis pangerango* n. sp. ♂; 2. *Catamacta dihamma* n. sp. ♀; 3. *Lopharcha quinquestriata* n. sp. ♂; 4. *Pternozyga anisoptera* n. sp. ♂; 5. *Diactenis haplozona* MEYR. ♀; 6. *Mimeoclysia piridina* DIAK. ♀; 7. *Diactenis haplozona* MEYR. ♂; 8. *Schoenotenes nivis* n. sp. ♂; 9. *Proactenis tricomma* n. sp. ♂. ♂



A. DIAKONOFF: Microlepidoptera I.

Fig. 1-8. Genitalia of: 1. *Proactenris tricomma* n. sp. ♀; 2. *P. sisir* n. sp. ♂; 3. *Eboda variabilis* n. sp. ♂, 4. ♀; 5. *Tymbarcha translucida* n. sp. ♂, 6. ♀; 7. *Peronea herbaecolor* n. sp. ♂; 8. *P. angustior* n. sp. ♀.



A. DIAKONOFF: Microlepidoptera I.

Fig. 1-8. Genitalia of: 1. *Peronea orthioterma* n. sp. ♂; *P. herbaecolor* n. sp. ♀; 3. *Melanalopha lathraea* n. sp. ♂, 4. basal segments of abdomen in ♂, 5. genitalia of ♀; 6. Genitalia of *Cacoecia expansa* n. sp. ♂; 7. *Schoenotenes discreta* n. sp. ♂, 8. ♀.