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RECORDS AND DESCRIPTIONS OF MICROLEPIDOPTERA (5)

by

A. DIAKONOFF

(Rijksmuseum van Natuurlijke Historie, Leiden)

When revising the genera of Indo-Australian and Papuan Tortricidae (1939) the author was very much in doubt as to the systematic position of the genus *Diactenis* Meyrick, 1907, referred before to the Tortricidae. It did not fit in that family, neither could it be successfully transferred to any other Tortricoid family known. Through lack of further data the author decided at last to transfer *Diactenis* to the family Chlidanotidae; the necessity of its removal from the Tortricidae being only too evident. This decision, however, was not very happy, as *Diactenis* was neither at its proper place in the Chlidanotidae. In the same year (1939) the late T. Bainbrigge Fletcher suggested to the author (in litt.) to erect for *Diactenis* a new family. Although this seemed a reasonable solution, we esteemed such an action to be premature, our information on the possible congeners of *Diactenis* being insufficient at that time. Instead, however temporarily, *Diactenis* was transferred back to the Tortricidae; but at the same time attention was drawn to the close correlation of that genus with two others (1941).

Soon afterwards still more new forms of the *Diactenis* relationship continued coming to our notice, and the conception of this new family began to take shape.

It materialized after our study of the excellent collection of Microlepidoptera, brought together by our lamented friend, the late Dr. L. J. Toxopeus,

during the Third Archbold Expedition to New Guinea. The results of this study will be published soon.

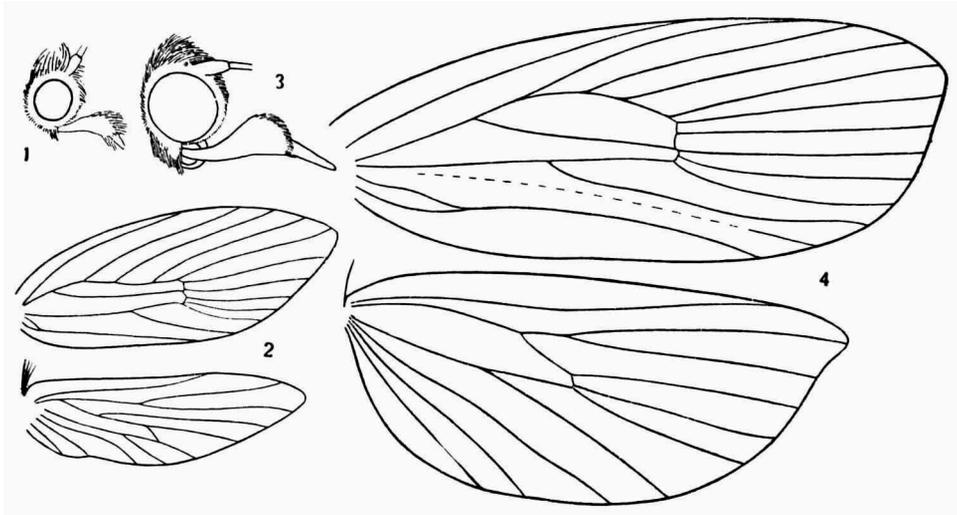
Meanwhile we are satisfied that the information collected during these twelve years is entirely sufficient for carrying into effect the so long delayed intention.

SCHOENOTENIDAE fam. nov.

Head with dense, appressed scales, sometimes rather rough-haired (figs. 1, 3). Ocellus posterior, often absent. Proboscis developed or short. Antenna about $\frac{1}{2}$, in male ciliated, sometimes serrulate, basal segment without pecten. Labial palpus porrect, seldom subascending, moderate, moderately long or long, median segment mostly dilated posteriorly with more or less roughly appressed or rather projecting scales above and beneath, terminal segment short or moderate, subobtuse. Maxillary palpus obsolete or concealed; seldom distinct, minute. Thorax sometimes with a moderate posterior crest. Posterior tibia clothed with dense long hairs above. Fore wing (figs. 2, 4) in male without costal fold (in one genus a costal fold present), with three tufts of raised scales on upper surface and raised scales along veins, lower surface sparsely scaled, often double rows of scales forming a fringe along veins only, interneural space being naked; cell distinctly narrowed posteriorly, upper angle strongly rounded, with a strong sinuate parting vein, from upper edge of cell before base of vein 11, to between veins 5 and 6; 12 veins, all separate, seldom 7 and 8 stalked; 1b furcate at base, 2 from $\frac{3}{5}$ - $\frac{2}{3}$ of lower edge of cell, 3 from angle, 3-5 separate and tolerably equidistant, seldom 3 and 4 stalked, 7 to termen, 11 from middle or from before middle. Hind wing (figs. 2, 4) without cubital pecten, elongate-semioval, $1\frac{1}{2}$, cilia $\frac{1}{6}$ -2; often semipellucid, lower surface only with rows of scales along veins; 8 veins; 2 from $\frac{2}{3}$ - $\frac{4}{5}$, seldom from angle, 3 from angle or from before angle, remote from 4, seldom approximated, 5 much remote from 4, parallel, seldom approximated, connate or stalked with 4, discoidal vein mostly extremely oblique, veins 6 and 7 stalked, seldom connate, stalk short or long, originating from angle, from upper edge of cell towards base, or seemingly from base and then anastomosing by a short branch with cell before middle; 8 free, little curved. Sometimes wing membrane forms a narrow longitudinal fold from base to beyond cell, concealing upper edge of the latter.

Genital apparatus in male (figs. 5-12) with uncus developed, mostly slender, often with a pair of curved lateral porrect projections at its base, to which we gave the name of hami (Diakonoff, 1948). Gnathos mostly a rectangularly

bent thin rod with apical half pending, transverse. Socius small, or moderate, or absent, situated above the base of hamus or connected with the latter. Transtilla often strong. Valva rather slender, elongate, strongly bristled, sacculus often with a pad covered with modified flattened bristles; its shape is characteristic of each genus. Aedoeagus mostly slender, curved. Cornuti, strong thorns of variable shape. In female ovipositor often modified, eighth segment often strongly sclerotized and intricately built, colliculum sometimes



Figs. 1-2. *Diactenis thauma* spec. nov., ♀; 1, head; 2, wing neuration.
Figs. 3-4. *Schoenotenes synchorda* Meyrick, ♂; 3, head; 4, wing neuration.

present. Ductus bursae often with a vesiculation at its upper part which sometimes is as large as bursa copulatrix itself; it is submembraneous and unarmed, apparently of entodermal origin, and may be the enlarged ductus seminalis; upper part of colliculum is sometimes bent and follows entrance of this vesiculation. Signum mostly absent, when present, a scobinate thorn.

Type of the family: *Schoenotenes* Meyrick, 1908. Type of the genus: *Schoenotenes synchorda* Meyrick, 1908, by monotypy (India, Java).

The present group is distinct and natural. It is easy of recognition by the characteristic uniformly narrowed and posteriorly rounded cell in fore wing, with a strong sinuate parting vein terminating above base of 5, by the shape of the cell and the position of veins 6 and 7 in the hind wing, and by the typical sparse scaling of both fore and hind wings at the under side, only the veins being fringed with scales, which makes them appear thickened and strongly raised on the smooth wing membrane. These features make it

possible to recognise the members of the present family by a single glance at the under side of the wing. Only in the genera *Proselena* and *Paraselena* this feature is not so obvious.

The family comprises moths of moderate or rather small size and of a general tortricoid appearance. *Schoenotenes* species resemble the Tortricidae most and are invariably in possession of three characteristic patches of raised scales on the upper surface of the fore wing, viz., a ridge along basal fourth

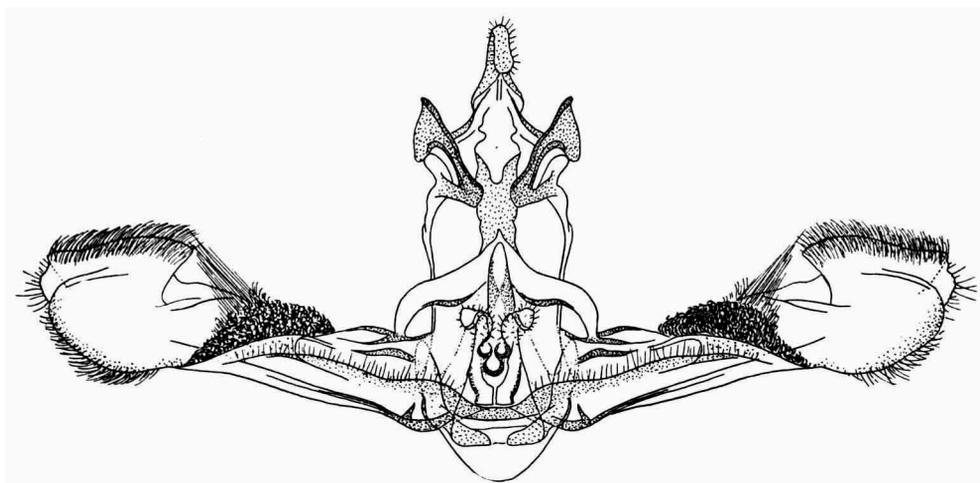


Fig. 5. *Schoenotenes synchorda* Meyrick, ♂, genitalia.

of the upper edge of cell, a large tuft in middle of fold and a smaller discal tuft on closing vein. In other genera these tufts are sometimes less distinct, or the basal tuft is absent. The terminal veins on upper surface of wing are marked by rows of slightly raised scales that are especially distinct in *Diactenis*, where the entire wing appears roughened. The facies of *Metachorista* resembles that of the Eucosmidae.

The genitalia are of the tortricoid type, but in several cases have acquired a considerable development of their own. Striking is the presence — in more specialized forms — of separate, articulate porrect appendages, the hami, situated at the base of the uncus immediately below the socii. Sometimes the socius is elongate and united with the hamus along its basal half, or even it forms a bristled pad in the middle of the lateral wall of the hamus. We are inclined to think that the hamus is homologous with a chitinous flat piece which is found in the Tortricidae below and lateral of the articulation of the gnathos. It is not a part of the socius itself, as in several species a small socius can be found above and quite separated from the hamus. Hami are also present in certain Chlidanotidae (*Picroxena* Meyrick, 1921).

The genitalia of the female often show considerable specialisation as to the intricately developed seventh and eighth segments and to the shape of the ovipositor; the former are often strongly plicate and covered with short hairs or fine thorns, the latter is rather tubular, with distal lobes divided in a ventral bristled part, and a dorsal, often strongly thickened, pad-like finely haired appendix.

As to the systematic position of the present family, it belongs doubtlessly in the tortricoid group and is nearest to the small and still rather obscure family Chlidanotidae. In appearance the Schoenotenidae have much in common with the Tortricidae, and all the genera described before, except one, have been attributed by Meyrick without hesitation to the latter family; only *Metachorista* Meyrick was described as a Eucosmid. However, this connection is more superficial than actual, as the build of the male genitalia shows a large gap between these groups. The Schoenotenidae seem to us to be still more remote from the Eucosmidae except such aberrant (ancient?) forms as *Articolla* Meyrick, which genus has a rather similar facies and may be, in fact, a link between these two families, or rather, a link between the Eucosmidae and the Chlidanotidae.

The extensive, and obviously old genus *Schoenotenes* reflects a possible development of the whole family, more recent forms approaching the Tortricidae, more ancient ones showing a correlation with the tineoid moths, especially with the Copromorphidae, which have a similar facies.

The Schoenotenidae can be distinguished from the Tortricidae by the invariably present strong sinuate parting vein in cell, by the three raised scale-tufts of fore wing as described above, by the absence of costal fold in male (with one exception), by the typical shape, by the neuration and the scaling of hind wing, and clearest of all, by the male genitalia; from the Eucosmidae and the Copromorphidae, by the absence of a cubital pecten in hind wing, and especially by the genitalia, from the latter also by the not pectinate male antennae; from the Chlidanotidae and the Carposinidae by neuration, from the latter also by the shape of the palpi.

The family apparently is of New Guinean origin, where it is abundantly represented. Three endemic genera and several species inhabit Australia, while Malayan and Indian regions count only a few species of *Schoenotenes* and *Diactenis*, and *Proactenis* is as far recorded from New Guinea and Java.

The larva of only one species (*Palaeotoma styphelana* Meyrick, 1881) is known: it is a true gall-producer in top shoots of Myrtaceae in Australia. The pupa of another (*Diactenis pteroneura* Meyrick) has been found on *Nycanthes* (Olaeaceae) in India.

A series of new genera from New Guinea await publication. Meanwhile the following key will facilitate discrimination of the genera described so far. Six of them are transferred from the Tortricidae and one from the Eucosmidae. It is not unlikely that in future more representatives of the Schoenotenidae will be discovered among the genera of the two latter families.

Key to the genera of the Schoenotenidae

1. Fore wing with veins 7 and 8 stalked *Paraselena* Meyrick, 1910
- Fore wing with veins 7 and 8 separate 2
2. Hind wing with stalk of veins 6 and 7 very long, originating apparently from base of wing, sometimes connected with middle of what appears to be the upper edge of cell, by a transverse bar 3
- Hind wing with stalk of veins 6 and 7 short or moderate, originating from upper angle of cell or from middle of obliquely running upper edge of cell 5
3. Hind wing with stalk of veins 6 and 7 from near base of upper edge of cell (fig. 2) *Diactenis* Meyrick, 1907
- Hind wing with stalk of 6 and 7 apparently from base of wing, connected by a transverse bar with what seems to be the upper edge of cell 4
4. Hind wing with veins 2-4 remote and equidistant, 3 from before angle *Proselena* Meyrick, 1881
- Hind wing with vein 3 from angle, nearer to 2 than to 4. *Proactenis* Diakonoff, 1941
5. Hind wing with veins 3 and 4 approximated at base or connate (fig. 4). *Schoenotenes* Meyrick, 1908
- Hind wing with veins 3 and 4 widely remote 6
6. Hind wing with veins 6 and 7 short-stalked, 4 and 5 approximated; fore wing with termen convex; thorax without crest *Palaeotoma* Meyrick, 1881
- Hind wing with veins 6 and 7 long-stalked, 4 and 5 connate, seldom short-stalked or very closely approximated; fore wing with termen concave; thorax with posterior crest *Metachorista* Meyrick, 1938

Diactenis Meyrick, 1907 (figs. 1-2)

Diactenis Meyrick, 1907, Journ. Bombay Nat. Hist. Soc., vol. 17, pp. 979-980.

The type of the present genus, *D. pteroneura* Meyrick, 1907, was recorded by that author from India, Ceylon, the Andaman Islands, and Queensland. Later the material from the Andaman Islands and Queensland was separated by him under the name of *D. veligera* Meyrick, 1928.

When trying to identify *Diactenis* material from Java in 1941, we noticed that the genitalia of our specimens, of which two were mounted at that time, did not agree with our figure of the genitalia of *D. pteroneura* (1939, fig. 19A); so it happened that we mistook our material for *D. haplozona* Meyrick, 1921, a species described from Java. Due to the war no additional information on the types of these two species could be acquired from European Museums at that time.

Recently we studied the unique specimen of "*Diactenis*" *haplozona* in the Leiden Museum. It appears to belong to another genus, as will be shown below.

As to the above mentioned material of *Diactenis* from Java, a renewed study, now of the genitalia of every specimen available, revealed that not less than four different, but superficially very similar species occur in that island. Owing to the kindness of Mr. J. D. Bradley, British Museum (Natural History), we were able to compare the genitalia of these species with a photograph of those of the lectotype of *D. pteroneura*, a male from Ceylon. Our Javanese species appear to be distinct from the latter, and, consequently, they are described below as new.

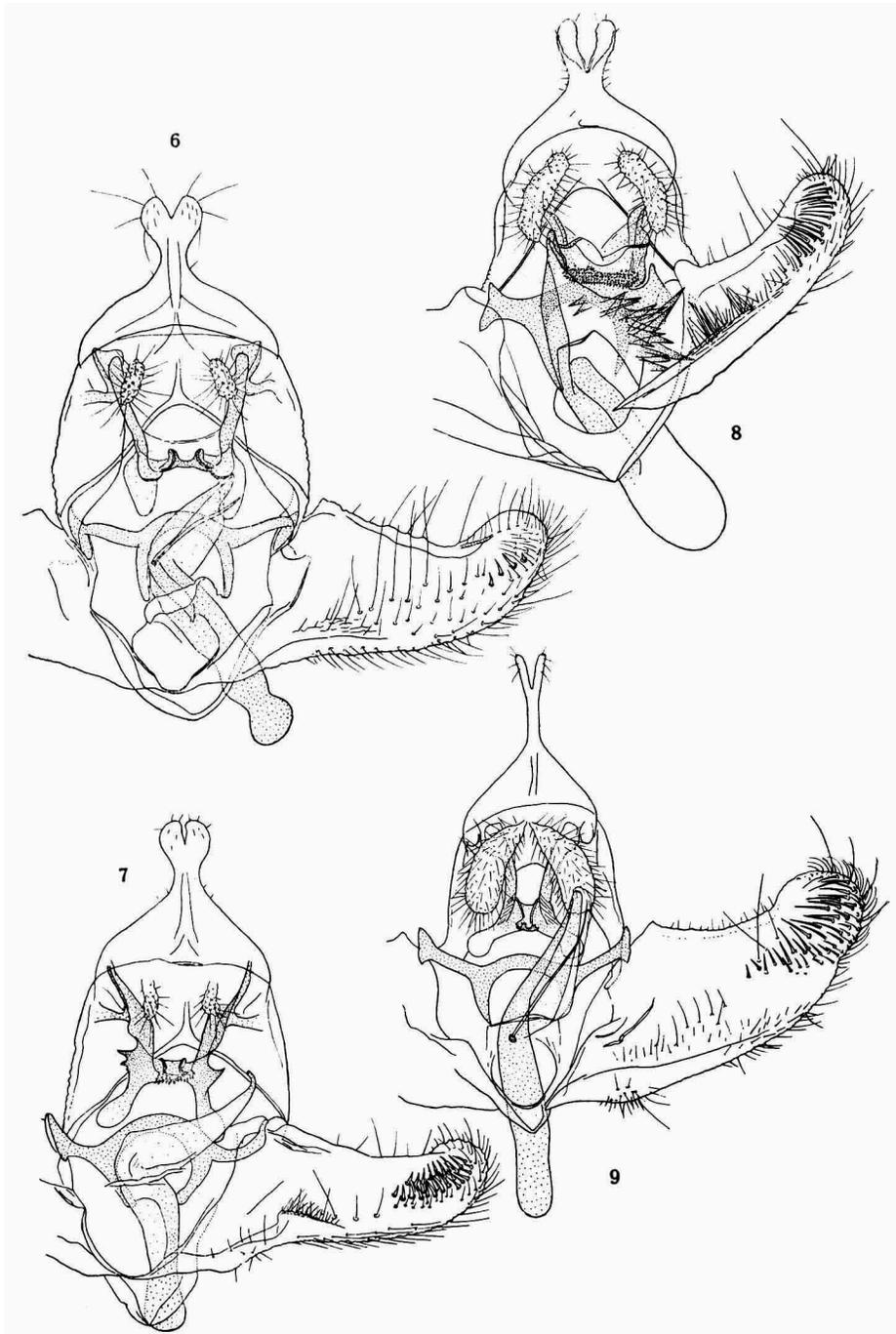
The ductus bursae of three of the species described (of the fourth the female is unknown) is of a moderate length, and not sclerotized; the bursa copulatrix is ovoid; it is also simple. A vesicle, as large as the bursa copulatrix itself, opens into the ductus bursae above its middle; this may be a dilatation of the ductus seminalis. These parts are omitted from our figures, as they do not present any characters that could be used for the separation of the species concerned.

Diactenis thauma spec. nov. (figs. 1, 2, 6, 10)

θαύμα = masterpiece

♂ 8.5-9 mm, ♀ 8-10 mm. Head pale ochreous, face becoming whitish below, side tufts very large, bent over vertex, their tips touching in a median line. Antenna minutely serrulate in male, filiform in female, ochreous-whitish, posterior half suffusedly ringed with brownish above. Palpus with median segment strongly expanded towards apex, terminal segment short, drooping, obtusely pointed; ochreous-whitish, basal half of median segment suffused with light brown. Thorax pale ochreous, slightly irrorated with tawny. Abdomen pale greyish-fuscous, dorsum suffused with dark grey or with a median dark grey shade, venter ochreous-whitish, anal tuft pale ochreous. Legs pale ochreous, anterior and median legs suffused externally with brownish, and with tawny, respectively.

Fore wing ovate-pointed, moderately dilated as far as its three-fourths, costa slightly curved at extreme base, hardly curved from beyond base to beyond $\frac{3}{4}$, apex pointed, termen curved, strongly oblique. Light ochreous, sparsely strewn with minute light tawny specks and brown points, markings formed by dark brown scales with light tawny bases. Costa very finely edged with ochreous; its anterior half with some ten minute brownish marks; irregular sparse dark brown speckling along basal fourth of dorsum, tending



Figs. 6-9. Male genitalia of *Diactenis* spp. 6, *thauma* spec. nov.; 7, *sequax* spec. nov.; 8, *plumula* spec. nov.; 9, *isotima* spec. nov.

to form a small triangular spot on dorsum beyond base, and to dissolve into a series of transverse blotches posteriorly; a more or less extended ochreous-tawny suffusion along fold from beyond its base to above dorsum, attenuated posteriorly, merging in a transverse tuft of slightly raised scales of the same colour on dorsum which is edged posteriorly by dark brown specks; an ill-defined, elongate-ovate suffused brownish-tawny spot slightly above middle of disc at $\frac{1}{3}$ of wing length, transversely strigulated or sometimes obscured by dark brown specks; a moderate, tolerably straight, outwardly oblique transverse fascia, from well beyond middle of costa to termen rather before tornus, hardly dilated below; it is tawny-ochreous, on costa suffused with dark brown, below costa finely obliquely strigulated with that colour, towards dorsum becoming obliterate, and only indicated by its brown edges; anterior edge of fascia well-defined throughout, posterior edge suffused from below costa to above dorsum, and confluent with a large rounded patch of greyish suffusion, strongly speckled with dark brown along veins, extending posteriorly from end of cell almost halfway towards apex of wing; it is followed by a transverse narrow fascia of dark brown irroration, attenuated towards edges, angulate in middle, running tolerably parallel to wing margins, rising from termen above tornus $\frac{3}{4}$ across wing; a series of irregular interneural dark brown dots along posterior $\frac{1}{4}$ of costa, in apex and along termen, gradually becoming larger towards tornus, and shaped as vertical bars; interneural spaces pellucid. Sometimes markings partially obliterate or obscured by more strongly developed brown irroration; females usually somewhat darker than males. Cilia ochreous-whitish, opposite apex and along termen with a minute brownish median line, below this basal portion of cilia deeper ochreous.

Hind wing semipellucid, becoming pale grey towards margins, series of pale grey scales arranged along veins. Cilia pale fuscous with ochreous-whitish base.

Tegumen (fig. 6) broad. Uncus with thick, semioval lobes. Socius elongate, small: hardly reaching halfway towards transverse rod of gnathos. Gnathos strong, bases appearing trifid, arms moderate, transverse rod long, point broad, with two auricular transverse blades, lateral pending appendages broad, narrowed, obtuse. Valva with only a few spines on cucullus. Aedoeagus angulate, base constricted; cornutus, a slender spine. Slides 1326D, 1327D (holotype), 1329D, 1337D.

Ovipositor (fig. 10) of peroneid type. Ventral flaps of 8th segment pointed, points minutely serrulate. Apophyses robust. Limen, a narrow band, dilated in middle, ostium triangular. Slides: 1332D, 1340D, 1343D, 1344D (allotype), 1345D.

East Java, Tengger Mountains, Nongkodjadjar, 1300 m, 31.III.1940 (holotype, ♂), 28.II.1940 (allotype, ♀), 22, 27, 28.I, 10.III, 3, 5.IV.1940 (A. M. R. Wegner). West Java, Mount Gedé-Pangerango, Tjibodas, 1400 m, 18.XII.1940 (A. Diakonoff). Sumatra, Fort de Kock, 920 m, 1925 (E. Jacobson). 4♂, 5♀.

Type locality: East Java.

Diactenis sequax spec. nov. (figs. 7, 11)

Diactenis haplozona Diakonoff, 1941 (nec Meyrick, 1921), *Treubia*, vol. 18, pp. 426-427 (partim), pl. 20 fig. 7 (gen. ♂).

♂ 8-8.5 mm, ♀ 8-9 mm. Very similar to *thauma*, and differing superficially only by somewhat paler colouring, the ground colour being more yellowish-ochreous tinged, instead of light ochreous-tawny. Thorax in male is hardly or not irrorated with fuscous, head paler than in *thauma*. Otherwise the colouring and the markings are alike, and vary in both species to the same extent. It is not possible to separate them without the aid of the genital characters.

Tegumen (fig. 7) less broad than in *thauma*. Uncus similar. Socius smaller, more slender and slightly shorter. Gnathos with trifid bases, arms stronger, with longitudinal ribs, one or generally two teeth at each side of the transverse rod which is shorter, point less broad, but higher, appendages clavate, more slender, diverging. Cucullus of the valva with numerous spines. Aedoeagus of similar shape, but with slender curved point. Cornuti not perceptible. Slides: 1333D, 1334D, 1335D (holotype).

Ovipositor (fig. 11) of similar shape as in *thauma*. Ventral flaps of 8th segment obtuse, tops denticulate. Apophyses slender. Limen much broader, ostium apparently round, tubular beginning of ductus bursae indicated. Slides 1331D (allotype), 1341D, 1342D, 1347D.

East Java, Tengger Mountains, Nongkodjadjar, 1300 m, 19.IV.1940 (holotype, ♂), 18.IV.1940 (allotype, ♀). 27.I, 5, 24, 25.IV.1940 (A. M. R. Wegner). 3♂, 4♀.

Type locality: East Java.

The present species is very closely allied to *thauma*. Both differ from *D. pteroneura* Meyr. by the much shorter socii and the differently shaped gnathos.

Diactenis isotima spec. nov. (fig. 9)

ἰσότητος = equal

♂ 8 mm. Head whitish with faint ochreous tinge, face almost white. Antenna whitish, slightly suffused with fuscous, except towards base. Palpus

short, median segment strongly expanded; white, basal half of median segment except above suffused with tawny. Thorax whitish, hardly ochreous-tinged, with a few scattered grey scales. Abdomen pale grey, anal tuft whitish, venter white. Legs whitish, tinged tawny, anterior leg except coxa suffused with blackish-fuscous, median tarsus banded with brownish.

Fore wing elongate-ovate, not dilated, pointed; costa gently curved anteriorly, dorsum strongly curved at base. Very pale ochreous-whitish, markings dark fuscous, faintly suffused with tawny. Costal edge from base to middle faintly suffused with tawny, with five minute triangular fuscous, inequally spaced marks; a small transverse slightly outwardly oblique blackish-fuscous jot at $\frac{1}{4}$ of disc above middle, surrounded by faint tawny longitudinally extended suffusion; an outwardly oblique transverse fascia formed by a conspicuous elongate blackish-fuscous spot on costa well beyond middle, and by irroration of the same colour on veins below it; fascia does not reach dorsum, is faintly suffused with tawny throughout, this suffusion reaches dorsum; a large tuft of raised scales in centre of disc edging fascia anteriorly; wing beyond fascia slightly suffused with tawny; a strongly angulate series of roughish blackish-fuscous dots on veins, from vein 8 to 6 running more obliquely than edge of costa, thence becoming inwardly oblique, dots on veins 5 to 3 minute, ultimate marginal; space between transverse fascia and series of dots suffused with grey, with veins strongly irrorated with blackish-fuscous, this irroration not reaching the above mentioned dots; roughish dots on veins along posterior third of costa, and along termen to tornus, tornal dot largest; a series of irregular transverse marks of faint tawny irroration along dorsum beyond base to before transverse fascia. Cilia ochreous-whitish, somewhat deeper ochreous-tinged than ground colour of fore wing.

Hind wing semipellucid, very pale ochreous-grey, cilia pale grey.

Tegumen (fig. 9) less broad than in other species. Uncus long, slender, furciform. Socius very large, reaching beyond transverse rod of gnathos. Gnathos with outwardly curved arms, transverse portion broad but short; point, a small cup with dentate rim; appendages strongly diverging, clavate. Cucullus with numerous bristles. Aedoeagus long, little bent; cornutus, one slender spine. Slide 1336D.

East Java, Tengger Mountains, Nongkodjadjar, 1300 m, 21.III.1940 (A. M. R. Wegner). 1 specimen.

Type locality: East Java.

Judging by the male genitalia this species is the nearest relative of *D. pteroneura*, from Ceylon and India. It possesses similar uncus and socii, but the gnathos and the valva are shaped differently.

Diactenis plumula spec. nov. (figs. 8, 12)

Diactenis haplozona Diakonoff, 1941 (nec Meyrick, 1921), *Treubia*, vol. 18, pp. 426-427 (partim), pl. 20 fig. 5 (gen. ♀).

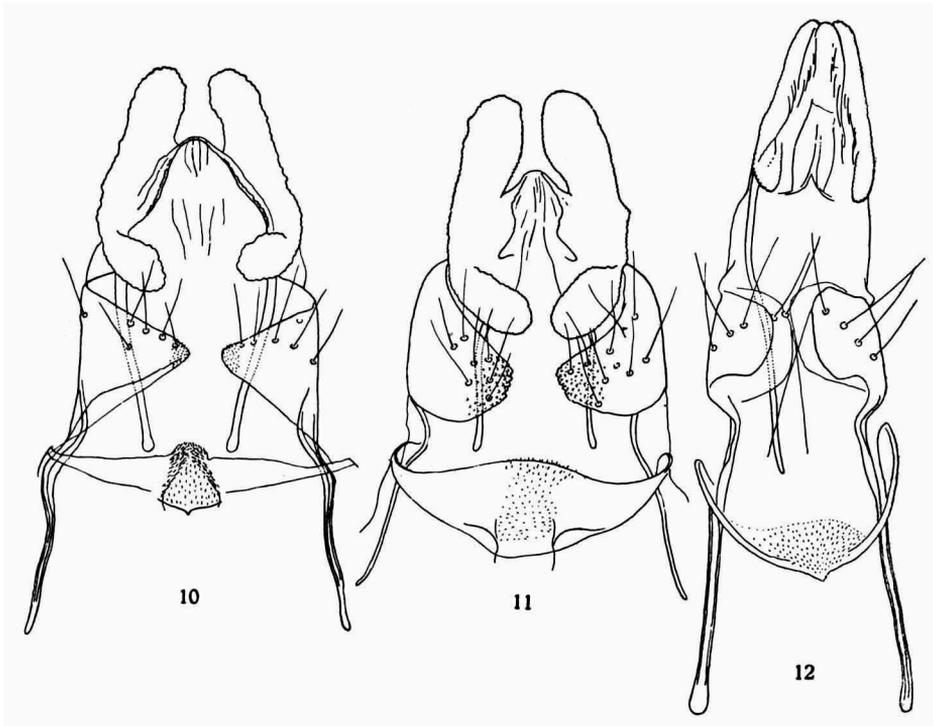
♂ 8.5 mm, ♀ 8.5-9 mm. Head and thorax in male whitish, faintly ochreous-tinged, middle of vertex of the head, and thorax except tegulae suffused with greyish; in female more distinctly tinged pale ochreous, sometimes touched with fuscous, thorax entirely suffused with fuscous. Antenna whitish, more or less suffused with brownish except towards base. Palpus somewhat longer than in the three preceding species, especially in female; whitish, median segment fuscous, except above. Abdomen pale grey. Legs ochreous-whitish, anterior leg except coxa, and tarsus of median leg suffused with brown.

Fore wing elongate-ovate, pointed, narrower than in *isotima*, broadest in middle, termen longer. Male: yellowish-white, irregularly minutely irrorated with fuscous; basal half of costa with five minute dark marks; an elongate group of dark fuscous scales beyond $\frac{1}{4}$ of disc above its middle; an irroration of similar scales on dorsum opposite preceding; transverse fascia formed by an elongate dark fuscous spot on costa beyond middle, a small transverse striga of the same colour across cell below preceding, being posterior edge of the discal tuft of raised scales, and some brownish speckling connecting this striga with dorsum and extending on both sides along the latter; subterminal transverse series of dots on veins is rounded (not angulate as in *isotima*), disc between these dots and cell only faintly clouded with grey; marginal dots along costa and termen minute, partially obliterate. Female: variable, sometimes darker tinged, somewhat more ochreous, denser irrorated with fuscous, which irroration forms distinct transverse strigulation on dorsum; transverse fascia suffused with grey and ochreous-tawny, its edges on costa suffused with dark fuscous; its anterior edge is continued as a narrow strigula to dorsum, and is suffused on both sides with tawny-ochreous; grey colour extending over the tuft of raised scales in disc and over veins beyond cell; these veins also streaked and irrorated with darker grey; subterminal row of dots ill-defined and continuous, forming a narrow rounded strigula; wing beyond transverse fascia except towards costa rather suffused with grey throughout and transversely strigulated with fuscous, so as to obscure markings. Cilia whitish, along costa tinged ochreous and infuscated, along termen with a grey median strigula.

Hind wing in male pale greyish-ochreous, cilia pale grey; in female light ochreous-grey, cilia pale fuscous-grey.

Tegumen (fig. 8) rather broad. Uncus with elongate lobes, much more slender than in the two preceding species. Socius large, elongate, reaching

to transverse bar of gnathos. Gnathos rectangular, with narrow, simple bases, arms moderate, transverse portion long, with membrane folds above, set with several rows of fine teeth below; median point and lateral appendages absent. Cucullus with bristly hairs. Aedoeagus large, not angulate; cornuti, a patch of strong spikes. Slide 1328D.



Figs. 10-12. Female genitalia of *Diactenis* spp. 10, *thagma* spec. nov., 11, *sequax* spec. nov.; 12, *plumula* spec. nov.

Ovipositor (fig. 12) slender, elongate. Apophyses long. Limen, a narrow, curved rod. Ostium, a broad cup. Slides 1330D (allotype), 1338D, 1339D, 1346D .

East Java, Tengger Mountains, Nongkodjadjar, 1300 m, 9.V.1940 (holotype, ♂, allotype, ♀), 27.IV.1940, 9.V.1940. 1♂, 4 ♀.

Type locality: East Java.

Judging by the genital characters, this species stands isolated from the preceding and from *pteroneura* Meyr. Superficially, however, it is similar to both.

Proactenis haplozona (Meyrick, 1921) combin. nov.

Diactenis haplozona Meyrick, 1921, Zool. Meded. Mus. Leiden, vol. 6, p. 149.

Type: male (without abdomen): "W. Java, Preanger, 5000 vt., Sythoff, ♂", "M 58". In the Leiden Museum.

As was remarked above, our record of "*D. haplozona*" (1941) concerns not this species but the complex of the four *Diactenis* species described above.

P. haplozona is closely related to *P. centrostricta* (Diakonoff, 1941), from New Guinea. It differs by slightly narrower hind wings which are sordid pale ochreous, while in *centrostricta* they are white with faint golden gloss; the fore wing is more fuscous-tinged, the markings suffused with fuscous, not with pinkish as in *centrostricta*, the subterminal transverse line is ill-defined, being dissolved into a series of small suffused interneural dots.

These two species have a peculiar character in common which distinguishes them from other species of this genus: the anterior coxa possesses a slender, jet-black pencil of long hair-scales, attached laterally of its base. They both have also longer, and rougher palpi than other *Proactenis* species.

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