

A C T A Z O O L O G I C A
C R A C O V I E N S I A

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Józef RAZOWSKI

**A Discussion of Some Groups of *Tortricini* (*Tortricidae*, *Lepidoptera*) with
Descriptions of New Genera and Species**

[93 text-figs.]

Dyskusja nad niektórymi grupami *Tortricini* (*Tortricidae*, *Lepidoptera*) oraz opisy nowych rodzajów
i gatunków

Дискуссия над некоторыми группами *Tortricini* (*Tortricidae*, *Lepidoptera*) и описание
новых родов и видов

The descriptions of some new genera and species with a revision or discussion of other genera and species are given below. It was necessary for me to make a revision of the group of genera allied to *Eboda* WALKER. The species of these genera have almost the same venation of the wings but differ in the male or female genitalia. DIAKONOFF (1939) revised the Indomalayan and Papuan genera of *Tortricinae* and characterized the genera *Eboda* WKR., *Spatalistis* MEYR. and *Paratorna* MEYR. Now, with a large amount of material before me I am able to add some observations and also have some new interpretations of these genera. In these and other genera of *Tortricini* I describe some new species which occur chiefly in exotic regions.

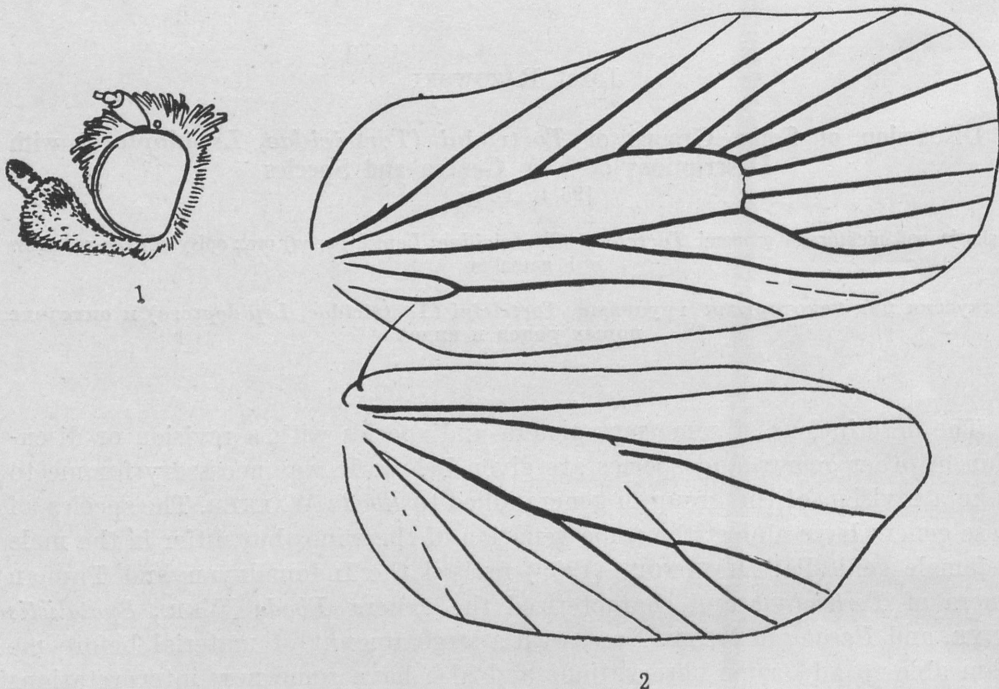
***Eboda* WALKER**

This genus was characterized by DIAKONOFF (1949) and a key for the identification of the species was included. While working in the British Museum (Natural History) in London I have found some new species. However, I have not examined all the types of the species in *Eboda* WKR., but I give a short revision of this group below.

The species of the genus *Eboda* WKR. are characterized by rather short labial palpi. The median joint is well developed, broad; terminal joint rather long, protruding. Scales short. Fore wing very characteristic, elongate-ovate. Costa at base strongly curved outwards, then straight or delicately concaved before the middle. Apical portion of costa rounded; apex atrophied or slightly developed. Termen short. Radial veins separate; m_3 stalked with cu_1 to 1/3;

cu_2 from beyond the middle of central cell. Hind wing of the usual *Tortricini* shape; rr near to m_1 from central cell; m_2 lacking; $m_3 - cu_1$ from one point.

There are two groups of species, which differ by the coloration and genitalia. To *Eboda smaragdina* — group belong the species with green colour of the forewing. The shape of wing is also very characteristic by the presence of costal protruding scales. In male genitalia dorso-terminal projection of the costa of the valva is present. Coremata with very long scales. The second group is the group of *Eboda celligera* MEYR. In the species of this group forewing is more ovate,



Figs. 1—2. *Eboda* WKR.: 1 — head, 2 — venation of wings

apex atrophied, costal protruding scales delicate. The ground colour of the forewing never green. Male genitalia without costal projection of the valva. *Eboda exeristis* MEYR. has some intermediate features, however, it differs by the male genitalia from other species of this genus.

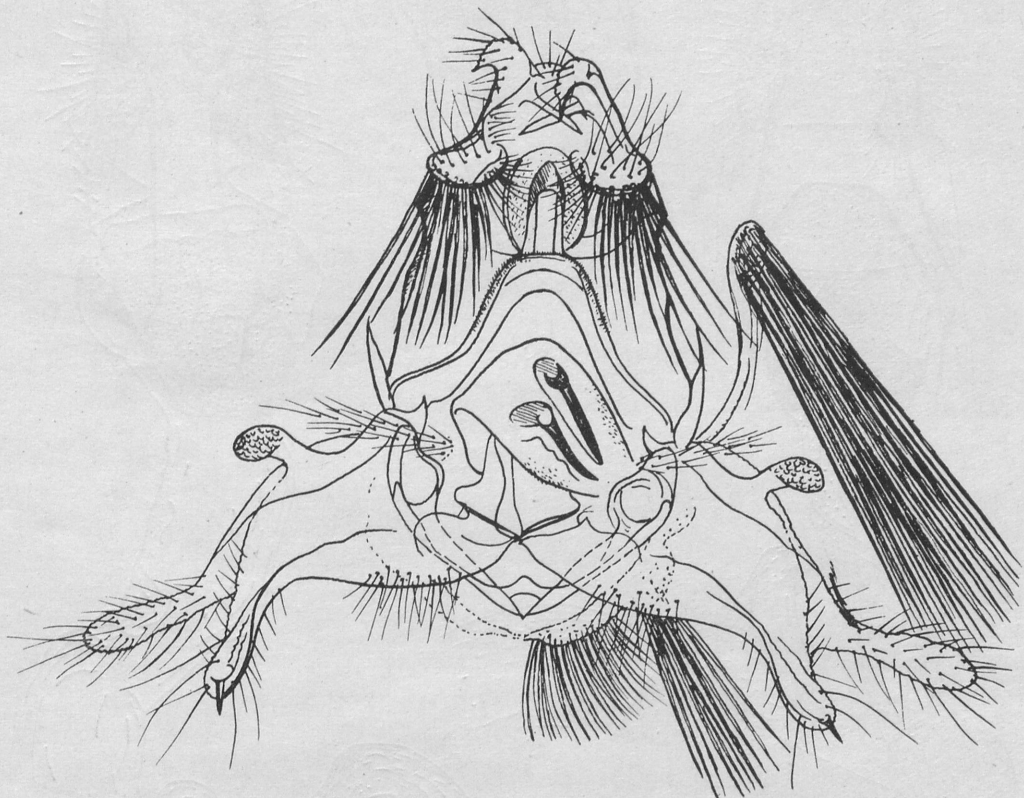
The head and the venation of the wings of *Eboda* sp. are figured below (figs. 1, 2).

Eboda smaragdina WALKER

Eboda smaragdina WALKER, 1866, Cat. Lep. Het. B. M., 35: 1805.

Head greyish with addition of green in posterior portion. Front pale, whitish. Labial palpi short, about twice as long as diameter of an eye. Second joint strongly dilated posteriorly. Terminal joint broad. The colour of palpi whitish

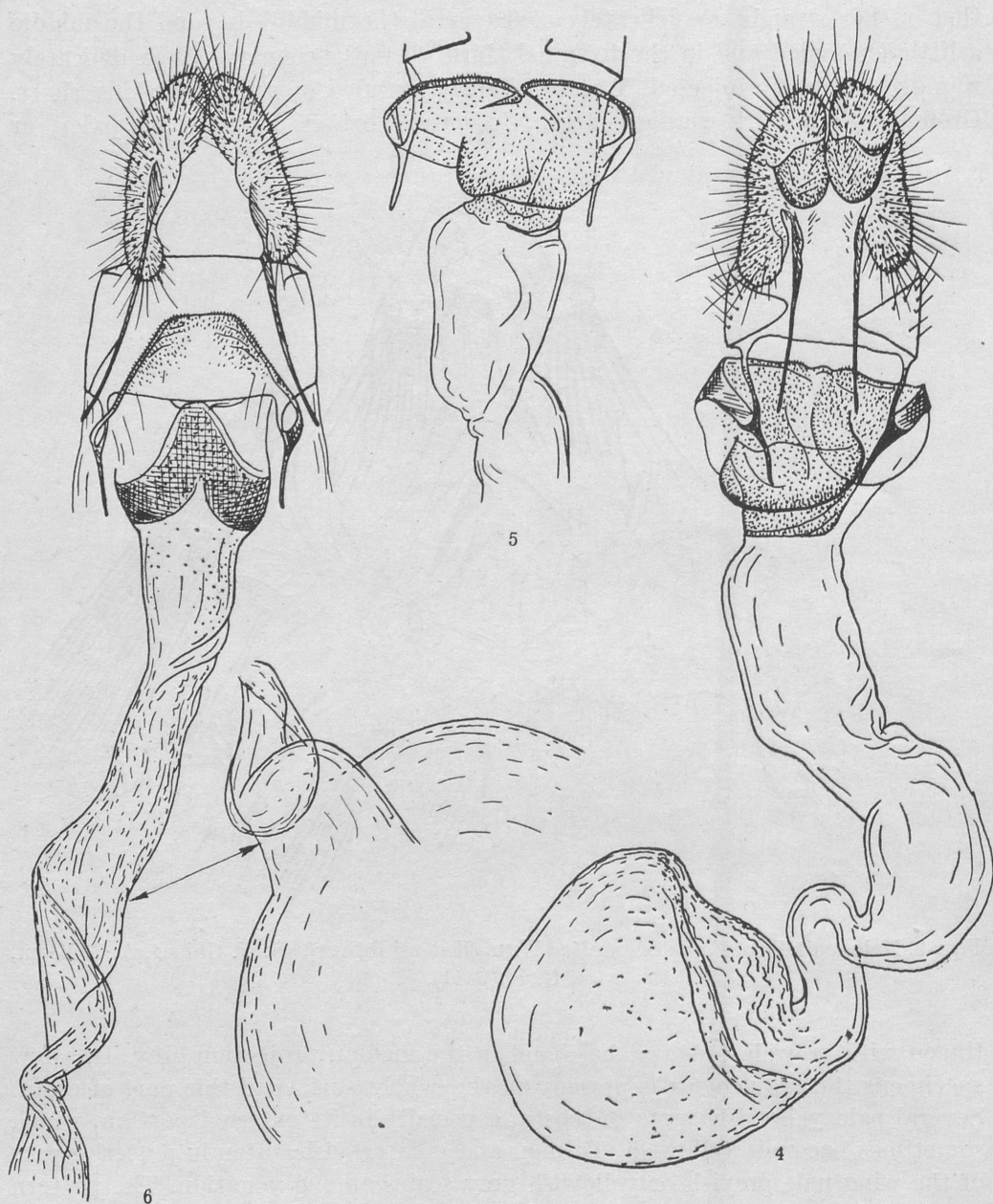
grey or whitish with groups of brown scales in second and terminal joints. Thorax green. Forewing slightly dilated posteriorly. Costa strongly expanded at base, then rather straight or delicately concave till the middle, beyond the middle a little expanded and in the terminal third abruptly concave. Apex delicately rounded, slightly projected. Termen slightly rounded or straight, rather short. Ground colour dark verdigris-green, in outer portion of the wing paler, or



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Figs. 3. Male genitalia of *Eboda smaragdina* WKR. (Kamusi R [iver], B. N. Guinea, A. S. MEEK, G. SL. 5411).

tinged with greyish. Costa at base and in the median projection grey. In a few specimens the grey colour is present on the whole surface of this part of costa. Several pale yellowish spots on costa, especially in its external portion, which sometimes becomes yellowish. Termen and cilia greyish; often in posterior part of the wing pale greyish or yellowish grey scales among venation. The pattern consists of two or three (often more) rather large spots in median area of the wing. These spots are dark brown, erected scales on greyish yellow ground. Praecostal spot is small and often atrophied. Subterminal fascia very thin, yellowish, with several grey spots (brownish in two specimens), convex posteriorly. Hindwing paler at base; fringes concolorous. Length of forewing 7—9 mm.



Figs. 4—6. Female genitalia: 4 — *Eboda smaragdina* WKR. (Vella Lavella, Solomom Is., Feb. — Mar., 1908) G. Sl. 5412), 5 — *E. smaragdina* WKR. (Russe Camp., Utakawa, sea level, Dutch N. Gui. [nea], January, 1913, A. F. R. WOLLASTON, G. Sl. 5431), lamella vaginalis with posterior part of ductus bursae, 6 — *E. chrisitis* sp. nov. (holotype).

Male genitalia (fig. 3). Tegumen large with broad pedunculi. Valva broad, narrowing posteriorly, rather weakly sclerotized throughout. Sacculus well developed, broad in basal part, narrowing and curved ventrad posteriorly. A delicate convection before half of its length. The tip of sacculus armed with sharpe spine. Costa more strongly sclerotized than median part of valva, rather broad, provided with a peculiar head-shaped projection in the middle. Brachiola well developed, long. Vinculum strongly sclerotized, broadened and flattened in dorsal portions. Uncus atriopied but tip of tegumen well sclerotized. Socii large, complicated. In their basal part lobe provided with large spine-like hairs which are broad at the base. External part of socius strongly sclerotized, elongate, arched and pointed. Two sharp spines present near bases of external parts of socii. Subscaphium short, rather broad, well sculptured. Transtilla well developed, substriangular covered by minute spines. Juxta in comparison to whole apparatus rather small. Aedeagus broad but with narrow base, minutely dentated in exterior portion. Two large cornuti in vesica.

Female genitalia (figs. 4, 5). Lamella vaginalis broad, strongly sculptured, its anterior part rounded. Ductus bursae broad, transparent. Bursa copulatrix rounded, very slightly sculptured. Signum absent. Lamella genitalis well developed; gonapophyses anteriores short, gonapophyses posteriores about four times longer. Labia elongate, provided with strong sclerotized lobes.

Comments. This species occurs in New Guinea and the Solomon Islands. All data from other localities must be revised, because in this region there are two further species, which are very similar superficially to *Eboda smaragdina* WKR. In the material examined I have found three specimens with yellow-orange ground colour of the forewing. It seems to me that this unusual coloration is caused by water before preparation or by the killing agent. Other features in these specimens agree with the green ones.

Examined material. Type labelled „N. Guin.“ (without abdomen) in the British Museum (Nat. Hist.). Other specimens: New Guinea (Hydrographer Mts., 2500 ft., Mai; Kamusi R.; Upper Setekwa, Snow Mts., 2—3000 ft., August; Bougainville), Gilolo (Almahera), Solomon Islands (Guadalecanar; Vella Lavella).

Eboda chrisitis sp. nov. ♀

Labial palpi about 2, yellowish. Second joint strongly expanded posteriorly; terminal joint longer than in *Eboda smaragdina* WKR. Lateral parts of labial palpi and head more brownish yellow, vertex olive brownish. Thorax greenish. Shape of forewing as in preceding species, however, basal expansion of the costa is rather not so abrupt and more rounded. Apex rounded; termen slightly convex. Ground colour of the wing yellowish green, more yellowish at costa and termen. External part of the wing paler than the rest, but not greyish green as in *E. smaragdina* WKR. Shades among veins yellowish. Median pro-

jection of costa provided with group of greenish grey scales. Yellowish spots on costa slightly visible. In median area of the wing two brownish spots. Fringes concolorous with the ground colour in external part of the wing. Hindwing brown, shining; fringes concolorous. Length of forewing 7 mm.

Female genitalia (fig. 6) very similar to those in *Eboda smaragdina* WKR. Lamella vaginalis large; limen subtriangular, projected posteriorly. Proximal portion of lamella surrounding ostium, well sclerotized; both minutely spined. Ductus bursae longer than in preceding species. Bursa copulatrix very large, rounded. Sculptures on both rather weakly developed. No signum in bursa copulatrix. Gonapophyses anteriores similar to those in *E. smaragdina* WKR.; gonapophyses posteriores also rather long. Labia of the different shape from that in *E. smaragdina* WKR., without rounded inner lobes.

Holotype (female): „Pulo Laut I[sland], S. E. Borneo, DOHERTY 1891, No. 40815“, G. Sl. 5429, in the collection of the British Museum (Nat. Hist.).

Eboda diakonoffi sp. nov. ♂, ♀

Eboda smaragdina; DIAKONOFF, 1939, Zool. Meded. Rijksmus. nat. Hist., 21: 226, figs: 13 H, G, 17 D, 18D.

Labial palpi similar to those in *Eboda chrisitis* sp. nov.; second joint strongly broadend towards the end, curved upwards; terminal joint rather long. Colour of the palpi and the front yellowish white. Upper part of the head more brownish yellow, posterior one brownish. Thorax olive-green; tegulae rather clear green. Shape of forewing as in *E. smaragdina* WKR. Ground colour verdigris or olive-green. Subterminal fascia pale yellowish to whitish. Ground colour beyond this fascia orange greyish or yellowish grey with a row of greenish scales throughout the middle. Scale-hairs of the middle costal projection greenish. Spots on costa yellowish, in middle rather yellowish orange. Fringes concolorous with the ground colour of the external portion of the wing. Hindwing dark brown, rather shining; fringes nearly same colour. Length of forewing 7—9 mm.

Male genitalia (fig. 7) very similar to those in *E. smaragdina* WKR. Sacculus rather shorter than in that species, more convex in anterior portion. Brachiola long; projection of costal edge of valva strong, with large head-shaped termination. Tegumen with elongated and pointed tip. Socii large, similarly haired as in *E. smaragdina* WKR., but the upper portions are decidedly shorter and rather slender and smooth. Spine-like projections of tegumen much longer than those in *Eboda smaragdina* WKR., dentate.

Female genitalia (fig. 8) rather similar to those in *Eboda chrisitis* sp. nov. (shape of limen). Introitus scobinate, rather similar to that in remaining species of this group. Ductus bursae very broad and rather long, narrowing before bursa copulatrix. Bursa copulatrix large; signum well developed. Gonapophyses rather long; labia with weak lobes.



Figs. 7—8. *Eboda diakonofii* sp. nov.: 7 — male genitalia of holotype, 8 — female genitalia of allotype.

Holotype (male) „Fergusson Id., D'Entrecasteaux Is., 7—20. IX. 1894, MEEK“, G. Sl. 5430.

Allotype (female) labelled as holotype, G. Sl. 6823.

Paratypes (5 specimens), three labelled as holotype and dated 9—22. X.; 23—31. XII.; 7—20. XI., two other as follows „Admiralty Islands, MEEK, 1913“ and „Mt. Sibela, 3000—5000 ft., Batian, DOHERTY 1892, No. 41385“.

Comments. This species being very similar superficially to *Eboda smaragdina* WKR. was erroneously determined and illustrated by DIAKONOFF (1939). The female genitalia figured in his publication are not those of the type specimen of *Eboda smaragdina* WKR. as stated by A. DIAKONOFF, as a type is without abdomen. I have seen two specimens illustrated by DIAKONOFF, both collected in the Fergusson Island, and they are conspecific with this new species. The new species differs strongly in female genitalia by the precesse of the signum in bursa copulatrix. In the male sex the differences are rather slight, but the species can be easily distinguished by the shape of the spine-like projection of the tegumen. In the new species these projections are bent, dentate and longer than those in *E. smaragdina* WKR.

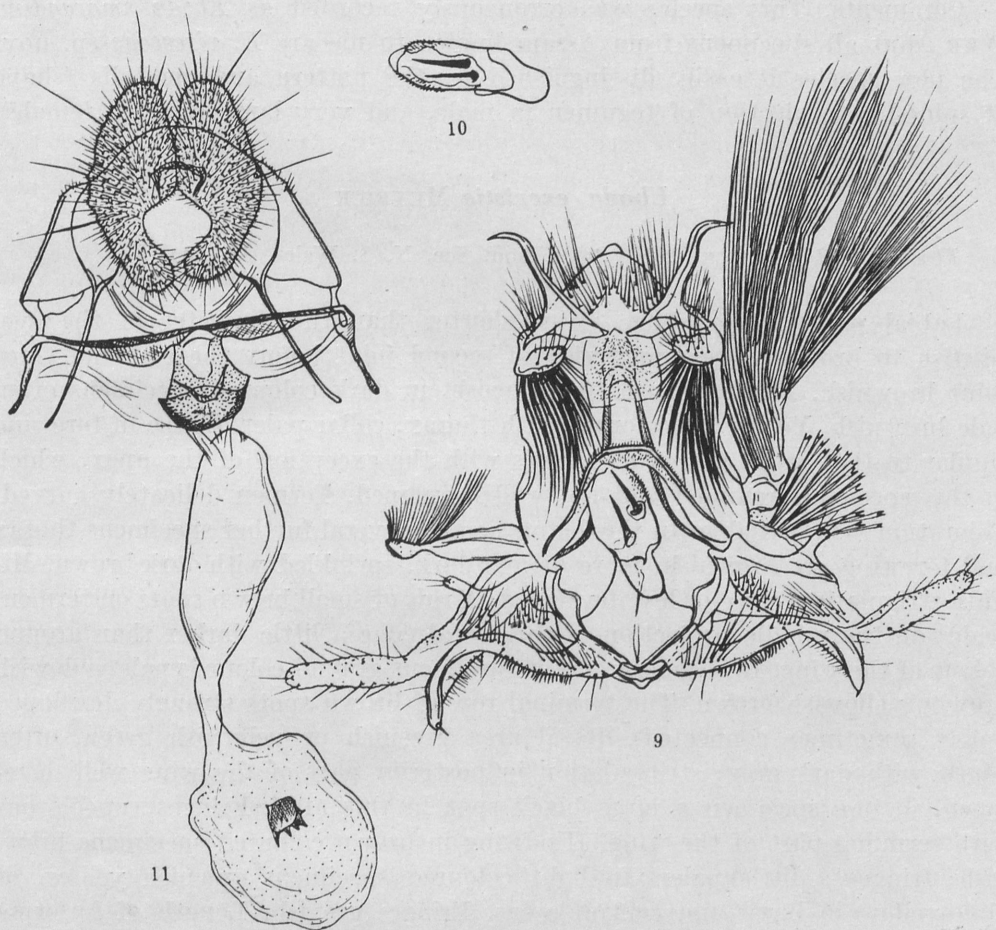
***Eboda virescens* sp. nov. ♂, ♀**

Eboda smaragdina (part.); DIAKONOFF, 1939, Zool. Meded. Rijksmus. nat. Hist., 21: 226.

Labial palpi about 2, similar in shape to those in all preceding species, however, third joint appears to be a little longer. The colour of palpi whitish, a little greyish on upperside; in the end of second joint some brownish scales; third joint brownish. Head rather pale (especially front), yellowish to brownish yellow. Thorax green. Shape of forewing as in *Eboda smaragdina* WKR., however, projection of the middle of costa is larger. Ground colour more or less dark intense green. On basal and median projections dark grey scales; costa marked by orange yellow spots. Convention before apex delicately edged with yellowish orange. External part of the wing pale, yellowish or greenish, narrow in costal area, abruptly expanded in dorsal area. Subterminal line yellowish, provided with fine grey or brown-grey spots. In some specimens subterminal fascia atrophied, however, the row of spots remains. In the dorso-terminal subquadrate spot several brown scales, more or less developed. Some specimens with orange-yellow strip near vein m_2 . Spots in the middle of the forewing are large and coalescent and form a fascia. This fascia is large in dorsal and median portion and narrows towards costa, or sometimes atrophied. The colour of this fascia is brownish yellow, or brownish grey, margins whitish. Fringes orange yellowish, rather pale, divided with grey, dark grey on apex of the wing. Hindwing brown, fringes nearly of the same colour. Length of forewing 7—9 mm.

Male genitalia (figs. 9, 10) more delicately developed than in *Eboda smaragdina* WKR. and *E. diakonoffi* sp. nov. Valva short, rather triangular, narrowing towards the end. Sacculus slender, delicate, curved in basal half. Free

end of sacculus arched downwards, pointed. Costa weakly sclerotized; characteristic projection small, head-like termination weakly developed. Branchiola long. Tegumen large with arched and expanded tip posteriorly. Small, rounded uncus present; socii only as proximal lobes. Spine-like projections very long, bent characteristically. Transtilla of usual *smaragdina*-group shape, rather weakly developed. Aedeagus (fig. 10) very small; two cornuti in vesica present.



Figs. 9—11. *Eboda virescens* sp. nov.: 9 — male genitalia holotype (aedeagus in situ) 10 — aedeagus of paratype (G. Sl. 6791), 11 — female genitalia of allotype.

Female genitalia (fig. 11). Lamella vaginalis with long and well sclerotized lateral lobes. Ostium bursae in a cup-like scobinate convection. Lateral connections between it and lobes membranous. Ductus bursae in distal portion narrow, then very wide, bulbous. Proximal part of ductus bursae just before bursa copulatrix strongly narrowed. Bursa copulatrix rather small, weakly sculptured; signum large. Lamella genitalis large. Labia very large; gonapophyses posteriores on characteristic lamella, rather long.

Holotype (male) „Khasi Hills, Assam, '12.1906“, G. Sl. 6791.

Allotype (female) labelled as holotype, G. Sl. 6798.

Paratypes (ten specimens) all from Khasi Hills, Assam dated „'3. 1907“, one genitally investigated (G. Sl. 6793), and „'12. 1906“.

Holotype, allotype and eight paratypes in the collection of the British Museum (Nat. Hist.), two paratypes in author's coll.

Comments. This species was erroneously recorded as *Eboda smaragdina* WKR., but all specimens from Assam known to me are *E. virescens* sp. nov. The new species is easily distinguished by the pattern and genitalia (shape of spine-like projection of tegumen in male, and very large labia in female).

Eboda exeristis MEYRICK

Eboda exeristis MEYICK, 1910, Proc. Linn. Soc. N. S. Wales, 35: 290.

Labial palpi rather short, twice shorter than the diameter of the eye, whitish to brown-white, upper side of second joint before the end and third joint brownish. Front whitish to yellowish, in dark coloured specimens often pale brownish. Vertex concolorous with thorax; collar paler. Shape of forewing similar to that in all preceding species with the exception of the apex, which in this species is rounded and not well developed. Termen delicately curved. Coloration very variable. In the lectotype and several further specimens thorax and forewing are brownish, more or less dark, sprinkled with dark brown. Minute strigulation more or less developed. A row of small brown spots on termen; scales on the middle projection of the costal edge a little darker than ground colour of the wing. In second group of specimens ground colour is pale yellowish grey to yellowish brown. The terminal row of brown spots strongly developed (spots sometimes connected). Basal area greenish or yellowish green, often edged with dark grey; stringulation in posterior part of the wing well developed, in one specimen a large black spot in this area. Fringes concolorous with terminal part of the wing. Hindwing in brown coloured specimens brownish; fringes a little paler. In light coloured specimens greenish yellow, or olive-yellow in basal and central areas. Fringes greyish. Length of forewing about 8 mm.

Male genitalia (figs 12, 13) quite different than those in preceding species. Valva broad, not narrowing posteriorly; sacculus strong, delicately arched ventrad in anterior portion, provided with sharp, strongly sclerotized projection at the end of ventral edge. Two further pointed projections in the distal portion of valva, a single, large, rounded plate above them. The latter, distal portion of sacculus and central part of valva provided with spines. Costal edge of valva smooth, without head-like projection. Brachiola large, elongated. Tegumen delicately developed, rather slender; pedunculi narrow. Socii both curved, dentate hooks present in the top of tegumen laterally. Aedeagus (fig. 13) rather small, straight. A single cornutus present in vesica.



Figs. 12—14. *Eboda exeristis* MEYR.: 12 — male genitalia; aedeagus in situ (Toowong, Queensland, 27. XII. 1897, DODD., G. Sl. 5420), 13 — aedeagus (Toowong, Queensland, 15. III. 1898, DEDD., G. Sl. 5421), 14 — female genitalia (Huberton Hills, Queensland, I. 1911, DODD., G. Sl. 4518).

Female genitalia (fig. 14) resemble those in (*E. smaragdina* WKR. but ductus bursae is longer and narrow. Lamella vaginalis large, rounded and scobinate. Posterior part of ductus bursae bulbous. Bursa copulatrix large, transparent; signum with large latero-proximal spines. Labia of the usual shape.

Comments. This very variable species is easily distinguished from the remaining species of this genus by the rounded apex of forewing. In male genitalia in comparison with *Eboda smaragdina* WKR. lack lower parts of socii, projection of costal edge of valva and spines of tegumen. However, according to the remaining features and the female genitalia it belongs to the genus *Eboda* WKR.

Lectotype and several specimens in the British Museum (Nat. Hist.) in London. Terra typica: Queensland, Australia. These specimens were taken in January, February, March, June, August and December.

Eboda chlorocosma TURNER

Eboda chlorocosma TURNER, 1925, Trans. & Proc. R. Soc. S. Austral., 49: 53.

Turner described this species from New South Wales (Port Macquarie). According to the original description it is probably only a form of *Eboda exeristis* MEYR. Unfortunately I have no opportunity to check the type of this species.

Eboda cyclopleura TURNER

Eboda cyclopleura TURNER, 1916, Trans. & Proc. R. Soc. S. Austral., 40: 522.

According the original description *Eboda cyclopleura* TURN. is a good species related to *E. exeristis* MEYR. It is recorded from Northern Queensland (Kuranda, near Cairns).

Eboda chloroclistis sp. nov. ♂

Labial palpi about 1.5; rather pale. Second joint strongly expanded posteriorly; terminal joint protruding. Front greyish white; thorax olive-grey; collar and vertex pale brownish white. Forewing of the same breadth throughout, costa strongly expanded at base, then gently curved; apex pointed, not protruding; termen short, nearly straight. Anterior portion of the wing to half of its length greenish (this colour has changed into greenish yellow in left wing probably by water before preparation). Ground colour in the posterior portion of the wing is grey with a small addition of green. An oblique, narrowing costad dark grey fascia, and terminal similarly coloured angulate fascia present; both with green hue. Pale, brownish spots on costa hardly visible (in left wing rather well developed). Fringes greyish with small addition

of yellowish brown. Hindwing honey-yellow at base and in central area, becoming grey to brown in peripheries. Fringes concolorous with colour of external portion of the wing. Length of forewing 6 mm.

Male genitalia (figs 15, 16). Valva well developed, elongate. Sacculus strong, convex in proximal portion, then concave. Its distal portion very large, subquadrate. Dorsal branch of sacculus elongate, curved, pointed terminally. A characteristic, rounded and hairy plate on the upper edge of this projection before the end. On ventral subquadrate projection of sacculus large lobe provided with strong spines. Costa of valva well sclerotized, long. Brachiola long, rather thin; tegumen large; socii flat coalescent to top portion of tegumen. Two long characteristically bent projections in middle part of the ventral side of tegumen. Transtilla transparent. Aedeagus (fig. 16) very large, broad. Dorsal surface of aedeagus weakly sclerotized. Two large cornuti (one shorter than the other) present in vesica.

Holotype (male) „Sanguir, 1892, DOHERTY, No. 41417“, G. Sl. 6783 in the collection of the British Museum (Nat. Hist.).

Comments. This species has some features of the *E. exeristis* MEYR. and *celligera*-group. Projections of sacculus are very complicated. Ventral projection large, subquadrate and its spined lobes are homologous with those in *celligera*-group. Dorsal projection (in *celligera*-group thin and sometimes very long) is in new species strongly developed and provided with dorsal hairy lobe, similar to the spined lobe in *Eboda exeristis* MEYR.

Type locality Sanguir (Sangi), an island north of Celebes.

Eboda celligera MEYRICK

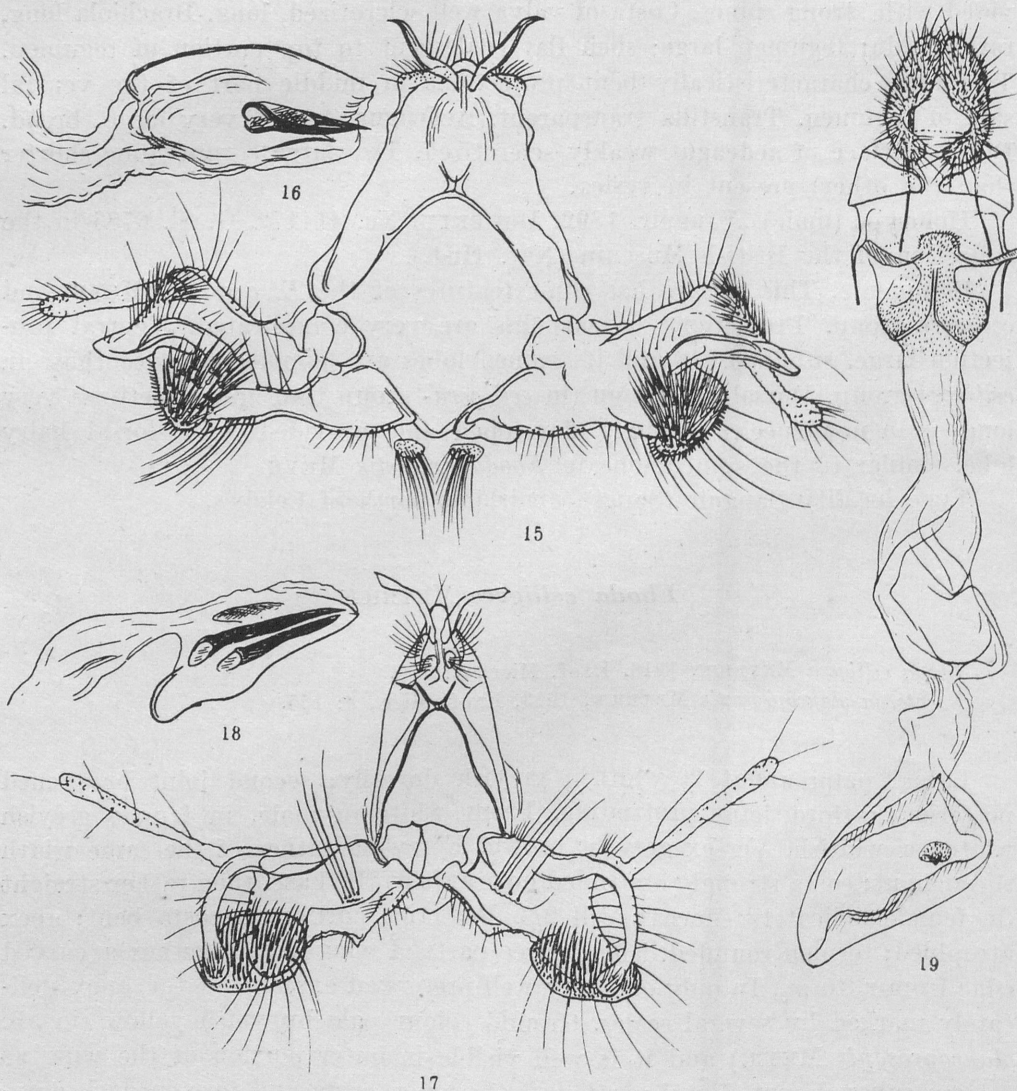
Eboda celligera MEYRICK, 1918, Exot. Micr., 2: 170.

Paratorna glaucoprosopis MEYRICK, 1913, Exot. Micr., 4: 155.

Labial palpi about 2, whitish, greyish dorsally; second joint broadened posteriorly; third joint protruding. Front white in male, in female greyish white, or whitish. Vertex grey or brown. Forewing rather of the same width throughout; costa strongly expanded outwards at the base, then rather straight (in female delicately concave) till $2/3$. Posterior portion of costa bent; apex atrophied; termen rounded. These three parts of wing give together a curved edge from r_3 to m_3 . In only one very well preserved example is the apex delicately marked by several scales. Ground colour pale brownish yellow (in ab. *glaucoprosopis* MEYR.) and it is well visible in outer portion of the wing as a large suboval spot. Basal portion of the wing, costa and termen dark grey-brown. In other specimens ground colour in basal spot near dorsum brown yellow. In one female the whole surface of the wing is rather light and the dark pattern consists of apical brown shade and suffused oblique fascia (exterior edge of basal spot) in the middle part of the wing. In dark specimens the spot formed

by the ground colour is rather small, and on costa there are several small spots of the same colour.

In the typical form the forewing is dark, leaden-grey, with a slight violet-grey hue. Brownish yellow elongate spot before termen and several small similarly coloured spots on costa and termen present. In the middle area of the wing and at dorsum two brownish yellow or brownish ochreous spots delicately edged with whitish grey. These are analogous to spots of central area of the wing in *smaragdina*-group.



Figs. 15—19. Male and female genitalia: 15 — male genitalia of *Eboda chloroclistis* sp. nov. (holotype), 16 — aedeagus of the same specimen, 17 — male genitalia of *E. celligera* MEYR. (Heito, Formosa Sl. bred., 35, G. Sl. 5455), 18 — aedeagus of the same specimen, 19 — female genitalia of *E. celligera* MEYR. (Khanshirei, Formosa, 1000 ft., 18. VIII. 1905, A. E. WILMAN, G. Sl. 5454).

Male genitalia (figs 17, 18). Valva rather well developed with slightly sclerotized costa; sacculus strong, proximal portion straight, pointed at the end, then concave. Ventral part of sacculus rounded, lobe suboval, spined. Dorsal arm of sacculus very long, curved, rounded terminally. Brachiola very thin, long. Tegumen slender, protruding distally; socii complicated, but rather weakly developed. Spine-like processes long and bent, pointed terminally. Aedeagus large, elongate. Two large cornuti nearly of the same length in vesica present.

Female genitalia (fig. 19). Lamella vaginalis broad; limen protruding in middle. Lateral arms of lamella rather narrow. Ostium in large, scobinate cup-like convection. Distal part of ductus bursae scobinate, then transparent, bulbous in middle. Bursa copulatrix with one signum.

Comments. The type of *Eboda celligera* MEYR. („Pusa, Bengal, T. B. F. 18. 3. 12“, G. Sl. 6891 [Cl.] and type of its synonym *Paratorna glaucoprosopis* MEYR. („Kagi, Formosa, Sl. 8. 3. 28“, G. Sl. 6892 [Cl.]) both in the collection of the British Museum (Nat. Hist.). Further specimens: Formosa (Haito — 4 spns; Kanshirei, 11. IV. and 18. VIII. — 2 spns.), Malaya (Selangon Subang, New Willage, 4. IX. — 2 spns.), China (Cho-ganh, Tonkin, 1 spn.).

Eboda variabilis DIAKONOFF

Eboda variabilis DIAKONOFF, 1941, Treubia, 18(2): 432, pl. 21 figs. 3, 4.

This species was described from four specimens collected in East Java in Tennger Mts. Unfortunately I did not see the type, which is preserved in the Buintenzorg Museum.

According to the original description this species is very similar in both sexes to *Eboda celligera* MEYR. However, it differs well genitally in the male by the short cornuti (in DIAKONOFF's description: „Cornuti two large spines“). The larger cornutus in *E. variabilis* DIAK. is five times shorter than the length of the aedeagus, and in *E. celligera* MEYR. only 1,2 times. Unfortunately I am unable to compare the female genitalia of both species because of the rather indistinct photograph in DIAKONOFF's paper.

Eboda assamica sp. nov. ♂

Labial palpi like those in *Eboda celligera* MEYR., pale greyish yellow on upper side. Front whitish; head and thorax brownish. Forewing delicately expanding posteriorly. Costa expanded at base, then gently arched; apex atrophied; termen and posterior part of costa forming an arch. Base of the wing brownish in middle, paler than that near costa, in dorsal portion brown. Posterior edge of this concave. Costa and termen (to vein m_3) brownish grey. Central and posterior part of the wing whitish with ochreous shade in the

middle. Costa marked with small brown and orange spots. Fringes greyish, near „apex“ brown, whitish at tornus. Hindwing brownish grey, darker in peripheries, rather transparent. Length of forewing about 6 mm.

Male genitalia (figs 20, 21). Valva large at base. Sacculus with gently rounded ventral edge in the half of the length. Ventral termination elongate; lobe large, elongate. Dorsal projection slender, strongly curved ventrad. Costa of valva long, rather weakly sclerotized; brachiola very long. Tegumen slender; socii flat lateral pathes provided with hairs and spines. Processes on tegumen short, large on bases. Small uncus present. Aedeagus (fig. 21) rather small, pointed. Two very small cornuti (one larger) present in vesica.

Holotype (male): „Khasi Hills, Assam, [No.] 31907“, G. Sl. 5456, in the collection of the British Museum (Nat. Hist.).

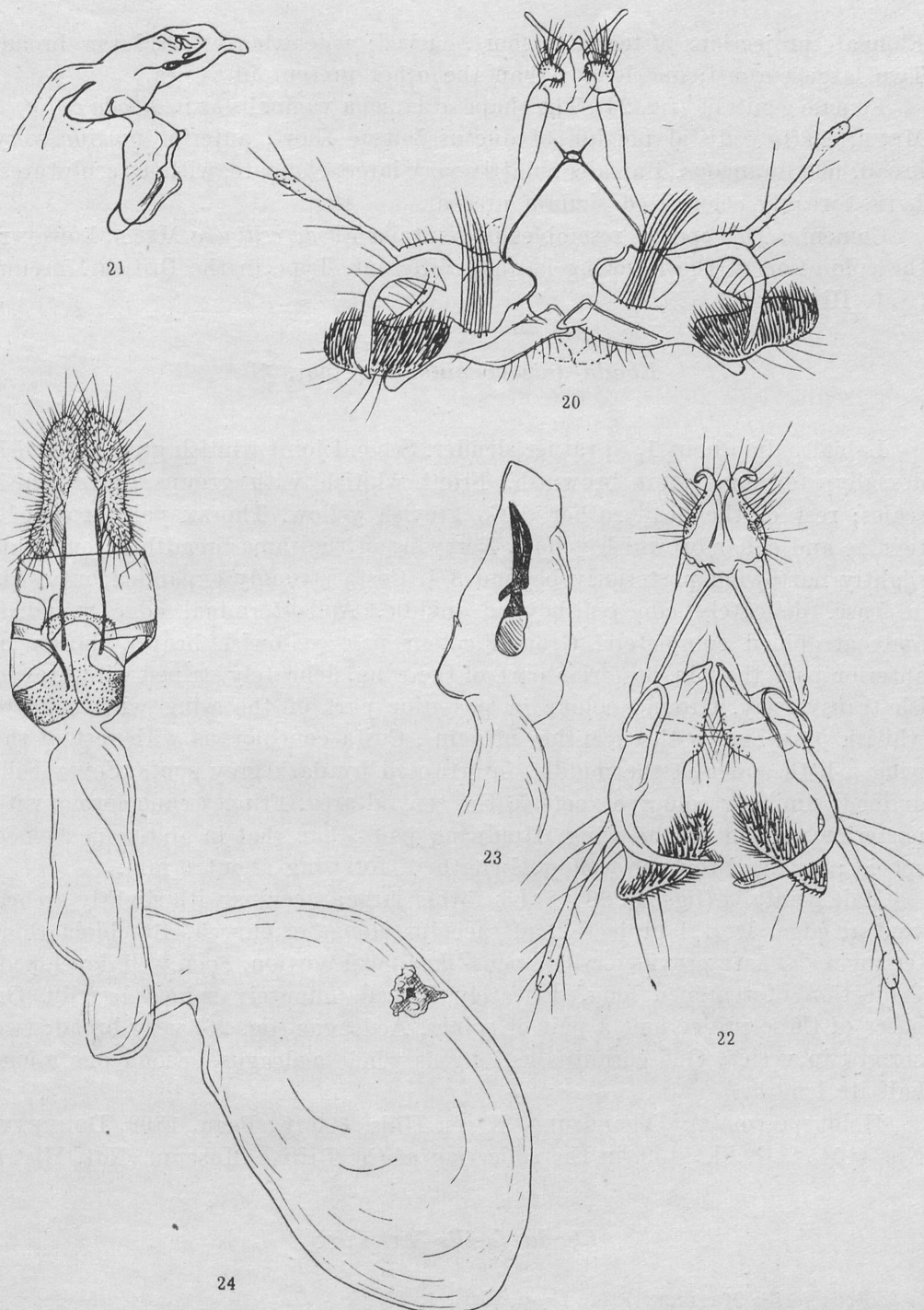
Comments. This species very much resembles *Eboda variabilis* DIAK. in male genitalia. The differences are, however, in the shape of the ventral termination of sacculus (elongate in new species; broad in *E. variabilis* DIAK.) and in length and shape of processes of the tegumen, which are in *E. variabilis* DIAK. much more elongate. The new species was determined by E. MEYRICK as *Paratorna dorcas* MEYR.

Eboda haruspex MEYRICK

Eboda haruspex MEYRICK, 1912, Exot. Micr., 1: 15.

Labial palpi about 2; basal joint short; second joint subtriangular; terminal joint protruding, rather narrow. Ventral part of palpi grey-white, in dorso-lateral and dorsal portions of second joint and on terminal joint brown scales. Head brownish; thorax cinnamon-brown. Costa arched outwards in basal portion, then nearly straight to half of the length; bent in the middle. Apex delicately developed; termen arched, rather short. Ground colour brownish cinnamon, paler in dorso-posterior part of the wing, where it is more whitish brown. In this area only venation and transversal small strips are concolorous with the ground colour in basal area. Near before the middle of the wing pale brownish yellow transverse fascia. This fascia is broadened in median and praedorsal areas of the wing. In middle of largest parts and near costa groups of brown scales. This fascia is sometimes edged with whitish yellow, or interrupted between costa and the middle. In basal part of the wing rather small, rounded spot, concolorous with median fascia. Costa dark grey divided by orange spots. Fringes yellow-white. Hindwing rather narrow, apex subrounded. The colour of hindwing dark brown, between costa and vein *sc* whitish cream. Fringes brownish, paler than the colour of the wing, rather yellowish brown. Length of forewing 6—7 mm.

Male genitalia (figs 22, 23) very similar to those in the preceding species. Ventral edge of sacculus concave beyond the middle; dorsal projection slender, not long. Brachilla very long, thin. Tegumen slender; socii rather large, hairy.



Figs. 20—24. 20 — male genitalia of *Eboda assamica* sp. nov. (holotype) 21 — aedeagus of the specimen, 22 — male genitalia of *E. haruspex* MEYR. (lectotype: Ceylon, Madulsima, IV 07, G. Sl. 6877 [Cl.]), 32 — aedeagus of the same specimen, 24 — female genitalia of *E. haruspex* MEYR. (Madulsima, Ceylon, 10. 06, GREEN, G. Sl. 5450).

Elongate projections of tegumen short, curved; aedeagus (fig. 23) large, broad. Two large cornuti; one longer than the other present in vesica.

Female genitalia (fig. 24). The shape of lamella vaginalis as in *Eboda celligera* MEYR. Narrow distal portion of ductus bursae short, anterior portion very broad, membraneous. Bursa copulatrix very large, elongate, without sculptures. Large, weakly sclerotized signum present.

Comments. This species resembles in genitalia *Eboda celligera* MEYR, however, the coloration of the forewing is quite different. Type in the British Museum (Nat. Hist.).

Eboda anisocornutana sp. nov. ♂

Labial palpi about 1, 5; rather slender. Second joint whitish grey, brownish dorsally; terminal joint brownish. Front whitish with groups of brownish scales; rest of the head rather dark, greyish yellow. Thorax pale brownish; tegulae and collar brownish yellow. Forewing of the same breadth throughout, slightly narrowing posteriorly beyond 3/4. Costa strongly expanded outwards at base, delicately concave beyond middle. Apico-terminal edge rounded, apex atrophied completely. Ground colour pale yellowish brown, darker in anterior part than in posterior part of the wing, delicately striped with brownish transversely. Ground colour in posterior part of the wing with delicate whitish pink hue, with exception of veins. Costa concolorous with rest of the wing a little paler in the middle, interrupted by dark grey spots. Several ill-defined, similarly coloured spots in the central area. Fringes concolorous with posterior portion of the wing. Hindwing paler than that in above mentioned species; fringes brownish yellow. Length of forewing about 6 mm.

Male genitalia (figs 25, 26). Valva rather large; sacculus with slightly arched ventral edge. Dorsal projection of sacculus elongate, curved. Brachiola thin; tegumen elongate provided with uncus-like apical portion. Socii well developed. Projection of tegumen long, delicately curved, minutely spined basally. On bases of these projections a pair of spines. Aedeagus (fig. 26) very broad; two cornuti in vesica. One cornutus as long as whole aedeagus, second one about half its length.

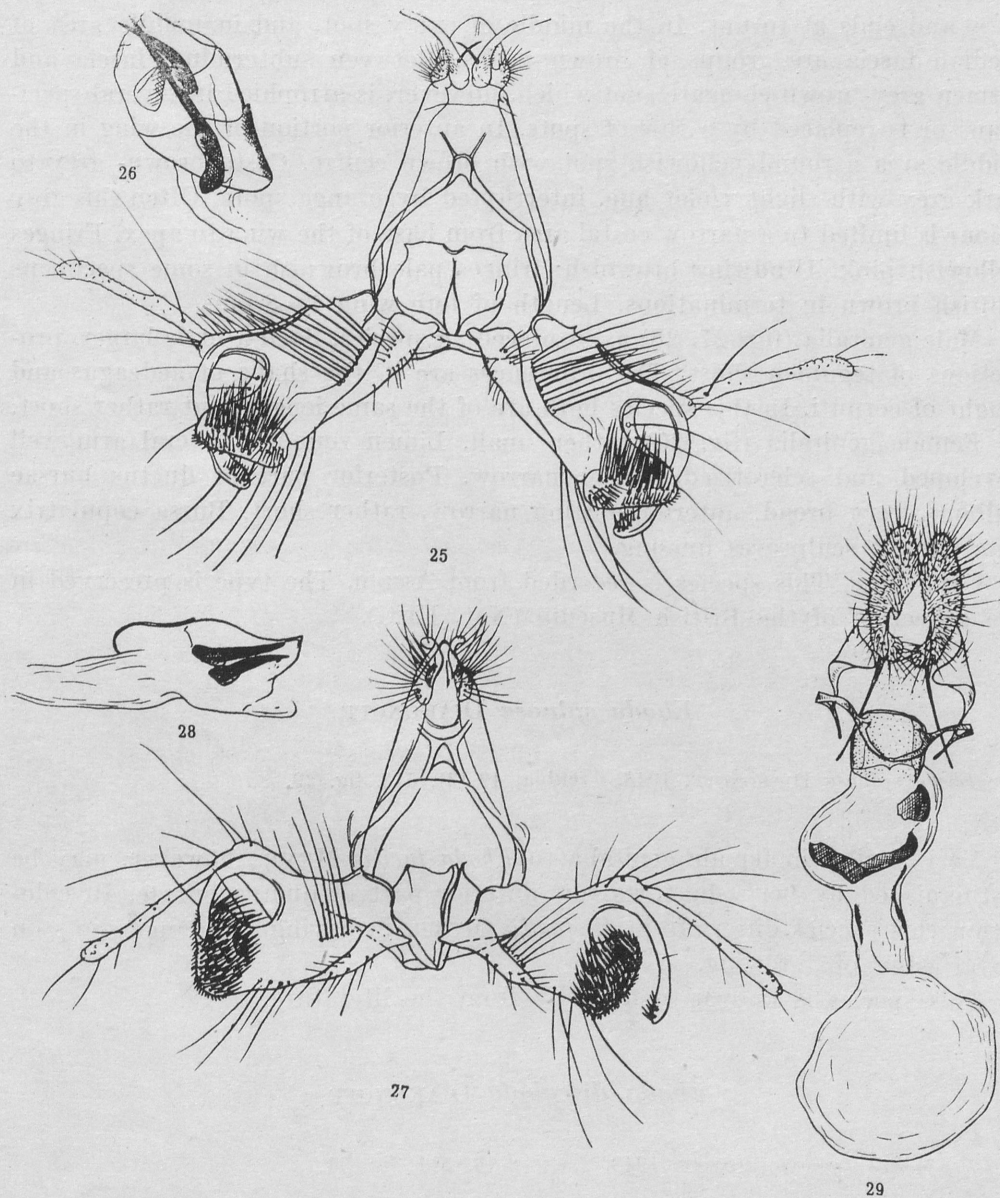
Holotype (male): „Thandsung, Karen Hills, 500 ft., Pegu, 1890, DOHERTY, No. 41045“, G. Sl. 5459, in the collection of the British Museum (Nat. Hist.).

Eboda facilis MEYRICK

Eboda facilis MEYRICK, 1912, Exot. Micr., 1: 15.

Labial palpi about 1,5. Second joint slender at base, strongly broadened towards the end; terminal joint rather short, rounded terminally. Ventral side of second joint pale yellowish, lateral side whitish with the pattern of

brown scales. Third joint yellowish with a group of brown scales on ventral portion. Upper side of palpi whitish, brown scaled. Front and vertex greyish yellow, in middle brownish grey scales. Collar concolorous with vertex; thorax brownish, tegulae with rusty brown scales. Costa strongly arched outwards at base, then rather straight or slightly concave, from middle costa gently



Figs. 25—29. 25 — male genitalia of *Eboda anisocornutana* sp. nov. (holotype), 26 — aedeagus of the same specimen, 27 — male genitalia *E. facilis* MEYR. (lectotype: Khasi Hills, Assam, VI. 1906, G. Sl. 6878 [Cl.]), 28 — aedeagus of the same specimen, 29 — female genitalia of *E. facilis* MEYR. (Khasi Hills, Assam, VII. 1906).

curved in arch. Apex ill-defined; termen short, rounded. Ground colour cinnamon-brown, paler or darker in places; base brownish grey. Before the middle of the wing a brownish yellow, rather pale fascia, broadened at middle and dorsum, and edged with whitish. This fascia is atrophied at costa being, however, broadened at the end. Subterminal fascia (concolorous with median fascia, or a little paler than it) consist of intervenular spots. It commences at r_5 and ends at tornus. In the middle of every spot, and in middle area of median fascia are groups of brown scales. Between subterminal fascia and termen grey-brown elongate spot which, however, is atrophied in several specimens or is replaced by a row of spots. In anterior portion of the wing in the middle area a round yellowish spot with brown centre. Costa brown-grey to dark grey with slight violet hue, interrupted by orange spots. Often this grey colour is limited to a narrow costal area from base of the wing to apex. Fringes yellowish pink. Hindwing brownish; fringes pale brownish in some specimens whitish brown in terminations. Length of fore wing 7—8 mm.

Male genitalia (figs 27, 28) as in preceding species. Socii a little larger, projections of tegumen short. The differences are in the shape of aedeagus and length of cornuti. In this species both are of the same length, but rather short.

Female genitalia (fig. 29) rather small. Limen rounded, lateral arm well developed and sclerotized, rather narrow. Posterior part of ductus bursae bulbous, very broad, anterior portion narrow, rather short. Bursa copulatrix transparent, sculptures missing.

Comments. This species is recorded from Assam. The type is preserved in the collection of the British Museum (Nat. Hist.).

Eboda spinosa DIAKONOFF

Eboda spinosa DIAKONOFF, 1948, Treubia, 19 (3): 515, fig. 29.

Very similar in female genitalia to *Eboda facilis* MEYR., however, may be distinguished by very short, narrow anterior part of ductus bursae. In coloration this species differs from *E. facilis* MEYR. in having no orange spots on costal edge of forewing.

This species is known to me only from the literature.

Eboda discobola DIAKONOFF

Eboda discobola DIAKONOFF, 1948, Treubia 19: 514, fig. 34.

According to the original description this species is correlated with *Eboda celligera* MEYR. In the female genitalia limen is large, scobinate. Ductus bursae rather long, thin; bursa copulatrix rounded, without signum.

Eboda musculus DIAKONOFF

Eboda musculus DIAKONOFF, 1948, Treubia, 19: 516.

Distinct by the shape and greyish colour of the forewing. Genitalia not figured in DIAKONOFF'S paper.

Other species described in this genus

Eboda bryochlora DIAKONOFF, 1960, Verh. Kon. Ned. Akad. Vet. Natuurk., 53: 187, pl. 40, f. 236—265. This species recorded from Madagascar does not belong in the genus *Eboda* WKR. It is known only one female specimen, and I cannot decide to which genus *E. bryochlora* DIAK. belongs.

Apotoforma BUSCK

Apotoforma BUSCK, 1933, Entom. Americ., 13: 153.

Emeralda DIAKONOFF, 1960, Verh. Kon. Ned. Akad. Vet. Natuurk., 53: 190 — *synon. nov.*

This genus was created for *Oxygrapha rotundipennis* WALSINGHAM from Jamaica. Venation, male and female genitalia have been figured. I place in this genus six further species, viz., *Apotoforma jamaicana* sp. nov., *A. dolosa* (WALS.), *A. monochroma* (WALS.), *A. negans* (WALS.), *A. uncifera* sp. nov. and *A. cimelia* (DIAK.), and I sink *Emeralda* DIAK. as a synonym of this genus. The genus *Emeralda* DIAK. was created for *cimelia* DIAK. from Madagascar. There are no differences in venation of the wings, and small differences in the male genitalia are of specific character. In *A. cimelia* (DIAK.) the uncus is well developed and there are a great number of long cornuti in the vesica. In the typus generis of the genus *Apotoforma* BUSCK in *A. rotundipennis* (WALS.) uncus is rather ill-defined, and the cornuti are smaller. In *A. jamaicana* sp. nov. the uncus is of the specific shape, but cornuti are more numerous than in *A. rotundipennis* (WALS.). *Apotoforma monochroma* (WALS.), *A. dolosa* (WALS.) and *A. uncifera* sp. nov. are characterized by the more or less developed uncus and very short (in *A. uncifera* sp. nov.). Female genitalia (known only in *A. rotundipennis* (WALS.) and *A. jamaicana* sp. nov.) are similar to these in the preceding groups of species by the rather weakly developed lamella of gonapophyses posteriores. In *A. jamaicana* sp. nov. in anterior portion of ductus bursae is a characteristic bulbous and scobinate sack, which is absent in *A. rotundipennis* (WALS.), but I suppose, is rather a specific feature. The genitalia of *Apotoforma negans* (WALS.) are unknown.

Apotoforma jamaicana sp. nov. ♂, ♀

Labial palpi about 1, 3; slender. Second joint broadened at the end, yellowish white terminally; third joint long, protruding, yellow with small addition of brownish. Front whitish, rest of the head brown-yellow; basal joint of antenna brownish. Collar and bases of tegulae brownish, rest of tegulae and thorax pale yellowish brown. Forewing of constant width throughout, both in male and female. Costa at base abruptly arched outwards, straight to $3/4$, from about vein r_3 slightly curved. Apex rounded, however, cilia on r_4-r_5 a little protruding; termen short, rounded. Ground colour whitish yellow to yellowish. Numerous brownish or yellow scales on whole surface present, changing ground colour (when examined under the low power) into yellow-brown. Costa at base brown with slight violet-grey hue. In $1/3$ brownish or brown-yellow spot which forms, together with two or three diffused spots, an indistinct transverse fascia touching dorsal edge at $2/3$. In the holotype this fascia is weakly developed, but some groups of erect brown scales in this place are present. Costa from beyond middle darkened with brown-yellow or brown. From the point where vein r_3 touches costa goes a curved fascia arising at the posterior part of termen. This fascia is brownish, however, in allotype violet brownish. Fringes concolorous with the ground colour. Hindwing elongate, trapezoidal, apex protruding, rounded. The colour of hindwing brownish, rather pale; fringes whitish brown. Length of forewing about 6 mm.

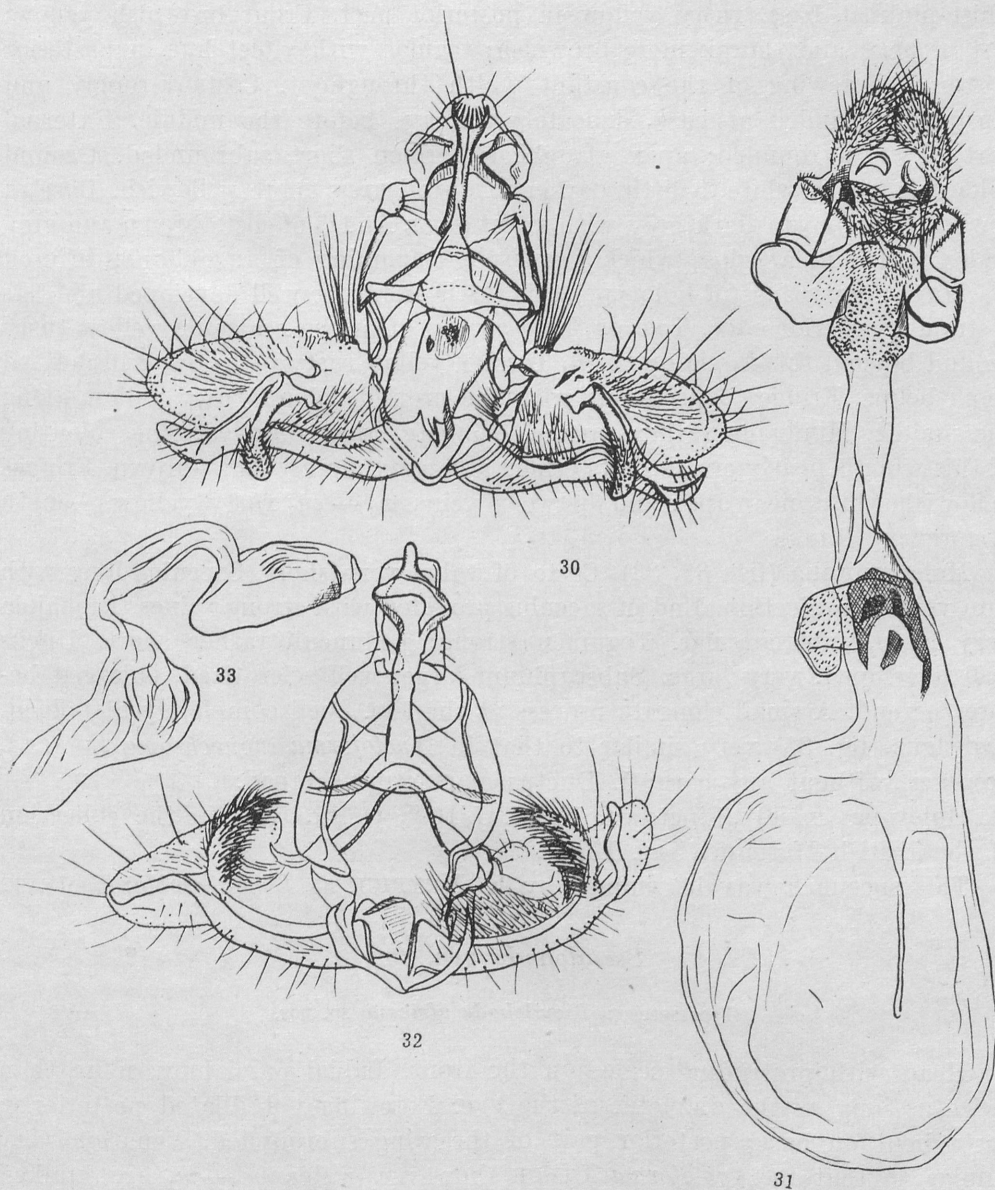
Male genitalia (fig. 30). Valva with very short costa, provided with a bunch of long hairs. Sacculus well developed, slightly expanded ventrad in basal part. Its ventral termination is large, curved upwards, pointed. In its dorsal edge, in the middle of valva long club-like projection. Brachiola very broad, coalescent with valva on whole of its distal portion. Tegumen well developed; socii rather large. Uncus very large, rounded terminally, with two slender, arched lateral projections, which are probably upper portions of curiously divided socii. Subscaphium, long strongly sclerotized tube, concave and spined terminally. Aedeagus very broad; cornuti absent, however, numerous sockets on vesica present.

Female genitalia (fig. 31) large. Labia of the normal *Tortricini* shape. Gonapophyses posteriores on lamella. Lamella genitalis large, minutely spined posteriorly. Limen large, scobinate with large, well sclerotized lateral wings. These in natural position are emarginate dorsad. Gonapophyses anteriores atrophied. Ductus bursae long, transparent, broadened towards bursa. In this broad portion a large bulbous sack, distinctly scobinate. The base of this is rather well sclerotized. No signum in bursa copulatrix.

Holotype (Male) „Runaway Bay, Jamaica, 27. 3. 1905, WLSM. 77053“, G. Sl. 5474.

Allotype (No. 77051, G. Sl. 5473) and paratype labelled as the holotype both in the collection of the British Museum (Nat. Hist.).

Comments. In the bursa copulatrix I have found twenty large, flat cornuti with broken bases. They were left in bursa during copulation, and I suppose, they belong to the male of the same species. The new species was determined as *A. monochroma* by WALSINGHAM.



Figs. 30—33. 30 — male genitalia of *Apotoforma jamaicana* sp. nov. (holotype), 31 — female genitalia of *A. jamaicana* sp. nov. (allotype), 32 — male genitalia of *A. uncifera* sp. nov. (holotype), 33 — aedeagus of the same specimen.

Apotoforma uncifera sp. nov. ♂

Labial palpi about 1.5; thin. Second joint very thin at base, enlarged posteriorly; terminal joint long, protruding. Palpi white with a very slight pink hue; second joint in posterior portion yellow rusty ventrally; terminal joint white-pink at base, rusty yellow in posterior part. Front brownish yellow; rest of head and thorax more brownish; tegulae with violet hue in posterior portions. Forewing of the constant width throughout. Costa strongly and abruptly expanded at base, delicately concave before the middle. External part of costa rounded; apex atrophied; termen short subrounded. Ground colour yellowish white, a little darker in dorsal area, more yellowish. Base of the wing and costa dark grey with violet gloss. At 1/3 of costa brown and grey scales with similar gloss which forms the beginning of an oblique, diffused fascia. In right wing (of holotype) this fascia is rather well developed and has a straight anterior edge. Two or three groups of brown scales on yellow rusty ground beyond this fascia on costa. Termen yellow rusty with row of ill-defined spots below. Fringes concolorous with the ground colour, rusty yellow along the middle. Hindwing rather narrow, elongate, apex rounded. The colouring of this wing is nearly cream, but termen and apex more yellow-brown. Fringes yellowish white, near apex and between veins m_3 — cu_2 rusty yellow. Length of forewing 6 mm.

Male genitalia (figs 32, 33). Costa of valva very short. Sacculus long with thin ventral projection. End of sacculus provided with strong spines. Brachiola very large, subtriangular. Tegumen strong; pedunculi rather short. Uncus well developed, very large. Subscaphium large, well sclerotized, enlarged before the end. A small elongate process at the top. Socii completely atrophied. Aedeagus (fig. 33) very similar to that in *Apotoforma monochroma* (WALS.), however, without any cornuti. Ductus ejaculatorius broad.

Holotype (male) „Pinetown, Natal, L'10.“, G. Sl. 5458 in the collection of the British Museum (Nat. Hist.).

This specimen was determined by E. MEYRICK as *Eboda amblopiis* MEYR.

Pseudeboda gen. nov.

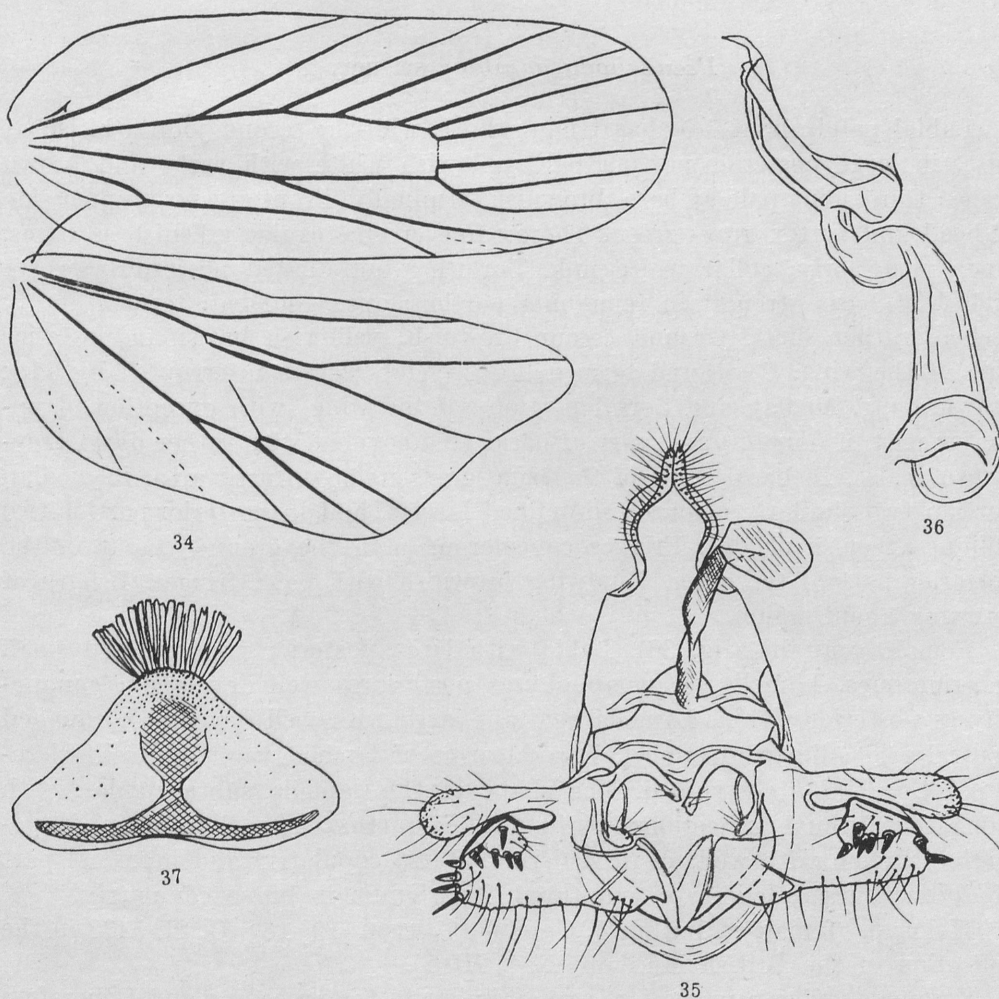
Type species: *Pseudeboda africana* sp. nov.

Head with protruding scales on the front. Labial palpi long, more than twice as long as the diameter of the eye. Forewing not dilated posteriorly; costa bent on base; posterior part of the wing subrounded. Venation very similar to that in *Apotoforma* BUSCK, however, veins m_3 — cu_1 are stalked shorter. Hindwing rather narrow. Vein *sc* long; vein *rr* before top of apex; m_2 lacking, m_3 near cu_1 from the central cell (fig. 34).

Male genitalia as in *Apotoforma* BUSCK, however, sacculus has a very strong spined venral portion and longer, well sclerotized dorsal process. Brachiola elongate; socii long, erect.

Pseudeboda africana sp. nov. ♂

Labial palpi elongate, more than 2; second joint expanded posteriorly; terminal joint long. The colour of palpi yellowish, terminal joint and some scales on the lateral side of second joint brown. Front yellow-green, rather pale; thorax greenish grey. Forewing rather of constant width throughout; costa arched strongly at base; then straight; apex rounded; termen rounded short. Ground colour pale grey-green with olive-green scales grouped in short transverse stripes. Costa and termen more intensely greenish, with several diffused brownish grey spots. On the surface of the wing several brown points. Fringes greenish. Hindwing brownish; fringes a little paler. Length of forewing about 7 mm.



Figs. 34—37. *Pseudeboda africana* sp. nov.: 34 — venation, 35 — male genitalia of holotype, 36 — aedeagus of the same specimen, 37 — last praegenital tergite

Male genitalia (figs 35, 36). Valva with short costa. Sacculus very strong, curved outwards in basal portion, then nearly straight, dilated posteriorly in a large, flat process. Dorso-distal part of this process is folded. Distal edge armed with strong, short and broad spined. Dorsal arm of sacculus well sclerotized, bent, hairy terminally, sinuated just beyond base of valva. Brachiola long and rather thin, broadened posteriorly. Vinculum well developed; transtilla in the shape of transparent band. Tegumen large ending in rounded process, which is armed with arched elongate socii and probably is not the uncus. Subscaphium well sclerotized, ending with large terminal plate. Aedeagus elongate, pointed. No cornuti in vesica. Tergite of praegenital segment (fig. 37) with long, characteristic sclerite, scaled posteriorly.

Holotype (male): „S[outh] Africa, R. E. TURNER, Port S. John, Pondoland, Sept. 1923“, G. Sl. 5433.

Pseudeboda gambiae sp. nov. ♀

Labial palpi about 1,5; basal joint short, whitish; second joint whitish at base, in large posterior portion pale yellowish white with rusty and brown scales; third joint pale at base, brownish terminally. Front greenish, upper side of head and vertex grey-green. Thorax fine green; tegulae greenish at bases, green posteriorly; collar white-pink. Forewing not dilated posteriorly; costa arched at base, straight in remaining portion; apex rounded; termen gently arched, rather short. Ground colour brownish, yellowish brown in posterior part of the wing. Costa and termen brown-yellow; costa interrupted by dark brown spots. Median and dorsal portions of the wing (with exception of posterior part of dorsum) and part of basal area covered with rather dark, grey-brown scales. In basal third of the wing grass-green suffused area, in median portion two similarly coloured ill-defined fascias, and in posterior portion two oblique greenish shades. Fringes concolorous with the ground colour in the posterior part of the wing. Hindwing brownish with paler fringes. Length of forewing about 7 mm.

Female genitalia (fig. 38). Labia with large posterior portions and small anterior ones. Lamella of gonapophyses posteriores well developed; gonapophyses posteriores thin. Lamella genitilis large with well developed, rounded ventral folds; limen atrophied. Lateral arms of lamella vaginalis well sclerotized, thin, minutely spined. The shape of this lamella subtriangular, with elongate proximal projections. Ostium wide; ductus bursae long, thin, in posterior portion with well sclerotized ring. Bursa copulatrix and proximal part of ductus bursae delicately sculptured. No signum in bursa copulatrix.

Holotype (female): „Bathurst, Gambia, CARTER [19] 18“, G. Sl. 5438 in the collection of the British Museum (Nat. Hist.).

Comments. The new species is very similar to the preceding and I therefore place it in the same genus. I have not found any differences in the shape or the venation of the wings.

Amboyna gen. nov.Type species: *Amboyna furcifera* sp. nov.

Labial palpi rather short; second joint slightly broadened terminally; third joint large broadened ventrally. Venation and shape of the wings as in this group of genera.

Male genitalia. Costa of valva long, well sclerotized Sacculus very large, bifurcate in two pointed tips posteriorly. Brachiola short, subrounded. Tegumen well developed; no uncus. Socii not coalescent, erect. Subscaphium membranous; transtilla well developed. Aedeagus strong, two cornuti on large basal plates present in vesica.

Amboyna furcifera sp. nov. ♂

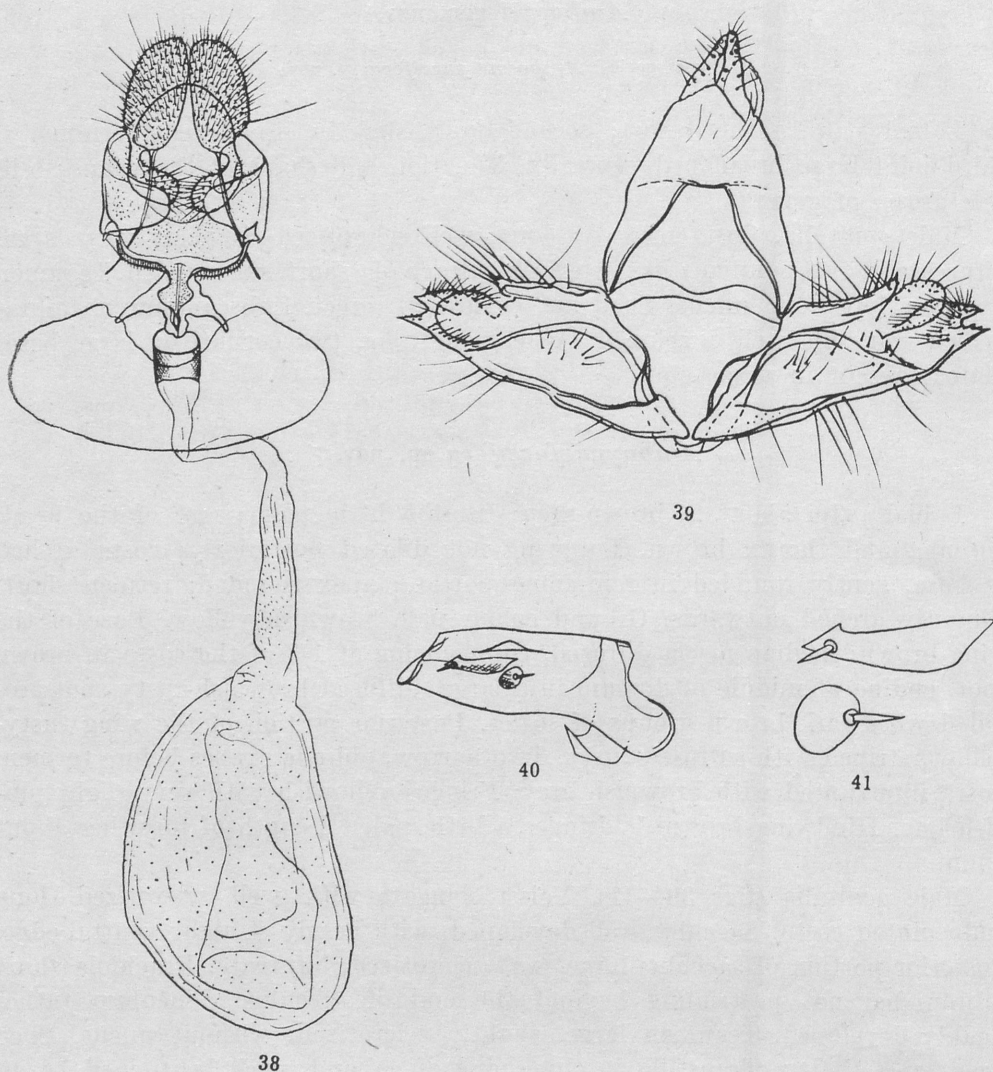
Labial palpi about 2, brown-grey; front a little paler; rest of the head, antenna and thorax brown. Forewing not dilated posteriorly; costa arched at base, gently rounded in remaining portion; apex rounded; termen short, slightly arched outwards. Ground colour pale brownish yellow. Base of the wing brown; median fascia diffused, commencing at $\frac{1}{3}$ of the costa in brown spot, ending at middle of dorsum in a large, diffused brownish-rusty spot provided with dark brown groups of scales. Posterior portion of the wing rusty-yellow, striped with suffused rusty. Two narrow, oblique stripes before termen. Costa interrupted with brownish grey. Fringes yellowish with very slight pinkish hue. Hindwing brownish, fringes a little paler. Length of forewing about 6 mm.

Male genitalia (figs 39—41). Valva elongate with well sclerotized, long and pointed costa. Sacculus well developed, with nearly straight ventral edge. Posterior portion of sacculus large, well sclerotized, bifurcate. Brachiola short subrounded not protruding beyond the end of sacculus. Vinculum rather weakly developed. Tegumen large, slightly sclerotized, without uncus. Socii long, erect, hairy. Transtilla in the shape of a band, with broadened bases. Aedeagus (fig. 40) long, pointed terminally, provided with small lateral fold in the middle. Two cornuti (fig. 41) present in vesica. One cornutes on rounded plate, second cornutes on elongate plate.

Holotype (male) „Amboyna, 1892, DOHERTY“, G. Sl. 6782, in the collection of the British Museum (Nat. Hist.).

Brachiolia gen. nov.Type species: *Tinea egenella* WALKER, 1864

Labial palpi 1, 2 to 2. Second joint broadened towards the end; third joint protruding. Venation as in *Eboda*—group. In forewing the distance between r_1 and r_2 twice as long as that between r_2 and r_3 at the central cell. Veins r_2 ,



Figs. 38—41. 38 — female genitalia of *Pseudeboda gambiae* sp. nov. (holotype), 39 — male genitalia of *Amboyina furcifera* sp., nov. (holotype), 40 — aedeagus of the same specimen, 41 — cornuti

r_3 , r_4 of equal distances apart. Vein r_4 near r_5 ; m_3 and cu_1 stalked to $1/5$; equidistant to m_2 . In the hindwing m_3 and cu_1 near to each other.

Male genitalia. Valva rather short with short, but well sclerotized costa. Sacculus strong, elongate, pointed terminally. A bulbous projection before the terminal part of the sacculus. Brachiola similar, in shape to that in *Pseudeboda* gen. nov. Tegumen strong; uncus present; subscaphium atrophied; tubus analis membranous; socii vesigial. In aedeagus single large cornutus with broad base.

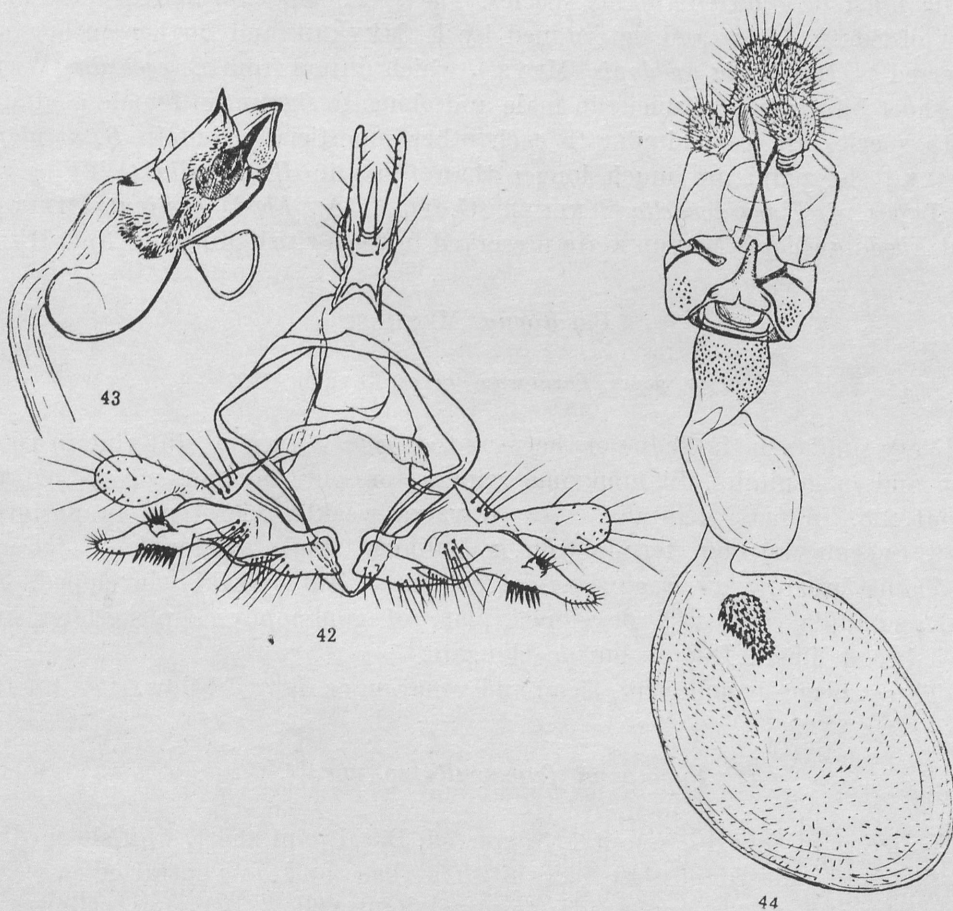
Female genitalia. Labia with enlarged posterior parts. Lamella genitales very strong; lamella vaginalis well developed with strongly sclerotized projection in the middle. Posterior part of the ductus bursae scobinate. Bursa copulatrix with large signum.

Two species belong here, viz., *Brachiolia egenella* (WKR.) and *B. ambolpis* (MEYR.).

Brachiolia egenella (WALKER)

Tinea? egenella WALKER, 1864, List. Spec. Lep. Ins. B. M., 30: 1005.

Eboda obstinata MEYRICK, 1908, Journ. Bombay nat. Hist. Soc., 18: 624 — *synon. nov.*; MEYRICK 1912, Exot. Micr. 1: 20; MEYRICK, 1912, Cat. Lep., 10: 58; MEYRICK, 1913, Wytism. Gen. Ins., 149: 59; FLETHER, 1921, Ind. Agr. ent. Mem., 6: 41.



Figs. 42—44. *Brachiolia egenella* (WKR.): 42 — male genitalia of type (Ceylon, G. Sl. 5558), 43 — aedeagus of the same specimen, 44 — female genitalia (Pusa, 11—16. VIII., 1924 rolling leaf of Creeper — V., G. Sl. 5462)

I have examined the types of *Tinea egenella* WKR. and *Eboda obstinata* MEYR. In the genital slide of the latter species the posterior part of the tegumen is folded ventrad, and therefore in the photograph in GATES CLARKE'S work (1958) the long projections of the uncus are not well visible.

Male genitalia (figs 42, 43). Valva broad, rather short; sacculus very strong with elongate posterior portion. A group of strong spines on ventral edge before the end. Brachiola large; uncus long, well sclerotized, bifurcate, hairy; socii atrophied; transtilla broad. Aedeagus very large, pointed, provided with two small teeth posteriorly. Numerous very small spines and one strong cornutus in vesica.

Female genitalia (fig. 44). Lamella vaginalis large, sculptured. Gonapophyses anteriores short. Posterior part of ductus bursae scobinate. A single, short dentate signum present.

Comments. All records referring to *Eboda amblopiis* MEYR from Ceylon and India must be referred to this species. The specimens captured in the islands east of South Africa and determined by E. MEYRICK and further authors are referred to *Brachiolia amblopiis* (MEYR.), which differs from *B. egenella* (WKR.) by short bifurcation of uncus in male and elongate signum in female genitalia. Both species are very similar to each other superficially, but in *B. amplopiis* (MEYR.) the palpi are much longer than those in *B. egenella* (WKR.).

Types of *Tinea egenella* WKLKER (G. Sl. 5558), *Eboda obstinata* MEYRICK and *Eboda amblopiis* MEYRICK are preserved in the British Museum (Nat. Hist.).

Paratorna MEYRICK

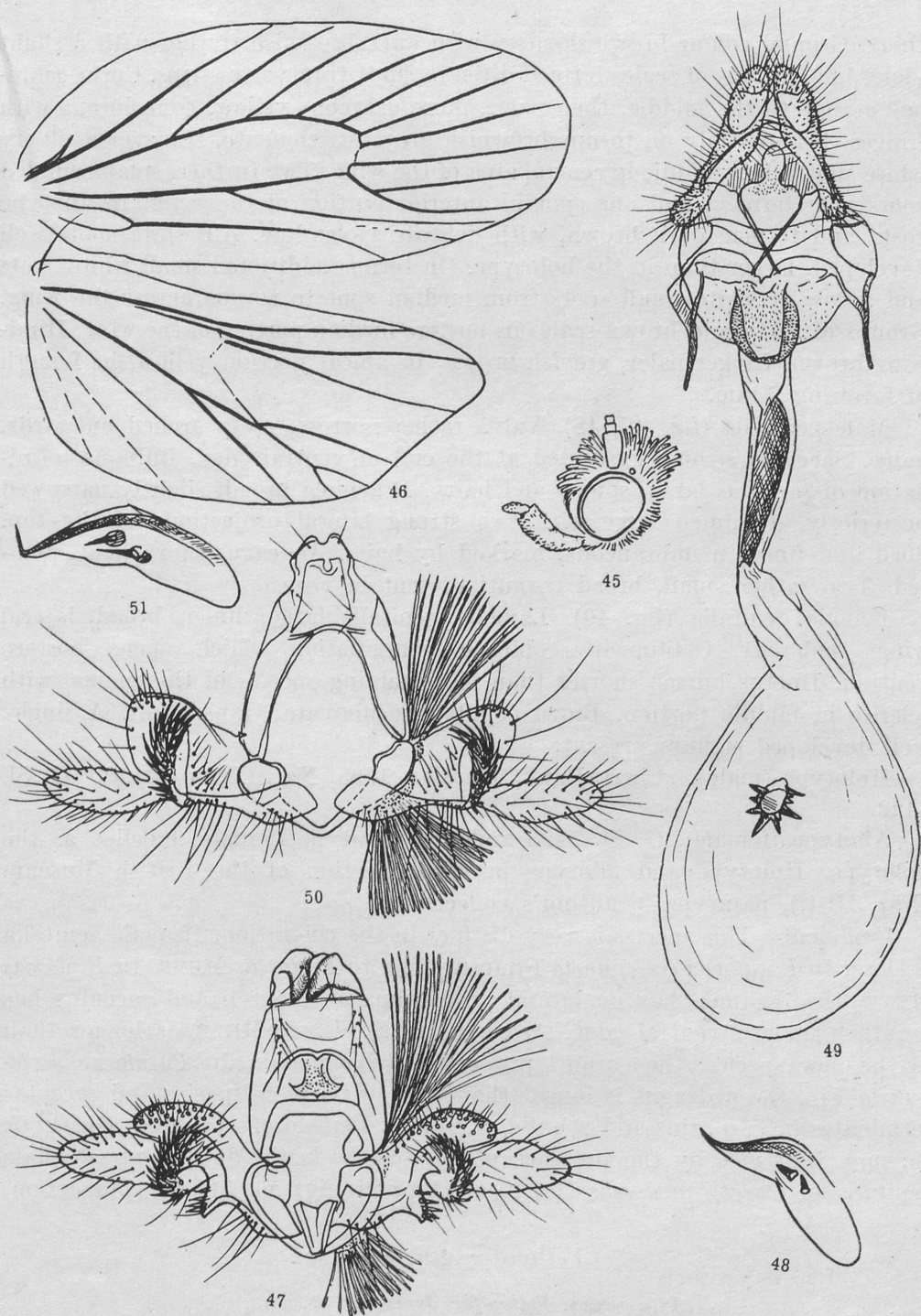
Type species: *Paratorna dorcas* MEYRICK, 1907

Very similar in the shape of the wing to *Eboda* WKR., but differing in venation and in genitalia. In hindwing vein m_2 present, m_3 and cu_1 stalked till about 2/3. In male genitalia costa of valva weakly sclerotized in posterior part. Sacculus strong, terminating in bulbous, single or double projection. Brachiola broad, very large; socii atrophied, or very weakly developed. Female genitalia with well developed plate of gonapophyses posteriores and with broad limen. Ductus bursae elongate.

Three species belong here. Head and venation as figured below. (figs 45, 46).

Paratorna fenestralis sp. nov. ♂, ♀

Labial palpi delicate, about 1, 5; erected. Basal joint short, whitish; median joint curved, dilated posteriorly, whitish at base and on ventral edge, yellowish laterally and on upper side; terminal joint yellow, ochreous yellow apically. Front in lower portion yellow, rest of the front, remaining parts of the head and thorax brown, tegulae more rusty. Forewing elongate-ovate; costa at base abruptly arched, then curved; apex atrophied; termen rounded, rather



Figs. 45—51. *Paratorna* MEYR.: 45 — head, 46 venation, 47 — male genitalia of *P. femestralis* sp. nov. (holotype), 48 — aedeagus of the same specimen, 49 — female genitalia of *P. fenestralis* sp. nov. (allotype), 50 — male genitalia of *P. dorcas* MEYR. (Khasi Hills, Assam, IV. 1906, G. Sl. 5426), 51 — aedeagus of the same specimen)

short. Ground colour brownish-rusty with dark brownish (rather with a slight violet hue) groups of scales formed often in short transverse strips. Costa ochreous orange to the middle, then paler, more ochreous yellow, concolorous with fringes. Fringes only on tornus brownish grey. An elongate, transverse silvery white spot before middle in central area of the wing. Two further, small rounded spots near termen, and one spot in anterior portion of the wing. In allotype costa and termen dark brown, with delicate violet hue. All white spots well developed, larger than in the holotype. On tornus additional small white spots and a row of white small spots from median spot to tornus across the wing. Groups of rusty and brown scales in postere-median portion of the wing. Hind-wing brown; fringes paler, greyish brown, in apical portion yellowish. Length of forewing 7 mm.

Male genitalia (figs 47, 48). Valva rather narrow; costa arched outwards, hairy. Sacculus strong, expanded at the end of ventral edge. Bulbous termination of sacculus large, spined and hairy. Brachiola broad, slightly narrowed posteriorly. Tegumen large with two strong lateral projections of the top. Socii ill-defined, membraneous, marked by hairs. Aedeagus short, bent, pointed. Two rather small, broad cornuti present in vesica.

Female genitalia (fig. 49). Lamella genitalis large; limen broad, lateral wings scobinate. Ostium in scobinate emargination, which opens postero ventrad. Ductus bursae shorter than in remaining species of this genus, with sclerite in middle portion. Bursa copulatrix subovate, transparent. A single, well developed signum present.

Holotype (male): „Chera Punji, Khasias, 1895, Nat. (DONCASTER).“ G. Sl. 5422.

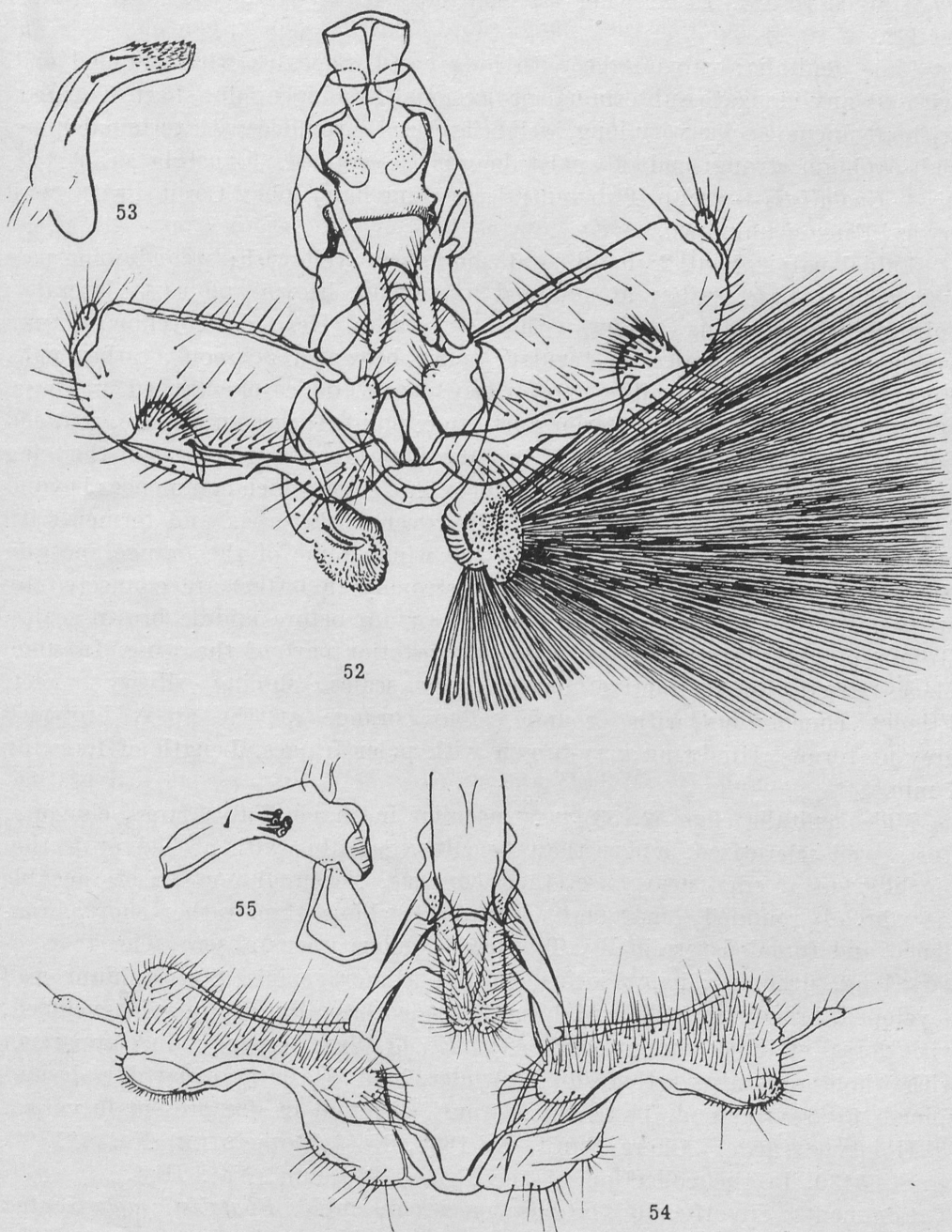
Allotype (female), G. Sl. 5423 and one paratype (female) labelled as the holotype. Holotype and allotype in the collection of the British Museum (Nat. Hist.), paratype in author's collection.

Comments. This species is very distinct in the coloration. In male genitalia is closer to *Paratorna seriepuncta* FILIPIEV than to *P. dorcas* MEYR. In *P. dorcas* MEYR. the tegumen has no lateral projections at the top and sacculus has a rather smooth ventral edge. Aedeagus in *P. dorcas* MEYR. is longer than in the new species, the cornuti proportionately smaller. In *Paratorna seriepuncta* FIL. the aedeagus is longer than that in the new species and sacculus terminates in two arms and a bulbous ending. Female of *Paratorna fenestralis* sp. nov. is distinct by the presence of the sclerite in the ductus bursae. Male genitalia of *Paratorna dorcas* MEYR. are figured (figs 50, 51) for comparison.

Vellonifer gen. nov.

Type species: *Vellonifer doncasteri* sp. nov.

Labial palpi about 2; second joint broad, expanding ventrally in the terminal portion; third joint elongate. Forewing with slightly arched costa; apex pointed; termen sinuate. The venation as in *Spatalistis* MEYR., however, in



Figs. 52—55. Male genitalia: 52 — *Vellomifer doncasteri* sp. nov. holotype, 53 — aedeagus of the same specimen, 54 — *Spatalistis zygota* sp. nov. holotype, 55 — aedeagus of the same specimen

the forewing cu_2 arises from the median cell before its middle. Veins m_3 and cu_1 stalked to $1/3$. In hindwing m_2 very near to m_3-cu_1 , which are stalked to $1/2$.

Male genitalia: valva large with long costa. Sacculus with rounded end, without any elongate subterminal projections. Brachiola thin, short. Tegumen without uncus; socius very long, well sclerotized, provided with terminal spine. Subscaphium strong; end of anal tube well sclerotized. Transtilla as in *Acleris* — *Spatalistis* — group. Two ventral very long hairy lobes. Cornuti with small bases. Female unknown.

Labial palpi about 2; basal joint short, pale yellowish; second joint pale yellowish at base, yellow at enlarged broad end, brown and rusty laterally; third joint protruding, yellow with rusty scales. Head dark yellow; thorax yellow with rusty scales on tegulae; collar brownish ochreous, rather pale. Forewing slightly expanding posteriorly; costa delicately arched at base, straight to $4/5$, arched in posterior part; apex pointed; termen sinuate, rounded beyond the middle. Ground colour bright yellow. In posterior part of the wing large, greyish brown spot with oblique proximal edge, which commences beyond $1/3$ of dorsum, ends at $2/3$ of costa. However, costa, apex and termen with elongate yellow spot towards base of the wing. Some of the orange spots in the ground colour and pattern (not so strongly in latter) are connected by stripes. In $1/3$ and $1/2$ of costa, and on dorsum before middle brown scales. Groups of dark brown erected scales in posterior part of the wing. In some places groups of refractive brown grey scales, shining silvery violet. Fringes concolorous with ground colour, orange at the apex, brownish grey at tornus. Hindwing grey-brown with paler fringes. Length of forewing 7 mm.

Male genitalia (figs 52, 53) very peculiar in shape. Valva large, elongate. Costa well sclerotized, longer than sacculus. Sacculus with arched projection of the ventral edge near base, then concave. Terminal portion of sacculus very broad, rounded, emarginate dorsad. Brachiola thin, rather short, broadened and rounded terminally. Tegumen slender; uncus absent. The enormously long, drooping, hairy socius ends in a short spine. Subscaphium well developed, broad; transtilla with broad, rounded bases; vinculum well developed, with dorsal endinges similar to those in *Eboda* WKR. Aedeagus in comparison with whole apparatus rather small, slender, bent. Its lateral and dorsal sides spined towards the end. Three thin cornuti, different in size present in vesica.

Holotype (male) „Chera Punji, X. 1894, Nat. (DONCASTER) No. 72179“, G. Sl. 5439, in the collection of the British Museum (Nat. Hist.).

Comments. Superficially the new species resembles *Spatalistis aglaoxantha* MEYR. from China. However, in *S. aglaoxantha* MEYR. the costal area of the forewing is darkly coloured and the ground colour which forms an elongate spot beneath the termen is absent. Termen is not sinuate; apex gently rounded. According to the female genitalia *aglaoxantha* MEYR. belongs to the genus *Spatalistis* MEYR.

Spatalistis MEYRICK

Spatalistis MEYRICK, 1907, Journ. Bombay nat. Hist. Soc., 17: 978.

Many species were included here by MEYRICK and other authors, however, not all were congeneric with *Spatalistis rhopica* MEYR., type of this genus. This genus is characterized in male genitalia by elongate valva, long, slender sacculus and thin, rather short brachiola. Uncus rather well developed, however, in some species short. Socii elongate, flat, drooping. In female genitalia lamella vaginalis with large, pointed proximal projections, similar to those in the genus *Acleris* HBN.

I include here *Spatalistis rhopica* MEYR., *S. hormota* MEYR., *S. aglaowantha* MEYR., *S. translineata* MEYR., *S. violacea* DIAK., *S. gratiosa* sp. nov. *S. zygota* sp. nov. and *S. bifasciana* (HBN.), however, the latter differs in male genitalia.

Spatalistis gratiosa sp. nov. ♂

Labial palpi about 3; basal joint smooth, yellowish; second joint strongly enlarged posteriorly with long scales on ventral and dorsal sides, yellowish olive, brownish scaled, with group of brown scales at base laterally; third joint short similarly coloured as in second joint. Thorax yellowish, rather pale with yellowish green scales, dark fuscous green on tegulae. Head pale, whitish yellow; antenna similarly coloured, with greenish scales on the segments. Forewing slightly expanding posteriorly; costa arched outwards at base, covered with longer scales; straight or slightly convex from 1/3 to 3/4, delicately curved posteriorly. Apex pointed; termen sinuate (fringes only a little). Ground colour yellowish olive in basal portion of the wing to about 3/4 of costa and below 1/4 of dorsum. Posterior portion of the wing rusty yellow with very slight olive hue. Both colours divided by yellowish. In basal area of the wing two triangular and three or four irregular dark grey spots. Larger spots edged with whitish. Costal patch brownish olive, provided with black scales medially. In posterior part of the wing irregular, diffused rusty spots, more visible, grouped in row along oblique edge of basal colour. Apex black. Several groups of silvery -grey refractive scales both on the ground colour and pattern. Two very large groups of erected scales in middle area, and several small ones on remaining surface of the wing. Fringes yellow-olive, delicately tinged with pale rosy. Hindwing brownish, paler basally. Fringes yellowish-brownish at apex, yellowish white to vein m_3 , brownish in remaining part, divided with brownish from beyond the apex. Length of forewing about 8 mm.

Abdomen missing.

Holotype (male): „Margherita, Assam, DOHERTY, 1889, [No] 40065“, in the collection of the British Museum (Nat. Hist.).

Comments. The new species is very similar to *Spatalistis hormota* MEYR., but easily distinguished by the narrower forewing, large tufts of crested scales and costal subtriangular path. Venation like in *S. rhopica* MEYR.

Spatalistis zygota sp. nov. ♂

Labial palpi about 2; basal joint short, cream-white; second joint strongly broadening towards the end, cream, with long yellow scales in ventral edge terminally and two groups of short rusty scales on the upper side; third joint protruding, yellowish with rusty scales. Front yellowish with rusty scales on upper side; rest of the head thorax yellow with rusty scales. Several brown scales at bases of tegulae. Forewing nearly same width throughout; costa arched at base, then slightly curved; apex pointed; termen short, rather sinuate. Ground colour yellowish. A complicate, dark orange reticulation all over the wing. Three transversae diffused fascias constructed of blackish brown spots near base, in the middle and before termen. Further three dark spots among fascias on costa, and two or three ill-defined spots in median area. On dark pattern large groups of silvery grey shining scales, and before subterminal fascia a row of silvery white scales. Fringes concolorous with ground colour, with some orange scales in middle line and greyish scales at tornus. Hindwing brownish yellow, brownish on peripheries. Fringes brownish grey, brownish at apex and to dividing line. Length of forewing 6 mm.

Male genitalia (figs 54, 55). Valva elongate, costa well developed. Sacculus broad at base, sinuate in the middle. Terminal portion rather slender, hairy, apical portion short. Brachiola thin, rather small; tegumen weak, with long slender pedunculi. Uncus well developed, rounded; socii rather small; tubus analis rather well sclerotized. Aedeagus long, bent. One small, slender and four larger, broadened basally cornuti present in vesica.

Holotype (male): „Margherita, Assam, 1889, DOHERTY, No. 4005“, G. Sl. 5440, in the collection of the British Museum (Nat. Hist.).

Trophocosta gen. nov.

Type species: *Spatalistis nummifera* MEYRICK, 1910

Labial palpi 1,5—2. Forewing with apex pointed and sinuate termen. Venation of *Spatalistis* — group. In forewing r_5 touching termen beyond the apex; vein m_1 equidistant to m_2 ; m_3 stalked with cu_1 till 1/4, far from m_2 at median cell. In hindwing m_3 and cu_1 stalked to 1/2; m_2 very near m_3 .

Male genitalia: valva elongate with very short costa. Sacculus well developed, pointed terminally. Tegumen rather well developed, uncus absent or ill-defined. Socii of different shape but well developed. Anal tube with well sclerotized subscaphium. Aedeagus short, cornuti small, only in *T. paryphaea* (MEY.) long, numerous. Brachiola completely atrophied.

In female genitalia lamella vaginalis large with short anterior processes. Ductus bursae long, thin. Bursa copulatrix large; signum in the shape of plate, or absent.

Seven species belong in this genus, viz., *Trophocosta nummifera* (MEYR.), *T. cyanoxantha* (MEYR.), *T. nites* sp. nov., *T. multiastra* sp. nov., *T. argyrosperma* (DIAK.), *T. conchodes* (MEYR.) and *T. paryphaea* (MEYR.).

***Trophocosta nummifera* (MEYRICK) comb. nov.**

Spatalistis nummifera MEYRICK, 1910, Proc. Linn. Soc. N. S. Wales, 35: 287.

Spatalistis perusta DIAKONOFF, 1953, Verh. Akad. Vet., Amst. (2), 49: 82 fig 301—
synon. nov.

I have examined the type of *Spatalistis nummifera* MEYRICK in the British Museum (Nat. Hist.) and compared its male genitalia with the figure in DIAKONOFF's publication. It agrees well, however, in the drawing of the male genitalia of *S. perusta* DIAK. the socii are rather shorter. It depends probably on the position of the tegumen. This I have confirmed by examining another specimen.

***Trophocosta nitens* sp. nov., ♂**

Labial palpi about 2; second joint long hairy before end ventrally; third joint protruding. The colour of palpi yellow, third joint tinged slightly with brownish. Front, vertex and bases of antennae tinged slightly with brownish. Front, vertex and bases of antennae yellowish; thorax yellow (badly damaged by large pin). Forewing rather broad; costa curved outwards from base to the middle, then straight; apex pointed; termen delicately sinuate. Ground colour of the wing and cilia yellow. Numerous groups of orange scales all over the wing, especially in anterior and posterior parts. Three groups of greyish brown scales at costa and several similar ones in posterior portion of the wing. Small, shining silvery scales both on ground colour and pattern. Fringes and tornus grey brownish, rather pale. Hindwing brownish, pale towards base, fringes concolorous. Length of forewing 4.5 mm.

Male genitalia (fig. 56). Valva broad, costa rather long (in comparison with that in other species of this genus). Sacculus with large base, concave before middle. Beyond the middle a narrow fold with fan-shaped group of long hairs. End of sacculus elongate, narrowing in the ending, which, in shape, resembles a bird's head. Upper side of sacculus arises to costa of valva and therefore all this part appears to be an elongate pointed valva. Tegumen small with elongate pedunculi. Uncus broad, short; socii broad, provided with row of long spine-like hairs on posterior edge. Gnathos rather well developed, subscaphium scobinate. Aedeagus broad, short; no cornuti in vesica.

Holotype (male): „Mt. Riu, 2000 ft., Sudest Isl., April 1916, (Eichhorn Bros.); G. Sl. 5471, in the coll. of the British Museum (Nat. Hist.).

Comments. Superficially this species resembles *Trophocosta nummifera* (MEYR.) but differs in genitalia.

Trophocosta multiastra sp. nov., ♀

Labial palpi over 2, yellowish, dark yellow posteriorly. Second joint strongly broadened terminally; third joint protruding. Head yellow; thorax a little darker rusty red posteriorly. Forewing rather elongate, broadest in the middle. Costa curved at base, delicately arched dorsad beyond the middle; apex pointed, not protruding; termen very slightly sinuate. Ground colour yellow, along the patern yellowish-rusty, sprinkled delicately with rusty yellow. Large, brownish red spot covering the whole surface of the wing with the exception of costal and terminal edges. Numerous, rather small black raised tufts of scales on spot, especially in its posterior portion. Larger grey spots among these tufts. Over the whole surface of the wing groups of refractive scales; greyish silvery on grey spots, yellowish pearl on yellow ground. Fringes yellow, on tornus greyish red. Hindwing brownish, fringes a little paler, yellowish near apex. Length of forewing 5 mm.

Female genitalia (fig. 57). Lamella vaginalis large, nearly equilateral with rather weakly developed proximal projections. Lateral arms short. Gonapophyses short. Ductus bursae very long, very slightly sculptured. Bursa copulatrix large, elongate, simple. No signum or sculptures present.

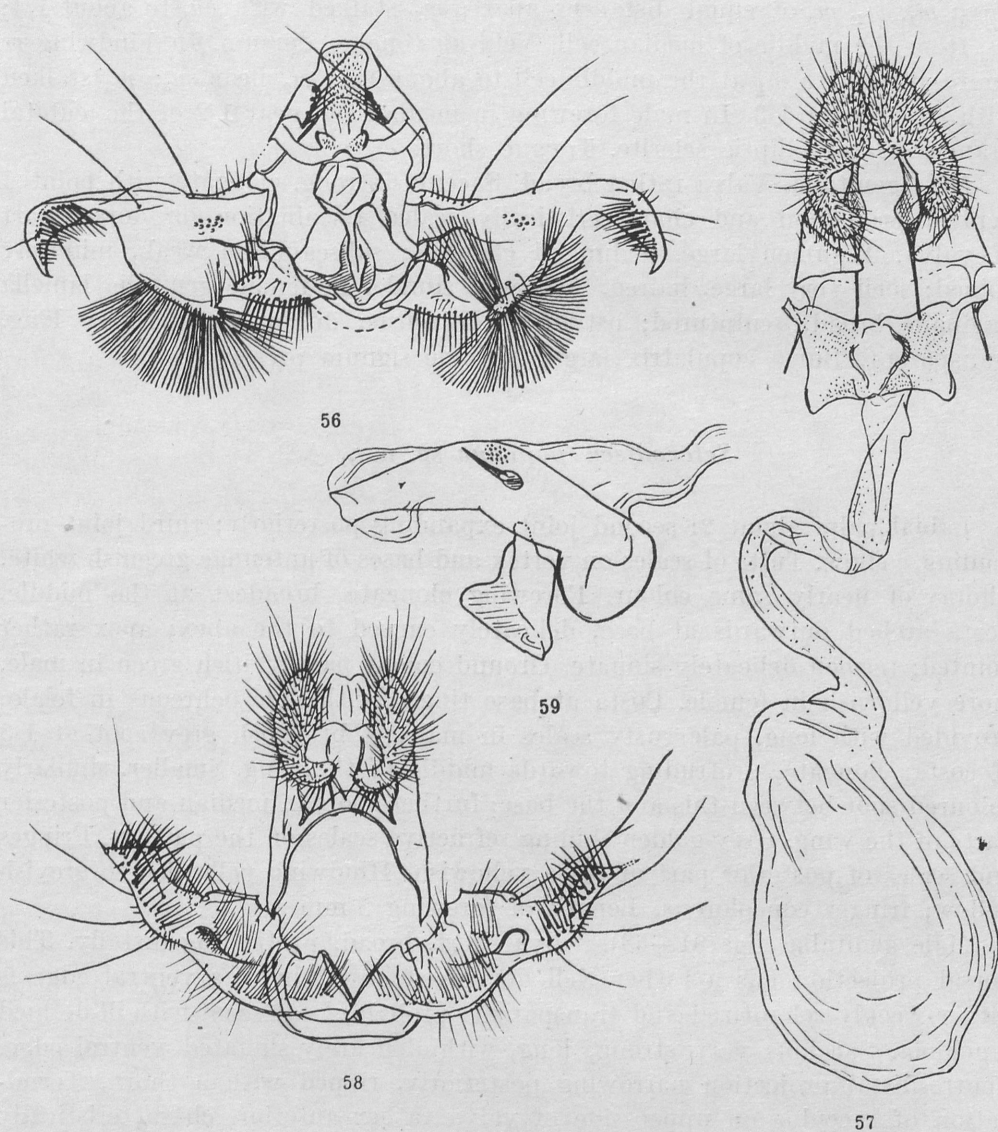
Holotype (female): „Mt. Riu, 2000 ft., Sudest Isl., April 1914 (Eichhorn Bros.)“, G. Sl. 5484, in coll. of the British Museum (Nat. Hist.).

Trophocosta conchodes (MEYRICK), comb. nov.

Spatalistis conchodes MEYRICK, 1910, Proc. Linn. Soc. N. S. Wales, 35: 287.

The genitalia of this species are not figured in GATES CLARKE's work (1958); type: „Sudest I., New Guinea, A. S. M., 105“, G. Sl. 6787 is preserved in the British Museum (Nat. Hist.). The description of male genitalia (figs 58, 59) as follows.

Valva with rather long (in comparison with that in other species of this genus); sacculus long, bilobed ventrally, provided with subrounded projection in the middle. Its posterior part large, spined. Terminal spine short, rather broad. Tegumen large; socii similar to those in *T. cyanoxantha* (MEYR.). Tubus analis large. Aedeagus very large, bent, pointed with small tooth before the end laterally, and a group of minute teeth in the middle. A single cornutus, bulbous at the base, present in vasica.



Figs. 56—59. 56 — male genitalia of *Trophocosta nitens* sp. nov., aedeagus in situ, holotype, 57 — female genitalia of *T. multiastra* sp. nov. holotype, 58 — male genitalia of *T. conchodes* (MEYR.), type, 59 — aedeagus of the same specimen

Sclerodisca gen. nov.

Type species: *Sclerodisca papuana* sp. nov.

Labial palpi about 2. Basal joint short; second joint slightly expanding posteriorly; third joint protruding, rather thin. Forewing elongate; costa arched outwards; apex pointed; termen slightly sinuate. Venation: sc far to costa, r_2 in the same distance to r_1 as to r_3 ; r_3-r_4 half of r_2-r_3 ; r_4 approximated

to r_5 ; m_1 , m_2 , m_3 of equal distances apart; m_3 stalked with cu_1 to about $1/4$; cu_2 from the middle of median cell. Vein *an* touches dorsum. In hindwing *rr* approximated to m_1 at the middle cell to about $1/4$; m_2 near m_3 ; m_3 stalked with cu_1 to over $1/3$. In male forewing in median cell near $1/2$ of the cubital branch a large elliptic sclerite. Tongue short.

Male genitalia. Valva rather broad. Sacculus strong, elongate with pointed ventral projection and characteristically scaled termination on dorsal part of valva. Tegumen large, pedunculi elongate; subscaphium weak, minutely spined; socii very large, haired. Aedeagus simple. In female genitalia lamella vaginalis broad, sculptured; ostium in introitus; ductus bursae very long, transparent. Bursa copulatrix large; a single signum present.

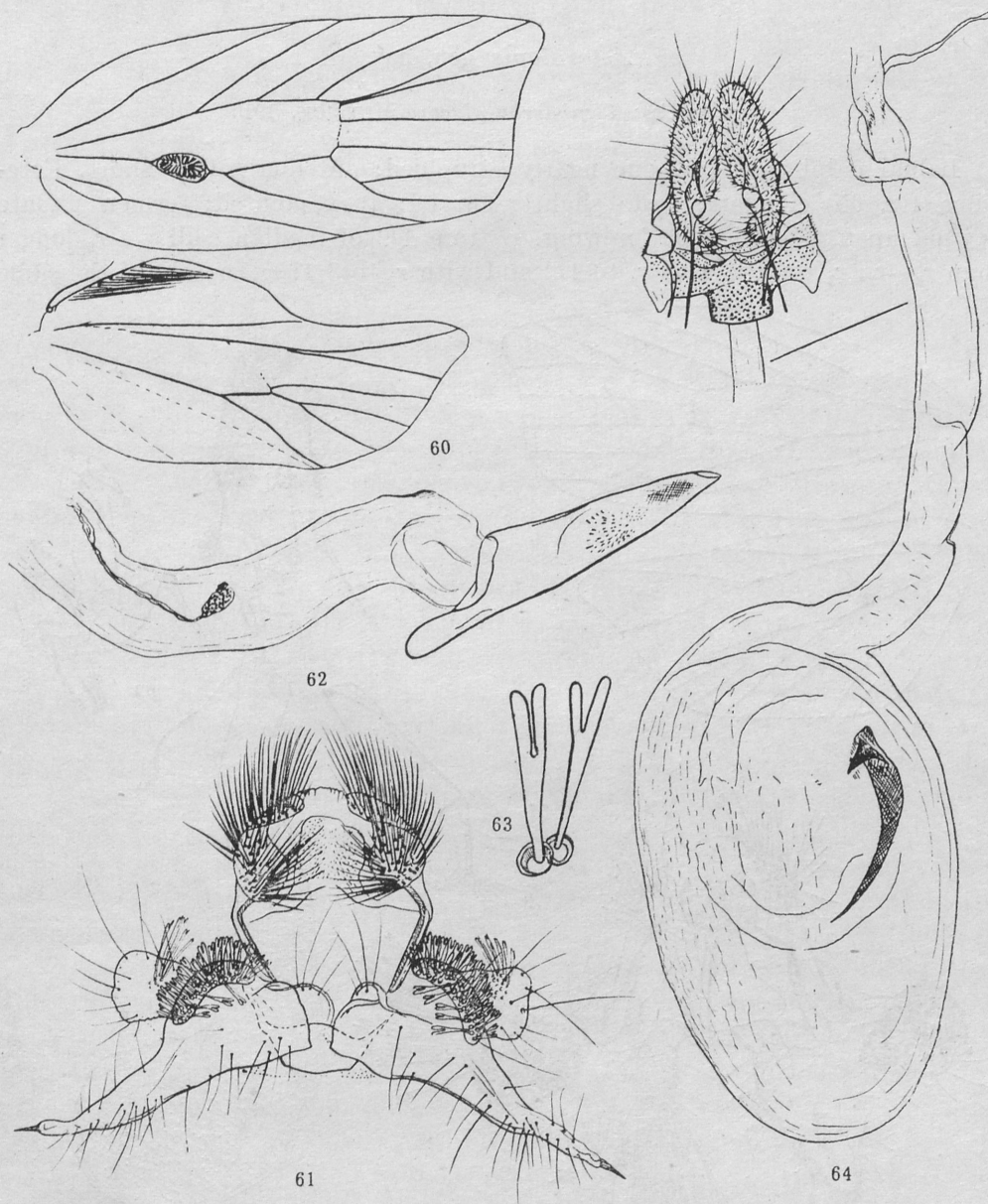
Sclerodisca papuana sp. nov., ♂, ♀

Labial palpi about 2; second joint expanding posteriorly; third joint protruding, yellow. Tufts of scales on vertex and bases of antennae greenish white. Thorax of nearly same colour. Forewing elongate, broadest at the middle. Costa arched outwards at base, delicately curved to the apex; apex rather pointed; termen delicately sinuate. Ground colour pale whitish green in male, more yellowish in female. Costa at base tinged with pale ochreous in female; provided with long, pale rusty scales in male. A brownish grey spot at $1/3$ of costa, elongate, protruding towards middle of the wing. Smaller, similarly coloured spot between this and the base; further spots in median and posterior parts of the wing. Grey-golden shining refractive scales on the pattern. Fringes and scales of posterior part of costa yellowish. Hindwing yellowish to greyish yellow; fringes concolorous. Length of forewing 5 mm.

Male genitalia (figs 61—63). Valva short, broad, protruding distally. This dorsal projection has a rather well developed costa, but its ventral edge is rather weakly sclerotized and transparent; probably coalescent with ill-defined brachiola. Sacculus very strong, long, with delicately sinuated ventral edge. Ventro-distal projection narrowing posteriorly, tipped with a thorn. Termination of sacculus on upper side of valva rather anterior, characteristically scaled. These scales (fig. 63) are strong, flat and bifurcate. Tegumen large with slender pedunculi. Uncus absent; socii large, spined and haired. Subscaphium broad, minutely dentate. Aedeagus long with nearly straight ventral edge, narrowing posteriorly, pointed. Numerous minute spined present. Ductus ejaculatorius very broad with scobinate sclerite.

Female genitalia (fig. 64). Labia well developed with long distal portions. Lamella vaginalis broad with nearly straight proximal edge. Introitus large, sculptured. Ductus bursae very long, transparent; bursa copulatrix elongate a single long signum present.

Holotype (male): „Goodenough Id., d'Entrecasteaux, E. Papuan Is., Meek 1897, [No]. 18159 WLSM“, G. Sl. 5468.



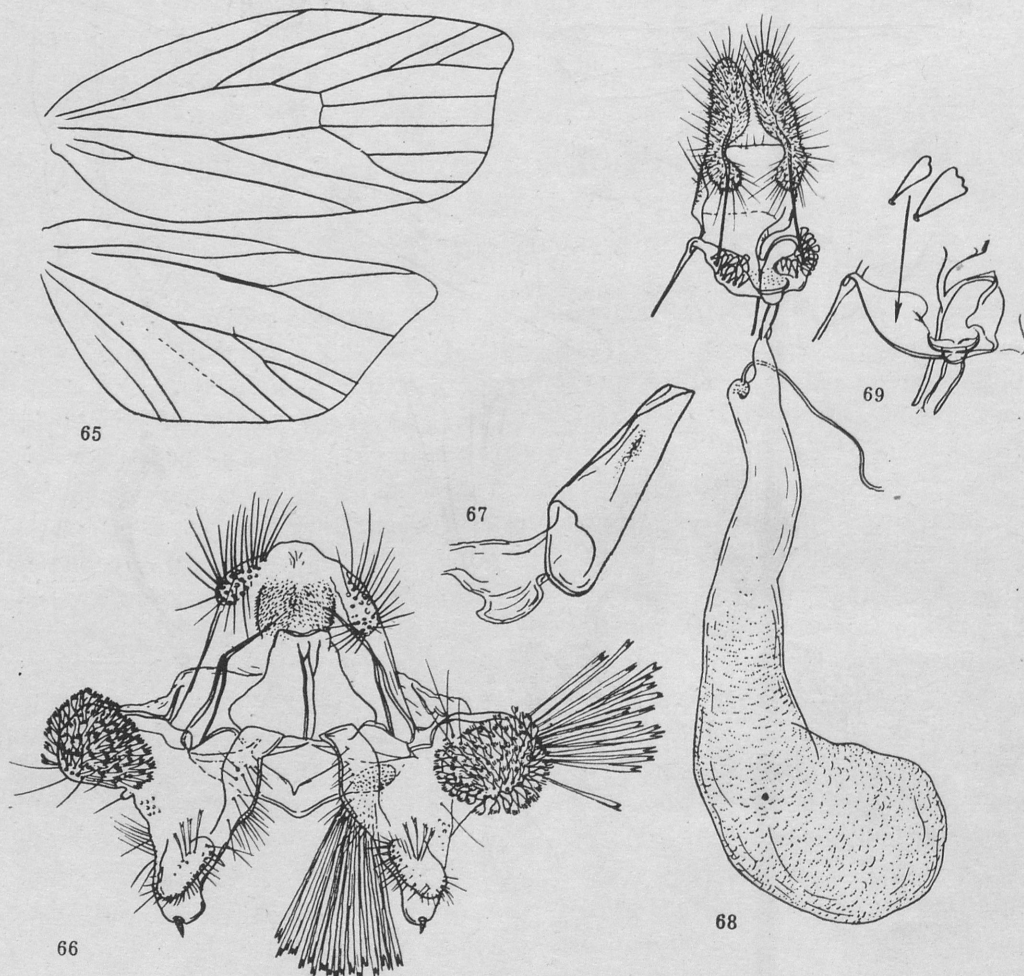
Figs. 60—64. *Sclerodisca papuana* sp. nov.: 60 — venation, 61 — male genitalia of holotype, 62 — aedeagus of the same specimen, 63 — female genitalia of allotype

Allotype (female) identically labelled as the holotype, WALSINGHAM'S No 18155, G. Sl. 5469. Both types in the coll. of the British Museum (Nat. Hist.).

Asterolepis gen. nov.

Type species: *Tymbarcha glycera* MEYRICK, 1910

Labial palpi short; tongue nearly atrophied; antenna rather short. Forewing (fig. 65) elongate; costa slightly curved; apex pointed; termen sinuate beyond apex. Venation of forewing: r_1 from $1/2$ of median cell; r_1-r_2 longer than r_2-r_3 ; r_3 stalked with r_4 to $1/2$ and with r_5 to $3/4$; m_1 nearly of the same



Figs. 65—69. *Asterolepis glycera* (MEYR.): 65 — venation, 66 — male genitalia (Mt. Riu., 2000 ft., Sudest Isl. April 1916, Eichhorn Bros, G. Sl. 6784), 67 — aedeagus of the same specimen, 68 — female genitalia of type (Cairns, G. Sl. 1820, B. M.), 69 — lamella vaginalis of the same specimen

distance to r_3 — 5 as to m_2 ; m_2 approximated to m_3 which is stalked with cu_1 to $1/3$; cu_2 from about half of median cell. Hindwing elongate; apex long. Venation: rr stalked with m_1 to $1/3$; m_2 near m_3 ; cu_1 stalked with m_3 to $1/3$. No pecten in forewing of the male.

Male genitalia. Valva large, costa well developed, enlarged distally. This is strongly provided with scales. Sacculus with rounded ventro-distal projection; haired termination before the end. Tegumen broad; socii small; aedeagus simple; brachiola atrophied.

Female genitalia with delicately developed ovipositor. Lamella vaginalis rather large; ductus bursae in posterior portion very narrow; signum very small.

This genus resembles in male genitalia *Sclerodisca* gen. nov., but the shape and position of hairy termination of sacculus and dorsal edge of valva are different. The differences in the venation are great.

Asterolepis glycera (MEYRICK), **comb. nov.**

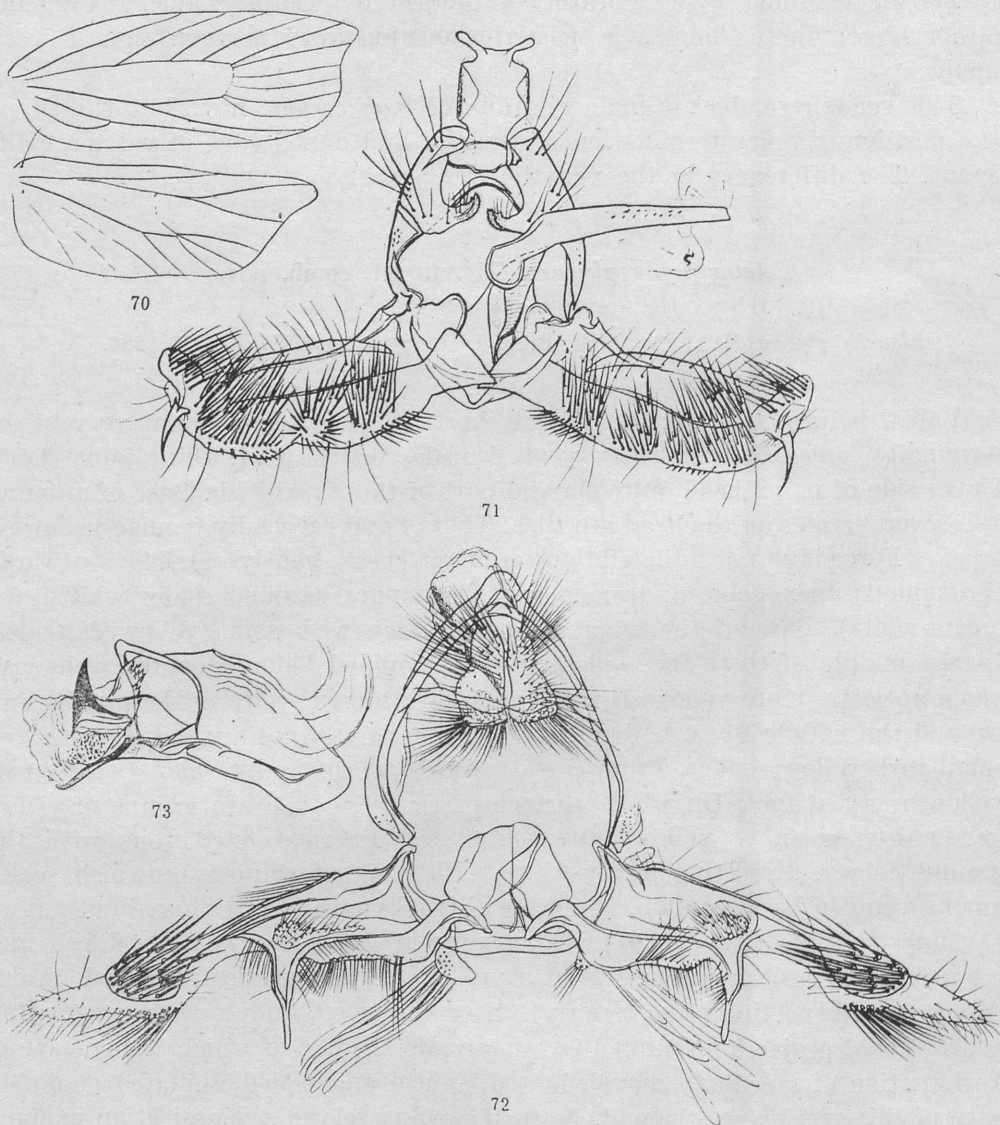
Tymbarcha glycera MEYRICK, 1910, Proc. Linn. Soc. N. S. Wales, **35**: 286.

Labial palpi about 1.5; basal joint short, whitish; second joint very broad terminally, greenish with rusty ventral scales on the end; third joint short. Upper side of palpi, head, antenna and part of thorax whitish. Base of antenna and several scales on the head greenish. Thorax and especially tegulae yellowish green. Forewing not dilated posteriorly; costa gently arched outwards throughout; apex pointed; termen slightly sinuate. Ground colour whitish (or cream-white). Base of the wing yellowish green with some yellowish scales. In the middle of costa incomplete fascia atrophied before dorsum; yellowish green at costa, more yellowish with some dark brown scales in the middle and beyond the middle towards dorsum. Posterior part of costa yellowish with two small rustyyellow shades. From costa towards tornus and termen two narrow yellow rusty stripes. On whole surface of the wing delicate groups of either yellowish-greenish or yellow brownish scales. Fringes concolorous with the ground colour. Hindwing cream-white with rows of shining brownish scales among veins in basal portion. Fringes whitish. Length of forewing about 5 mm.

Male genitalia (figs 66, 67). Valva very broad; costa well developed and sclerotized. Distal projection large, rounded, characteristically scaled (scales enlarged and pectinate posteriorly). Sacculus very strong with protruding ventro-distal projection rounded terminally, on the end of which a single spine. Termination of sacculus suboval, haired, spined and scaled, sinuated on dorsal edge of this arm before the end. A small, weakly sclerotized projection in sinus between sacculus and arm of valva is probably a modification of the brachiola. Tegumen well developed, protruding apically into rounded convection. Socii small, well haired. Subscaphium broad, minutely dentate. Aedeagus (fig. 67)

rather elongate, narrowing posteriorly with small basal portion. Delicate sculpture in vesica; cornuti absent.

Female genitalia (figs 68, 69). Lamella vaginalis with large, rounded lateral parts provided with large scales (fig. 69). Ostium bursae in short cup-like, well sclerotized fold. Ductus bursae very narrow before ostium, broad anteriorly. Bursa copulatrix large, elongate; delicate sculptures and very small signum in the shape of delicate ring present. Gonapophyses posteriores longer than anteriores.



Figs. 70—73. 70 — *Archigryptis* gen. nov. — venation, 71 — male genitalia of *A. limacina* sp. nov. holotype; aedeagus in situ, 72 — male genitalia of *Accra witteae* sp. nov. holotype
73 — aedeagus of the same specimen

Comments. The type of *Asterolepis glycera* (MEYR.) is a female and is labelled as follows: „Cairns, Queensland, F. P. D., 11. 26.“, G. Sl. 7820 [B. M.]. In the British Museum collection I have found a male specimen from Sudest Island (?Tagula). Both specimens are nearly identical in the shape of the wings and pattern. In the male the coloration is more intense than in the female. The characters of the species given above is based on the male specimen.

***Archigraaptis* gen. nov.**

Type species: *Archigraaptis limacina* sp. nov.

Labial palpi long; terminal joint protruding. Forewing (fig. 70) elongate; costa arched outwards; apex pointed, short; sinuation of termen very slight. Venation: r_1 from before middle of median cell; r_1-r_4 to costa; r_5 to termen; r_2 nearer r_3 than r_1 ; r_4 near to r_5 ; r_5 , m_1 , m_2 , m_3 nearly equidistant; m_2 , m_3 and cu_1 arched at median cell, all separate. Vein cu_2 from before middle of the cell. In hindwing rr very near to m_1 ; m_2 , m_3 , cu_1 closely approached. Coloration of the forewing similar to that in *Polemograaptis* MEYR. species.

***Archigraaptis limacina* sp. nov., ♂**

Labial palpi about 2; basal joint small, yellowish; second joint subtriangular, yellow-brown, browner terminally; third joint elongate, protruding, rusty yellow. Inner sides with blue scales. Legs yellow-brown, ringed with brown-grey. Front yellowish-greyish, rest of the head grey-brown; thorax more olive brown. Forewing elongate, nearly of the same with throughout. Costa gently arched to 3/4, then rather straight; apex pointed; termen short, slightly arched beyond the middle. Costa pale, yellowish-brownish; remaining greyish green, in posterior part of the wing with delicate lilac hue. Costa spotted with brown; apico-terminal area with rusty brown. Rest of the pattern brick-red. In basal portion of the wing three elongate spots near dorsum and three further spots in middle. A narrow stripe from middle of dorsum towards costa terminating beyond middle, followed by an elongate spot. Three further slightly bent stripes in posterior portion of the wing. Fringes brownish grey. Hindwing brown; fringes concolorous. Length of forewing 6 mm.

Male genitalia (fig. 71). Valva elongate; costa long, well sclerotized. Sacculus strong, long, sinuated near base and beyond middle, without terminal projection. In caudal edge of valva a long, bent thorn directed ventrad. Rather short, rounded brachiola present. On sacculus, valva and brachiola long, spine-like hairs. Tegumen well developed with slender pedunculi. Large, minutely spined lateral folds of tegumen, projected towards middle are probably transformations of gnathos. Tubus analis in well sclerotized subscaphium. Two elongate, thin apical projections of subscaphium present. Aedeagus long, thin, delicately spined beyond the middle. In vesica small omega-shaped sclerite.

Comments. This species is very similar to *Polemograptis*—species in the coloration of the forewing, however, it differs by the venation and the male genitalia. It is probably a development of *Polemograptis* MEYR.

Holotype (male): „Thandsung, Karen Hills, 500 ft., DOHERTY 1890, [No] 40922“, G. Sl. 5536, in the coll. of the British Museum (Nat. Hist.).

Accra gen. nov.

Type species: *Argyrotoxa viridis* WALSINGHAM, 1891

Tongue very short. Forewing elongate, not dilated posteriorly; costa curved at base, then straight; apex rounded; termen short, straight. Venation: r_1 from about half of middle cell; r_1-r_2 longer than r_2-r_3 ; r_3-r_4 short; r_5 to termen; m_1 near m_2 ; m_3 approximate to cu_1 ; cu_2 more posterior than r_1 . In hindwing rr closely approximated to m_1 ; m_2 , m_3 and cu_1 very near each other.

Male genitalia: valva elongate, broadened terminally (this part resembles cuculus in *Eucosmini*) with long, well sclerotized costa. Sacculus strong with ventral projection; brachiola modified. Tegumen similarly shaped as in *Eucosmini*, with very long pedunculi, protruding terminally. Tubus analis rather weakly sclerotized; socii large. Aedeagus with characteristic thorn before apex and well sclerotized dorsal band. Female genitalia with complicated limen, which is connected with the sternite of praegenital segment. Ductus bursae long; bursa copulatrix elongate.

Externally this genus resembles *Polemograptis* MEYR. In female genitalia the ductus bursae and the bursa copulatrix are also similar to those in that genus. Male genitalia approaches those in *Eucosmini* (shape of tegumen and socii) but differs from those of this tribe by presence of brachiola and shape of juxta, which is of the usual *Tortricini*- shape. The peculiar form of the aedeagus suggests a rather distinct position of this genus among remaining genera of *Tortricini*.

Accra viridis (WALSINGHAM), comb. nov.

Argyrotoxa viridis WALSINGHAM, 1891, Trans. ent. Soc. London, 1891: 68, pl. 3 fig. 4.

This species was transferred by WALSINGHAM (1897) to the genus *Tortrix* L., then by MEYRICK (1912) to *Polemograptis* MEYR. It is easily distinguished by the shape of red spots on forewing. The type of *A. viridis* (WALSM.) labelled „Afrique Occid., Ogoe, L. GAZENGEL, 1894“ is preserved in the collection of the British Museum (Nat. Hist.).

Accra witteae sp. nov., ♂

Labial palpi broken. Front brownish; scale tufts of vertex greyish yellow; base of antenna yellowish, remaining segment brown. Thorax brownish yellow. Forewing of the same width throughout; costa gently curved from base to 1/3,

then rather straight; apex rounded; termen short, rather straight. Ground colour pale rusty brown with green scales in posterior part. Similar green scales on rest of the wing but rather infrequently (probably in fresh specimen the wing is greener). Costa brownish yellow, black spots along it from base to apex, two largest in middle and at apex. Rusty shades beyond these spots towards middle of the wing. Termen rusty, anteriorly edged with leaden-grey. Three oblique rows of reddish spots across the wing. Tringes greyish yellow. Hindwing brown with yellow grey; fringes yellowish at the apex. Length of forewing 7 mm.

Male genitalia (figs 72, 73). Valva elongate with long, well sclerotized costa and broad postero-dorsal portion, which is covered by strong spine-like hairs. Sacculus strongly sclerotized, enlarged beyond base, concave before end. The long ventral projection, which has well marked distal edge, is characteristic of this species. Brachiola long; tegumen with very long, slender pedunculi and protruding tip. Subscaphium slightly sclerotized and marked by small sclerite; tubus analis large; socii large, hairy. Aedeagus strong with narrow ventral projection terminally. Large thorn and small spines in vesica.

Holotype (male) „Congo Belge, P. N. U., Georges de la Pelenge (1500 m.), 10—14, V. 1947, Mis. G. F. DE WITTE, 483 a“, G. Sl. 6789, in the collection of the Institut des Parcs Nationaux du Congo in Brussels.

Acleris HÜBNER

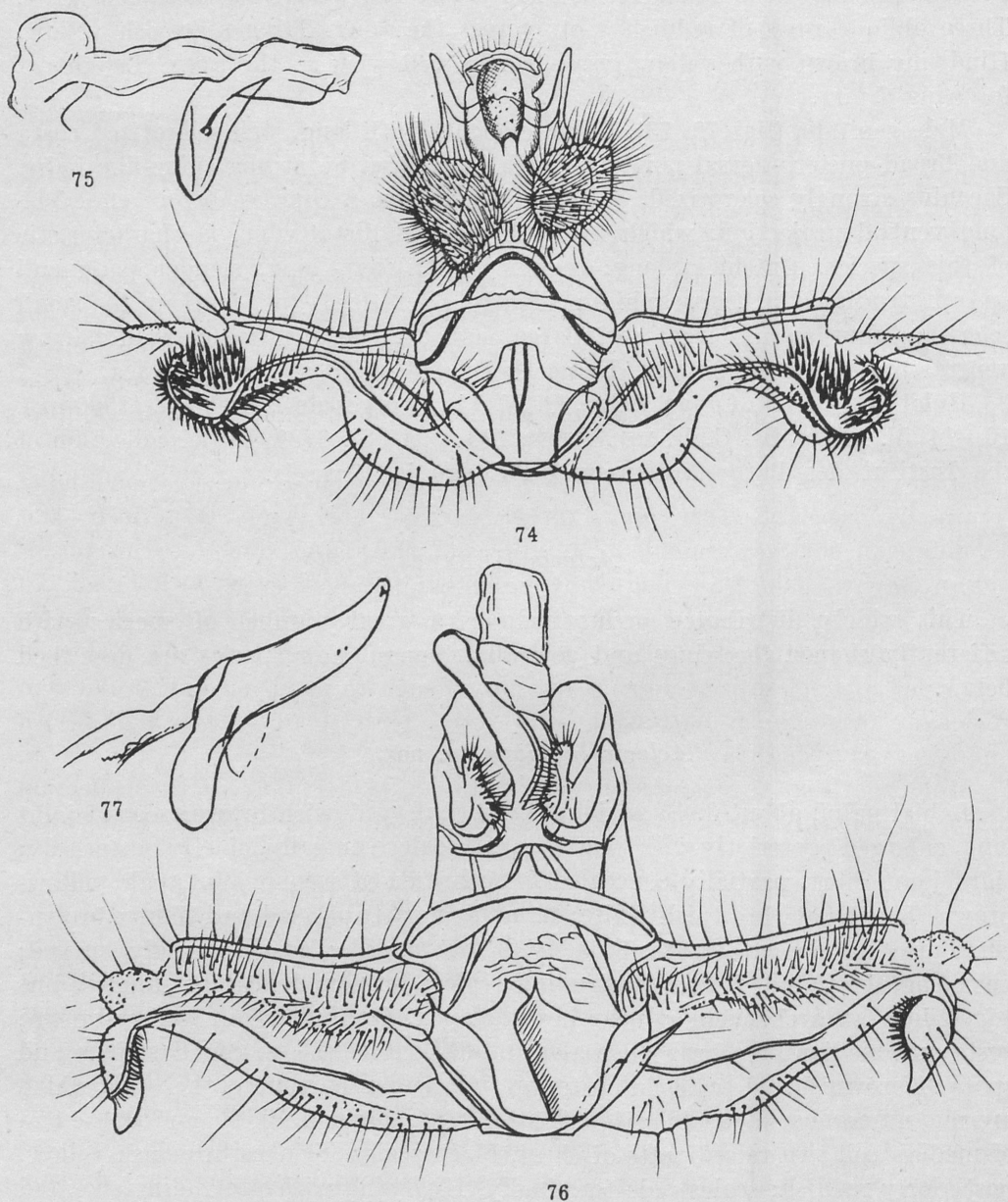
This widely distributed genus includes a great number of species with differently shaped forewings and genitalia. Several new species are described below.

Acleris lucipara sp. nov., ♂

Labial palpi, about 3. Basal joint short, pale yellowish brown; second joint long, enlarged posteriorly with long terminal scales ventrally, chiefly posteriorly; third joint short, partially concealed in scale tuft of second joint, pale yellow-brown. Front pale brownish white; remaining parts of head and thorax brownish. Forewing elongate-ovate, broadest before middle; costa strongly curved; apex slightly rounded with protruding scales; termen delicately sinuate, but edged into an arch. Vein r_5 near beyond apex. Ground colour yellow-brown; costa and median area browner, paler and darker in places. Small stripes and spots of brownish red scales in posterior and median portions of the wing, which are not numerous in basal portion. Near dorsum, beyond middle and at the end of median cell two raised tufts of short, black scales. Fringes brownish yellow, posteriorly reddish; scales pale terminally. Hindwing with protruding, pointed apex, yellowish brown; fringes a little paler. Length of forewing 7—8 mm.

Male genitalia (figs 74, 75). Valva long with costa protruding terminally. Sacculus well developed, large and rounded basally, sinuate beyond the middle;

terminations well developed, spined and haired. In terminal portion of valva large scale-like spines, broadened before middle. Brachiola narrow, rather long. Tegumen with large pedunculi and long, pointed lateral projections apically. Socii very large, subrounded. Subscaphium well sclerotized, provided with elliptical plate, minutely spined in the centre beyond the middle ventrally.



Figs. 74—77. Male genitalia of *Acleris* sp.: 74 — *A. lucipara* sp. nov., holotype, 75 — aedeagus of the same specimen, 76 — *A. avicularia* sp. nov., holotype, 77 — aedeagus of the same specimen

Transtilla slightly enlarged basally. Aedeagus rather short, bent with long basal portion. A single short cornutus present in vesica.

Holotype (male): „Mao, N. Manipur, Aug. 5000—7000 ft., Assam, DOHERTY 1889, [No] 40333“, G. Sl. 5488.

Paratype (male) identically labelled, No. 40332, G. Sl. 5427.

Both specimens in the coll. of the British Museum (Nat. Hist.).

Acleris avicularia sp. nov., ♂

Labial palpi rather thin, about 2. Second joint long; terminal joint protruding, narrow. Palpi laterally brownish grey; head browner; thorax yellowish brown. Forewing broadest at the middle; costa strongly arched outwards; apex small, rather pointed; termen short, curved. Ground colour yellowish brown, more distinct at base. Middle area darkened with brownish. Numerous brown-grey spots especially in median and dorsal areas of the wing. Venation in the posterior part of wing brown. Fringes badly damaged. Hindwing whitish yellow, brownish strigulated. This strigulation is more developed along costa and peripheries. Fringes concolorous with the ground colour. Length of forewing 8,5 mm.

Male genitalia (figs 75, 76). Valva strong, costa well sclerotized, not dilated terminally. Sacculus very long, rather narrow, narrowing posteriorly and terminate in enlarged, rounded laterally end. Hairs and spines in this termination rather weak. Brachiola short, rounded; tegumen large with broad pedunculi and rounded posterior lobes. Socii small, coalescent with large bases; subscaphium strongly sclerotized with long ventral edge; transtilla with well developed and sclerotized dorsal edge, provided with small median projection. Aedeagus rather long, narrowing posteriorly, with small praeterterminal thorn and two very small lateral spines.

Holotype (male): „Guatemal, FRSTF. 1895“, G. Sl. 4592 in the collection of the Zoological Institute of the Polish Academy of Sciences in Warszawa.

Acleris decolorata sp. nov., ♂

Labial palpi about 1; basal joint narrow; second joint slightly expanding posteriorly; terminal joint small. Colour of palpi and head yellowish; tegulae and the rest of scales on thorax pale brownish yellow. Forewing delicately narrowing posteriorly beyond 1/3; costa strongly curved to 1/3, then delicately concave and straight; apex pointed; termen rather straight, oblique. Long scales in 1/3 of costa. Ground colour pale brownish yellow, with small groups of rather darker, more brownish scales. Near tornus and partially along dorsum rusty yellow diffusion. Dark brown scales (one or in two groups) near termen and in costal area. Three white, narrow spots on costa from 1/3 to 3/4. Fringes brownish yellow basally, grey-brown terminally. Hindwing of similar colour

to that in forewing but paler. Apical portion and peripheries brownish yellow; fringes yellow-white. Length of forewing 7 mm.

Male genitalia (figs 77, 78). Valva elongate, narrow in the middle; costa long, well developed. Sacculus broad at base, narrowing to before the end. Termination subtriangular, provided with long hairs. A large sinuate convection beyond the middle ventrally. Brachiola large, subtriangular, pointed terminally. Tegumen rather elongate, pedunculi narrow; socii large, elliptical. Subscaphium strongly sclerotized, protruding and delicately spined apically. Aedeagus rather short, one cornutus present in vesica.

Holotype (male): „Assam, Cherapunji, Native coll.“, G. Sl. 5546, in the collection of the British Museum (Nat. Hist.).

Acleris zeta sp. nov., ♂

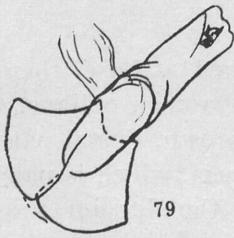
Labial palpi about 1; basal joint very short; second joint broadened terminally; third joint short, concealed in scales of the second joint. Palpi laterally brownish, brown-violet terminally. Head and thorax similarly coloured. Forewing elongate, nearly of the same width throughout. Costa strongly curved at base, then nearly straight; apex pointed; termen oblique. Ground colour pale brownish yellow, more brownish grey at base. Large, diffused, subtriangular spot on costa in the middle, its proximal edge marked with groups of dark brown, raised scales. In the posterior part of the wing with exception of termen, brown rusty shade. Several brownish raised scales in anterior portion of the wing and a rather large group near dorsum in 1/3. Fringes yellowish grey, rusty grey at apex. Hindwing pale brownish yellow, yellowish white at base. Fringes yellowish white with exception of apical portion, where it is more brownish yellow. Length of forewing 7,5 mm.

Male genitalia (figs 79, 80) similar to those in preceding species. Valva long; sacculus slender with exception of terminal part; a strong, narrow sinuation beyond the middle. Posterior edge of this sinuation delicately curved outwards, pointed ventrally. Posterior portion of sacculus broad; termination elongate; brachiola rather delicate, rounded terminally. Tegumen small, bilobed posteriorly; pedunculi long. Socii elongate, reaching end of anal tube. Subscaphium of usual *Acleris*—shape with rather weakly developed ventral hook. Aedeagus short; 14 cornuti present in vesica.

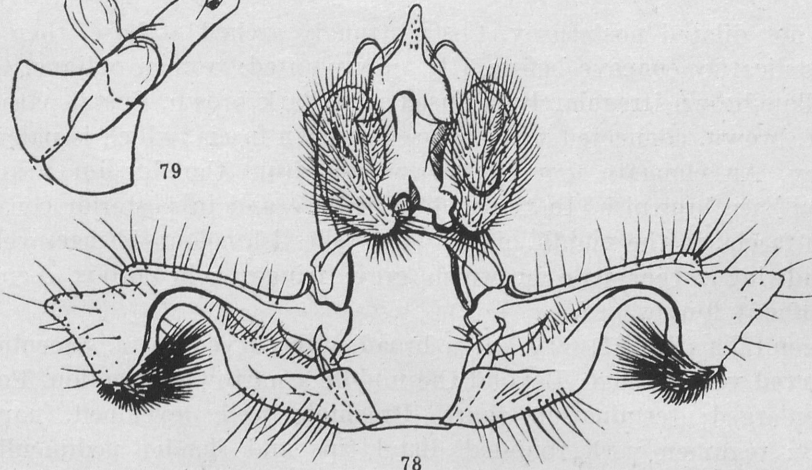
Holotype (male): „Likiang, China, H. 8. 34“, G. Sl. 6726, determined by MEYRICK as „*Peronea agrioma* MEYR.“ in the coll. of the British Museum (Nat. Hist.).

Acleris sinuosaria sp. nov., ♂

Labial palpi rather short; second joint broadening posteriorly; third joint protruding. Exterior sides of palpi and of the head black-brown; a little paler on upper sides. Thorax concolorous with upper side of the head. Forewing



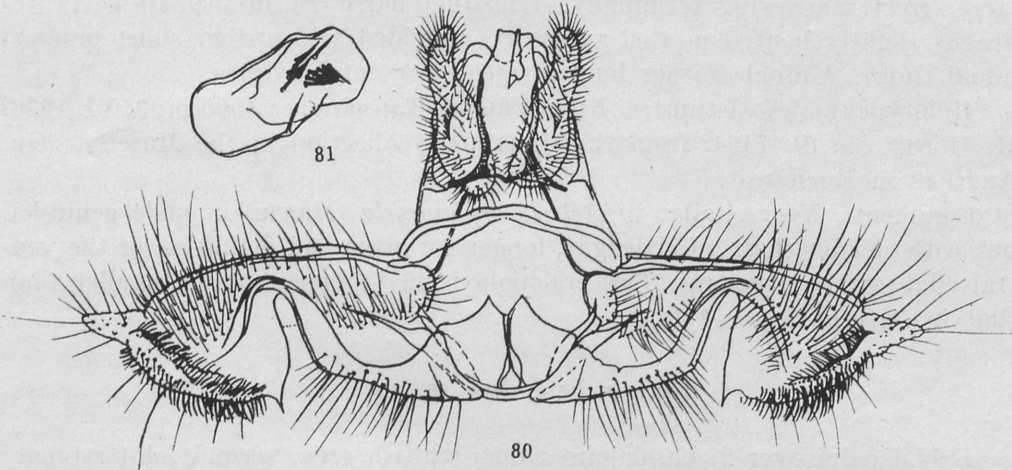
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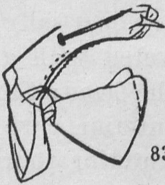
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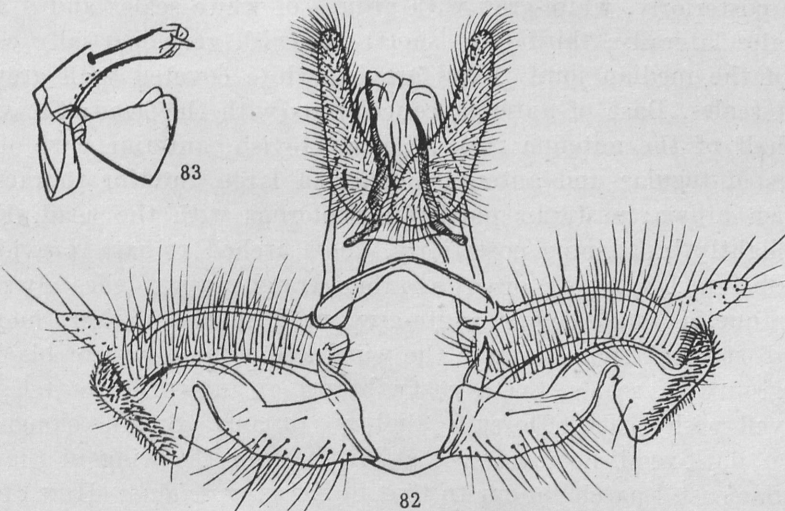
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83



82

Figs. 78—83. Male genitalia of *Acleris* sp.: 78 — *A. decolorata* sp. nov. holotype, 79 — aedeagus of the same specimen, 80 — *A. zeta* sp. nov., holotype, 81 — aedeagus of the same specimen, 82 — *A. sinuosaria* sp. nov., holotype, 83 — aedeagus of the same specimen.

elongate, not dilated posteriorly. Costa strongly arched at base, then nearly straight, delicately concave before $3/4$; apex pointed; termen oblique. Ground colour yellow-brown irregularly suffused with dark brown. Costal path large, triangular, brown, connected with diffused median fascia, which is paler, more brown-grey. An elongate, curved brown spot from the dorsum near base. Costa near base brownish. In the middle of base and in posterior convection of median fascia, in the middle of the wing yellowish colour. Fringes yellowish grey. Hindwing rather pale brownish grey; fringes concolorous. Length of forewing about 9 mm.

Male genitalia (figs 81, 82). Valva broad with curved costa. Sacculus with broad, curved ventral edge. Beyond the middle a narrow convection. Posterior portion enlarged; termination short. Brachiola well developed, narrowing posteriorly; tegumen with rounded distal tips and slender pedunculi; socii large, erect, narrowing terminally. Transtilla narrowed in median part. Aedeagus slightly bent, dentated ventrally, provided with rather short praeterminal thorn. A single rather long cornutus present in vesica.

Holotype (male) „A-tun-tse (Nord Yünan), Tansohle, ca 4500 m; 9. VI. 1936, H. HÖNE“, G. Sl. 7464, from the CARADJA's collection in the Museum „GR. ANTIPA“ in Bucharest.

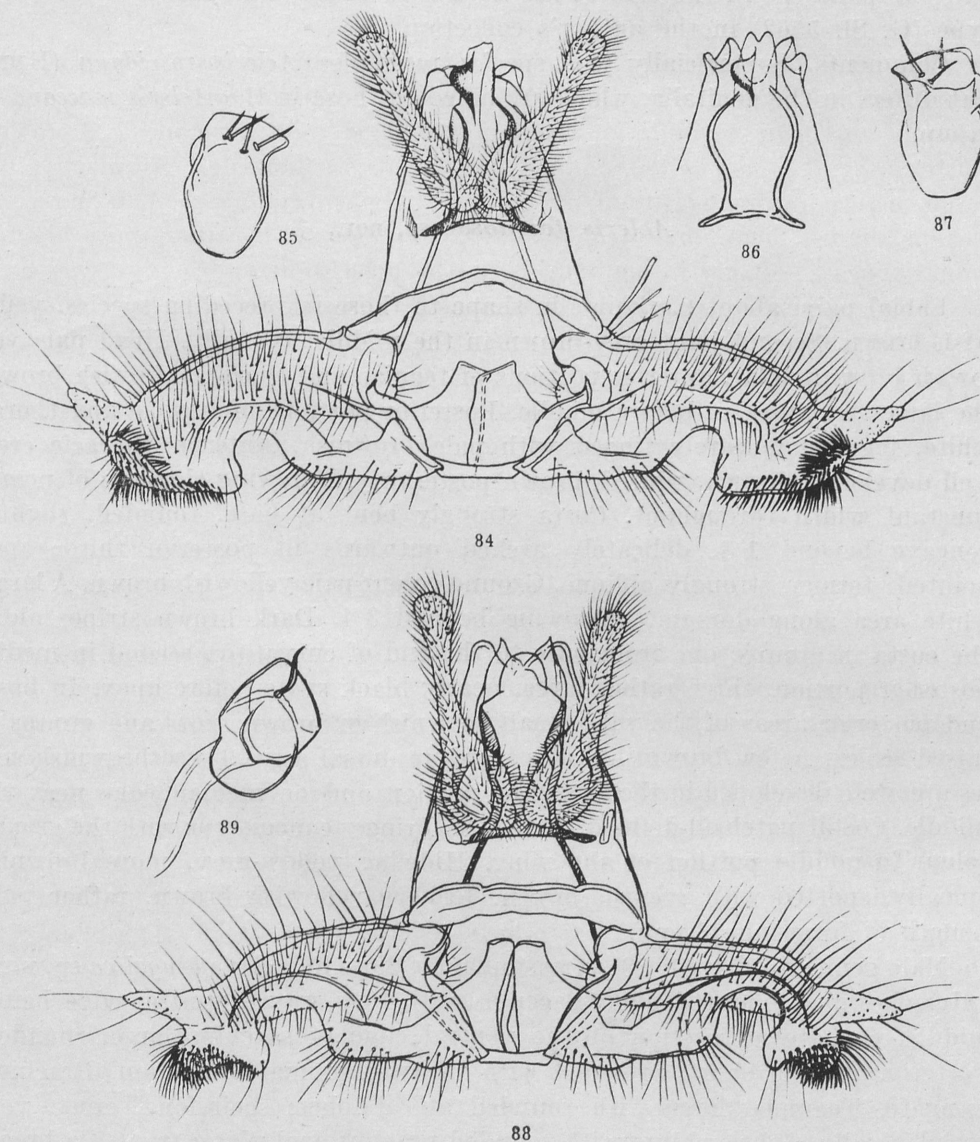
Comments. Very similar to *Acleris orphnocycla* (MEYR.) in male genitalia, but with slender thorn of aedeagus, longer cornutus and dentation of the ventral edge of the aedeagus. The brachiola is in the new species smaller than that in *A. orphnocycla* (MEYR.).

Acleris bengalica sp. nov., ♂

Labial palpi over 2; basal joint short, whitish grey; second joint strongly expanding posteriorly, white-grey with groups of white scales and a group of reddish scales laterally; third joint short, yellowish grey, partially concealed in scales of the median joint. Head greyish white covered with grey, white terminated scales. Base of antenna concolorous with the head; the segments to about half of the antenna rusty. Collar greyish; anterior part of thorax (with bases of tegulae and anterior surface of large anterior thoracic crest) dark reddish brown; posterior portion concolorous with the head. Forewing elongate, slightly broadening posteriorly. Costa arched at base, provided with long scales before $1/3$; middle of costa rather straight; apex delicately rounded; termen oblique. Ground colour white-grey with several darker, more grey-brown small suffused spots through the wing, and some brown or black-brown scales or groups of scales. Costa rusty brown or brownish spotted; termen suffused, yellowish rusty. Dorsum slightly fuscous. Small, elongate towards termen, dark reddish brown spot at the base of the wing in the middle. Subtriangular costal patch similar to that in *Acleris roscidana* (HBN.) brownish or rusty-brownish, paler internally, with three darker spots in corners. Small tuft of erected scales near dorsum before $1/3$; orange in holotype, yellowish

in paratype. Fringes concolorous with the ground colour. Hindwing pale brownish-whitish, darker, more brownish in apex and peripheries; fringes long, concolorous with the ground colour of the wing. Length of forewing 15 mm.

Male genitalia (figs 83-86). Valva well developed; sacculus strong with nearly straight basal half; sinuated beyond the middle, straight posteriorly. Spines on whole posterior portion of sacculus present. Brachiola large, broad basally. Tegumen slender with long pedunculi and short posterior lobes



Figs. 84—89. Male genitalia of *Acleris* sp.: 84 — *A. bengalica* sp. nov., paratype (G. Sl. 5562), 85 — aedeagus of the same specimen, 86 — end of tegumen of holotype, 87 — aedeagus of holotype, 88 — *A. formosae* sp. nov., holotype, 89 — aedeagus of the same specimen

(fig. 85). Before these and more laterally are smaller lobes. Socii long, erect; subscaphium elongate with well sclerotized ventral projection subterminally. Transtilla with well marked costa. Aedeagus very short, broad, provided with small rounded ventro-terminal projection. Three cornuti in the holotype, four in the paratype.

Holotype (male): „Bengal (MOORE coll.)“, G. Sl. 5563.

Paratypes (2 males) identically labelled as the holotype. The holotype and one paratype in the coll. of the British Museum (Nat. Hist.), other paratype (G. Sl. 5562) in the author's collection.

Comments. Superficially this species resembles *Acleris roscidana* (HBN.) but differs in the genitalia, which are allied to those in the *Acleris maccana* — group.

Acleris formosae sp. nov., ♂

Labial palpi about 2, similar in shape to those in preceding species, yellowish brown. Second joint grey-brown in the middle, laterally. Head pale yellowish brown; collar, anterior portions of tegulae and thorax yellowish brown; the latter brownish to before middle. Posterior portions of tegulae and thorax white, tegulae delicately tinged with pale brownish. Anterior thoracic crest well developed, brown, whitish brown posteriorly. Forewing elongate of nearly constant width throughout. Costa strongly bent at base, rounded, slightly concave beyond $1/3$, delicately arched outwards in posterior third; apex pointed; termen strongly oblique. Ground colour pale yellowish brown. A large, white area along dorsum, narrowing beyond $3/4$. Dark brown stripes along the costa in groups; one from base to the end of curvature, second in medio-posterior portion, three rather large, nearly black spots before apex. In basal and posterior areas of the wing small brownish or brown spots and groups of raised scales. A few brownish scales in white dorsal area. These brownish scales are well developed in the posterior portion and on median edge near the middle. Costal patch ill-defined, brownish. Fringes concolorous with the ground colour in middle portion of the wing. Hindwing yellow-grey, more brownish apically, spotted with greyish brown. Fringes yellowish brown, rather pale. Length of forewing 13 mm.

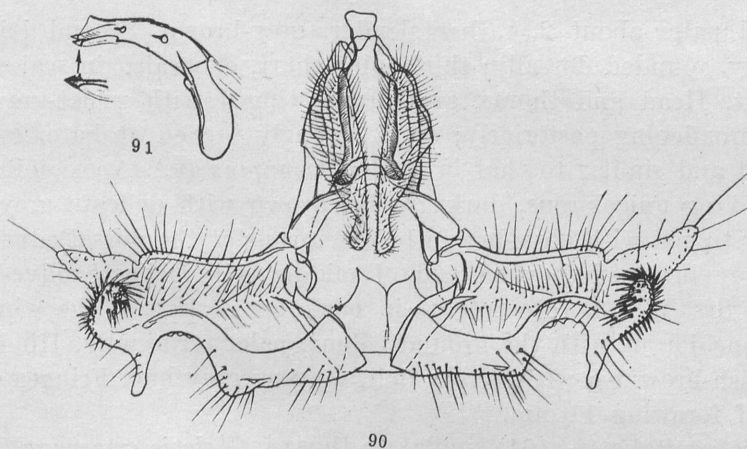
Male genitalia (figs 87, 88) very similar to those in *Acleris bengalica* sp. nov., valva, however, more slender. Sacculus with long waved ventral edge before middle. Sinuate convection of the ventral edge of sacculus large, rounded. Posterior portion short, provided with ventro-proximal projection. Brachiola elongate. Tegumen large with rounded apical lobes; socii long, erect, very broad basally. Subscaphium with rounded praeterterminal plate; transtilla broad. Aedeagus very short; a single bent cornutus present in vesica.

Holotype (male): „Arizan, Formosa, 7500 ft., 19. IX. 1906, A. E. WILEMAN“, G. Sl. 6649, in the British Museum (Nat. Hist.).

Comments. The new species belongs to the same group as *A. bengalica* sp. nov. and *A. porphyrocentra* (MEYR.) from China, and superficially is very similar to the latter species. The differences between the new species and *Acleris porphyrocentra* (MEYR.) are in the pointed distal ending of the ventral edge of the sacculus before the middle, and in the shape of the subscaphium which in *A. porphyrocentra* (MEYR.) has a strongly sclerotized ventral projection before apex ventrally.

Acleris kinangopana sp. nov., ♂

Labial palpi over 3. Basal joint yellowish-brownish, brown in the middle; second joint long, protruding ventrally, similarly coloured as basal joint with exception of the middle and ventral portions; third joint narrow, yellowish.



Figs. 90—91. *Acleris kinangopana* sp. nov.: 90 — male genitalia of holotype, 91 — aedeagus of the same specimen

Forewing slightly expanding posteriorly; costa strongly curved; apex elongate, pointed; termen strongly oblique, delicately sinuate. Ground colour grey-brown, costa spotted with dark brown. Two larger strips and ill-defined, protruding towards the middle shade on half length of costa. Base darkened. Small groups of ochreous and yellowish scales and black points on whole surface of the wing. Some of them are erected, especially in 1/3 of costa and in the median area of the wing. Fringes yellowish grey, yellowish at apex, grey at tornus. Hind-wing with short, rounded apex, greyish, brownish grey on peripheries. Fringes concolorous with base of the wing. Length of forewing about 8 mm.

Male genitalia (figs 89, 90). Valva broad with rather short costa. Sacculus strong, nearly straight to the middle ventrally, then decidedly sinuate. In this sinus two or three minute dents. Praeterterminal ventral projection very long, rather narrow. Termination of sacculus well developed, rounded terminally. Brachiola subtriangular, strong. Tegumen rather slender; tubus analis well developed. Socii very long, narrowing ventrally; transtilla enlarged basally.

Aedeagus rather short, bent, pointed terminally. Two small cornuti present in vesica.

Holotype (male): „Mt. Kinangop, Brit. E. Africa, A. J., 2. 12, 10200“ G. Sl. 5551.

Comments. This new species was determined by MEYRICK as paratype of *Acleris thylacitis* (MEYR.). *A. thylacitis* (MEYR.) is very variable in pattern and coloration of the forewing. The lectotype of it („Afrique or. anglaise, Monts Aberdare de Nyéré a Naivasha, Mt. Kinangop, Forest Inférieures, St. 53, 2200—2400 m., Fevr. 1912, ALLUAUD & JEANNEL“, G. Sl. 4148) is preserved in the Museum d'Histoire Naturelle in Paris.

Acleris tremewani sp. nov., ♀

Labial palpi about 2, rather slender, grey-brown. Second joint enlarged posteriorly, rounded dorsally; third joint short, concealed in scales of the median joint. Head and thorax grey-brown tinged with violet-grey. Forewing slightly broadening posteriorly; costa strongly arched at base, concave from 2/3 to 3/4 and similar to that in *Acleris emargana* (F.). Apex pointed; termen sinuate. Wing unicolorous, dark greyish brown with delicate grey-violet hue; delicately tinged with olive-brown before tornus at the dorsal edge and a little paler, more brownish beyond end of middle cell. Delicate olive-brown rows of scales, first in 1/3, three others in posterior portion of the wing. Scales of fringes concolorous with the ground colour, paler terminally. Hindwing rather pale greyish-brownish with a very delicate rosy grey hue. Fringes concolorous. Length of forewing 11 mm.

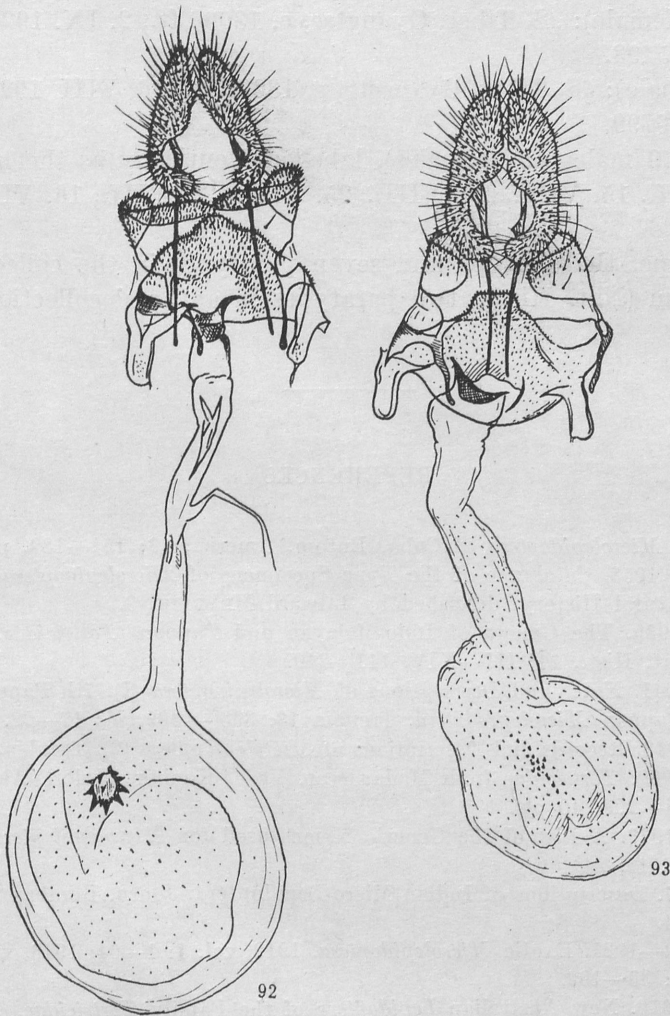
Female genitalia (fig. 91) similar to those in *Acleris emargana* (F.). Lamella vaginalis very large, minutely spined; proximal projections long. Ductus bursae long, delicately broadened before ostium. Bursa copulatrix large, rounded, delicately sculptured. Signum rounded.

Holotype (female): „Upper Burma, Hpimaw Ford, Nr. Myitkyina, 8000 ft., Cap. A. E. SWANN“, G. Sl. 5550, in the collection of the British Museum (Nat. Hist.).

Comments. The new species differs from *Acleris emargana* (F.) by the shape of the signum and proximal projections of the lamella vaginalis. The ductus bursae in the new species is approximately twice as long as that in *A. emargana* (F.) and the signum is well developed, rounded.

Acleris emargana tibetica ssp. nov., ♂, ♀

Forewing more elongate than that in typical form. Costa with weak emargination, more similar to that in *Acleris rhombana* (SCHIFF. & DEN.) than that in *A. emargana* (F.). Apex pointed; termen oblique, not so strongly sinuate as in typical form. Ground colour pale greyish yellow. Several black dots on



Figs. 92—93. Female genitalia: 92 — *Acleris tremewani* sp. nov., holotype, 93 — *A. emargana tibetica* ssp. nov., paratype (G. Sl. 5493).

the surface, mostly in the posterior portion of the wing. Costa near the base and before apex rusty. Triangular path on costa large, diffused, divided into two or three parts. Lower part (two points or fascia) blackish; upper part rusty. Rusty brown spot in 1/3 of the dorsum, rather medially. In unicolorous specimens (2 examples) costal patch ill-defined (only lower dark grey-brown fascia, however, diffused). Ground colour darkened by the presence of brown and black scales. Narrow, orange coloured stripes and scales present. Hind-wing pale yellowish brown, brownish strigulated.

Female genitalia (fig. 92) with narrow lamella genitalis and narrow limen. Ductus bursae broad, scobinate; signum atrophied (however, in specimen G. Sl. 5494 rather large, divided into three parts).

Holotype (female): „S. Tibet, Gyangtse, c. 13000 ft., 2. IX. 1928, F. M. BAILEY“, G. Sl. 5493.

Allotype (male): „S. Tibet, Gyangste, c. 13000 ft., 26. VIII. 1928, F. M. BAILEY“, G. Sl. 6799.

Paratypes (9 males and females), labelled identically as the holotype and dated: 12. VIII., 15. VIII., 20. VIII., 25. VIII., 28. VIII., 16. VIII. 28. VIII. and 7. IX.

The holotype, the allotype and seven paratypes in the collection on the British Museum (Nat. Hist.), two paratypes in authors' collection.

REFERENCES

- BUSCK A. 1933. *Microlepidoptera* of Cuba. Entom. Americ., **13**: 151—189, pls: 30—36.
- CLARKE J. F. G. 1958. Catalogue of the Type Specimens of *Microlepidoptera* in the British Museum (Natural History) described by Edward MEYRICK, 3.
- DIAKONOFF A. 1939. The Genera of Indo-Malayan and Papuan *Tortricidae*. Zool. Meded. Rijksmus. nat. Hist., **21**: III—XIV, 111—240.
- DIAKONOFF A. 1941. Notes and Descriptions of *Microlepidoptera* (I). 7th Paper on Indo-Malayan and Papuan *Microlepidoptera*. Treubia **18**: 395—439, pls 17—22.
- DIAKONOFF A. 1948. Records and Descriptions of *Microlepidoptera* (2). Treubia, **19**: 483—524.
- DIAKONOFF A. 1960. *Tortricidae* from Madagascar. Verh. Konink. Nederl. Akad. Wet., Natuurk., **53**: 1—209, 40 pls.
- FLETHER T. B. 1929. A List of the Generic Names used for *Microlepidoptera*. Mem. Dept. Agric. India., **11**, 244 pp.
- MEYRICK E. 1907. Descriptions of Indian Micro-Lepidoptera. Journ. Bombay nat. Hist. Soc. **17**: 976—994.
- MEYRICK E. 1912—1931. Exotic *Microlepidoptera*. 1912, vol. **1**: 1—64; 1918, vol. **2**: 97—224; 1931, vol. **4**: 33—192.
- TURNER A. J. 1916. New Australian *Lepidoptera* of the Family *Tortricidae*. Trans. & Proc. Roy. Soc. South Austral., **40**: 498—536.
- TURNER A. J. 1925. New Australian *Lepidoptera*. Trans. & Proc. Roy. Soc. South Austral. **49**: 37—60.
- WALKER F. 1866. List of the Specimens of Lepidopterous Insects in the Collection of the British Museum, **35**.
- WALSINGHAW. 1891. African Micro Lepidoptera. Trans. ent. Soc. London, **1891**: 63—132, pls III—VII.

STRESZCZENIE

Autor przeprowadza rewizję rodzaju *Eboda* WKR. oraz opisuje szereg nowych rodzajów i gatunków plemienia *Tortricini*. Omawia także niektóre dawniej opisane, a nie badane genitaliowo gatunki. Jako nowe zostały opisane:

Eboda diakonoffi sp. nov., *E. virescens* sp. nov., *E. chloroclistis* sp. nov., *E. assamica* sp. nov., *E. anisocornutana* sp. nov., *Apotoforma jamaicana* sp. nov., *A. uncifera* sp. nov., *Pseudeboda* gen. nov., *P. africana* sp. nov., *P. gambiae* sp. nov., *Amboyana* gen. nov., *A. furcifera* sp. nov., *Brachiolia* gen. nov. (type species: *Tinea egenella* WKR.). *Paratorna fenestralis* sp. nov., *Vellonifer* gen. nov., *V. doncasteri* sp. nov., *Spatalistis zygota* sp. nov., *S. gratiosa* sp. nov., *Trophocosta* gen. nov. (type species: *Spatalistis nummifera* MEYR.), *T. multi-
astra* sp. nov., *T. nitens* sp. nov., *Sclerodisca* gen. nov., *S. papuana* sp. nov., *Asterolepis* gen. nov. (type species: *Tymbarcha glycerna* MEYR.). *Archigraptis* gen. nov., *A. limacina* sp. nov., *Accra* gen. nov. (type species: *Argyrotoxa viridis* WLSM.), *A. witteae* sp. nov., *A. avicularia* sp. nov., *A. decolorata* sp. nov., *A. zeta* sp. nov., *A. sinuosaria* sp. nov., *A. bengalica* sp. nov., *A. formosae* sp. nov., *A. kinangopana* sp. nov., *A. tremewani* sp. nov., *A. emargana tibetica* ssp. nov.

РЕЗЮМЕ

Эта работа содержит ревизию рода *Eboda* WKR. и описание новых родов и видов Tortricini; обсуждает также некоторые виды прежде описанные, а ещё неисследованные по строению генитального аппарата. Как новые описано следующие виды: *Eboda diakonoffi* sp. nov., *E. virescens* sp. nov., *E. chloroclistis* sp. nov., *E. assamica* sp. nov., *E. anisocornutana* sp. nov., *Apotoforma jamaicana* sp. nov., *A. uncifera* sp. nov., *Pseudoeboda* gen. nov., *P. africana* sp. nov., *P. gambiae* sp. nov., *Amboyana* gen. nov., *A. furcifera* sp. nov., *Brachiola* gen. nov., (species typica: *Tinea egenella* WKR.), *Paratorna fenestralis* sp. nov., *Vellonifer* gen. nov., *V. doncasruti* sp. nov., *Spatalistis zygota* sp. nov., *S. gratiosa* sp. nov., *Trophocosta* gen. nov.) species typica: *Spatalistis nummifera* MEYR.) *T. multi-
astra* sp. nov., *T. nites* sp. nov., *Sclerodisca* gen. nov., *S. papuana* sp. nov., *Asterolepis* gen. nov.) species typica: *Tymbarcha glycera* MEYR.), *Archigraptis* gen. nov., *A. limacina* sp. nov., *Accra* gen. nov., (species typica: *Argyrotoxa viridis* WLSM.), *A. witteae* sp. nov., *Acleris lucipara* sp. nov., *A. avicularia* sp. nov., *A. decolorata* sp. nov., *A. zeta* sp. nov., *A. sinuosaria* sp. nov., *A. bengalica* sp. nov., *A. formosae* sp. nov., *A. kinangopana* sp. nov., *A. tremewani* sp. nov., *A. emargana tibetica* ssp. nov.

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