

REMARKS ON NEW OR LITTLE KNOWN
INDOMALAYAN MOTHS
(LEPID. HETEROC.). VIII.

By Prof. Dr. W. ROEPKE, Wageningen.

I am not sure whether the foregoing species are correctly placed in the genus *Turnaca* Wlk. The typus generis of *Turnaca* is *acuta* Wlk.; lack of material is the cause that I can not decide whether the *Turnaca*'s here mentioned are congeneric with *acuta* or not. If not, another generic name must be selected. I think that this must be *Ambadra* Moore: Proc. Zool. Soc. Lond. 1883, p. 16, as already stated by Kirby: Syn. Cat. Lep. Het. 1, 1892, p. 571.

Furthermore, it is obvious that *T. rafflesi* is allied to *celebensis*, and *T. sordida* to *straminea*. Both form two different groups for which, in future, separate generic names perhaps will become necessary.

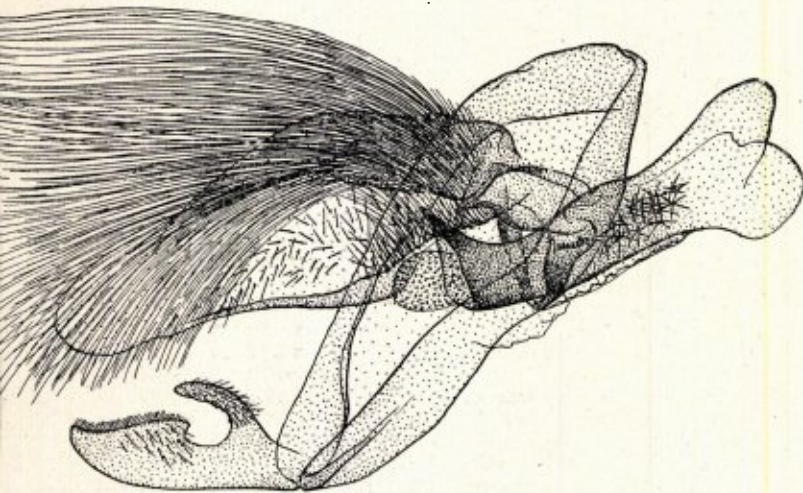


Fig. 16 b. *Turnaca straminea*, male genitals.

It may be added that Moore in Hrsf.-M. 2, 1859, p. 430, also described an *Eumeta horsfieldi* which is placed by Kirby l.c. in *Ambadra*, together with *rafflesi*. Gaede in Seitz as well as in his Lep. Cat. pars 59, has overlooked the species. The diagnosis of Moore l.c. runs as follows: „*Eumeta Horsfieldi*, n. sp. — Male, brown; forewing suffused with grey along the costa and on the disc; an indistinct submarginal row of black dots: hind-wings pale brown. Expanse $1\frac{3}{4}$ in.

a. ♂. Java. From Dr. Horsfield's Collection.”

Gargetta costigera Wlk. (fam. Notodontidae):
fig. 17 a ♂♂, b caterpillar.

Wlk. List. 32, 1865, p. 455: Darj. - Moore: Tr. Zool. Soc. Lond. 1867, p. 683. - Btl.: Ill. typ. Lep. Sc. 6, 1886, p. 11, pl. 103, f. 6. - Swh.: Cat. Ox. Sc. 1, 1892, 300. - Hps.: Moths 1, 1893, p. 135, f. 80 ♂. - Dug.: J. Bomb. N.H. Soc. 11, 1898, p. 625. - van E.: Heteroc. Sum. 1930, sep. p. 423: Ind.; Sum.;

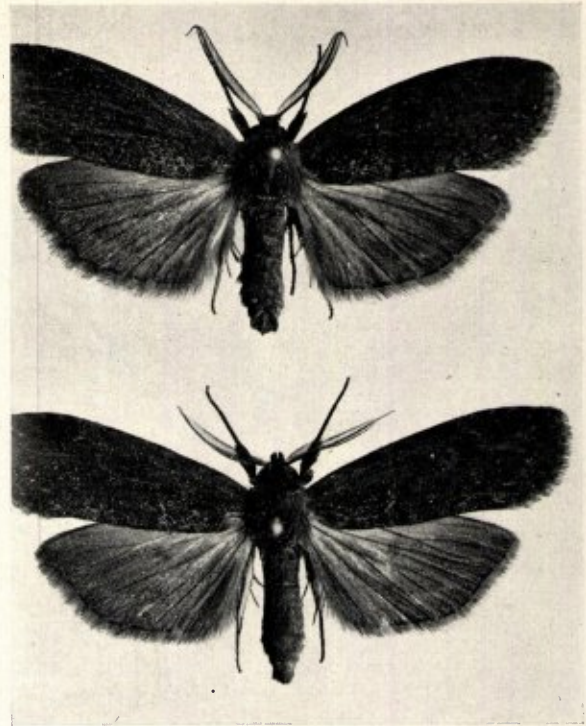


Fig. 17 a. *Gargetta costigera* Wlk., 2 males,
Buitenzorg 1919, slightly more than $2 \times$ n.s.

Java. - de Joan: A. S. E. Fr. 98, 1929, p. 450:
Tonk. - Gaede - S. 10, 1930, p. 615, pl. 81 d ♂.

There occur several species of the genus *Gargetta* Wlk. in the Dutch East Indies, one of which is not rare in Java, and which is referred by van Eecke l.c., to *G. costigera* Wlk. I am, however, not sure if this identification is quite correct; there is some possibility that the Malayan specimens represent a subspecies or even a distinct species. By studying the male genital armatures, this question could probably become settled; having, however, no specimens from Continental Asia at my disposal, I retain Wlk.'s name for the insect under consideration.

The *Gargetta*'s are strange Notodontids, with elongate, narrow forewings and broad, rounded hindwings. When at rest, the wings are tightly wrapped against the body, so that one forewing covers the other and the hindwings lie folded beneath them, in the same manner as in certain Lithosiids, Phycitids, Blastobasids a.o.

In Java, the common *G. costigera* is rarely caught at lamplight, but is easily to be found as a caterpillar, if one knows the food plant. The latter is a common Euphorbiaceous shrub, *Bridelia tomentosa*, occurring at many localities along the countryside.

I bred many caterpillars during my stay at Buitenzorg, in 1918-19. The caterpillar, fig. 17 b, is a slender insect of a greyish brown or greenish grey colour, resembling somewhat a small twig of the food plant. The body terminates into a long forked appendage, as in *Cerura*, the tips of this fork being somewhat curled upwards. When

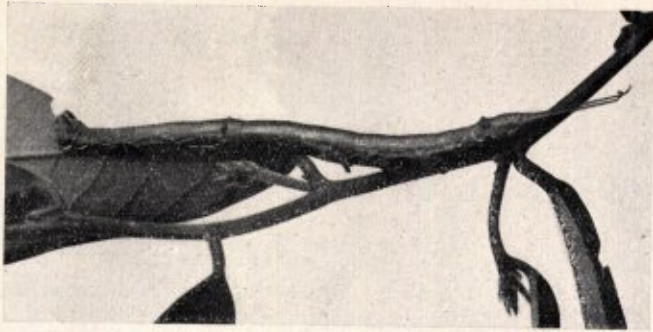


Fig. 17 b. *Gargetta costigera*, larva feeding on *Bridelia tomentosa*. Buitenzorg 1919; n.s.

disturbed, the larva can spread out the fork, making defending movements with it in all directions. Pupation took place in the pith of the Kirai-palm (*Metroxylon sagus*). The pupa is very slender, movable, cremaster with two short spines. The moth is very variable, generally dark brown, but more or less variegated with grey scales or even with greyish patches.

G. costigera Wlk. is recorded from Java by van Eecke. From this island, we have in our collection the following *Gargetta* sp.: *albovittata* Hps.: 8 specimens from different localities, W. and C. Java; *ingens* Wlk.: 2 specimens; *triplicepunctata* Gaede: 2 specimens from Perbawatee, W. J. From Celebes, we have *albovittata* Hps.: 1 specimen from Sidaonta, 1500 m, 7. 37, leg. Kalis; *nagaënsis* Hps.: 1 ♂ from Todjambu, 7. 36, leg. Toxopeus; and 1 ♂ of a large species that may prove to be a subsp. of *ingens* Wlk. From Borneo, we have 2 ♂♂ of *curvaria* Hps., a dark brown unknown ♂, perhaps a new species, and two large ♀♀ which may belong to *ingens* Wlk. or *triplicepunctata* Gaede. They are all collected by Mr. Qu. de Quarles, in the district of Samarinda, S.E. Borneo.

I should not wonder if in future *triplicepunctata* might prove to be only a variety of *ingens*.

Allotoma n. g. (fam. Notodontidae).

♀. Antennae short, less than $\frac{1}{2}$ costa, rather thick, bipectinate, pectinations, shorter towards apex, but reaching it. Frons with a very peculiar,



Fig. 18 a. *Allotoma cornifrons* ♀, holotypus, 1.3 × n. sp.

broad, strongly chitinized, snout-like projection, which is even visible from above. Palpi short, roughly haired, proboscis well developed. Wings broad, termen of forewing rounded, apex rather acute, hindwing rounded. In forewing, v_1 a & b not forked at base, v_1 entirely lacking, v_2 from about $\frac{1}{2}$ lower margin of cell, v_3 and v_4 remote at base, v_5 from above middle of dc, v_7 , v_8 , v_9 , v_{10} stalked, v_{11} from upper angle of cell. Cell short, dc highly angled inwards. No areola. Hindwing with two anaes; v_2 from about $\frac{2}{3}$ lower border of cell, v_4 and v_5 almost from the same point at lower angle of cell, v_5 from above middle of dc, v_6 and v_7 shortly stalked from upper angle of cell. v_8 closely approached to base of v_6 and v_7 . The cell is obviously broad and short, the dc strongly angled inwards. Frenulum present. Abdomen not extending beyond anal angle of hindwings, no anal tuft. Legs very short, the forelegs with extremely strong claws, stronger than in the other legs, with a large pulvillus, the first three

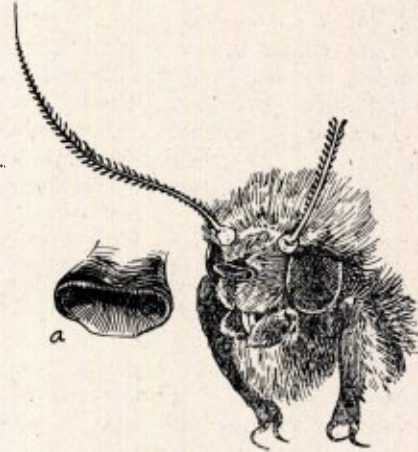


Fig. 18 b. *Allotoma cornifrons*, head with frontal processus, enlarged.

tarsal joints with strong, apical spines at their outer edge. Hindtibiae with one pair of apical spurs only, shorter than first tarsal joint.

♂ unknown.

24. *A. cornifrons* n. sp.: fig. 18
a ♀, b head of idem.

♀. Antennae greyish, head roughly hairy, yellowish, palpi greyish brown. Patagia yellowish, tegulae, thorax above and abdomen grey. Ground-colour of forewing yellowish grey, covered with many greyish brown scales, causing a darker basal area and a darker postmedian area, both not sharply bordered. On dc a black spot. Cilia yellowish. Hindwing uniformly dark grey, cilia yellowish. Underside of hindwing as upperside, of forewing more uniformly dark grey. Thorax underside yellowish, legs greyish brown.

1 ♀, 50 mm, holotypus, S.E. Borneo, January 1937, leg. Qu. de Quarles. I saw another ♀, from Sumatra, in the Leiden Museum.

The systematic position of the genus is quite

uncertain; the prominent frontal projection which is not met with in other Notodontids, as far as I know, makes it somewhat doubtful if the insect belongs to this family. There is, however, no other family, where it fits better.

25. *Pseudohoplitis vernalis* G a e d e
(fam. Notodontidae).

This species is described and figured in Seitz 10, 1930, p. 640 ♂, pl. 84 h ♂, from N. Celebes. Furthermore, a „form nova” *infuscata* is introduced l.c. from Mt. Kina-Balu, Borneo, and from the Barisan Mts., Sumatra. In his Lep. Cat. pars 39, 1934 (Notodontidae), p. 137, the same author does not mention *infuscata*, and as a habitat of his *vernalis*, he gives Borneo and Sumatra only, omitting Celebes!

Now I have two males, apparently belonging to the same species, from the coll. of Mrs. Walsh. One of them 35 mm, without locality, dated 1917; the other 33 mm, labelled Perbawatee, 1 Dec. 1925. I think that this may be the locality of both specimens. When comparing the description and the rather poor figure in Seitz of the type specimen *vernalis vernalis* G a e d e from Celebes, the specimens from W. Java must belong to *vernalis infuscata* G a e d e, on account of their darker forewings and the double transversal line on hindwing; also the dc on hindwing is darkened.

Calyptronotum n. g. (fam. Notodontidae).

Palpi short, more or less concealed in the thickly hairy underside of head and pronotum. The eyes are also partially covered by this pilosity. Antennae in both sexes bipectinate over $\frac{2}{3}$, pectinations in ♀ shorter than in ♂. Thorax above thickly hairy, with a very obvious high crest on mesonotum which is even bent forwards when well preserved.

V_2 from nearly $\frac{3}{4}$ lower margin of cell, v_3 and v_4 remote at base, v_5 from middle of dc, v_6 and v_7 stalked from upper angle of cell, stalked with v_{10} and v_8 ; v_9 wanting.

In hindwing v_2 from about $\frac{4}{5}$ of lower border of cell, v_3 and v_4 approximate at base, but separate, v_5 from middle of dc, v_6 and v_7 stalked from upper angle of cell, v_8 along upper border of cell. Frenulum present. Hindtibiae with one pair of apical spurs, not reaching length of first tarsal joint.

26. *Calyptronotum confusum* n.sp.:
fig. 19 a ♀, b head and notum.

♂. Forewing silvery grey or whitish, with a number of more or less indistinct, darker, waved cross lines, chiefly in apical third. In basal third, groups of light greenish scales. A black antemarginal line distinct, from apex to end of v_2 , with black radiations on the ends of veins. Hindwings and the whole underside unicolorous reddish brown.

♀. Forewing slightly darker, more greyish brown, the markings more distinct, consisting chiefly of a dark, waved, double postmedian cross-line which forms eventually some dark spots in

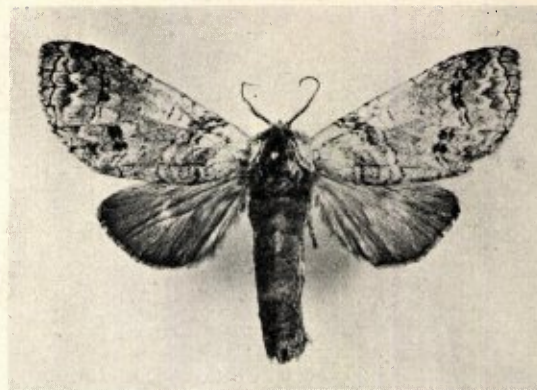


Fig. 19 a. *Calyptronotum confusum* ♀, allotypus, very slightly enlarged.

cell 1 and cell 2. Thorax darker than in male. Hindwings and underside as in male.

2 ♂♂, 43 and 45 mm, para- and holotypus; 6 ♀♀, 52—59 mm, with allo- and paratypes.

Locality: G. Gedeh, 1 ♂♀, leg. Overdijkink; Perbawatee, 4 ♀♀, leg. Walsh; Buitenzorg 1 ♀, leg. Dupont.

This insect has been erroneously described and figured as *Fentonia argentifera* Moore by van Eecke: Heter. Sumatr. sep. 1930, p. 431, pl. 13.

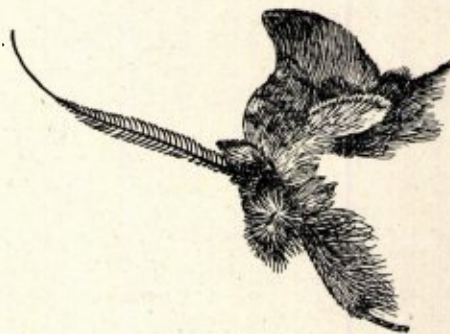


Fig. 19 b. *Calyptronotum confusum*, head and thorax of ♀, enlarged.

f. 3. He records one ♂ from Fort de Kock, Sumatra. I have 4 ♂♂ from Shillong, India, which I think are the real *argentifera* as described by Hampson: F. Br. Ind. Moth 1, 1893, p. 147, f 90 ♂. They are quite different. The new species under consideration is characterized by the high pronotal crest. It bears a certain resemblance to what is described and figured in Grünberg-Seitz 2, 1912, p. 313, pl. 47 e ♂♀, as *Phalera sigmata* Btl. from Japan and W. China. Marumo: Jnl. Coll. Agr. Imp. Univ. Tokyo, 6/4, 1920, p. 311, places this species into *Macrurocampa* Dyar; G a e d e: Lep. Cat. pars 59, 1934, p. 197 puts it again into *Phalera* and treats *Macrurocampa* as a synonym of *Fentonia* Btl. The structures of the species under consideration correspond neither exactly to *Phalera* nor to *Macrurocampa* or *Fentonia* so that I thought it advisable to erect a new genus. (To be continued).