

DESCRIPTIONS AND RECORDS OF MICROLEPIDOPTERA FROM SUMATRA AND JAVA

(4th Communication on Indo-Malayan and Papuan Microlepidoptera *)

by

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(Paseroean, Java).

PHYCITIDAE.

Euzophera prionacra nov. spec. (pl. 5, fig. 1).

πίων = a saw, *ἄκρον* = a marge.

♂, ♀ 12 - 12.5 mm. Head and thorax greyish-ochreous, with a violet tinge, scattered with violet and blackish scales; face light ochreous. Palpi rather long, rectangularly bent, ascending; basal and median joints roughish below, ochreous, scattered with dark brown and violet, terminal joint elongate, subacute, greyish, densely mixed with dark brown and violet, its top lighter, ochreous. Flabellum of antennae densely covered with light-ochreous scales at base. Antennae greyish-ochreous. Forewings ochreous, suffused with violet and blackish; a short longitudinal streak on middle of costa and a longitudinal suffusion in fold violet; antemedian fascia angulated outwards, indicated by suffused black dots: three of these forming an oblique, transverse row from $\frac{1}{3}$ of costa, pointing towards tornus, not reaching middle of disc; a fourth dot below fold, before middle of disc; postmedian fascia indicated by a row of suffused, smaller, black dots; an oblique, elongate suffusion connecting plical suffusion with apex of wing, blackish; preterminal fascia formed by a row of well defined, round, black dots; terminal stria violet; second discal stigma indicated by two blackish dots on $\frac{2}{5}$ of disc, the lower dot being connected with oblique suffusion above mentioned. In a brighter male specimen both the postmedian and preterminal fasciae are distinct, complete, undulate, violet. In female forewings darker, suffusion in fold extending over basal half of dorsum, blackish. Cilia violet, scattered with light ochreous. Hindwings light ochreous, suffused violet-brownish along apex and termen and on veins; cilia ochreous, with a violet-brown antemedian line, around apex darker, violet-brown with whitish base. Abdomen light ochreous, scattered with violet above and on basal half below, anal tuft in male yellowish. Legs ochreous, densely scattered and mixed with darker brown and violet.

*) 1st - 3rd Communications have been published in *Treubia*, vol. 16, p. 399, 1938, *Zool. Meded. Leiden*, vol. 21, p. 111, 1939, and *Treubia*, vol. 18, p. 29, 1941, respectively.

Genital apparatus ♂ (fig. 1A). Coremata a brush of long, dark scales on each side of 8th segment; mensis ventralis narrow, dilated in middle; tegumen broad and short, saccus large, rounded, little elongate; uncus rounded, covered with short hairs, at the top with a minute thorn on each side; gnathos moderate, its arms twice geniculate, its point rounded; valva elongate, haired on disc, with small bristles at base; transtilla a \square -shaped, strong rod, with an excavate dilatation in middle; cristae minute bristled knobs; canaliculus broad, rounded, densely covered with minute thorns; aedoeagus moderate, cornutus 1, a curved strong thorn, with dilated base bearing longitudinal ribs. (Slide No. 182D, paratype).

♀ (fig. 6A). Ovipositor rather narrow, densely haired, its lobes appearing double by an elongate thickening in disc, with an invagination at base, both lobes connected below by a bristled, transverse area; lobes of 8th segment conspicuous, bristled along upper margin; limen a very large and narrow rod; ostium wide; ductus bursae short, bursa copulatrix pear-shaped, signum a slightly scobinate patch (Slide No. 189D, paratype).

North East Sumatra, Medan, 8.X.1937; 16.V. and 27.V.1939. Bred from dry tobacco leaves in a fermentation barn (Dr. P. A. VAN DER LAAN). 4 ♂, 7 ♀. Holo- and allotype in the author's collection, paratypes in his collection and in the collection of the Deli Experiment Station.

TORTRICIDAE.

Mimeoclysia nov. gen. (pl. 5, fig. 2; textfig. 2):

Head (fig. 2) with long, dense, loosely appressed hairs on vertex, forming a flattened crest between the antennae, projecting above the face; face with short, dense, appressed scales, projecting below middle. Palpi rather long, porrected, basal joint roughly scaled, median joint rather narrow, smooth, slightly dilated at middle, its top oblique, projecting beneath with an acute point, terminal joint projecting, elongate, smooth, with a blunt point. Antennae $\frac{2}{3}$, shortly bipectinate, basal joint short, little thickened, without pecten. Proboscis well developed. Thorax broad and long, with a slight indication of a posterior crest, tegulae short. Abdomen very long, with a large anal tuft. Legs rather smooth, hind tibiae with projecting hairs at the top. Forewings (fig. 2) without raised scale-tufts, with rough, appressed scales along costa imitating a costal fold to beyond $\frac{1}{2}$, costa almost straight, little curved at base and before apex, apex rounded, termen sinuate above, rounded and somewhat projecting beneath, dorsum considerably rounded and prominent in middle, gradually curved at base. 1 with a moderate furca to $\frac{1}{4}$, 2 from about $\frac{4}{5}$ of cell, 3 and 4 stalked, from angle, stalk long, 5 remote, 6 somewhat approximated to 7 + 8, 7 and 8 stalked, 7 to termen, 9 near apex, 10 approximated, 11 from about $\frac{3}{4}$ of upper margin of cell. Hindwings broad, under $1\frac{1}{2}$, semiovate-trapezoid, without cubital pecten; costa curved at $\frac{1}{4}$, apex rounded, termen slightly concave below apex, dorsum somewhat prominent. 2 short, from near apex, 3 and 4 stalked, stalk

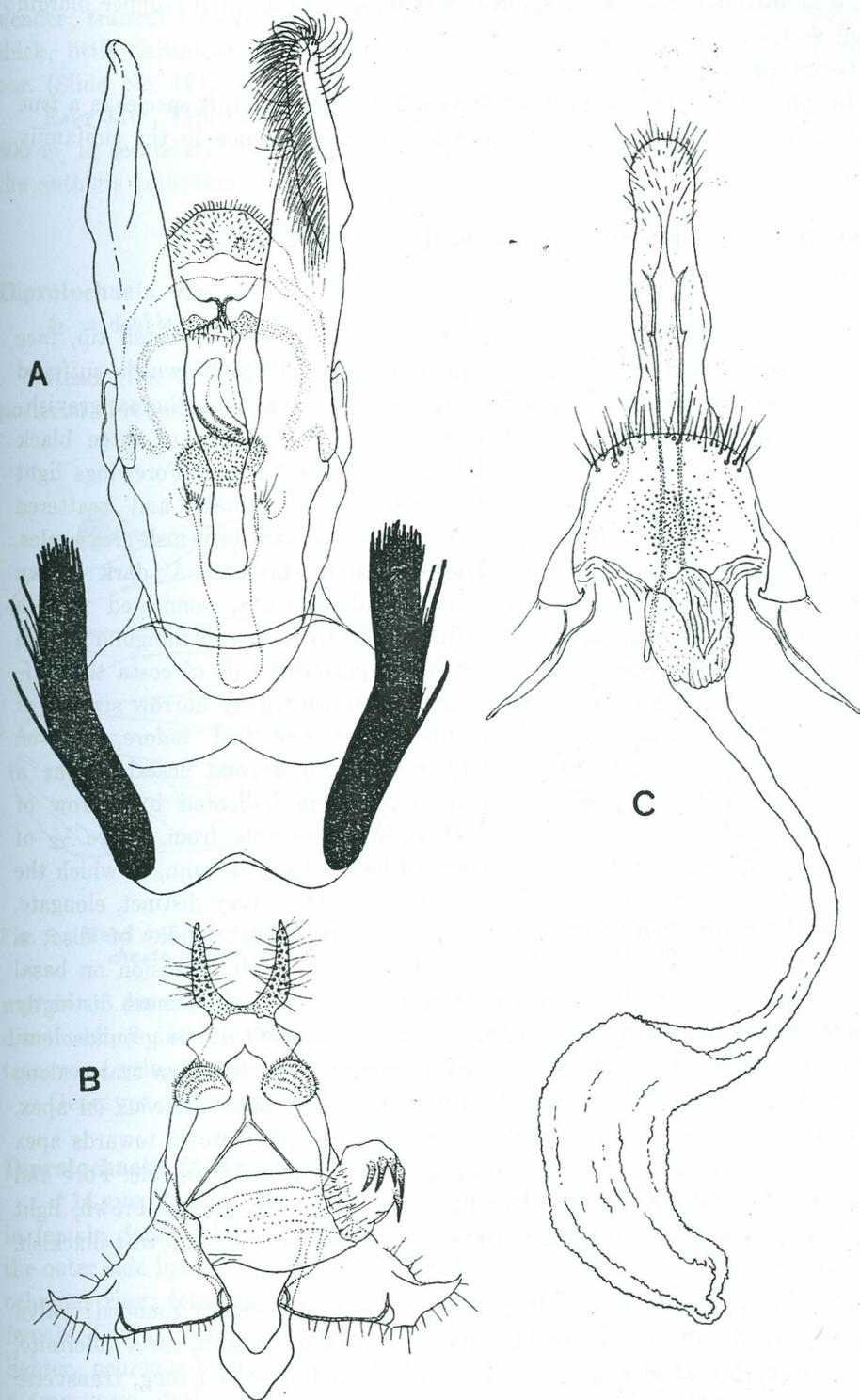


Fig. 1. A: Male genitalia of *Euzophera prionacra* nov. sp. B: Male genitalia of *Diprotochaeta fallax* nov. sp. C: Female genitalia of the same species. (Auct. delin.).

long, 5 approximated, 6 and 7 stalked, 8 running parallel to the upper margin of cell as far as $\frac{4}{5}$.

Genotype *piridina* nov. spec., ♂.

In spite of the peculiar position of vein 2 in forewings this species is a true Tortricid and not a Phaloniad. I place this primitive genus in the subfamily Cnephasiades.

Mimeoclysia piridina nov. spec. (pl. 5, fig. 2; textfig. 2).

πυρίδιος = ἄ vagabond.

♂ 12.5 mm. Head light ochreous, crest on vertex with blackish tip, face black. Antennae light ochreous, basal joint brownish. Palpi brownish, suffused with dark brown at the outer side. Tegulae light ochreous, thorax greyish-

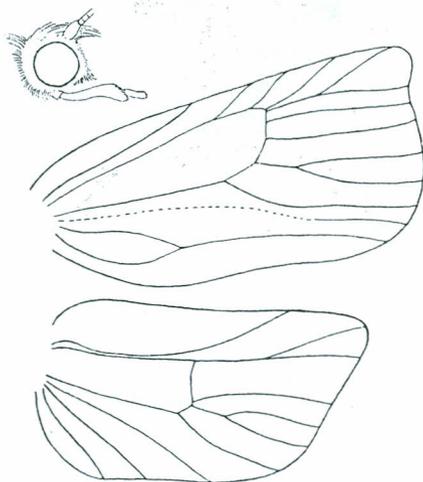


Fig. 2. Head and wing neuration of *Mimeoclysia piridina* nov. sp., ♂.

ochreous, with a triangle of three black dots at the posterior end. Forewings light greyish-ochreous, retinate and scattered with greyish and dark brownish-grey scales. Markings dark brown. A dark brown suffusion along costa, connected with a suffused, ill-defined, subtriangular costal patch; on posterior half of costa this suffusion is interrupted by narrow streaks of groundcolour: one just before, one on middle and one beyond costal patch; a transverse fascia indicated by a row of dark brown scale-dots from before $\frac{1}{2}$ of costa to before $\frac{1}{2}$ of dorsum, of which the middle one forms a very distinct, elongate, transverse dot above middle of disc; a greyish, elongate-ovate suffusion on basal $\frac{2}{5}$ of dorsum, in its middle reaching to $\frac{1}{4}$ of disc; the wing is more distinctly retinate on terminal than on basal half; apex with a small dot of groundcolour, edged on costa by a dark brown suffusion; groups of dark brown scales along dorsum. Cilia light ochreous, mixed with dark brown, light ochreous on apex. Hindwings brownish-grey, pellucid at base, suffused with brown towards apex and on veins; cilia grey with light base and darker antemedian line. Fore and middle legs greyish-brown, hind legs light ochreous; tarsi greyish-brown, light ringed. Abdomen greyish-ochreous at base, brown posteriorly, anal tuft blackish, conspicuous.

Genital apparatus ♂ (fig. 6B). Tegumen elongate, saccus rounded; valva elongate, straight, densely bristled and haired, especially at apex, costa indefinite, with a triangular knob at base; sacculus short, ending in a strong, transverse knob; uncus elongate-clavate, densely bristled under the top; gnathos elongate,

slender; transtilla membranous, narrowed in middle; anellus weak. Aedoeagus thick, little chitinised, cornutus a large and strong, spindle-shaped, chitinous bar. (Slide No. 191D, type).

EAST JAVA, Tengger Mts., southern slope of Mt. Semeroe, Ranoe Daroengan, 800 m, in secondary rain forest, 27.VI.1939 (author leg.). 1 specimen. Type in the author's collection.

GELECHIADAЕ.

Diprotochaeta nov. gen. (pl. 5, fig. 3; textfig. 3).

$\delta\iota$ = double, $\pi\rho\acute{o}$ = fore, $\chi\alpha\iota\tau\eta$ = a mane.

Head (fig. 3) very smooth, face with closely appressed scales. Ocelli posterior. Proboscis short, dilated by scales at base. Antennae about $\frac{3}{5}$, in σ shortly cirrulate, scape short in male, moderate in female, little thickened, without pecten. Labial palpi rather long, strongly curved, ascending, medial joint elongate, somewhat dilated by two rows of short, projecting scales beneath, terminal joint filiform, very acute, about as long as medial, smooth. Maxillary palpi short, filiform. Posterior tibiae with long, projecting hairs above. Forewings with 2 from $\frac{5}{6}$ of discal cell, 3 from before angle, 4 absent, 5 from angle, remote from 6, 7 separate, to termen, 9 from about $\frac{5}{6}$, 10 from about $\frac{3}{5}$, 11 from $\frac{1}{3}$ of the upper margin of discal cell. Hindwings without cubital pecten, 2 from before $\frac{3}{4}$ of discal cell, 3 and 4 connate or shortly stalked, from angle, 5 from middle of transverse vein, 6 and 7 long-stalked, 8 from near base of upper margin of cell.

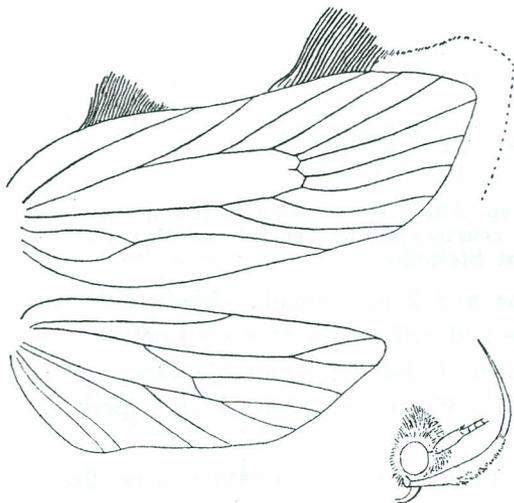


Fig. 3. Head and wing neuration of *Diprotochaeta fallax* nov. sp. ♀.

Genotype *fallax* nov. spec., σ , ♀.

Diprotochaeta fallax nov. spec. (pl. 5, fig. 3; textfig. 3).

σ 14 mm, ♀ 14 - 15 mm. Head greyish-brown in male, light brownish-ochreous in female, face in both sexes light ochreous at the inner side, medial joint at the outer side light-ochreous, tinged brownish towards apex, which bears a light-ochreous ring; terminal joint light brownish-ochreous, light ochreous-yellow in female. Thorax, tegulae and forewings unicolorous greyish-brown in male, much lighter, ochreous-brownish in female, in both with a violet tinge. In female a transverse, darker, oblique suffusion is perceptible from below $\frac{1}{4}$ of costa to tornus, and a semicircular preterminal, suffused fascia from below $\frac{2}{3}$ of

costa to the tornal suffusion above mentioned. A yellow suffusion along costa from before $\frac{1}{3}$ to $\frac{3}{5}$ brighter yellow between the two costal scale-patches, the second patch edged in female by two yellow, suffused dots on costa; a yellowish suffusion along lower half of termen; costal scale-patches ochreous-brownish. Cilia beyond the second patch light ochreous or yellowish, with basal half brownish, brownish on apex and tornus. Hindwings and cilia ochreous-brownish in female, violet-brown in male, along costa light ochreous in both sexes. Abdomen ochreous-brownish in female, greyish-brown in male. Legs light ochreous-brownish, suffused brown on the outer side in male.

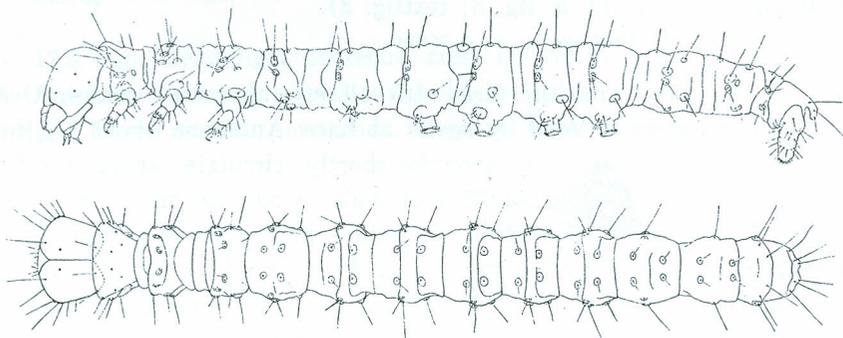


Fig. 4. Larva of *Diprotochaeta fallax* n. sp. Above lateral view, below dorsal view. Bristles of the head not completed. (By courtesy of the Central and East Java Experiment Station).

Empty pupa is about 5.5 mm long and 2 mm broad, robust, with long hairs on margins of abdominal segments and with a row of short bristles along the posterior ventral edge of 8th segment. I did not study the larva myself but publish a figure by the courtesy of the Central and East Java Experiment Station (fig. 4).

Genital apparatus ♂ (fig. 1B). Tegumen broad, saccus rather large, broad, bluntly pointed; valva triangular, costa with a bristled apical projection, sacculus dilated posteriorly, its apex sharply pointed; uncus long, deeply furcate, with sharp, haired points, a triangular, blunt projection on each side of its base. Gnathos paired, its halves spheroid pads, on each side covered with short hairs. Aedoeagus very large, cornuti five curved thorns. (Slide No. 186D, paratype).

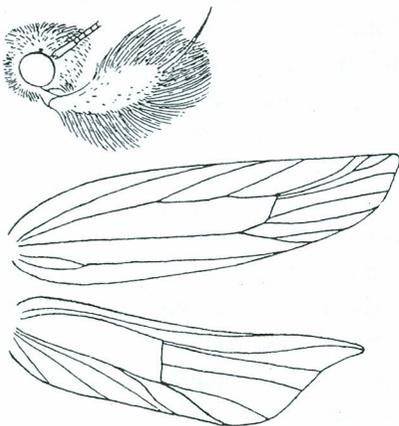


Fig. 5. Head and wing neuration of *Dichomeris ostracodes* MEYR., ♂.

♀ (fig. 1C). Ovipositor rather long, extensile, with weak bristles at the top. 8th segment very broad, with a strong posterior edge, covered with bristles, its wall above ostium with retinate surface (stippled in figure). Ductus bursae beginning with a dark, deeply folded, spheroid chiti-

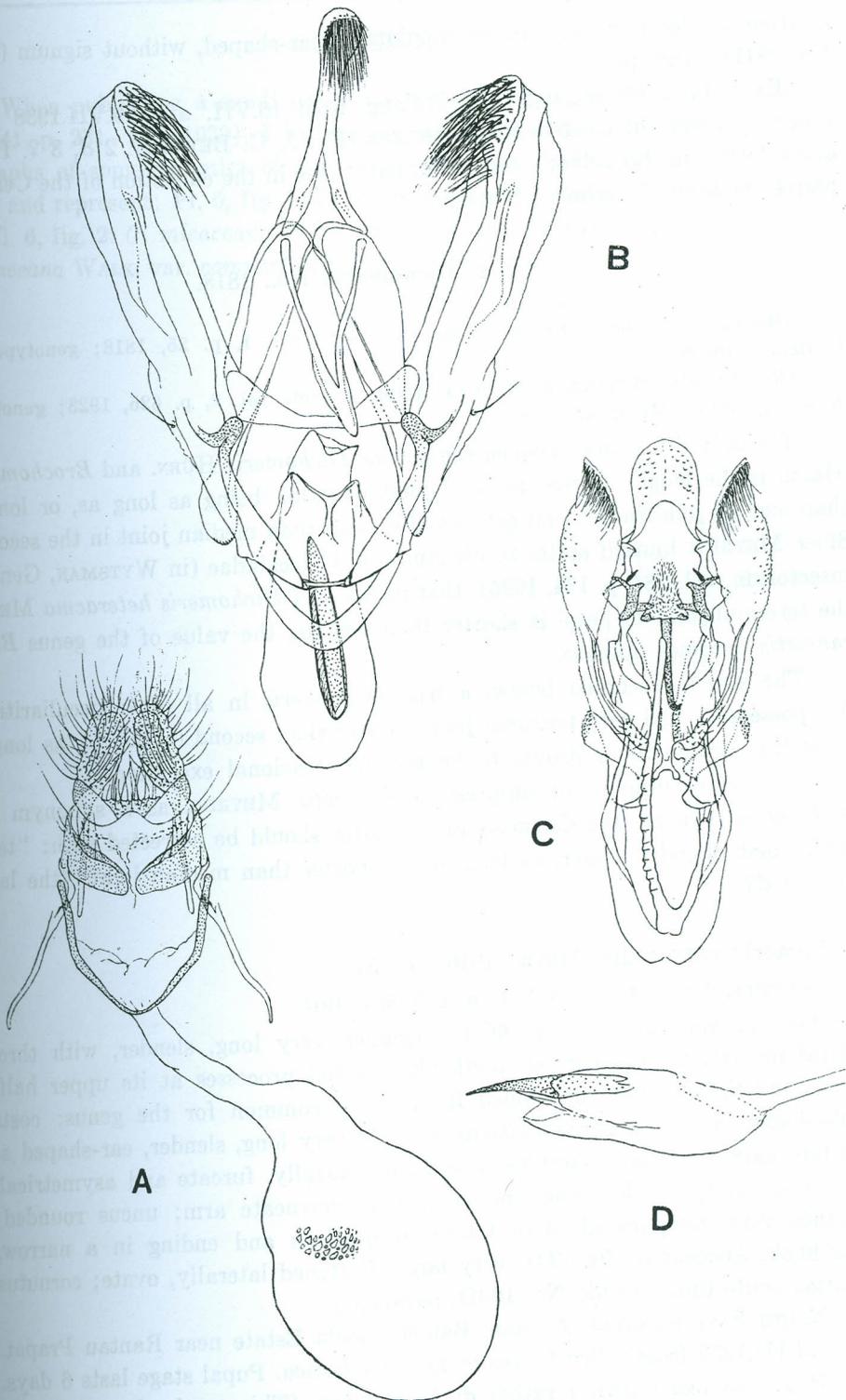


Fig. 6. A: Female genitalia of *Euzophera prionacra* nov. sp. B: Male genitalia of *Mimeoclysia piridina* nov. sp. C: Male genitalia and D: Aedeagus of *Dichomeris ostracodes* MEYR. (Auct. delin.).

nisation, moderately long; bursa copulatrix pear-shaped, without signum (Slide No. 181D paratype).

EAST JAVA, Gloengsing near Malang, bred 16.VII. and 29.VII.1938 from rolled up leaves of *Centrosema pubescens* (Dr. J. G. BETREM). 2 ♂, 3 ♀. Holotype and allotype in the author's collection, paratypes in the collection of the Central and East Java Experiment Station.

Genus *Dichomeris* HB., 1818.

Dichomeris HÜBNER, Samml. Exot. Schmett., vol. 1, p. 25, 1818; genotype *D. ligulella* HÜBNER.

?*Brochometis* MEYRICK (syn. nov.), Exot. Microl., vol. 2, p. 625, 1923; genotype *B. plexigramma* MEYRICK.

The only difference between the genera *Dichomeris* HÜBN. and *Brochometis* MEYR. is the length of the terminal joint of palpi, being as long as, or longer than median joint in the first genus and shorter than median joint in the second. Since MEYRICK himself states in his study on Gelechiadae (in WYTSMAN, Genera insectorum, vol. 184, p. 174, 1925), that in the ♂ of *Dichomeris heteracma* MEYR. the terminal joint of palpi is shorter than median, the value of the genus *Brochometis* becomes dubious.

The species recorded below, a true *Dichomeris* in all other peculiarities, also possesses palpi with terminal joint shorter than second (about $\frac{4}{5}$ as long). Thus this circumstance proves to be not an occasional exception.

I therefore propose to suppress *Brochometis* MEYRICK as a synonym of *Dichomeris* HÜBNER; the diagnosis of the latter should be corrected with: "terminal joint of palpi longer, as long as, or shorter than median joint" (the last only in ♂?).

Dichomeris ostracodes MEYR., 1916 (fig. 5).

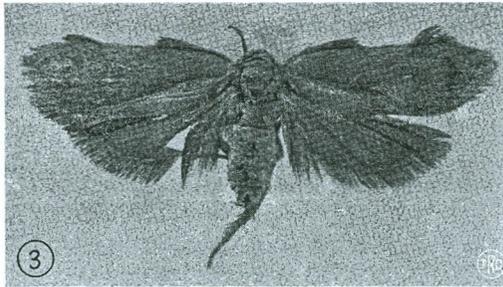
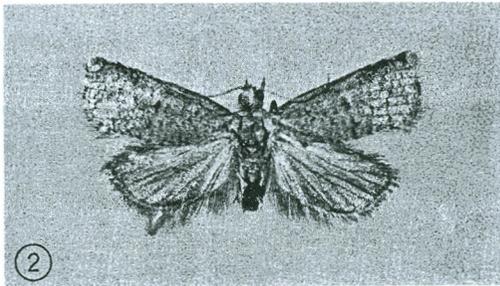
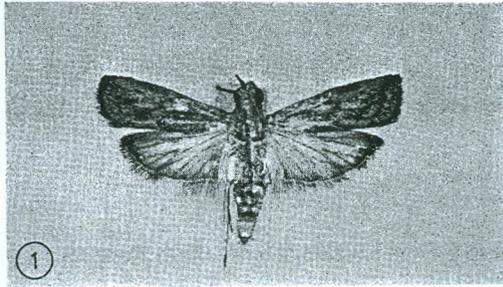
MEYRICK, Exot. Microl., vol. 1, p. 583-584, 1916.

Genital apparatus ♂ (fig. 6C.). Tegumen very long, slender, with three lateral projections and curved, tooth-like, medial processes at its upper half; saccus indefinite. Valva developed in the way common for the genus: costa club-shaped, with apical scobinations, valvula very long, slender, ear-shaped at the top, narrow at base, sacculus descended ventrally, furcate and asymmetrical, with one short, bristled, and one very long, verrucate arm; uncus rounded; gnathos very complicated, with lateral projections and ending in a narrow, long hook. Aedoeagus (fig. 6D), very large, flattened laterally, ovate; cornutus a large, acute thorn. (Slide No. 190D, paratype).

NORTH EAST SUMATRA, Asahan, Bandar Goela Estate near Rantau Prapat. Bred 21.III.1939 from rolled leaves of *Derris elliptica*. Pupal stage lasts 6 days. (Dr. P. A. VAN DER LAAN). 1 rather dark specimen. (This species has also been recorded from Burma and Java).

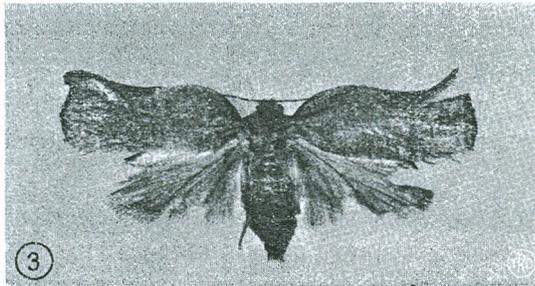
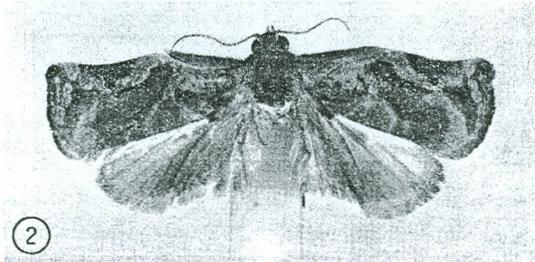
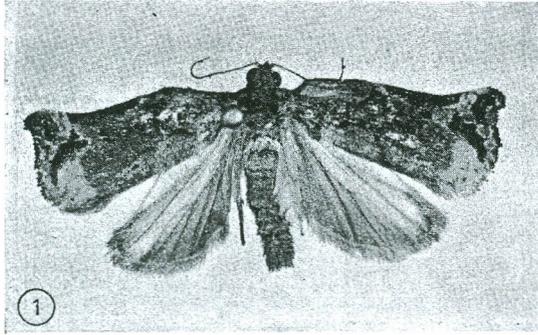
APPENDIX.

When publishing a small paper on Indian Tortricidae (Rec. Indian Mus., vol. 41, p. 231 - 233, 1939), I had no opportunity for the reproduction of photographs of some varieties of *Cacoecia micaceana* WALK. They are published here and represent: Pl. 6, fig. 1. *Cacoecia micaceana* WALK. var. *obscura* DIAK., ♂. Pl. 6, fig. 2. *C. micaceana* WALK. var. *compacta* (MEYR.), ♂. Pl. 6, fig. 3. *C. micaceana* WALK. var. *compacta* (MEYR.), ♀. (About 3.3 × nat. size).



A. DIAKONOFF: *Descriptions and records of Microlepidoptera from Sumatra and Java.*

Fig. 1. *Euzophera prionacra* n. sp. ♂. Fig. 2. *Mimeoclysia piridina* n. sp. ♂. (Author phot.). Fig. 3. *Diprotochaeta fallax* n. sp. ♀. (Phot. by the courtesy of the Central and East Java Experiment Station, Semarang). (About $3.3 \times$ nat. size).



A. DIAKONOFF: *Descriptions and records of Microlepidoptera from Sumatra and Java.*

Fig. 1. *Cacoecia micaceana* Wlk. var. *obscura* DIAK. ♂. Fig. 2. *C. micaceana* Wlk. var. *compacta* (MEYR.) DIAK. ♂. Fig. 3. *idem*, ♀. (About $3.3 \times$ nat. size; author phot.).