

NEW AND LITTLE-KNOWN NEUROPTERA FROM
THE DUTCH EAST INDIES.

By

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By the kindness of the Director, Dr. DAMMERMAN, I have had the pleasure to work out a lot of *Neuroptera*, belonging to the Zoological Museum of Buitenzorg, and below I give descriptions of a few new species together with notes about some other interesting ones.

In "Mecoptera and Planipennia of Insulinde" (Notes Leyden Museum, vol. XXXI, pag. 1—100, pl. I—V, 1909) H. W. VAN DER WEELE gave an excellent list with descriptions of the known Neuroptera from the Dutch dominions in the East Indies. The following species should be added to that list: *Conchylosmylus triseriatus* BANKS, *Micromus igorotus* BANKS¹⁾, *Notiobiella maindroni* NAVAS, *Ancylopteryx nonelli* NAVAS¹⁾, *Ancylopt. scioptera* NAVAS, *Ancylopt. scioneura* NAVAS, *Stigmachrysa cladostigma* NAVAS, *Chrysopa buruensis* n. sp.¹⁾, *Chrysopa cruciata* n. sp., *Chrysopa dammermani* n. sp.¹⁾, *Chrysopa deuthera* NAVAS, *Chrysopa sumatrensis* E.-P., *Chrysopa esakii* E.-P. and *Euclimacia rufa* n. sp.

Suphalacsa princeps GERSTAECKER, Mitt. naturw. Ver. Vorpomm. u. Rüg., p. 103 (1893). — West Java.

1 ♀ Coll. OUWENS, Soekaboemi (?).

Suphalacsa sumbawana WEELE, Ascalaphiden, p. 166, fig. 123 (1908). — Sumbawa.

1 ♀ without abdomen, and without indication of locality; it agrees very well with the description and the figure, given by V. D. WEELE.

Suphalomitus malayanus var. **javanensis** WEELE, Ascalaphiden, p. 186, fig. 134 (1908). — Java.

1 ♂ Coll. OUWENS, Soekaboemi (?).

The specimen is a matured one, tip of the wing yellowish tinged.

Hybris javanica BURMEISTER, Handb. Entom., p. 1001 (1839). — Java.

1 ♂ Tjibeber, 7. XI. 1918 (J. H. IKEN don.); 1 ♀ Sibolangit, 14. IX. 1920 (DOCTERS VAN LEEUWEN).

Formicaleo divus WALKER, Cat. Neur. Ins. Brit. Mus., p. 346 (1853). — Ceylon.

¹⁾ see: Fauna Buruana.

1 ♂ 1 ♀ Coll. OUWENS, Soekaboemi (?); 2 specimens Toetal, Kei Isl., 1922 (H. C. SIEBERS leg.).

I cannot follow V. D. WEELE in regarding *gravis* WALKER and *divus* WALKER as synonyms of *audax* WALKER. I have seen photos of the type specimens, and I think that each of the three species will be a good and distinct species. The widespread and rather common Malayan species may be *divus* WALKER.

Myrmeleon frontalis BURMEISTER, Handb. Ent., p. 993 (1839). — Java.

1 ♂ Buitenzorg, 1. II. 1921 (DAMMERMAN leg.); 2 ♀ 21. I. 1921; 1 ♀ 20. I. 1921; 1 ♀ 19. VII. 1921, Buitenzorg (KARNY leg.); 2 ♀ Buitenzorg, 25. I. 1922 and 10. IX. 1922 (H. C. SIEBERS leg.); 2 ♀ Krakatau, IX. 1920.

This species is a well-known one from Java.

Myrmeleon celebensis MAC LACHLAN, Tijdschr. Entom., p. 5, tab. I, fig. 8 (1875). — Celebes.

1 ♀ N. Nova Guinea, 1920 (W. C. v. HEURN leg., Prauwenbivak); 1 ♀ Lampongs, Wai Lima, Z. Sumatra, XI.—XII. 1921 (KARNY leg.).

This species is very distinct, and different from *M. acer* WALKER (Australia) and from *M. solers* WALKER (China). In "Entom. Mitteil." p. 22 (1926) I have pointed out the characters separating the three species. *M. celebensis* seems to be a widespread species in the Malayan Archipelago.

Larvae of Myrmeleonidae.

3 specimens, Krakatau, 24. IV. 1920 (DAMMERMAN leg.); belong possibly to *Myrmeleon frontalis*.

Myiodactylus nebulosa MAC LACHLAN, Ent. Monthly Mag., p. 85 (1878). — New Guinea.

One specimen from New Guinea present. It is a very scarce and interesting species; only known from New Guinea.

Thaumatomyilus diaphanus GERSTAECKER, Mitt. naturw. Ver. Vorpomm. u. Rüg., p. 168 (1893). — West Java.

One specimen (abdomen lost) present from Tjibodas, 1500 m., VIII. 1921. This species seems to be a very scarce one.

Spilosmylus modestus GERSTAECKER, loc. cit., pag. 169 (1893). — West Java.

One specimen (abdomen lost) from Verlaten Eiland, IV. 1920.

The species is also known from North Borneo.

Conchylosmylus triseriatus BANKS, Trans. Amer. Ent. Soc., p. 214 (1913). — Queensland.

1 specimen from Kei Isl. 1922 (H. C. SIEBERS leg.).

It is a fine and interesting species. The specimen is hardly matured, and its wings have a distinct greenish tinge.

Spilosmylus sp.

Fragments of a specimen from Kei Islands, 1922 (H. C. SIEBERS leg.) present.

In the fore wing Sc and R are marked with six short dark streaks; in subcostal area and between each pairs of these streaks a distinct dark oblong spot or a short streak. In the hind wing only two pairs of streaks just before pterostigma are indicated; no spots or streaks in the subcostal area. Venation of fore wings brownish; longitudinal veins with short whitish interruptions; most cross veins brownish; all the veins strongly dark haired. Each of the apical cross veins between 4th and 5th and between 5th and 6th branches from Rs surrounded by a brown circular pustula. The apical cross vein between Ma and Mp with a similar pustula. At the posterior border of the fore wing a brown pustula, crossed by two or three veins; this pustula is uniformly brownish coloured (unlike the corresponding pustula in other *Osmylidae*). M forks much before origin of first branch from Rs, but further out than origin of Rs; two cross veins between M and stem of Rs. Prothorax seems to be marked by two or three dark longitudinal streaks dorsally.

Length of fore wing about 14 — 15 mm.

Notiobiella maindroni NAVAS, *Broteria*, p. 70 (1910).

One specimen Buitenzorg, 22. I. 1922 (SIEBERS leg.); one specimen from the same locality, 28. VII. 1922 (KARNY leg.).

Micromus pusillus GERSTAECKER, *Mitt. naturw. Ver. Vorpomm. u. Rüg.*, p. 171 (1893). — Java.

One specimen Buitenzorg, IV. 1921.

Nenus novitius NAVAS, *Revue Russe d'Ent.*, p. 397 (1910). — Japan. *Nenus longulus* NAVAS, *Memorias*, p. 200, fig. 29 (1912). — China. *Micromus angustior* v. d. WEELE, *Notes Leyden Mus.*, XXXII, p. 201 (1910). — Java.

3 specimens from Tjibodas, 1500 m., 1921.

I have seen long series of this species from the Philippine Islands.

Hemerobius sp.

One defect specimen from Tjibodas, VIII. 1921.

The specimen is in very bad condition, and it is impossible to give any description of it. It is the first record from Java of a species of that genus.

Ancylopteryx trimaculata GIRARD, *Ann. Soc. Ent. France*, p. 163, pl. V, fig. 1 (1853). — Sumatra.

2 specimens from Buitenzorg, 26. II. 1921 and 17. VIII. 1922 (KARNY leg.).

I keep the name of GIRARD, because I am not quite sure, whether FABRICIUS's and GIRARD's species are the same.

Ancylopteryx polygramma GERSTAECKER, Mitt. naturw. Ver. Vorpomm. u. Rüg., p. 161 (1893). — Java.

One specimen, Wai Lima, Lampongs, Sumatra, XI.-XII. 1921 (KARNY & SIEBERS leg.).

Ancylopteryx (Seucera) scioneura NAVAS, Acad. Cienc. Zarag., p. 27, fig. 4 (1924). — New Britain.

One specimen from Wai Lima, Lampongs, Sumatra, XI.-XII. 1921 (KARNY leg.). The species is also known from the Philippine Islands.

Glenochrysa splendida v. d. WEELE, Notes Leyden Mus., p. 72, pl. V, fig. 29 (1909). — Borneo, Java, Timor; *Chrysopa faceta* NAVAS, Broteria, p. 104, fig. 4 (1912). — Nicobar Isl.

One specimen from Palaboean Ratoe, West Java.

Stigmachrysa cladiostigma NAVAS, Ann. Soc. scient. Brux., p. 570 (1925); *Nothochrysa cladiostigma* NAVAS, loc. cit., p. 325 (1914). — Sikkim.

One specimen, Buitenzorg, 15. VI. 1921; another specimen from the same locality, XI. 1921 (DAMMERMAN leg.). I have known this very interesting species for several years. Mr. HJALMAR JENSEN gave me a specimen collected at Wedi (Java). (Pl. VIII, Fig. 1).

Nothochrysa ferruginea MAC LACHLAN, Ent. Monthly Mag., p. 26 (1869). — Sarawak.

One specimen from Buitenzorg, 4. II. 1921; two specimens from Soekaboemi.

Leucochrysa hexastiche GERSTAECKER, Mitt. naturw. Ver. Vorpomm. u. Rüg., p. 159 (1893). — Java.

One specimen from Tjibodas, 1500 m., VIII. 1921.

Leucochrysa abnormis ALBARDA, Midden-Sumatra, p. 16 (1881). — Sumatra.

One specimen from Tjibodas, 1500 m., VIII. 1921.

Chrysopa cruciata n. sp. (Pl. VIII, Fig. 2).

Head pale green; labrum, clypeus except its middle part, and genae black; a black spot below each antenna, and a small dark spot between the antenna and the eye; apical joint of palpi greyish dark. Antennae

longer than the fore wing, pale; first joint stout. Prothorax pale greenish, transverse; mesothorax pale greenish with a large blackish spot at each side above base of the fore wings; metathorax pale greenish with two small circular black spots on the disc. Legs whitish; claws simple, broadened at base. Membrane of the wings and their venation whitish. Costal cross veins of both pairs of wings black, the second to seventh in the fore wings whitish in their middle. Third and fourth radial cross veins in the fore wing black at their ends; fifth to eighth totally black. Origin of Rs black, and strongly blackish shaded. The gradate cross veins, the cross veins between Psm and Pscu, some marginal forks and a few cross veins in basal part of the wings blackish, and blackish shaded. Tip of basal median cell blackish. Three cross veins between Rs and Psm; first of those touches Psm at a rather long distance from apex of the median cell. The two posterior gradate cross veins in the inner series form together with the subradial branch laying between them a distinct and strongly shaded figure, like a crux. In the hind wing fourth to sixth cross veins between R and Rs black; the gradate cross veins darker than the membrane.

Fore wing 8 mm; hind wing 7 mm.

One specimen from Wai Lima, Lampongs, Sumatra, XI.—XII. 1921 (KARNY leg.).

It is a beautiful species, which occupies a peculiar position amongst the *Chysopidae* on account of the long distance between the first cross vein from Rs to Psm and the tip of the median cell. On the other hand I will find it unreasonably to found a new genus on such a character.

Chrysopa deutera NAVAS, Ann. Soc. scient. Brux., p. 106 (1914).—Keeling Isl.

One rather defect specimen from Kratatau, XI. 1919.

The specimen agrees very well with the description; but the origin of Cu_2 in the fore wing, the two cross veins between Pscu and Cu_2 , 1A and 2A are brownish; the two obliquely placed black lateral streaks on prothorax are divided in two short streaks.

Chrysopa rufipes MAC LACHLAN, Tijdschr. Ent., p. 2, pl. I, fig. 1 (1875).—Celebes.

One specimen from Buitenzorg, XI. 1909, and one from Soekaboemi. This species has a wide range on the islands in the Malayan Archipelago.

Chrysopa sumatrensis ESB.-PETERSEN, Entom. Mitt., p. 25 (1926).—Sumatra.

One defect specimen from Java.

Mantispa manca GERSTAECKER, Mitt. naturw. Ver. Vorpomm. u. Rüg., p. 39 (1884).—Amboina.

One specimen from Kei Islands, 1922 (SIEBERS leg.).

Mantispa amabilis GERSTAECKER, loc. cit., p. 152 (1893).—Java.

One specimen from Wai Lima, Lampongs, Sumatra, XI.—XII. 1921 (KARNY & SIEBERS leg.).

Euclimacia rufa n. sp. (Pl. VIII, Fig. 3).

Head yellowish red; palpi reddish yellow; face coarsely punctate; vertex smooth; the carina hardly indicated. Antennae reddish yellow, short and thick, 48-jointed; the joints very short and thick; with the exception of the basal joint the other joints are several times broader than long. Eyes bronze-green. Prothorax yellowish red, divided by a deep transverse blackish groove, about one third from front margin; the front of prothorax as broad as the distance between the eyes, and almost twice as broad as the hind part. At each side of the transverse furrow a tubercle, and on the posterior brim of the furrow two smaller black tubercles dorsally. Near the posterior end of the prothorax a conspicuous transversely placed ridge. The hind margin of prothorax black dorsally. Meso- and metathorax black above and below; their scutell yellowish red; a reddish spot on metathorax below each of the hind wings. Abdomen yellowish red; but front half part more or less blackish marked. Coxae, intermediate and hind femora black; fore femora reddish with an oblong large brownish black spot exteriorly and interiorly; tibiae and tarsi reddish yellow; hind tibiae with a narrow dark ring in their middle exteriorly. Venation of wings yellowish with the exception of the longitudinal row of cross veins and the marginal veins behind this series, which are all brown. Membrane hyaline with a strong yellowish tinge at base of the fore wing and along the front margin of both pairs of wings; the tinge becomes brownish yellow at apex. Pterostigma reddish yellow.

Fore wing 22 mm; hind wing 19 mm.

One specimen without indication of locality.

The species has much likeness to the two Australian species *Eucl. nuchalis* GERST. and *Eucl. flavicostata* E.-P.

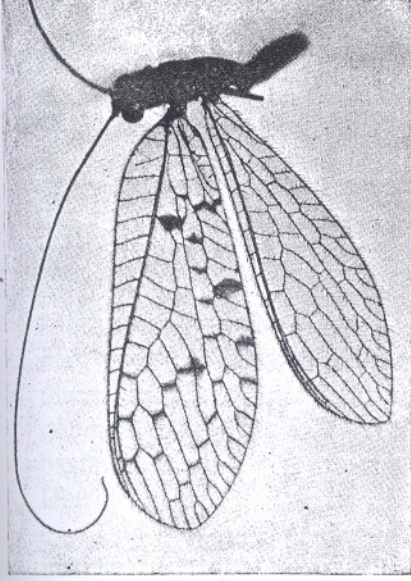


Fig. 2. *Chrysopa cruciata* n. sp.

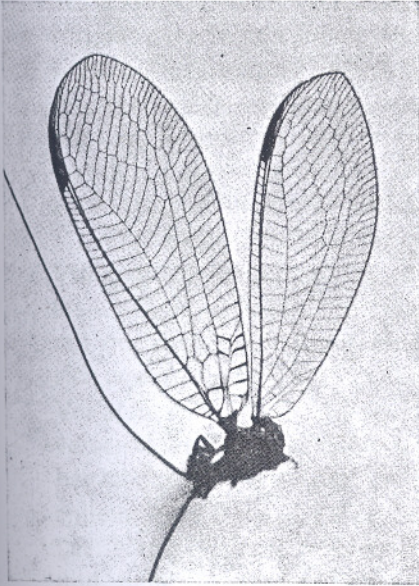


Fig. 1. *Stigmachrysa cladiostigma* NAVAS.

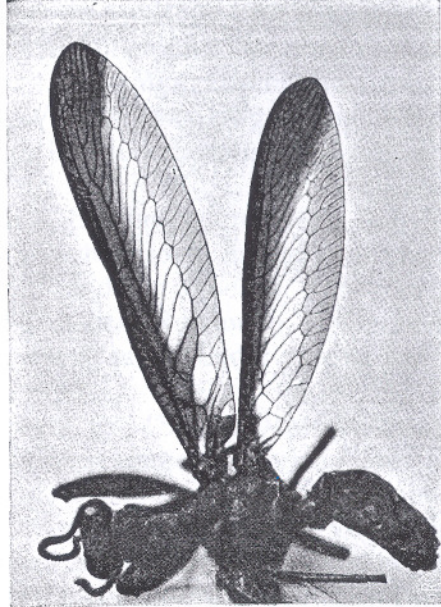


Fig. 3. *Euclimacia rufa* n. sp.