

**Five tortricines from Malaysia and New Caledonia
(Lepidoptera: Tortricidae)**

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ABSTRACT. *Aoupinieta* gen. n. and *Homalernis mankoboi* sp. n., *H. jeriau* sp. n., *Peraglyphis silvana* sp. n., *Aoupinieta hollowayi* sp. n., *A. novaecaledoniae* sp. n. are described as new. *Arotrophora crustata* MEYRICK is transferred to *Peraglyphis* COMMON. *Peraglyphis* is new to the Oriental region.

KEY WORDS: Tortricidae, Oriental, New Caledonia, new genus, new species.

INTRODUCTION

Tortricidae of the Oriental and Australian region are rather well known, but recent studies of the former have brought to light many new and unexpected data. Their relations between these regions seem, however, less well understood. Hence, the occurrence of two genera previously restricted to Australia seems interesting. Tortricidae of the fauna of New Caledonia are little known, especially in comparison with other lepidopteran families. In this paper two New Caledonian species are described. I place them in a new archipine genus.

COMMON (1963) included his *Paraglyphis* in the tribe Cnephasiini. However, none of the Australian genera belongs to that tribe. RAZOWSKI (2009a) discussed and listed all 13 Australian genera incorrectly placed in Cnephasiini. He also found one of them (*Arotrophora* MEYRICK, 1881) in the Oriental region and described 16 new species from that region. Hence, *Peraglyphis* is the second genus of this grouping widely distributed in the two regions, namely, from Assam, India and Ceylon to Australia and Oceania (Fiji).

Seven Australian genera (RAZOWSKI 2009a) certainly constitute a compact grouping which deserves separation into a distinct tribe (BROWN 2006).

I include two Malaysian species (*mankoboi* and *jeriau*) in the Indian genus *Homalernis* MEYRICK, 1908 on the basis of their similar facies and venation. However, the new species have very slender hindwings and a somewhat simplified venation. Two already known species of this genus are represented only by females, whereas the examples in question here are males. I followed (RAZOWSKI 2009b) DIAKONOFF's opinion of 1960 and include *Homalernis* in Schoenotenini.

All the specimens examined are housed in the collection of the Natural History Museum, London [NHML].

Appendix. In RAZOWSKI (2009a) the type locality of *Arothrophora tubulosa* was omitted. It is: Holotype female, "Fiji, Nandarivatu, 12-14 IX 1969, H.S. & G.S. Robinson"; GS 21270 [Coll. NHML].

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SYSTEMATICS

Homalernis mankoboi sp. n.

(Figs 1, 2, 10)

Diagnosis

H. mankoboi has the hindwing much slender than *H. semaphora* MEYRICK, 1908 and *H. arystis* MEYRICK, 1918 and the forewing markings in the form of transverse fasciae.

Description

Wing span 9 mm. Head yellowish brown, thorax browner with a few brown spots. Forewing slender, rather uniformly broad throughout; costa straight; termen distinctly oblique, slightly convex. Ground colour brownish yellow with brownish and grey suffusions and somewhat darker strigulation and dots. Markings: postbasal and median fascia yellowish brown with slight ferruginous admixture, with dark brown median stripe along median cell, the latter and tornus also brown; subterminal fascia a concolorous brown line edged by yellow-brown anterior fascia and greyer posterior fascia; two brown spots beneath apex. Cilia creamish scaled brown. Hindwing brownish; cilia greyer.

Male genitalia (Figs 1, 2). Uncus broad expanding posteriorly, incised terminally between two apical tips; socius lateral, short, hairy; gnathos lateral, very broad basally with elongate sclerotized posterior edge armed medially and a strong spine; proximal part of

gnathos less sclerotized, broad lobes connected medially; valva fairly long with costa concave postbasally with hairy dorsoposterior part; sacculus long, hairy above submedian convexity, then sinuate, free termination long with a terminal spine; peniculi short; aedeagus simple, slender; coecum penis with anterior opening for ductus ejaculatorius; caulis short.

Female not known.

Material examined

Holotype male: Malaysia: "Sabah: 945 m, Gunong Mankobo 116.56E, 5.48N, 14-23 VIII 1987, Dipterocarp For.[est]"; GS 32670, Natural History Museum, London.

Etymology

The name refers to the type locality.

***Homalernis jeriau* sp. n.**

(Figs 3, 11)

Diagnosis

Though very closely related to *Homalernis mankoboi*, *H. jeriau* is without the brown stripe in the middle of the median cell, but with the oblique lateroposterior edges of the uncus, the broad spine from the proximal edge of the lateral arm of the gnathos, and the short, sclerotized dorsal process of the latter.

Description

Wing span 8 mm. Head yellow-brown; thorax brownish. Forewing uniformly broad throughout, termen strongly oblique. Ground colour cream orange with greyish and orange parts, and brownish dots. Markings as in *mankoboi* but median fascia without brown stripe and concolorous dorsal third. Cilia yellow orange. Hindwing brown, cilia similar.

Male genitalia (Fig. 3). Uncus broad, short, broadest in middle, weakly concave apically; socius broad, weakly sclerotized; arm of gnathos with rather long dorsal process and brown, finely thorny dorsal part (not a spine as in *mankoboi*); valva and aedeagus as in the preceding species but caudal edge of the former distinctly convex.

Female not known.

Material examined

Holotype male: "W. Malaysia: 1140 m, Fraser's Hill, Jeriau Road, 5-12 VIII 1986"; GS 25420. Natural History Museum, London.

Etymology

The specific epithet refers to the type locality.

Tortricinae undescribed tribe

The following genus, *Peraglyphis* COMMON, 1963 belongs to an undescribed tribe previously regarded as Cnephasiini (see the introduction).

***Peraglyphis silvana* sp. n.**

(Figs 4, 5, 9, 12, 13)

Diagnosis

In the facies *silvana* is very close to *P. crustata* from India but *silvana* has a whitish hindwing, dark dorsobasal remnants of the basal blotch, directed posteriorly (in *crustata* extending posterolaterally as in Australian *P. epixantha* COMMON, 1963), broader valva, and a shorter sacculus.

Description

Wing span 16 mm. Head and thorax whitish grey; labial palpus browner in ventral half. Forewing not expanding terminally; costa uniformly convex; termen straight, moderately oblique. Ground colour greyish with white and grey diffuse spots; some marginal spots darker. Markings dark grey with ferruginous suffusions and blackish marks: postbasal fascia consisting of slender line perpendicular to costa and dorsal suffusion the darkest part of which is blackish, sharp posteriorly blotch; costal blotch white edged posteriorly, perpendicular to costa. Cilia greyish. Hind wing whitish slightly tinged brownish apically; cilia whitish.

Variation. Female forewing markings larger than in male with stronger brown parts; dorsum slightly suffused pale ferruginous.

Male genitalia (Figs 4, 5). Uncus large, forked in distal third; socius rather short; terminal plate of gnathos long, arched; lateral parts of vinculum forming large, subtriangular lobes; valva broad; sacculus reaching ca 1/3 of the latter, slender, with minute tip; membranous parts of transtilla finely scobinate; aedeagus moderate with three groups of short cornuti and double posterior row of thorns.

Female genitalia (Fig. 9). Papilla analis broad, elongate-oval; apophyses very slender; sterigma a short plate with sharp proximal corners; antrum broad, tapering proximally, rather weakly sclerotized; proximal part of ductus bursae very broad, in part finely thorny, with weak antemedian fold; signum a transverse scobinate plate.

Material examined

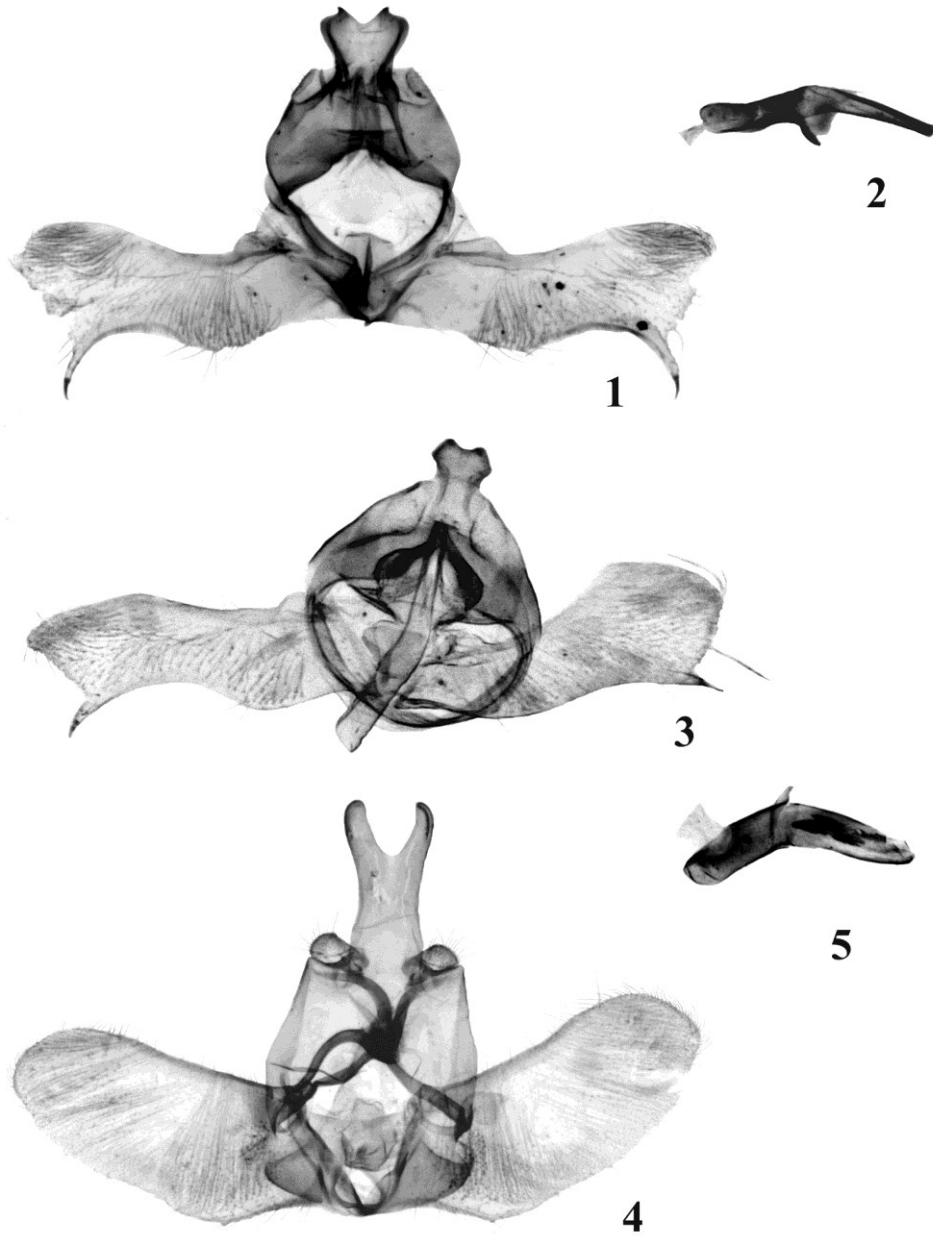
Holotype male: Malaysia: "Sabah: 1500 m, Mt Kinabalu, nr Kundasang golf course, 17-20 V 1989, Primary montane for.[est]"; GS 32667. Paratype female, same label, GS 32676. Natural History Museum, London.

Etymology

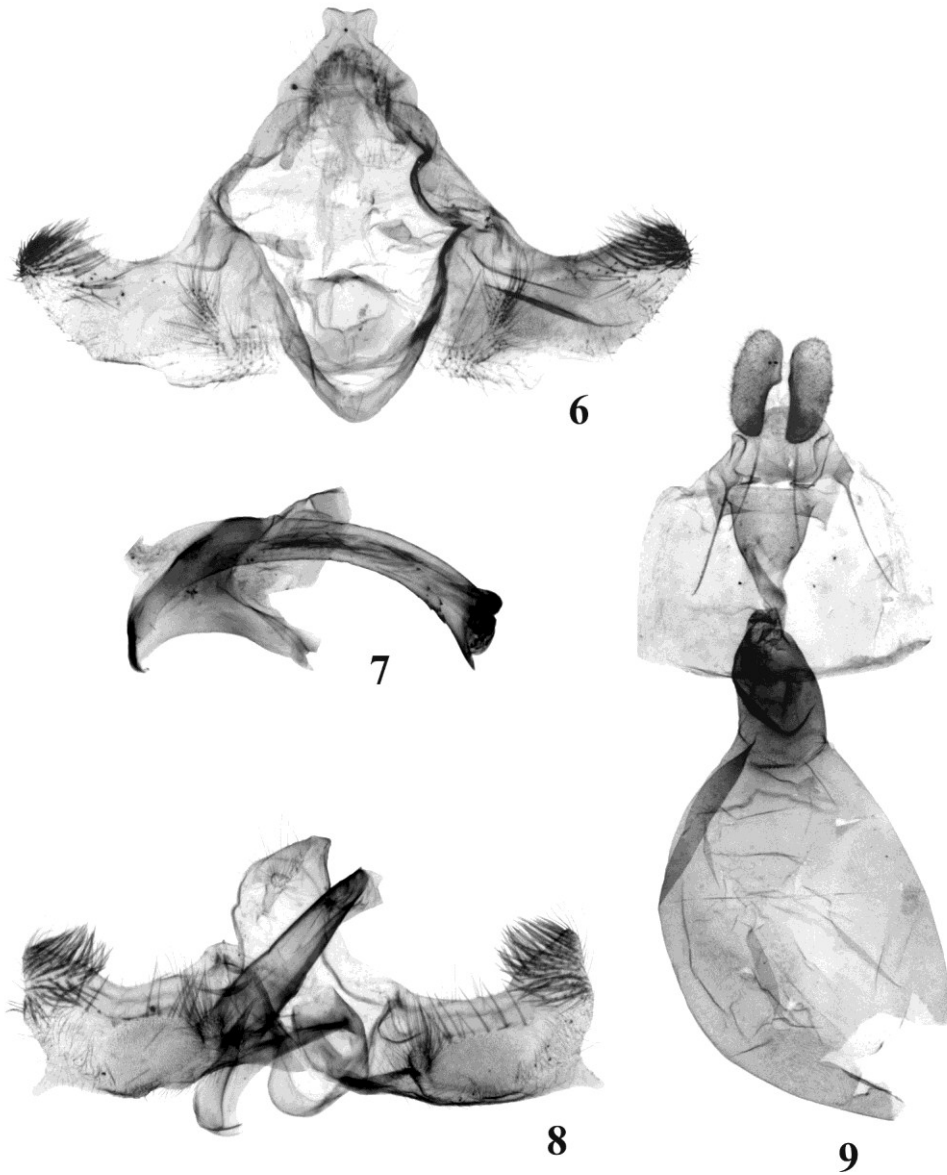
The name refers to the habitat of the moth; Latin: Silvanus – the mythological god of the forest.

Remarks

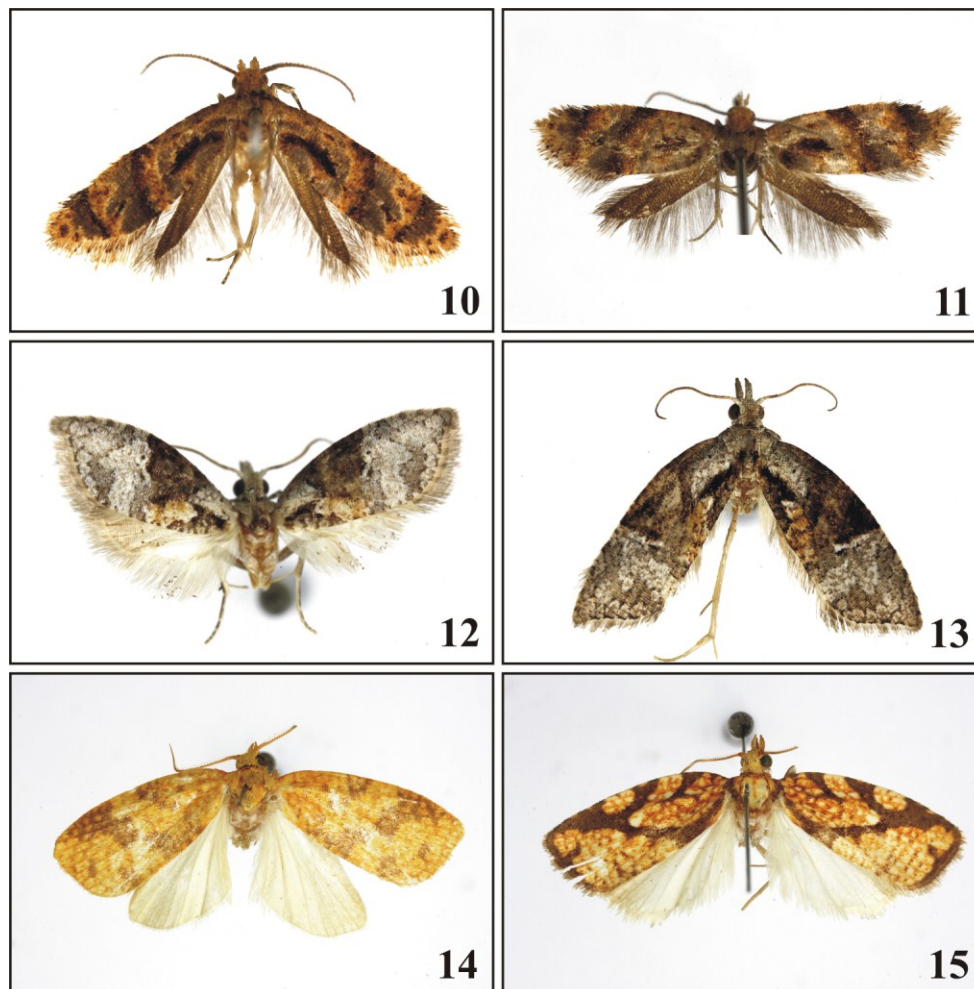
The new species is identified by comparison with the illustrations by CLARKE (1958).



Figs 1-5. Male genitalia: 1, 2 – *Homalernis mankoboi* sp. n., holotype, 3 – *Homalernis jeriau* sp. n., holotype, 4, 5 – *Peraglyphis silvana* sp. n., holotype.



Figs 6-9. Male and female genitalia: 6, 7 – *Aoupinieta hollowayi* sp. n., holotype, 8 – *Aoupinieta novaecaledoniae* sp. n., holotype, 9 – *Aoupinieta silvana* sp. n., paratype.



Figs 10-15. Adults: 10 – *Homalernis mankoboï* sp. n., holotype, 11 – *Homalernis jeriau* sp. n., holotype, 12 – *Peraglyphis silvana* sp. n., holotype, 13 – *Peraglyphis silvana* sp. n., paratype, 14 – *Aoupinieta hollowayi* sp. n., holotype, 15 – *Aoupinieta novaecaledoniae* sp. n., holotype.

***Peraglyphis crustata* (MEYRICK, 1912) comb. n.**

Arothrophora crustata MEYRICK, 1912, Exotic Microlepid., 1: 9. Khasi Hills, Assam, India. CLARKE 1958, MEYRICK Catalogue, 3: 56 (type figured).

Remarks

The type specimen illustrated by CLARKE (1958) is compared with the illustrations of *Peraglyphis hemerana* (MEYRICK, 1883) by COMMON (1963); the species are certainly congeneric.

Archipini

Aoupinieta gen. n.

Type-species: *Aoupinieta hollowayi* sp. n., present designation.

Diagnosis

Aoupinieta is somewhat similar to *Williella* HORAK, 1984 but in *Aoupinieta* the uncus is short, broad, the gnathos without a median plate, and the transtilla fully developed, thorny. The female of *Aoupinieta* has a signum rather resembling that of *Arotrophora* MEYRICK, 1881 but shorter and transverse, situated in the posterior part of the corpus bursae. *Williella* was originally regarded as a primitive Archipini genus whilst *Arotrophora* was usually included in Cnephasiini but deserves separation into a distinct tribe. I regard this genus as a member of Tortricinae closely related to the *Arotrophora* group of genera.

Two species included.

Description

Labial palpus ca twice the diameter of the compound eye. Venation: in forewing R5-M1 stalked to middle, M3-CuA1 stalked to 1/4, CuP opposite 1/4 distance R1-R2; chorda rudimentary, M-stem absent. In hindwing M1 absent, M2 near M3-CuA1 which are stalked to 1/3.

Male genitalia. Tegumen moderately large with rather slender pedunculi; uncus short, broad; socius drooping, hairy; vinculum broad ventrally; gnathos arms well sclerotized terminally to form sclerotized processes, otherwise almost membranous; valva fairly broad with well-developed costa and spiny terminal portion; sacculus reaching to beyond mid-length of valva, with short or elongate termination; transverse hairy rib from before middle of sacculus to subcostal area; transtilla membranous; juxta a simple plate; aedeagus moderately large, rather slender; coecum penis large; caulis long; cornuti numerous slender spines with very small lateral capituli.

Female not known.

Biology and distribution

Moth collected at altitudes of 520-760 m between May and October in New Caledonia.

Etymology

The generic name refers to the type locality of the type-species, Mount Aoupinie.

Aoupinieta hollowayi sp. n.

(Figs 6, 7, 14)

Diagnosis

A. hollowayi is very close to *A. novaecaledoniae* sp. n. but in *hollowayi* the uncus is broad and the sacculus has a very small termination.

Description

Wing span 23 mm. Head cream orange, labial palpus and thorax darker; bristles of antenna long. Forewing broad, weakly expanding terminad; apex short; termen straight, not oblique. Ground colour dark yellow; reticulation and sprinkling orange. Markings brown with indistinct violet admixture forming a partly diffuse reticulation with dark orange background consisting of trace of postbasal fascia, incomplete median fascia, and subapical blotch; remnants of subterminal fascia present. Cilia (worn) rather concolorous with reticulation. Hindwing cream, cilia whiter.

Variation. Ground colour of one paratype dark orange; markings stronger than in holotype with distinct median part of subterminal fascia and suffused basal half of dorsum. Second paratype with indistinct markings and brownish orange, strigulation of ground colour.

Male genitalia (Figs 6, 7). Uncus broad slightly expanding terminad, somewhat concave apically; socius moderate; gnathos process sclerotized, median part membranous; valva broad to middle with costa sinuate; disc sparsely hairy except for terminal part which is setose; row of subcostal hairs ill-defined; postbasal transverse rib more or less hairy; sacculus angle small, free termination minute; aedeagus large, bent with ventroterminal thorn and a few subterminal small thorns.

Biology

Moth collected in May, July and August at altitudes of 520 m (holotype) and 250 m (paratypes).

Material examined

Holotype male: "New Caledonia, Mt. Aoupinie 520 m, Site 62, 05258176594, J.D. Holloway, 31 VII 1971; B.M. 1971-507"; GS 32671. Paratypes two males similarly labelled but collected at Grand Lac 250, site 2 and 3 on V 1971 and 11 VIII 1971. Natural History Museum, London.

Etymology

The specific name is a patronym for Dr J.D. Holloway of London, the collector of this species.

***Aoupinieta novaecaledoniae* sp. n.**

(Figs 8, 15)

Diagnosis

A. novaecaledoniae is the second known species of this genus, differing from the type-species in the smaller uncus, the subtriangular end of the valva, the distinct free termination of the sacculus, and the simple aedeagus.

Description

Wing span 25 mm. Head and median part of thorax yellow; labial palpus brownish yellow; tegulae scaled orange, edged brown. Forewing as in the preceding species. Ground

colour yellow; reticulation dark orange. Markings dark brown consisting of subbasal spot, costal part of postbasal fascia; costal half of median fascia connected with a fascia which extends from brown dorsobasal area to subapical blotch and small subterminal spot; termen dark brown; white spots near end of median cell. Cilia cream grey. Hindwing creamish, cilia whiter.

Male genitalia (Fig. 8). Uncus rather short, broad, tapering posteriorly; socius and process of gnathos as in *hollowayi*; valva fairly long with triangular, setose dorsoterminal part; long row of setae ventrally to costa; sacculus with two small median convexities, the posterior marked by some short spines; end of sacculus finger-shaped; aedeagus simple, tapering terminad; cornuti with numerous slender spines.

Material examined

Holotype male: "New Caledonia, Mt. des Sources 760 m, Site 12, 06653/75513, J.D. Holloway, 30 V 1971, B.M. 1971-507"; GS 41715. Natural History Museum, London.

Etymology

The specific name refers to the country of origin.

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