Kotten en Mook (Westhoff en de J. '41), Doetinchem ♀ 19-6-'32 v. d. W.!, Renkum 9-'31 ♀ Uyttenboogaart, Ginneken '29 v. d. W.!, alles samengenomen niet zeer zeldzaam in takjes en onder schors en mos nestelend in het subcentreuropeesch district, in oude bosschen. Vele larven overwinteren. Even carnivoor en even geducht geangeld als de andere soorten van slankmier, die weliswaar traag van beweging zijn, maar wier vergiftige steek zeer sterk op andere insecten inwerkt (sterker dan andere genera) en die allerminst den naam van vreedzaam en schuw verdienen, welken zij genieten. (S.).
België : Overyssche (Brab.), Dalen van Sambre, Maas en de meeste zijrivieren. Rijnprov. : Aken, Dusseldorf, Ahr, Zevengeb. Engeland 45 loc., bijna geen in het Noorden.
id., maar bleekgeel, een smalle bleekbruine dwarsband, 1, 8 — 2,6 mm (fig. 50). *V. parvulus* Schenck.
België : Namur ; Rijnprov. : Münster a. Stein !
Geen metanotaalsleuf of twijfelachtige m. sl. maar *knods donker* 28

28. (Clypeus met langssleuf tusschen opstaande randen ; rug bijna recht, doorns lang ; geelrood, ook de knods ; achterlijf bruin behalve geheel van voren 2,5—2,7mm.
Niet in ons gebied, Midden-Europa zzz. *Lept. clypeatus* Mayr).
— in het midden met een verheven lijn die al of niet duidelijker is dan de overige lange strepen ; rug convexer 29

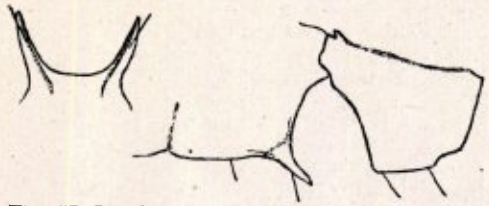

Fig. 53. L. affinis (co-type, coll. Wasmann). (Subsp. rabaudi Bondr.).

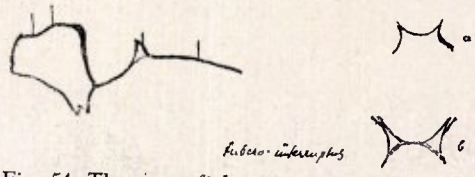

Fig. 54. Thoraxprofiel en steel. Leptothorax t. tubero-interruptus ♀ uit Meyendel, coll. Betrem. orig.
Doorns, van voren en van boven gezien : a. L. t. tubero-interruptus ; *b.* L. t. unifasciatus orig.

29. Epinotum-tanden zeer kort (fig. 51a) bijna even breed als lang ; de bovenzijde nagenoeg in het verlengde van den rug, de achterzijde verticaal. Eerste steellid zeer kort, bijna even hoog als lang. Roodachtig, ook *de sprietknods ;* bovenzijde van den kop en achterlijf donkerbruin. Ook wel lichter of donkerder, 2,3—3,2 mm.
L. corticalis Schenck.
zz. niet inlandsch. België ; niet waargenomen. Rijnprov. : Dusseldorf, Ahr, Zevengeb., Boppard, Kreuznach. Engeland : Wight, eene var. met langere doorns bij Pangbourne. (Nylandero-corticalis ? Ref.).
— slechts iets langer ; petiolus langer, duidelijker gesteeld ; geen duidelijke metanotaalsleuf ; rest als de vorige: 2,1—2,4 mm. Niet in ons gebied. *v. Nylandero-corticalis* For.
— langer. *Sprietknods donker,* behalve bij luteus die geheel lichtgeel is, moeilijk te onderscheiden vormen van den Linneont *L. tuberum* F. 30
— langer. Sprietknods niet of zeer weinig donkerder dan de rest van de spriet ; eenige Zuid-Europeesche soorten. Zie ook L. affinis 31.

(Wordt vervolgd).

REMARKS NO NEW OR LITTLE KNOWN INDOMALAYAN MOTHS (LEPID. HETEROC.). XI.

By Prof. Dr. W. Roepke, Wageningen.

37. **P. capucina** n. sp. : fig. 29 ♀.

♀. A smaller species. Palpi dark greyish brown, antennae lighter greyish brown, slightly bipectinate, pectinations reaching tip. Head above and median area of thorax upperside dark velvety brownish black, as usual. Forewings of a reddish brown tinge, the crosslines lighter, nearly whitish, but very faint, hardly visible, strongly undulating. Apex with a very prominent, large, dark brown patch which is, at its inner side, sharply bordered by the postmedian crossline. This line is not undulating, but strongly bent on v_4, nearly in an angle of 90°. It does not reach costa, but ends at upper angle of cell. Cilia equally reddish brown. Hindwing with cilia more greyish brown, abdomen and underside of the same coloration, legs something darker, chiefly forelegs.
1 ♀, 37 mm, holotypus (apex of left fore wing slightly, dammaged), Buitenzorg, 1894, bred by Mr. Piepers, Museum Leiden.

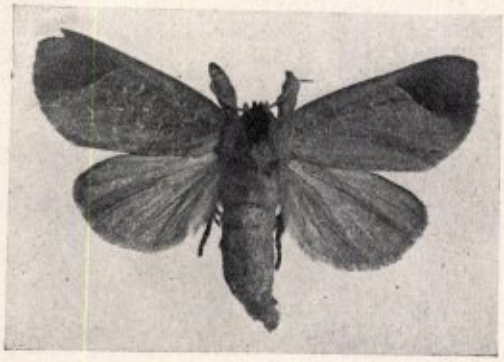

Fig. 29. *Pygaera capucina*, holotypus, 1.6 × n. s.

38. **Dudusa nobilis borneensis** Rpke.
T. v. E. **36**, 1943/44, p. 79, f. 3 (♂ gen.) : Samarinda, S. E. Born.

The description of this "subspecies" is based on one specimen only which is so badly worn that it has lost practically all its wing scales and a good deal of its pilosity. Therefore, it shows no longer any trace of its pattern nor of its characteristic hairtufts. But when going carefully through my Notodontid material and when reexamining the specimen once more critically, I become inclined to doubt whether it belongs to *nobilis*. I think that it may be rather a *Tarsolepis remicauda* ssp., and when compairing the male genitals, as figured in the above mentioned publication (fig. 3 and 5), this supposition gets more ground, chiefly by the shape of the uncus and by the armature of the aedeagus. Only the valva is rather different, it is more slender, but it shows the same rudimentary harpe. The different valva justifies to maintain *borneensis* as a subsp. of *T. remicauda* Btl. Thus the nomenclature runs as follows : **Tarsolepis remicauda borneensis** Rpke. ; Lc. (*Dudusa nobilis borneensis* ex err.).

Paramonema n. g. (fam. Limacodidae).

♂. Palpi enormously elongate, about as long as antennae or even surpassing them. Antenna about ½ costa, unipectinate, pectinations tapering towards apex. Proboscis minute. Costa of forewing straight, apex, termen and tornus equally rounded, v5 from lower angle of cell, with a projection extending far into the cell, rest of dc wanting; v6 from middle of cell, v7, v8, v9 stalked, v10 from upper border of cell. Hindwing rounded, v6 and v7 stalked, upper dc wanting, v5 with the same projection as in forewing. v8 approaching cell only at base and connected with it by a oblique crossbar. Hindlegs without spurs.

39. **P. giganteopalpata** n. sp.: fig. 30.

Coloration of the insect entirely and uniformly pale testaceous without traces of markings. Pilosity of palpi, chiefly of second and third joint, mixed with some dark scales.

Fig. 30. *Paramonema giganteopalpata* ♂, holotypus, 2 × n.s.

2 ♂♂, about 30 m, holo- and paratypus, both from Perbawattee, West Java, about 1000 m, Oct. 1924 and Dec. 1925, leg. Walsh. They are rather worn.

Stenomonema n. g. (fam. Limacodidae).

♂. Antennae about ¾ costa, strongly bipectinate, pectinations reaching apex. Palpi elongate, but total length less than ¼ antennae. Second joint slightly more than diameter of eye, third joint less than ½ second, not obviously scaled or hairy. Wings less broad than in *Paramonema*, the cilia very broad. In forewing, v4 and v5 from the same point at lower angle of cell, dc weak or wanting, less deeply angled, v6 from middle of it; v8, v9 and v10 stalked, v11 free from upper border of cell. In hindwing v6-7 stalked, dc deeply angled, v8 along upper border of cell, leaving it just before upper angle.

Legs rather long and slender, hind tibiae with two pairs of strong spurs and a pilosity along outer side.

40. **St. tenella** n. sp.: fig. 31.

Coloration a light greyish brown, forewing mixed with some darker scales which in disc form some indistinct darker patches on dc and below it. Cilia of the groundcolour. Hindwing slightly paler. Underside, legs, palpi and antennae of the groundcolour, no markings.

1 ♂, 20 mm, holotypus, Tjibodas, 1400 m, W.-Java, leg. Toxopeus.

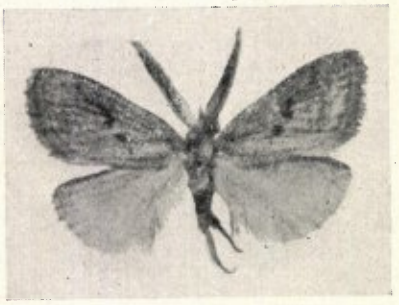

Fig. 31. *Stenomonema tenella* ♂, holotypus, 2.4 × n.s.

41. **Antheraea assamensis** Helf. (fam. Saturniidae).

Helf.: J. As. Soc. Beng, 6, 1837, p. 43 (*Saturnia*). —Westw.: Cab. Or. Ent. 1848, p. 41, pl. 20, f. 2 (*assama*). — Wlk. 5, 1855, p. 1249 (*Antheraea*). — Hrsf.-M.: Cat. Lep. Ins. E. I. Comp. 2, 1859, p. 398, pl. 19, f. 2 (l.), 2a (coc.). — Cotes: Ind. Mus. Notes, 1/3, 1889-91, p. 168, pl. 11 (♂, ♀, coc., l.). — Hps.: Moths 1, 1893, p. 20. — Watson: Ann. Rep. Manch. Ent. Soc. 1914, p. ? (subsp. *youngei*): Born. — Niepelt in Strand: Lep. Niepelt. 2, Nachtr. 1918, p. 1, pl. 18, f. 1-2 ♂ (subsp. *gschwandneri*): Sum. — van E.: Zool. Med. 6, 1922, p. 99 ♀ (*brunnea*): Centr. Sum. — Strand: Entom. Nachr. Bl. 1/3, 1927, p. 47 (*gschwandneri*). — van E.: Het. Sum. sep. 1930, p. 409 ♂♀, pl. 12, f. 1 ♂, 1a ♀: (*ass. brunnea*): Centr. Sum. — de Joan.: A. S. E. Fr. 98, 1929, p. 523 (291 sep.): Tonk. — Bouvier: Bull. Hill Mus. 4, 1930-32, p. 92 ♂: Sum.; Java, Gedeh 1 ♂ (*A. brunnea*). — Schüssler: Lep. Cat. pars 56, 1933, p. 170 (*assam.*); p. 175 (*brunnea*).

This large and beautiful Saturniid moth, known from Continental India, Borneo and Sumatra, occurs in Java too, as already stated by Bouvier, l.c., who had one ♂ from Mt. Gedeh, W. Java. I have 3 ♂♂ from Perbawattee, W. J. (Walsh.), and 1 ♂ from Idjen-Plateau, May 1929 (van den Bergh). These specimens measure 155-165 mm. The groundcolour is a dull purplich to greyish red, in the Idjen specimen something lighter, more vinaceous. The transversal streak is less distinct as in *brunnea*, on hindwing even nearly obsolete. In the apex of fore wing, it is not broadened into a large, triangular, whitish patch, as in *brunnea* van E. The costa of forewing and the patagia are light greyish. The ocellus of fore wing is completely filled up with rust-red, in the ocellus of hindwing, only the outer halfth shows this coloration.

By this pattern, *A. assamensis* is quite a distinct and characteristic species. The four Java specimens mentioned above, differ distinctly from those from Sumatra, as described and figured by van Eecke l.c., chiefly by the pattern of the apex in fore wing. But it seems not advisable to describe them as a separate subspecies, because they agree fairly well with the nominotypical race from Assam. I cannot decide if Sumatra is inhabited by more than one subspecies. If this is not the case, the name *gschwandneri* Niep. has priority above *brunnea* van E.

The *Antheraea*'s form a large and complicated group of Saturniids in Southern and Eastern Asia. Schüssler l.c. enlists more than 30 "species". These "species" are extremely variable, and there can be no doubt that this number in future, will be reduced considerably. Perhaps the number of "good species" that ultimately remains, even will prove to be a restricted one, but each species will be split up in a large number of more or less defined subspecies. Till now, no specialist has had the courage to undertake this difficult, but very important task.

From Java a number of *Antheraea*-"species" have become described of which I am sure that most of them are pure synonyms and that finally only a few virtual species shall survive. Leefmans: Trop. Nat. 19/5-6, p. 92, has given a list of the described species from Java and other islands, as recorded by Seitz X, but which is rather incomplete. Furthermore he describes the life history of one of these species which he calls *imperator* Wats. On a coloured plate, several of these species are figured. Schlüssler has cataloguized the species more completely in the Lep. Cat., pars 56.

42. **Syntherata loepoïdes** Btl.

Btl.: A. M. N. H. (5) 6, 1880, p. 61: Born. — Rothsch.: Nov. Zool. 2, 1895, p. 41: Java; Born. — Seitz 10, 1928, p. 509, pl. 54b: "*Type angeblich von*

Borneo stammend". — Bouv.: Bull. Hill Mus. **6**, 1930/32, p. 93 ♂ : Gedeh.

Of this small, but rare Saturniid, the Wageningen collection has 4 ♂♂, all from Perbawattee (Walsh.). The ♀ seems to be still unknown.

43. **Archaeoattacus staudingeri** Rothsch.

Rothsch.: Nov. Zool. **2**, 1895, p. 36, pl. 10, f. 2 ♂ (*Attacus*) : N.W.-Java. — van den Bergh: T. v. E. **58**, 1915, p. 277 ♂, pl. 9, f. 2 ♂ : Karo Plains, E.C. Sum. — Seitz **10**, 1926, p. 503, pl. 55 Ab (as *dohertyi* ex err. !) : Java. — van Eecke: Het. Sum., sep. 1930, p. 415 (*edwardsi staudingeri*) : Sum. — Schüssler: Lep. Cat. pars 55, 1936, p. 22 (*Archaeoattacus*) : N.W.-Java.

The Wageningen collection has 4 ♂♂, the largest one measuring nearly 20 cm ! Two of them are labelled Perbawattee, one West-Java only, the fourth Palaboean Ratoe, i. e. from the S. coast of W.-Java ; all leg. Walsh. In 1918, I saw a fine ♀ in a small private collection at Buitenzorg, from G. Malang, W.-Java, probably the only one, ever captured ! Since then, it may be lost, by the influence of tropical climate.

The placing of the species in a separate genus, *Archaeoattacus* Wats.: Trans. Manch. Ent. Soc. 1910, p. ?, may be correct, if one looks on the abdomen only which seems to be intermediate between the genera *Attacus* and *Philosamia*. Seitz figures it erroneously as *dohertyi*, and he says : *Weiter nach Osten hin variiert dann die Art auffälliger*". This statement is quite obscure, as the species has never been caught more easternly than W.-Java ! van Eecke considers it as a subspecies of the Continental *adwardsii* ; I cannot share this opinion, though certainly it comes very near to it. Seitz as well as Schüssler omit the habitat Sumatra. Strange, that such an obvious insect has already caused so much inaccurateness in so short a time !

44. **Thyatira vicina** Gn. (fam. Thyatiridae).

Gn.: Noct. **1**, 1852, p. 13 : Java (Horsf.). — P. & S. : T. v. E. **20**, 1877, p. 22 ♀ : Bat. — Pgst.: Jhrb. Nass. **48**, 1894, p. 34 : Java. — Gaede-S.: **10**, 1930, p. 659, pl. 85 b (*batis vicina*).

In Java, several species of *Thyatiridae* (*Cymatophoridae* auct.) are occurring which are not easily designated by their correct names. Fortunately, the *Thyatira* under discussion has been described as *vicina* by Guenée long ago, and as we only know one species from Java, this name ought to be applied to it. The question rises, however, whether it is the same as the European *batis* L. or not ; judging from its general appearance, I should conclude that it must be a separate species, though Gaede-S. l.c. treats it as a subspecies of *batis* L. The Java-specimens are slightly smaller, the wings narrower, the characteristic patches on fore wing smaller, less vivid and therefore less conspicuous.

In Java it is a typical mountain insect, though P. & S. l.c. record one ♀ from Batavia. I never saw it from the lowlands, but I have a large series from the mountains of W.- and E.-Java. Furthermore, I have a beautiful ♀ from Brastagi, 1500 m, E. Coast Sum. (Uil).

45. **Habrosyne obscura** n. sp. : fig. 32.

♂. The fixation of the correct name of this species is less easy than in the preceding case, inasmuch as several *Habrosyne*-species have been described from Continental India, which come into consideration, besides the palaerctic *derasa* L. with its wide distribution from W. Europe to N. India and Japan. Therefore I prefer to give a separate name to the only species, known to me from Java.

The insect is slightly larger and more robust than the European *derasa* L. (Dutch specimens), more uniformly dark brown, the light markings rather prominent, slightly suffused with pinkish. Only traces of reddish brown below discus of fore wing. Underside heavier banded with dark than in the European species, as well as in some other species described from Continental India.

I have a series of 11 ♂♂ from Patoehawattee, 1750 m, W.-J. (Toxopeus), Tjileueur-Patoeha, 2100 m, W.-J.

Fig. 32. *Habrosyne obscura* ♂, holotypus, 1.4 × n.s.

(id.) ; and Djoenggo-Ardjoeno, 1500 m, E.-J. (Kalis). Furthermore, I have a *Habrosyne* ♂ from the summit of Mt. Tanggamoes, S. Sum., above 2000 m, which shows the same light coloration as in European specimens. I think that it must be separate from *obscura*, but I hesitate to attribute it to one of the other species described from India.

46. **Gaurena ornata** n. sp. : fig. 33—34.

One of the whitish spotted species, belonging to the *florens*-group. The ground colour of fore wing is a beautiful coppery golden or olive brown, much variegated with whitish markings. The reniform is depressed o-shaped, the orbicular, however, 8-shaped, both whitish. The apex with a whitish patch, outer margin with white internerval lunules, in tornus a patch filled up with brownish, but its nucleus is bordered by a beautiful red. A patch near wing base also with traces of red. One of these specimens has a distinct dorsal tuft on the second abdominal tergite.

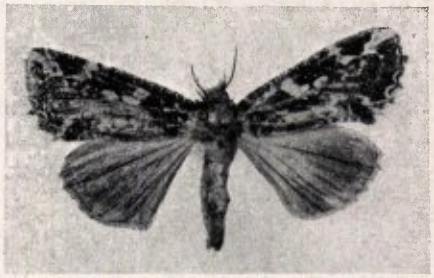

Fig. 33. *Gaurena ornata* ♀, holotypus, 1.4 × n.s.

I have 5 ♀♀ from Perbawattee (Walsh.) and 1 specimen without head and abdomen, from Tjinieruan, 1750 m, W. Java (Roepke). Exp. about 36-41 mm.

Furthermore, I have 2 ♀♀ from Perbawattee (Walsh) and Goalpara, W.-J. (Walsh) which show quite a different, more uniform greenish brown coloration, with the markings obscure and dilute. Even the reniform and orbicular are darkened. At the first sight, one should think it to be a separate species, but by a close examination with a strong pocket lens it proves to be a dark variety (melanism ?) of the described species. I think that a special name, f. **dilutior**, may be justified ; see fig. 34.

Fig. 34. *Gaurena ornata* f. *dilutior*, holotypus, 1.4 × n.s.

(To be continued).