

STUDIES ON THE FAUNA OF SURINAME  
AND OTHER GUYANAS: No. 4.

THE BLATTIDAE OF SURINAM

by

C. F. A. BRUIJNING

(Rijksmuseum van Natuurlijke Historie, Leiden)

In the earliest papers on neotropical Blattidae a fair number of specimens from Surinam were recorded (LINNAEUS, DE GEER<sup>1</sup>), DE SAUSSURE, BRUNNER). But in the period from the beginning of this century up to now only a few scattered reports of Blattidae from that region have appeared in the literature of the subject. The present article will be the first to deal exclusively with Surinam species.

The material dealt with in this paper was mainly secured by DR. D. C. GEIJSKES between 1938 and 1955. His extensive travels both in the coastal area and far into the interior of Surinam enabled him to collect all over the country.

A large and important part of his material was collected — in collaboration with Drs. P. CREUTZBERG — during the "Suriname-Expedition" (1948–1949), initiated by the "Foundation for Scientific Research in Surinam and the Netherlands Antilles". Five regions in the savannah and coastal area were explored: (1) a track of 21 miles from Mungo Tapu (Moengotapoe) to the coast near the Wia Wia bank, in which numerous swamps had to be crossed; (2) a coastal area in Coronie; (3) a savannah near the Tibiti River (tributary of the Coppename River); and a savannah near Zanderij II. The last journey (4) included the lower Marowijne River and the Nassau Mountains. In figure 1 a map of Surinam is given, showing localities and expedition routes where material studied in the present paper was collected.

<sup>1</sup>) DE GEER had a correspondent in Surinam named ROLANDER, from whom he received much material. SHELLFORD (*Trans. Ent. Soc. Lond.* 1907, p. 457) surmises that DE GEER lent some specimens in his collection to LINNAEUS for description.

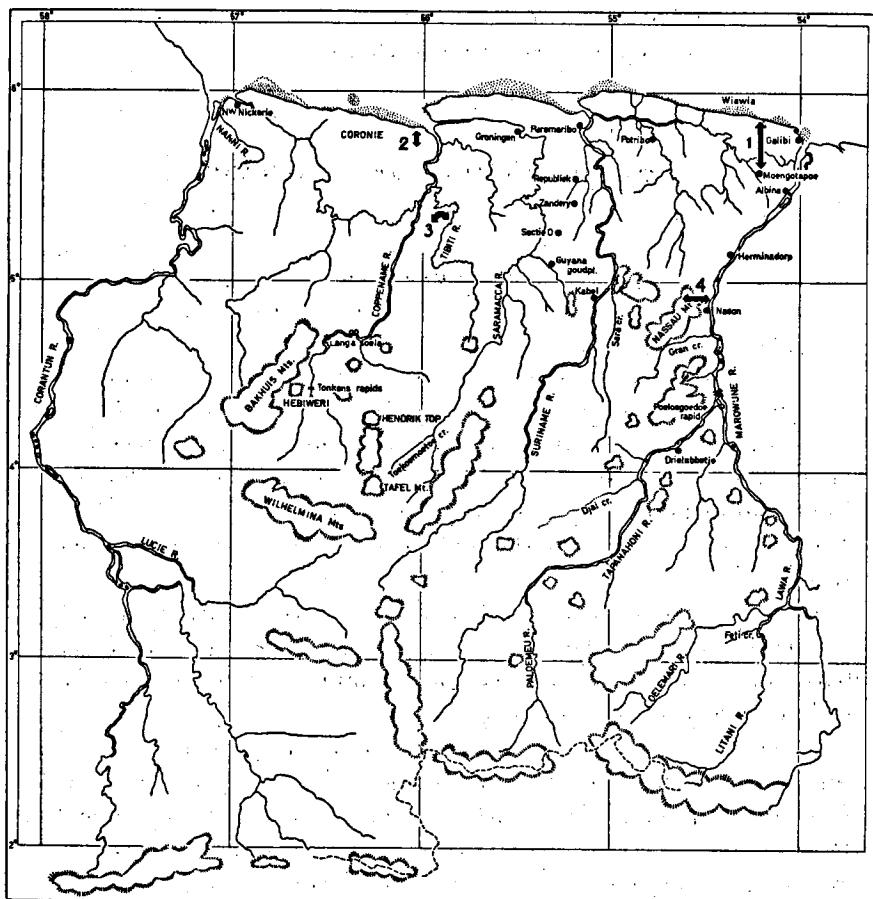


Fig. 1. Map of Surinam, showing localities, and routes (1-4) of the "Suriname-Expeditie 1948-1949".

TABLE 1  
GEOGRAPHICAL DISTRIBUTION OF THE BLATTIDAE TREATED IN THIS PAPER.

| Species                         | Brazil | French Guiana | Surinam | British Guiana | Venezuela | Colombia | Ecuador | Peru | Chile | Bolivia | Argentina | Central America | Mexico | U.S.A. | Greater Antilles | Lesser Antilles | Trinidad |
|---------------------------------|--------|---------------|---------|----------------|-----------|----------|---------|------|-------|---------|-----------|-----------------|--------|--------|------------------|-----------------|----------|
| <i>Blaberus atropos</i>         | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>giganteus</i>              | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>parabolicus</i>            | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Eublaberus bolleyi</i>       | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>posticus</i>               | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Leucophaea maderae</i>       | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Pycnoscelus surinamensis</i> | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Panchlorae aurora</i>        | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>bidentula</i>              | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>nivea</i>                  | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>cubensis</i>               | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>fraterna</i>               | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>regalis</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Achroblatta luteola</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Schizoblatta fissicollis</i> | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Lauxoblatta emarginata</i>   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Zetoborella gemmula</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Phortioeca nimbara</i>       | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Latindia dohrniiana</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Eulisosoma stygia</i>        | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Tairella carinalis/rrons</i> | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Holocompsa nitidula</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Oulopteryx dasilloides</i>   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Buboblatta geyskesi</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Sphecophila polybiarum</i>   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Attaphyla aptera</i>         | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Proscratea complanata</i>    | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Galiblatta cribrosa</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Chorisoneura parishi</i>     | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>stylata</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>fuscipennis</i>            | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>galibi</i>                 | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>pusilla</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>baricae</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>gatunae</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>wayana</i>                 | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>elegantula</i>             | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>albonervosa</i>            | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>inversa</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>strigifrons</i>            | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>splendida</i>              | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>surinama</i>               | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>guianae</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>lata</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>gracilis</i>               | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>heydei</i>                 | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Plecoptera pulicaria</i>     | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Eurycoleis blattoides</i>    | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Pelmatosilpha guianae</i>    | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>lata</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Periplaneta americana</i>    | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>australasiae</i>           | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>brunnea</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Nyctibora tomentosa</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>tenebrosa</i>              | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>dichropoda</i>             | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Megaloblatta insignis</i>    | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Paratropes elegans</i>       | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| — <i>phalerata</i>              | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Pseudischnotepha lineata</i> | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |
| <i>Epilampra abdomen-nigrum</i> | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               | x        |

cosmop.  
cosmop.  
cosmop.cosmop.  
cosmop.  
cosmop.



| <i>Species</i>                     | Brazil | French Guiana | Surinam | British Guiana | Venezuela | Colombia | Ecuador | Peru | Chile | Bolivia | Argentina | Central America | Mexico | U.S.A. | Greater Antilles | Lesser Antilles | Trinidad |
|------------------------------------|--------|---------------|---------|----------------|-----------|----------|---------|------|-------|---------|-----------|-----------------|--------|--------|------------------|-----------------|----------|
| <i>Chromatonotus notatus</i>       |        |               |         |                |           |          |         |      |       |         |           |                 |        |        |                  | x               | x        |
| <i>Dasyblatta thaumasia</i>        | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| <i>Supella supellectilium</i>      | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| <i>Doradoblatta coppennamensis</i> |        |               |         |                |           |          |         |      |       |         |           |                 |        |        |                  |                 |          |
| <i>Pseudomops affinis</i>          | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>luctuosa</i>                  | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>brunneri</i>                  | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>oblongata</i>                 | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| <i>Riatia fulgida</i>              |        |               |         |                |           |          |         |      |       |         |           |                 |        |        |                  |                 |          |
| — <i>orientis</i>                  | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>distincta</i>                 | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>stylata</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| <i>Anaplecta pulchella</i>         |        |               |         |                |           |          |         |      |       |         |           |                 |        |        |                  |                 |          |
| — <i>minutissima</i>               | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>pygmaea</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>maronensis</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>insignis</i>                  | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>subsignata</i>                | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>suffusa</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>pluto</i>                     | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>poecila</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| — <i>guianae</i>                   | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |
| <i>Maraca fossata</i>              | x      | x             | x       | x              | x         | x        | x       | x    | x     | x       | x         | x               | x      | x      | x                | x               |          |

In addition to Dr. GEIJSKES' series — here comprising all those samples without indication of collector — a small number of Surinam specimens from the Leiden and Amsterdam museums have also been examined. The names of the other collectors are always mentioned, e.g. the author's name abbreviated with Br.

No lists of synonyms are given for the cosmopolitan species.

As was to be expected, the material studied agrees closely with the series reported by HEBARD (1921, 1926), from French and British Guiana.

The present paper discusses 335 specimens, representing 78 species, 6 of which are described as new (see table 1).

The species previously reported from Surinam, French, and British Guiana, but not represented in this material, have been added in order to complete the list of species known from the Guianas.

The new species described here are: *Buboblatta geijskesi*, *Xestoblatta surinamensis*, *Euphyllodromia marowijnensis*, *Doradoblatta coppennamensis*, *Anaplecta pygmaea* and *Anaplecta guianae*.

I am much indebted to DR. GEIJSKES, who made his large series of Blattidae, including some new and rare species, available for study.

## BLABERINAE

### **Blaberus** Serville

- 1831 *Blaberus* SERVILLE, Ann. Sci. Nat. 22, p. 37.  
 1839 *Blabera* SERVILLE, Hist. Nat. Ins., Orth., p. 94.  
 1868 *Libisoca* WALKER, Cat. Blatt. Br. Mus., p. 12  
 1868 *Sisapona* WALKER, ibid., p. 16  
 1868 *Tarraga* WALKER, ibid., p. 16

Genotype: *Blaberus giganteus* (L)

The great variability in coloration of the *Blaberus* species has caused considerable confusion, since most of the descriptions of new species have been based on the coloration. The male genitalia present far more reliable characters, and are very important in the taxonomy of this genus. HEBARD (1917, p. 201) had already pointed to the fact, but PRINCIS (1946) was the first author to use these characters systematically in classifying the species of BLABERUS. He distinguishes two groups, viz. the *giganteus* group and the *atropos* group. In the first group the top of the penis is curved upwards and the teeth of the preputium are quite uniform (fig. 3). In the second group the penis has (dorsally only) a ridge, and is not curved, while the teeth of the preputium greatly vary in form, those on the extreme left being stout and blunt at the apex and forming groups of larger chitinous processes which are rounded distad (PRINCIS, l.c. "Höcker") (fig. 2).

The synonymy of some of the species is still a problem.

### **Blaberus atropos** (Stoll)

Fig. 2

- Blatta atropos* STOLL, 1813, Repr. Spectr. Blatt., p. 4, pl. 2d fig. 8.  
*Blabera fusca* BRUNNER, 1865, Nouv. Syst. Blatt., p. 376; BRUNNER, 1906, Journ. N.Y. Ent. Soc. 14, p. 142.  
*Blabera laticollis* WALKER, 1868, Cat. Blatt. Br. Mus., p. 5.  
*Blabera atropos*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 164.  
*Blaberus atropos*, HEBARD, 1917, Mem. Am. Ent. Soc. 2, p. 201; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 380; PRINCIS, 1946, Opusc. Ent. 11, p. 145, figs. 3, 9, 10; PRINCIS, 1952, Lunds Univ. Årsskr. (N.F.) 48, p. 4; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 159.

Type: no locality given by STOLL.

Distribution: British Guiana; Chile; Trinidad.

This species has often been confused with *B. craniifer* (Burmeister), a closely related species.<sup>1)</sup> The pronotal pattern, the broad shape, and the coloration of the tegmina of the two species are very much alike, but the male genitalia are quite distinct. *B. craniifer* (Burmeister) belongs to the *giganteus* group; *B. atropos*, however, has the stout, blunt teeth of the *atropos* group on the left side of its preputium (fig. 2).

No reports from Surinam. Reported by HEBARD (1929, p. 380) from Mahaicony, British Guiana.

### *Blaberus giganteus* (Linnaeus)

Fig. 3

*B(latta) gigantea* LINNAEUS, 1758, Syst. Nat., ed. 10, p. 424; STOLL, 1813, Repr. Spectr. Blatt., p. 2, pl. Id figs. 1-2.

*Blatta colossea* ILLIGER, 1802, Mag. Insektenk. I, p. 186.

*B(labera) mexicana* SAUSSURE, 1862, Rev. Mag. Zool. (2) 14, p. 233; SAUSSURE, 1864, Mém. hist. nat. Mex. 4, p. 234.

*Blaberus giganteus*, HEBARD, 1916, Ent. News 27, p. 290, pl. xv fig. 1; HEBARD, 1919, Trans. Am. Ent. Soc. 44, p. 118; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 213; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 148; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 214; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 120; PRINCIS, 1946, Förh. Kungl. Fys. Sällsk. Lund 16, p. 145; PRINCIS, 1946, Opusc. Ent. II, p. 141, fig. 1; PRINCIS, 1955, Bol. Ent. Venez. II, no. 1-2, p. 3; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 158.

*Blaberus colosseus*, HEBARD, 1916, Ent. News 27, p. 291, pl. xv figs. 2-5; HEBARD, 1917, Mem. Am. Ent. Soc. 2, p. 272; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 115; HEBARD, 1919, Trans. Am. Ent. Soc. 45, p. 118.

Type: "America".

Distribution: French Guiana; Surinam; British Guiana; Venezuela; Colombia; Panama; Guatemala; Mexico; U.S.A.; Dominican Republic; Trinidad.

Leiden Museum: 1 ♀, Oelemari river, Exp. Ahlbrinck, J. Raatgever, VIII-II. 1938-1939; 1 ♀, Lelydorp, Van Slobbe, 12.xi.1952.

Amsterdam Museum: 1 ♂, Lucie Rivier, Exp., VII-VIII.1926.

This species is easily distinguished from the other species of the genus by its pale coloration and great size.

The male genitalia show a strongly curved penis and irregularly inserted teeth

<sup>1)</sup> *B. craniifer* (Burm.) has been reported as *B. atropos* (Stoll) by GUERIN (1857) from Cuba; by REHN (1903 and 1908) from Cuba and Florida; and by REHN & HEBARD (1912 and 1914) also from Florida.

on the right side of the preputium, while the teeth on the left side are placed in a row along the margin of the preputium (fig. 3).

**Blaberus parabolicus** Walker

Fig. 4

*Blabera parabolica* WALKER, 1868, Cat. Blatt. Br. Mus., p. 8.

*Blabera armigera* SCUDDER, 1869, P. Boston Soc. 12, p. 243.

*Blabera aequatoriana* BOLIVAR, 1881, An. Soc. Espan. 10, p. 479.

*Blaberus parabolicus*, REHN, 1916, Trans. Am. Ent. Soc. 42, p. 243; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 149; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 380; REHN, 1932, Ark. Zool. 24A, 11, p. 58; PRINCIS, 1946, Opusc. Ent. 11, p. 145.

Type: ♂, Cuenca, Ecuador.

Distribution: Ecuador; Colombia; Peru; Bolivia; Brazil; Surinam. "This species is widely distributed in Amazonia, ranging from as far west as Cuenca, Gualaquiza and valley of Santiago, Ecuador; Villavicencio, Rio Guatiquia and Susumoco, Colombia and Rio Pacaya and Contamano, Rio Ucayali, eastern Peru, eastwards through Manáos and the localities here listed to Pará, lower Amazonia, and southward to Abuna, Bolivia, on the Rio Madeira and Nioac, Matto Grosso, Brazil in the Rio Paraguay drainage" (REHN, 1932, p. 58).

Leiden Museum: 2 ♂♂, 4 ♀♀, Paramaribo, in houses, Br., 5.IX.1955; 1 ♂, Paramaribo, 8.VI.1939; 1 ♀, Paramaribo, 2.VII.1955; 1 ♀, Paramaribo, Botanical Garden, 17.XII.1953; 1 ♀, Lelydorp, H. Heyde, IX.1945.

This species is fairly common in the town of Paramaribo, where it lives underneath the houses. At night it enters the houses and can become a real pest. The larvae are called "tranga bakkas," a name which is also used for some other insects.

The male genitalia belong to the *atropos* group. At the extreme right of the preputium stout, rounded processes are inserted between the teeth; some of the teeth on the free margin form pairs which are squarely inserted on the margin; sinistrad the teeth are developed in blunt, stout, chitinous processes, while at the extreme left a large bi- to trilobate process is found (fig. 4).

**Eublaberus** Hebard

1919 *Eublaberus* HEBARD, Mem. Am. Ent. Soc. 4, p. 116.

1894 *Blabera*, SAUSSURE & ZEHNTNER, Biol. Centr. Am. Orth. 1, p. 117 (in part; species placed in section "a" of key for the genus).

Genotype: *Eublaberus bolleyi* (= *Blaberus bolleyi*) (Rehn)

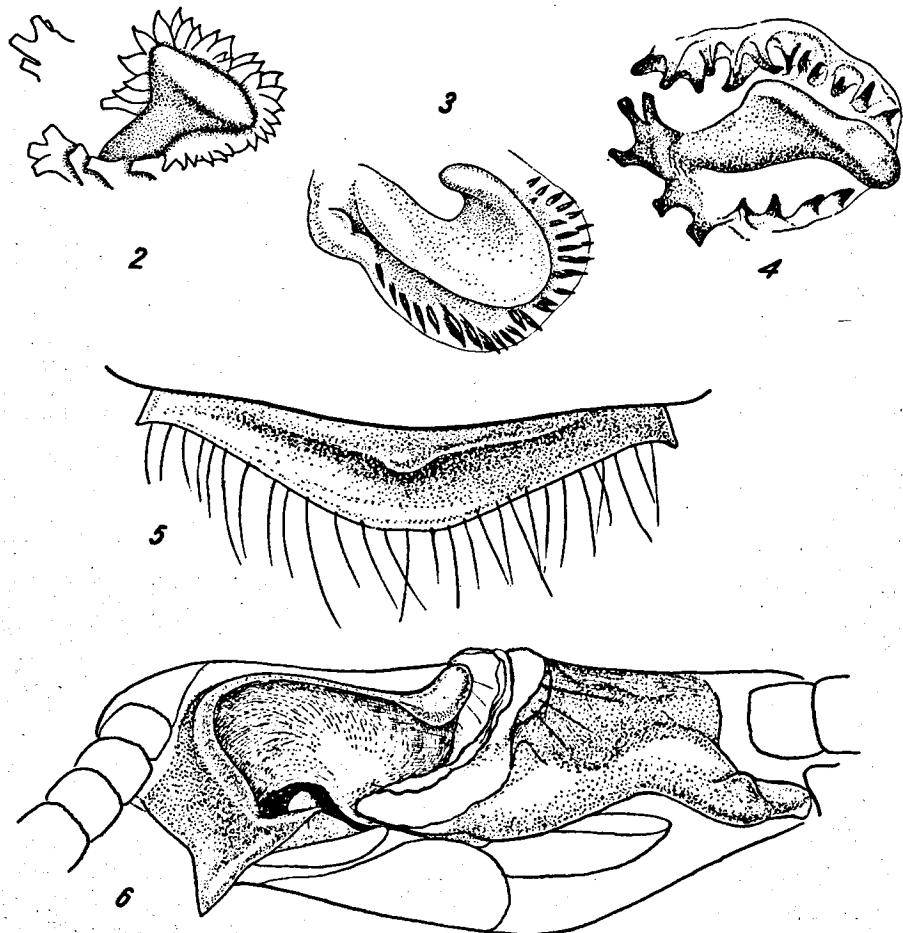


Fig. 2. *Blaberus atropos* (Stoll) — Male genitalia after PRINCIS.

Fig. 3. *Blaberus giganteus* (L.) — Male genitalia.

Fig. 4. *Blaberus parabolicus* Walker — Male genitalia.

Fig. 5-6. *Buboblatta geijssesi* nov. spec. — 5. Supra-anal plate of male. — 6. Caudal view of subgenital plate of male.

#### **Eublaberus biolleyi (Rehn)**

*Blaberus biolleyi* REHN, 1906, Proc. Acad. Nat. Sci. Phila. 57, p. 792, fig. 1; REHN, 1916, Trans. Am. Ent. Soc. 42, p. 244.

*Eublaberus biolleyi*, HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 117; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 213, pl. XIV figs. 3-7; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 214; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 380; HEBARD, 1929, ib., p. 396; REHN, 1932, Ark. Zool. 24A, 11, p. 60; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 25; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 159.

Type: ♀, Reventazon river, plains of Santa Clara, Costa Rica (Acad. Nat. Sci. Phila.).

Distribution: "extending from north-eastern Costa Rica (type locality) east to British and French Guiana and Trinidad, south to central Amazonia (Rio Autaz)" (REHN, 1932, p. 60).

Leiden Museum: 1 ♀, Nickerie, Surinam, 8.vi.1938.

Amsterdam Museum: 3 ♂♂, 3 ♀♀, 1 larv., Paramaribo, Halfide.

This species is closely related to *Eublaberus posticus* (Erichson), from which it differs in the "paler coloration, the more numerous and finer veins of the anal area of the tegmen, and the separate and distinctly outlined maculations of the pronotum" (REHN, 1906, p. 273).

#### ***Eublaberus posticus* (Erichson)**

*Blabera postica* ERICHSON, 1848, in Schomburgk, Faun. Flor. Brit. Guiana 3, p. 580; BRUNNER, 1865, Nouv. Syst. Blatt., p. 379; KIRBY, 1904, Syn. Cat. Orth., p. 165;

*Blabera femorata* SCUDDEER, 1869, Proc. Boston Soc. Nat. Hist. 12, p. 342.

*Blabera thoracica* SAUSSURE & ZEHNTNER, 1894, Biol. Centr. Amer. Orth. 1, p. 120, tab. v fig. 25; GRIFFINI, 1896, Boll. Mus. Zool. Torino 11, 236, p. 5.

*Blaberus thoracicus*, REHN, 1903, Trans. Am. Ent. Soc. 29, p. 289; REHN, 1905, Proc. Acad. Nat. Sci. Phila. 57, p. 792.

*Blaberus posticus*, REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 272.

*Eublaberus posticus*, HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 117; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 214; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 380; REHN, 1932, Ark. Zool. 24A, 11, p. 58; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 159.

Type: British Guiana.

Distribution: "The range of this species is very extensive, reaching from as far north as the Managua, Nicaragua, south to Corumbá, Matta Grosso, Brazil, westward to the Upper Amazon in eastern Peru (Napo or Marañon) and eastward at least to French Guiana and Trinidad" (REHN, 1932, p. 59).

Reported from Surinam and French Guiana by HEBARD (1926), and from British Guiana by REHN (1906).

This species shows close relationship to *E. biolleyi* (Rehn) (see remarks under that species).

## PANCHLORINAE

**Leucophaea** Brunner

- 1865 *Leucophaea* BRUNNER (pt.), Nouv. Syst. Blatt., p. 278  
 1903 *Leucophaea*, REHN, Trans. Am. Ent. Soc. 29, p. 282.  
 1892 *Rhyparobia* KRAUSS, Zool. Anz. 15, p. 165.  
 1893 *Rhyparobia*, SAUSSURE & ZEHNTNER, Biol. Centr. Amer. Orth. 1, p. 89.

Genotype: *Leucophaea maderae* (= *Blatta maderae*) (Fabricius).

**Leucophaea maderae** (Fabricius)

Type: ♂, ♀, Madera.

Distribution: This cosmopolitan species is distributed throughout the Neotropics.

Leiden Museum: 1 ♀, Paramaribo in house, 13.IX.1941; 6 ♀♀, Paramaribo in house, Br., 5.IX.1955; 1 ♀, Lelydorp in house, H. Heyde, XII. 1945.

This species is very common in houses in Surinam and is often a real domestic pest.

**Pycnoscelus** Scudder

- 1862 *Pycnoscelus* SCUDDER, Bost. Journ. Nat. Hist. 7, p. 421.  
 1917 *Pycnoscelus*, HEBARD, Mem. Am. Ent. Soc. 2, p. 192.

Genotype: *Pycnoscelus surinamensis* (= *Blatta surinamensis*) (Linnaeus).

**Pycnoscelus surinamensis** (Linnaeus)

Type: Surinam.

Distribution: *P. surinamensis* (L.) is a cosmopolitan species with a wide distribution throughout tropical and subtropical America.

Leiden Museum: 1 ♀, Charlesburg, Paramaribo, 21.VIII.1941; 1 ♀, Matapica beach, 20.X.1940; 1 ♀, Lelydorp, VIII.1944.

This species is not as domestic as most of the cosmopolitan Blattidae, but prefers to hide under stones and trash in the vicinity of human habitations. No adult males have ever been reported from the Americas. HEBARD (1917, p. 194) suggested that the females may be parthenogenetic. The larvae differ widely from the adults.

A common species in all the Guianas.

#### **Panchlora Burmeister**

1838 *Panchlora* BURMEISTER, Handb. Ent. 2, p. 506.  
1917 *Panchlora*, HEBARD, Mem. Am. Ent. Soc. 2, p. 197.

Genotype: *Panchlora pulchella* Burmeister (selected by REHN, 1903).

#### **Panchlora aurora Hebard**

*Panchlora aurora* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 209, pl. xvi figs. 7-8.

Type: ♂, La Forestière, upper Maroni river, French Guiana (Hebard collection, no. 1024).

Distribution: Kalacoon, British Guiana; St. Jean, Nouveau Chantier, La Forestière, French Guiana.

Not yet reported from Surinam.

#### **Panchlora bidentula Hebard**

*Panchlora bidentula* HEBARD, 1916, Ent. News 27, p. 221, fig. 1; REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 161; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 208; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 374; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 8; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 157.

Type: ♂, Igarapé-Assu, Pará, Brazil (Acad. Nat. Sci. Phila., Type no. 5295).

Distribution: Brazil; French Guiana; Venezuela; Trinidad.

Reported from St. Jean du Maroni, French Guiana (on the Surinam frontier).

Closely related to *Panchlora nivea* (L.) but differing in its slightly larger size, broader form, and wider interocular space. The male genitalia are symmetrical in *P. bidentula*, with two rounded projections meso-distad. In *P. nivea* the subgenital plate is produced sinistrad.

The interocular space in the female is two-thirds to three-quarters the greatest diameter of the eye; in *P. nivea* it is only one-fifth to one-sixth.

### **Panchlora nivea (Linnaeus)**

*B(latta) nivea* LINNAEUS, 1758, Syst. Nat. ed. 10, p. 424.

*Panchlora nivea*, SAUSSURE, 1864, Mém. Mex. Blatt., p. 194; BRUNNER, 1865, Nouv. Syst. Blatt., p. 274; SHELFORD, 1907, Trans. Ent. Soc. Lond. 1907, p. 463; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 208; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 374; MARTORELLI, 1939, Journ. Agr. Univ. Puerto Rico 23, p. 181; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 2; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 157.

Type: America; by inference Surinam (SHELFORD, 1907, p. 463).

Distribution: French Guiana; Surinam; British Guiana; Venezuela; Trinidad; Leeward and Windward Islands.

Leiden Museum: 1 ♀, third camp, km. 14.9, 24.ix.1948.

Amsterdam Museum: 1 ♂, Caledonia, Saramacca, Miss A. van Genderen, 25.xi.1929.

*P. nivea* is a small species. It has been reported as *P. virescens* by BRUNER (1906, p. 142), as *P. cubensis* by HEBARD (1929, p. 373), and by MARTORELLI & SALAS (1939, p. 234).

### **Panchlora cubensis Saussure**

*P(anchlora) cubensis* SAUSSURE, 1862, Rev. Mag. Zool. (2) 14, p. 230; HEBARD, 1917, Mem. Am. Ent. Soc. 2, p. 198, pl. VIII figs. 2-5; HEBARD, 1919, Trans. Am. Ent. Soc. 45, p. 115; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 105; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 208; HEBARD, ib., p. 241; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 144; HEBARD, 1921, ib., p. 213; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 207; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 247; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 373; HEBARD, 1929, ib., p. 396; HEBARD, 1932, Trans. Am. Ent. Soc. 58, p. 209; REHN, 1932, Ark. Zool. 24A, 11, p. 55; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 22; HEBARD, 1933, ib., p. 119; PRINCIS, 1946, Förh. Kungl. Fysiogr. Sällsk. Lund 16, p. 145.

*P(anchlora) poeyi* SAUSSURE, 1862, Rev. Mag. Zool. (2) 14, p. 230.

*P(anchlora) luteola* SAUSSURE, 1864, Rev. Mag. Zool. (2) 16, p. 342.

*P(anchlora) viridis* GRIFFINI (not *Blatta viridis* Fabricius, 1775), 1896, Boll. Mus. Zool. Torino 11, 236, p. 4.

*Pycnosceloides a porus* HEBARD, 1919, Trans. Am. Ent. Soc. 45, p. 300, figs. 1-2.

Type: ♀, Cuba.

Distribution: Northern South America; Central America; Mexico and West Indies (particularly the Greater Antilles).

Leiden Museum: 4 ♀♀, Paramaribo, W. C. van Heurn, 1911; 1 ♂, Paramaribo, D. Bolten, 25.II.1903; 1 ♂, Paramaribo, D. Bolten, 25.I.1907; 1 ♀, Paramaribo, A. Smit, 8.VII.1936; 1 ♂, Paramaribo, A. Smit, 18.VII.1936; 1 ♀, Paramaribo, 27.X.1938; 1 ♀, Paramaribo, 8.VI.1939; 1 ♀, Republiek, 6.VIII.1949; 1 ♂, km. 121 along railway, C. Bleys, 23.VII.1949; 1 ♂, Moengotapoe, 22.IX.1948; 1 ♀, Tonckings rapids, 19.XII.1943; 2 ♂♂, Drietabietje, Br., 20.II.1952; 2 ♀♀, Kawate, upper Paloeemeu river, 5.IV.1952.  
Amsterdam Museum: 1 ♀, Leonsberg, D. Piet, 12.I.1951; 1 ♀, Zanderij, D. Piet, 14.XII.1950; 1 ♀, Caledonia, A. van Genderen, 25.XI.1929.

This species has been recorded as *virescens*, *viridis*, *poeyi*, *nivea*, *hyalina* and *exoleta*. It is the most common species of the genus, and is regularly encountered as an adventive in European countries and in the U.S.A., to which areas it is transported with bananas and other cargoes.

*P. cubensis* is one of the commonest cockroaches in Surinam.

#### **Panchlora fraterna Saussure & Zehntner**

*Panchlora fraterna* SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Amer. Orth. I, p. 97; KIRBY, 1904, Syn. Cat. Orth. I, p. 153; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 374.

Types: Nicaragua and Panama.

Distribution: Nicaragua; Panama; British Guiana.  
No reports from Surinam.

#### **Panchlora regalis Hebard**

*Panchlora regalis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 211, pl. XVI fig. 9.

Type: ♀, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1025).

Distribution: French Guiana and Surinam.

Amsterdam Museum: 1 ♀, Lucie Rivier area, Exp., VII-VIII.1926.

The strikingly decorative tegmina and ventral abdominal surface make this

species easy to recognize. The specimen in the Amsterdam collection agrees closely with the description and figure given by HEBARD. Its measurements are: length of body 21.5; length of pronotum 6.5; width of pronotum not measured, since the lateral portions are strongly deflexed; length of tegmen 23.8 mm.

This is the first report to be made since the description of the type.

#### **Achroblatta** Saussure

1893 *Achroblatta* SAUSSURE, Soc. Ent., p. 67.

1893 *Achroblatta*, SAUSSURE & ZEHNTNER, Biol. Centr. Amer. Orth. 1, p. 100, pl. vi fig. 12.

Genotype: *Achroblatta luteola* (= *Blatta luteola*) (Blanchard).

#### **Achroblatta luteola** (Blanchard)

*Blatta luteola* BLANCHARD, 1843, in d'Orbigny, Voy. Amér. Mérid. 6, 2, p. 215, pl. xxvi fig. 3.

*Paratropes histrio* SAUSSURE, 1862, Rev. Mag. Zool., p. 229; SAUSSURE, 1864, Mém. Mex. Blatt., p. 58, pl. 1 fig. 5.

*Panchlora tripartita* WALKER, 1868, Cat. Blatt. Br. Mus., p. 35.

*Zetobora sigillata* WALKER, 1868, Cat. Blatt. Br. Mus., p. 51.

*Pseudomops lituriceps* WALKER, 1868, Cat. Blatt. Br. Mus., p. 83.

*Paratropa histrio*, SAUSSURE, 1870, Miss. Scient. Mex. Orth., p. 75.

*Achroblatta luteola*, 1893, SAUSSURE, Soc. Ent., p. 67; SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Amer. Orth. 1, p. 100, pl. vi fig. 12; REHN, 1903, Trans. Am. Ent. Soc. 29, p. 285; KIRBY, 1904, Syn. Cat. Orth. 1, p. 155; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 145; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 212.

Type: Santa Cruz, Bolivia.

Distribution: From Mexico to Bolivia and French Guiana.

Leiden Museum: 1 ♀, Sara creek, Surinam, Van Hemert, vi.1938.

#### **Schizopilia** Saussure

1864 *Schizopilia* SAUSSURE, Mém. Mex. Blatt., p. 217.

Genotype: *Schizopilia fissicollis* (Serville)

**Schizopilia fissicollis** (Serville)

*Blatta fissicollis* SERVILLE, 1839, Hist. Nat. Ins. Orth., p. 85; GUÉRIN, 1857, in Ramón de la Sagra, Hist. Cuba Ins., p. 337, pl. XII fig. 7.

*Zetobora fissicollis*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 292.

*Schizopilia fissicollis*, SAUSSURE, 1864, Mém. Mex. Blatt., p. 218; KIRBY, 1904, Syn. Cat. Orth. I, p. 159; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 208, pl. XII fig. 6; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 213.

*Schizopelia fissicollis*, REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 257.

Type: ♀, French Guiana.

Distribution: Only reported from French Guiana.

The Cuban record by GUÉRIN is incorrect (HEBARD, 1921, p. 209; REHN & HEBARD, 1927, p. 257).

**Lauxoblatta** Hebard

1931 *Lauxoblatta* HEBARD, Konowia 10, p. 259.

1932 *Lauxoblatta* REHN, Ark. Zool., 24A, 11, p. 56.

Genotype: *Lauxoblatta emarginata* (= *Zetobora emarginata*) (Burmeister).

In his article, which was published on December 1st, 1931, HEBARD wrote that REHN "has proposed the name *Lauxoblatta*" for the group for which KIRBY used *Zetobora* and which became nameless after that name lapsed as a synonym of restricted *Zetobora*. The article by REHN in which he proposed the name *Lauxoblatta* for the group (from *Lanx*, the name of a genus of fresh-water limpets) was published on January 27th, 1932, and therefore that name is superseded by the four weeks older *Lauxoblatta*.

**Lauxoblatta emarginata** (Burmeister)

*Zetobora emarginata* BURMEISTER, 1838, Handb. Ent. 2, p. 511; BRUNNER, 1865, Nouv. Syst. Blatt., p. 291; KIRBY, 1904, Syn. Cat. Orth. I, p. 158; REHN, 1916, Trans. Am. Ent. Soc. 42, p. 242; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 209, pl. XII figs. 11-12; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 256.

*Zetobora cicatricosa* BURMEISTER, 1838, Hand. Ent. 2, p. 511; GUÉRIN, 1857, in Ramón de la Sagra, Hist. Cuba Ins., p. 336, pl. XII fig. 5; SAUSSURE, 1864, Mém. Mex. Blatt., p. 213; BRUNNER, 1865, Nouv. Syst. Blatt., p. 291; SAUSSURE, 1870.

Miss. Mex. Orth., p. 107; KIRBY, 1904, Syn. Cat. Orth. 1, p. 158.

*Zetobora perspicua* WALKER, 1868, Cat. Blatt. Br. Mus., p. 46.

*Lauxoblatta emarginata*, HEBARD, 1931, Konowia 10, p. 259; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 23; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 12.  
*Lanzoblatta emarginata*, REHN, 1932, Ark. Zool. 24A, 11, p. 56.

Type: Pará, Brazil.

Distribution: Brazil (Pará); French and British Guiana; Surinam.

Leiden Museum: 1 ♂, km. 14.9, 14.x.1948; 1 ♀, 3rd camp, 18.x.1948; 1 ♀, km. 70 along railway, 6.ii.1942.

GUÉRIN's record of this species from Cuba is incorrect.

The species is closely related to *Lauxoblatta rufis* (Walker) from the Amazon. KIRBY synonymized the two species, but HEBARD (1921, l.c.) questioned the correctness of his conclusion. REHN (1932, p. 57) showed that "the two species are amply distinct". He gives a number of features which make the two distinct and well-characterized species.

#### **Zetoborella** Hebard

1921 *Zetoborella* Hebard, Proc. Acad. Nat. Sci. Phila. 73, p. 210.

Genotype: *Zetoborella gemmicula* Hebard

#### **Zetoborella gemmicula** Hebard

*Zetoborella gemmicula* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 211, pl. XIII figs. 1-2; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 213.

Type: ♂, St. Jean du Maroni, French Guiana (Paris Museum).

Distribution: French Guiana.

#### **Phortioeca** Saussure

1862 *Phortioeca* SAUSSURE, Rev. Zool. (2) 14, p. 232.

Genotype: *Phortioeca peruana* (= *Zetobora peruana*) (Saussure)

**Phortioeca nimbata (Burmeister)**

*Z(etobora) nimbata* BURMEISTER, 1838, Hand. Ent. 2, p. 511.  
*Zetobora nimbata*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 291; SAUSSURE, 1870, Miss. Mex. Orth., p. 105; KIRBY, 1904, Syn. Cat. Orth. x, p. 158.  
*Phortioeca nimbata*, HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 212 pl. XIII fig. 3; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 214; REHN, 1932, Ark. Zool. 24A, 11, p. 57.  
*Zetobora (Phortioeca) castanea* SAUSSURE, 1864, Rev. Zool. (2) 16, p. 343; SAUSSURE, 1864, Mém. Mex. Blatt., p. 216.

Type: Brazil (Pará).

Distribution: Brazil (Pará) and French Guiana.

HEBARD reported this species from a number of localities in French Guiana. Four specimens were captured at La Forestière, on the upper Maroni river, which flows between French Guiana and Surinam.

**CORYDIINAE****Latindia Stål**

1858 *Latindia* STÅL, Kongl. Sv. Freg. Eugenie's Resa, Zool. x, p. 311.

Genotype: *Latindia maurella* Stål

**Latindia dohrniana Saussure & Zehntner**

*Latindia dohrniana* SAUSSURE & ZEHNTNER, 1894, Biol. Centr. Amer. Orth. 1, p. 111, pl. v fig. 7; KIRBY, 1904, Syn. Cat. Blatt., p. 168; HEBARD, 1917, Mem. Amer. Ent. Soc. 2, p. 208; HEBARD, 1919, Mem. Amer. Ent. Soc. 4, p. 120; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 216; HEBARD, 1921, Trans. Amer. Ent. Soc. 47, p. 218; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 218; REHN, 1932, Ark. Zool. 24A, 11, p. 63.

*Latindia castanea* BRUNER, 1906, Journ. N.Y. Ent. Soc. 14, p. 143.

Type: ♀, Guatemala.

Distribution: From southern Mexico to the Guianas and Amazon Basin; Trinidad.

Leiden Museum: 1 ♂, Paramaribo, 13.xi.1946.

This species is probably a synonym of *Latindia castanea* Brunner (see HEBARD, 1921, p. 216 footnote, and REHN & HEBARD, 1927, p. 286).

**Eulissosoma** Hebard

1926 *Eulissosoma* HEBARD, Proc. Acad. Nat. Sci. Phila. 78, p. 215.

Genotype: *Eulissosoma stygia* Hebard.

**Eulissosoma stygia** Hebard

*Eulissosoma stygia* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 216, pl. xvi fig. 10.

Type: ♂, Charvein, lower Maroni river, French Guiana (Hebard collection, type no. 1030).

Distribution: So far, only reported from French Guiana.

**Tairella** Hebard

1926 *Tairella* HEBARD, Proc. Acad. Nat. Sci. Phila. 78, p. 217.

Genotype: *Tairella carinatifrons* Hebard

**Tairella carinatifrons** Hebard

*Tairella carinatifrons* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 217, pl. xvi figs. 11, 12.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 1031).

Distribution: French Guiana.

The type is unique.

**Holocompsa** Burmeister

1838 *Holocompsa* BURMEISTER, Handb. Ent. 2, p. 491.  
 1917 *Holocompsa*, HEBARD, Mem. Am. Ent. Soc. 2, p. 205.

Genotype: *Holocompsa nitidula* (= *Blatta nitidula*) (Fabricius).

**Holocompsa nitidula** (Fabricius)

*B(latta) nitidula* FABRICIUS, 1781, Spec. Ins. 1, p. 345.  
*C(orydia) (Holocompsa) collaris* BURMEISTER, 1838, Handb. Ent. 2, p. 492.  
*Blatta (Holocompsa) collaris*, GUÉRIN, 1857, in Ramón de la Sagra, Hist. Cuba Ins., p. 332, pl. XII fig. 3.  
*Holocompsa collaris*, SAUSSURE, 1864, Mém. Mex., Blatt., p. 151; BRUNNER, 1865, Nouv. Syst. Blatt., p. 347; pl. X figs. 50A-C; BRUNNER, 1892, Proc. Zool. Soc. Lond., 1892, p. 205, pl. 15 fig. 1; SAUSSURE & ZEHNTNER, 1894, Biol. Centr. Amer. Orth., p. 109, pl. III fig. 34.  
*Holocompsa nitidula*, KIRBY, 1904, Syn. Cat. Blattl. 1, p. 169; REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 272; REHN & HEBARD, 1914, Proc. Acad. Nat. Sci. Phila. 66, p. 381; HEBARD, 1917, Mem. Am. Ent. Soc. 2, p. 206, pl. VIII figs. 8-11; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 118; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 217; HEBARD, 1921, ib., p. 251; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 218; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 219; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 281.

Type: ♀, Surinam.

Distribution: This widely distributed domestic species has been recorded from S. Florida to north Brazil; West Indies; Spanish Guinea; Cameroons; French Congo; Ivory Coast; Mauritius.

The sexes differ considerably in coloration. It is a very common species in the West Indies. The following comment on the distribution is made by REHN & HEBARD (1927, p. 282): "Probably a native of the West Indies its West African distribution may be explained by slave ship introduction, while its occurrence in Mauritius may have been due to an extension from a West African colony by slave ships headed to the Mascarenes, which received many African slaves."

According to REHN & HEBARD (1927, p. 281), BURMEISTER'S *H. cyanea* was based on a male of *H. nitidula*. However, PRINCIS & KEVAN (1955, p. 150) examined the type specimen and proved that *cyanea* is a bona fide species, with *H. metallica* Rehn & Hebard as a synonym.

**Oulopteryx** Hebard

1921 *Oulopteryx* HEBARD, Proc. Acad. Nat. Sci. Phila. 73, p. 214.

Genotype: *Oulopteryx meliponarum* Hebard

This genus is readily distinguished from the other Corydiine genera by the appendicular field of the tegmina, which is rolled when at rest.

**Oulopteryx dascilloides** Hebard

*Oulopteryx dascilloides* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 215, pl. xv figs. 5-6; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 219.

Type: ♂, Pariacabo, French Guiana (Paris Museum).

Distribution: French Guiana.

Recorded from St. Jean and St. Laurent du Maroni, on the Maroni river, which forms the frontier between French Guiana and Surinam.

**Buboblatta** Hebard

1919 *Buboblatta* HEBARD, Mem. Amer. Ent. Soc. 4, p. 123.

Genotype: *Buboblatta armata* (= *Latindia armata*) (Caudell).

**Buboblatta geijskesi** nov. spec.

Fig. 5-6

Type: ♂, Temomairem, Toemoek Hoemak, Surinam, D. C. Geijskes, 28.vii.1939; Leiden Museum.

This new species is closely related to the genotype *Buboblatta armata* (Caudell).

♂. — Outline of head pyriform when seen from cephalic side; interocular space slightly broader than the space between the antennal sockets; ocelli small, round; distal joint of maxillary palpi distinctly shorter than fourth (seven-tenths) but much broader; fourth slightly longer than third (ten-ninths).

Pronotum subdeplanate, except convex cephalic part; laterad weakly deflexed; at about one-third of its length from the cephalic

margin there is a transverse depression, which is connected with two broad latero-caudal depressions. Tegmina broad, with ridges between the veins, except in anal field; twelve costal veins; tegmina extending beyond the abdomen by about half their length. Wings with costal veins not clubbed, ulnar vein with two complete branches; length of anal area two-thirds of total length of wing.

Cephalic femora with a few moderately heavy spines, followed by a row of small piliform hairs and two heavy distal spines. Ventrocephalic margins of median and caudal femora as in genotype. Caudal tarsi nearly as long as caudal tibia.

Supra-anal plate strongly transverse, dorsal surface with a deep transverse depression; caudal margin broadly rounded, weakly produced between the cerci, slightly emarginated mesad; weakly concave at base of the cerci; short lateral margins diverging in caudal direction, latero-caudal angle acute (fig. 5).

Subgenital plate convex, outline symmetrically trapezoidal, lateral margins rounding into the nearly straight caudal margin; densely covered with hairs; simple styles inserted at the caudo-lateral angles. From below the base of sinistral cercus a broad, flattened, curved, chitinous process extends caudad; its distal part is widened and has a stout thorn-shaped spine pointing mesad. Mesad from base dextral cercus lies a chitinous plate with a curved ridge ventrad (fig. 6).

Measurements: length of body 9.5, length of pronotum 2.6, width of pronotum 3.2, length of tegmen 11.5, width of tegmen 4.6 mm.

#### **Sphecophila Shelford**

1907 *Sphecophila* SHELFORD, Trans. Ent. Soc. London 1906, p. 515.

Genotype: *Sphecophila polybiarum* Shelford

At first sight this genus shows some resemblance to *Attaphila* Wheel., but closer examination reveals that they differ widely in many important features. The superficial resemblance is, however, not the result of close relationship, but represents a case of convergence caused by similar symbiotic modes of life.

**Sphecophila polybiarum Shelford**

*Sphecophila polybiarum* SHELFORD, 1907, Trans. Ent. Soc. London 1906, p. 518, pl. xxx figs. 10-12; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 216; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 219.

Type: ♂, Ste. Marie, Oyapock, French Guiana (Paris Museum).

Distribution: So far only known from French Guiana (Ste. Marie).

This species has been found in the nest of the wasp *Polybia pygmaea* Fab.

**Attaphila Wheeler**

1900 *Attaphila* WHEELER, Amer. Nat. 34, p. 856.

1917 *Attaphila*, HEBARD, Mem. Am. Ent. Soc. 2, p. 212.

Genotype: *Attaphila fungicola* Wheeler

All the known species of this genus live symbiotically with leaf-cutting ants of the genus *Atta*. Most of them have been captured in the fungus gardens of these ants.

**Attaphila aptera Bolivar**

Fig. 7-8

*Attaphila aptera* BOLIVAR, 1905, Mitteil. Schweiz. Ent. Ges. 11, 3, p. 137.

Type: ♂, Esperanza, Dibulla, Colombia.

Distribution: Colombia; Surinam.

Leiden Museum: 2 ♀♀, 1 ♂, Lelydorp, 20.v.1938.

The specimens were collected in the fungus gardens of an *Atta* species, probably *A. cephalotes*.

They agree well with the short and somewhat inadequate description given by Bolivar. Since I have not seen the type it is possible that our specimen belongs to a new, closely related species.

According to Bolivar the host of *A. aptera* in Colombia is *Atta 8-spinosa* Reiche.

The penultimate tergite, the supra-anal plate and the subgenital plate are illustrated here (figs. 7-8).

Measurements: length of body 2.8, length of pronotum 0.7, width of pronotum 1.3 mm.

## PERISPHAERINAE

**Proscrataea** Burmeister

1838 *Proscrataea* BURMEISTER, Handb. Ent. 2, p. 509.

1864 *Proscrataea*, SAUSSURE, Mém. Mex. Blatt., p. 205.

1865 *Proscrataea*, BRUNNER, Nouv. Syst. Blatt., p. 324.

Genotype: *Proscrataea complanata* (= *Blatta complanata*) (Perty).

**Proscrataea complanata** (Perty)

*Blatta complanata* PERTY, 1830, Delect. Anim. Art., p. 116, pl. xxiii fig. 1.

*Proscrataea complanata*, BURMEISTER, 1838, Handb. Ent. 2, p. 509; BRUNNER, 1865, Nouv. Syst. Blatt., p. 325, pl. ix fig. 43; KIRBY, 1904, Syn. Cat. Orth. 1, p. 195; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 235, pl. xvii fig. 11; REHN, 1932, Ark. Zool. 24A, 11, p. 70.

*P(roscrataea) funebris* BURMEISTER, 1838, Handb. Ent. 2, p. 509; BRUNNER, 1865, Nouv. Syst. Blatt., p. 325; KIRBY, 1904, Syn. Cat. Orth. 1, p. 195.

Type: Minas Geraes, Brazil.

Distribution: Brazil; French Guiana; Surinam; Peru.

Leiden Museum: 1 ♂, Paramaribo, 19.IV.1942; 2 ♀♀, Combé, Paramaribo, in garden, 2.XII.1952; 1 ♀, Combé, Paramaribo, 6.XII.1952; 1 ♀, Combé, Paramaribo, 9.VII.1949; 1 ♂, Lelydorp, H. Heyde, III.1940.

HEBARD (1926, p. 235) classified *P. funebris* Burmeister as a synonym of *complanata*, but REHN (1932, p. 70) is not so sure about this synonymy, as appears from the following quotation: ".... but until more information is available this does not seem warranted, as it is assuming Burmeister incorrectly described the pronotal coloration, which disregards the fact that the next species in his treatment is *complanata*, the pronotal pattern of which was there correctly though very briefly diagnosed." From BURMEISTER's description, REHN has drawn the conclusion that apparently the pronotum is entirely bordered with pale testaceous along the margin. Neither the specimens reported from French and British Guiana, nor the specimens from Surinam in the Leiden Museum, have a pale border along the caudal margin of the pronotum connecting the triangular markings. BURMEISTER was vague in his description of the pronotal marking, and maybe he merely distinguished the two species by the supposed difference in tegminal length and not by the difference in pronotal pattern. He described *complanata* as having "alis corpore brevioribus" and *funebris* as having "alis corpori aequalibus". If this is correct, his *funebris* is based on a specimen of *complanata*.

**Galiblatta** Hebard

1926 *Galiblatta* HEBARD, Proc. Acad. Nat. Sci. Phila. 78, p. 236.

Genotype: *Galiblatta cribrosa* Hebard

**Galiblatta cribrosa** Hebard

*Galiblatta cribrosa* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 237, pl. xvii  
figs. 12-13.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1029).

Distribution: French Guiana and Surinam.

Leiden Museum: 2 ♂♂, Kabel, in bromeliads in a tree, 22.IX.1939; 1 ♀, Kabel,  
on the bank of the Surinam river, 25.IX.1939; 1 ♀, Nassau Mts., 16.II.1949;  
1 ♂, Nassau Mts., 1.III.1949.

Amsterdam Museum: 1 ♀, expedition to Hendrik Summit, Gonggrijp and  
Stahel, 1922.

This species is rather common in the interior of Surinam.

**OXYHALOINAE****Chorisoneura** Brunner

1865 *Chorisoneura* BRUNNER, Nouv. Syst. Blatt., p. 255.

1917 *Chorisoneura*, HEBARD, Mem. Am. Ent. Soc. 2, p. 246.

Genotype: *Chorisoneura nigrirons* (= *Blatta nigrirons*) (Serville).

HEBARD (1926, p. 219) gave a preliminary key to the *Chorisoneura* species from  
the Guianas known at that time.

**Chorisoneura parishii** Rehn

*Chorisoneura parishii* REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 163, pl. 1  
figs. 19-21; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 126; HEBARD, 1926, Proc.

Acad. Nat. Sci. Phila. 78, p. 221; REHN, 1932, Ark. Zool. 24A, 11, p. 64; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 16; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 16; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 8.

Type: ♂, Igarapé-Assu, Pará, Brazil (Acad. Nat. Sci. Phila., type no. 5234).

Distribution: Brazil; French Guiana; Surinam; British Guiana; Venezuela; Panama.

Leiden Museum: 1 ♀, Poeloegoedoe, Marowijne, 30.viii.1939.

#### **Chorisoneura stylata Hebard**

*Chorisoneura stylata* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 222, pl. xvii fig. 1.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila., type no. 5427).

Distribution: So far, only reported from British Guiana.

#### **Chorisoneura fuscipennis Hebard**

*Chorisoneura fuscipennis* HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 131, pl. vi fig. 11; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 223; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 108.

Type: ♂, Porto Bello, Panama (United States Nat. Mus.).

Distribution: Panama and French Guiana.

#### **Chorisoneura galibi Hebard**

*Chorisoneura galibi* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 223, pl. xvii fig. 2.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard's collection, type no. 1026).

Distribution: French Guiana and Surinam.

Leiden Museum: ♀, Lelydorp, 17.v.1939.

This is the first report since the description of the unique type.

♀ - Agrees closely with male except in the following features. Interocular space slightly wider than width between antennal sockets. Tegmina less elongate than in male. Subgenital plate large, the distal part with a medio-longitudinal cleft.

Measurements: length of body 6.6, length of pronotum 1.4, width of pronotum 2.1, length of tegmen 6.5, width of tegmen 2.0 mm.

#### **Chorisoneura pusilla** Hebard

*Chorisoneura pusilla* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 225, pl. xvii fig. 3.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 1032).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, Republiek, Surinam, 9.III.1947.

First report since the description. Our specimen differs from the type in the slightly wider interocular space (nearly equal to the width between the antennal sockets).

#### **Chorisoneura barticae** Hebard

*Chorisoneura barticae* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 219, pl. xiv fig. 13; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 225; REHN, 1932, Ark. Zool. 24A, 11, p. 67.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila., type no. 5370).

Distribution: From Central Amazonia to French and British Guiana.

#### **Chorisoneura gatunae** Hebard

*Chorisoneura gatunae* HEBARD, 1921, Ent. News 32, p. 167, pl. III figs. 3, 4; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 226; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 16.

Type: ♂, Gatun, Canal Zone, Panama (Hebard collection, type no. 763).

Distribution: Panama; Venezuela; French Guiana.

**Chorisoneura wayana** Hebard

*Chorisoneura wayana* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 226, pl. xvii fig. 4; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 382.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1033).

Distribution: French and British Guiana.

This species may be expected to occur in Surinam, since it has been reported from French and British Guiana.

**Chorisoneura elegantula** Hebard

*Chorisoneura elegantula* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 227, pl. xvii fig. 5; REHN, 1932, Ark. Zool. 24A, 11, p. 67.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1034).

Distribution: French Guiana to Central Amazonia.

**Chorisoneura albonervosa** Rehn

*Chorisoneura albonervosa* REHN, 1916, Trans. Am. Ent. Soc. 42, p. 252, pl. xiv figs. 21–22; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 228.

Type: ♂, Pará, Brazil (Acad. Nat. Sci. Phila., type no. 5262).

Distribution: Brazil (Pará); French Guiana.

**Chorisoneura inversa** Hebard

*Chorisoneura inversa* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 229, pl. xvii fig. 6.

Type: ♀, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1028).

Distribution: French Guiana.

**Chorisoneura strigifrons** Hebard

*Chorisoneura strigifrons* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 230, pl. xvii figs. 7-8.

Type: ♀, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1027).

Distribution: French Guiana.

**Chorisoneura splendida** Hebard

*Chorisoneura splendida* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 231, pl. xvii figs. 9-10; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 382.

Type: ♂, Kartabo, Bartica, British Guiana (Acad. Nat. Sci. Phila., type no. 5426).

Distribution: British and French Guiana.

**Chorisoneura surinama** Saussure

*Chorisoneura surinama* SAUSSURE, 1868, Rev. Mag. Zool. (2) 20, p. 100; SAUSSURE, 1870, Miss. Mex. Orth., p. 93; KIRBY, 1904, Syn. Cat. Orth. I, p. 72; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 233.

Type: ♂, Surinam.

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♀, third camp, km. 14.9, 14.x.1948.

In most respects our specimen agrees with descriptions given by SAUSSURE and HEBARD. However, the dark interocular band is clearly defined, as described for the males by HEBARD, and does not have a vague dorsal margin.

Measurements: length of body 11.5, length of pronotum 3.1, width of pronotum 4.6, length of tegmen 12.1, width of tegmen 3.9 mm.

**Chorisoneura guianae** Hebard

*Chorisoneura guianae* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 217, pl. xiv figs. 11-12; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 234.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila., type no. 537).

Distribution: British Guiana, Surinam and French Guiana.

Leiden Museum: sex?, Combé, Paramaribo, 25.III.1941.

The specimen in the Leiden collection is damaged, and its abdomen and some legs are missing. Its coloration agrees completely with that of the type. Distinguishing characters include the sharp demarcation between the dark dorsal part of the head and the light ochraceous-buff ventral face; the pronotum, with broad transparent marginal areas and tawny disc with ochraceous longitudinal markings; and the tessellate appearance of the tegmen.

Measurements: length of pronotum 2.1, width of pronotum 3.5, length of tegmen 10.1, width of tegmen 2.8 mm.

#### **Chorisoneura lata Rehn**

*Chorisoneura lata* REHN, 1916, Trans. Am. Ent. Soc. 42, p. 253, pl. xv figs. 28-30; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 217.

Type: ♂, Pará, Brazil (Acad. Nat. Sci. Phila., type no. 5264).

Distribution: Brazil; French Guiana.

#### **Chorisoneura gracilis (Saussure)**

*Blatta gracilis* SAUSSURE, 1862, Rev. Mag. Zool. (2) 14, p. 167.

*Chorisoneura gracilis*, REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 271.

Type: Brazil.

Distribution: Brazil; British Guiana.

Fig. 7-8. *Attaphila aptera* Bolívar — 7. Subgenital plate of male. — 8. Penultimate tergite and supra-anal plate of male.

Fig. 9. *Chorisoneura heydei* nov. spec. — Subgenital plate of male.

Fig. 10. *Leuropeltis* Hebard — Ventro-cephalic margin of cephalic femur after HEBARD.

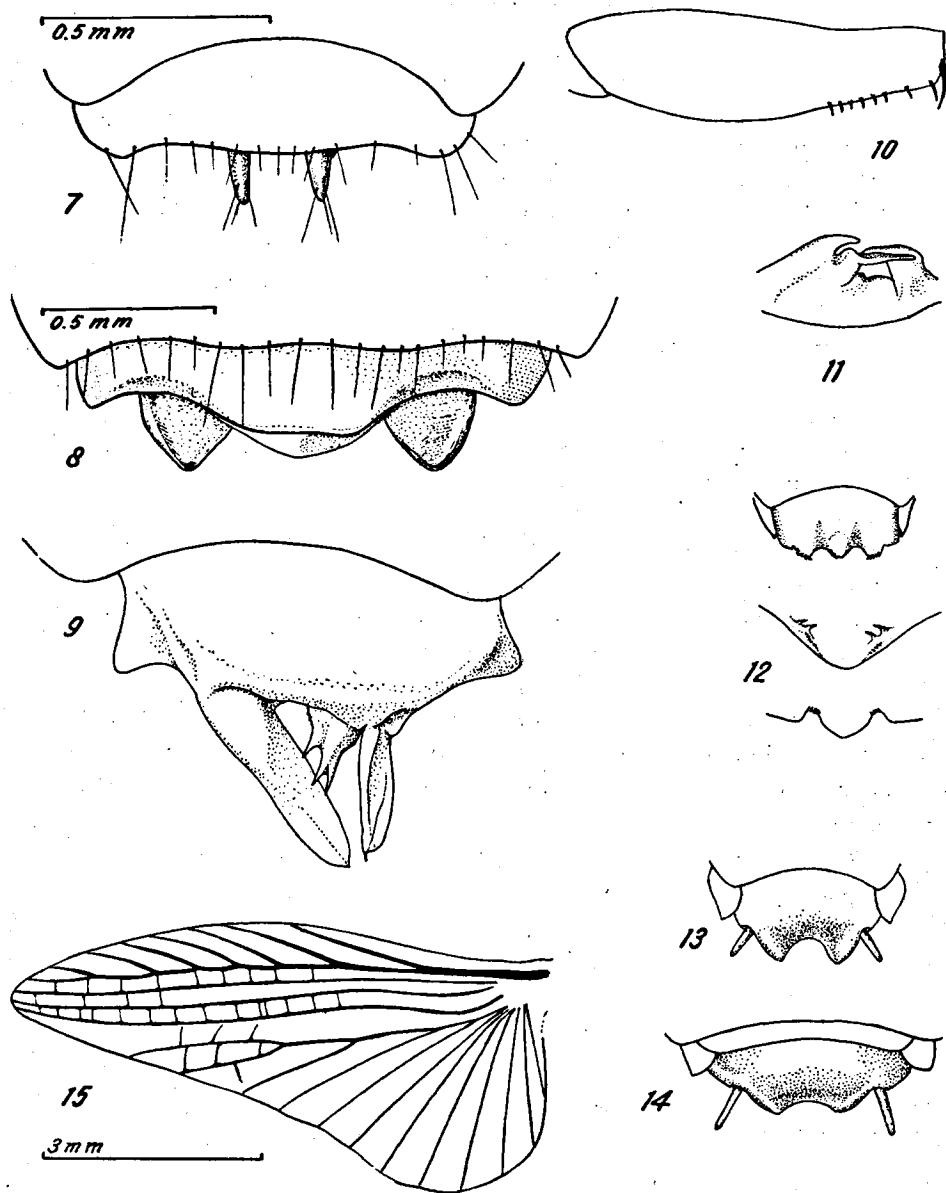
Fig. 11. *Macrophyllodromia nigrigena* Hebard — Ventro-caudal view of distal portion of the subgenital plate of male.

Fig. 12. *Amazonina platystylata* (Hebard) — Ventral dorsal and caudal view of subgenital plate of male, after HEBARD.

Fig. 13. *Lophoblatta pellucida* (Burmeister) — Ventral view of subgenital plate of male after HEBARD.

Fig. 14. *Lophoblatta arawaka* Hebard — Ventral view of subgenital plate of male.

Fig. 15. *Lophoblatta brevis* Rehn — Wing.



**Chorisoneura heydel nov. spec.**

Fig. 9

Type: ♂, Lelydorp, Surinam, H. Heyde, Sept. 1944; Leiden Museum.

Size slightly under medium for the genus, form moderately broad for the genus. Head with interocular space slightly smaller than width between antennal sockets. Maxillary palpi with fifth joint as long as fourth, third longer than fourth.

Pronotum strongly transverse, subelliptical, greatest width mesad.

Tegmina reaching beyond cercal apices, narrowing to sharply rounded apices; about eight costal veins; twelve oblique discoidal sectors.

Subgenital plate has concave lateral margins, caudo-lateral angles produced and sharply rounded over the cercal bases; styles elongate, set in sockets, the dextral the more so; the dextral style tapers from a large and briefly swollen base to acute apex; sinistral style less swollen at base; the margin between the styles is broader than the base of the dextral style; from this interstyolar margin springs a triangular chitinous plate which bears three elongate and a number of microscopic teeth (fig. 9).

Head with face and occiput immaculate, ochraceous buff, the latter tinged with ochraceous tawny. Limbs and ventral surface ochraceous buff; large median areas of ventral surface of abdomen opaque whitish.

Measurements: length of body 9.3, length of pronotum 2.1, width of pronotum 3.8, length of tegmen 10.5, width of tegmen 3.5 mm.

**Plecoptera Saussure**

1864 *Plecoptera* SAUSSURE, Mém. Mex. Blatt., p. 173.  
1917 *Plecoptera*, HEBARD, Mem. Am. Ent. Soc. 2, p. 250.

Genotype: *Plecoptera porcellana* (= *B(latta) porcellana*) (Saussure).

**Plecoptera pulicaria** Saussure & Zehntner

*Plecoptera pulicaria* SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Amer. Orth. 1, p. 86, pl. III fig. 8; KIRBY, 1904, Syn. Cat. Orth. 1, p. 178; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 234.

Type: Bugaba, Panama.

Distribution: Panama; Costa Rica and French Guiana.

**BLATTINAE****Eurycotis** Stål

1874 *Eurycotis* STÅL, Bihang Svensk. Vetensk. Akad. Handl. (13) 2, p. 13.  
1917 *Eurycotis*, HEBARD, Mem. Am. Ent. Soc. 2, p. 165.

Genotype: *Eurycotis rufovittata* (= *Polyzosteria rufovittata*) (Brunner).

**Eurycotis blattooides** Hebard

*Eurycotis blattooides* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 192, pl. xv  
figs. 15–16.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1017).

Distribution: French Guiana; British Guiana; Surinam.

Leiden Museum: 1 ♂, Nassau Mountains, 16.II.1949; 1 ♂, idem, 19.II.1949;  
1 ♂, Wia Wia, 19.XI.1948; 1 ♀, Moengotapoe, 21.IX.1948; 1 ♂, Moengotapoe,  
24.II.1948; 1 ♀, Charlesburg, Paramaribo, 9.VII.1941; 1 ♂, 1 larva, Gansee,  
on bromeliad, 26.IX.1938.

This castaneous-black species can easily be distinguished by the strongly bilobate apex of the supra-anal plate of the male, the lateral tegmina with rounded apices, and the extremely small wings, which are completely concealed by the tegmina.

Measurements: length of body ♂ 20.9–23.1, ♀ 21.5–23.5; length of pronotum ♂ 5.3–5.8, ♀ 6.0–6.4; width of pronotum ♂ 7.8–8.0, ♀ 8.2–8.5; exposed length of tegmina ♂ 4.9–5.1, ♀ 5.2–5.5 mm.

**Pelmatosilpha Dohrn**

1887 *Pelmatosilpha* DOHRN, Ent. Zeit. Stettin 48, p. 410.

Genotype: *Pelmatosilpha alaris* (= *Periplaneta alaris*) (Saussure)

**Pelmatosilpha guianae Hebard**

*Pelmatosilpha guianae* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 191  
pl. xv fig. 14; REHN, 1930, Trans. Am. Ent. Soc. 56, p. 43.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1016).

Distribution: French Guiana; Surinam; Brazil (Amazonas).

Leiden Museum: 1 ♂, Paramaribo, 30.III.1949; 1 ♀, Galibi, 6.IX.1948.

This species differs from *P. alaris* (Saussure) in the immaculate head and pronotum. It may be distinguished from *P. rotundata* by the difference in dorsal surface, which is more convex in the latter, and by the longer cerci.

Measurements: length of body ♂ 31.5, ♀ 34.9; length of pronotum ♂ 8.7, ♀ 8.9; width of pronotum ♂ 12.1, ♀ 12.9; length of tegmen ♂ 22.0, ♀ 23.7 mm.

**Pelmatosilpha lata Hebard**

*Pelmatosilpha lata* HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 361, pl. XIV figs. 1-2; REHN, 1930, Trans. Am. Ent. Soc. 56, p. 43.

Type: ♂, Kartabo, British Guiana (Acad. Nat. Sci. Phila., type no. 5479).

Distribution: Only known from British Guiana.

This species differs from *alaris* and *guianae* in its larger size. It corresponds with *alaris* in that the lateral margins of the produced portions of the male supra-anal plate are scarcely convergent (HEBARD, 1929, p. 36), while in *guianae* these margins are decidedly convergent.

**Periplaneta Burmeister**

1838 *Periplaneta* Burmeister, Handb. Ent. 2, p. 502.

Genotype: *Periplaneta americana* (= *Blatta americana*) (Linnaeus)

**Periplaneta americana** (Linnaeus)

**Distribution:** Cosmopolitan.

Leiden Museum: 1 ♂, Paramaribo, 30.xi.1938; 1 ♂, Paramaribo, 20.vi.1939.  
 Amsterdam Museum: 1 ♂, 2 ♀♀, 1 larva, Paramaribo, J. J. Halfhide; 1 ♂, Surinam, A. van Genderen, 1929.

As in all tropical countries, *P. americana* and *P. australasiae* are domestic pests.

**Periplaneta australasiae** (Fabricius)

**Distribution:** Cosmopolitan.

Leiden Museum: 1 ♂, Paramaribo, x.1950; 1 ♂, 2 ♀♀, Potribo, 13.xii.1954; 1 ♂, 1 ♀, Lelydorp, H. Heyde, i.1940; Janemale, Litani, 6.viii.1937; 1 ♀, Republiek, 9.ix.1948; 1 ♂, in luggage, Wanecreek, 25.x.1948.  
 Amsterdam Museum: 2 ♀♀, Paramaribo, H. Halfhide, 1924.

**Periplaneta brunnea** Burmeister

*P(eriplaneta) brunnea* BURMEISTER, 1838, Hand. Ent. 2, p. 503; REHN, 1910, Bull. Am. Mus. Nat. Hist. 28, p. 75; REHN & HEBARD, 1914, Proc. Acad. Nat. Sci. Phila. 66, p. 381; REHN, 1916, Trans. Am. Ent. Soc. 42, p. 238; HEBARD, 1917, Mem. Am. Ent. Soc. 2, p. 182, pl. vii figs. 12–16; HEBARD, 1919, Trans. Am. Ent. Soc. 45, p. 115; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 103; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 208, 285; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 142; HEBARD, 1921, ib., p. 212; CAUDELL, Un. Iowa Stud. Nat. Hist. 10, 1, p. 22; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 194; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 189; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 396; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 20; PRINCIS, 1952, Lunds Univ. Årsskr. (N.F.) 48, p. 5; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 151.  
*P(eriplaneta) truncata* KRAUSS, 1892, Zool. Anzeig. 15, p. 165.

**Type:** ♂, Chile; ♀, British Guiana.

**Distribution:** Circumtropical.

This species can be as common as *P. americana* and *australasiae*, and also lives associated with human habitations.

## NICTIBORINAE

**Nyctibora** Burmeister

1838 *Nyctibora* BURMEISTER, Handb. Ent. 2, p. 501.

Genotype: *Nyctibora sericea* Burmeister

**Nyctibora tomentosa** (Serville)

*Blatta tomentosa* SERVILLE, 1839, Hist. Nat. Ins. Orth., p. 86.

*Nyctibora latipennis* BRUNNER, 1865, Nouv. Syst. Blatt., p. 146.

*Nyctibora tomentosa*, SAUSSURE, 1870, Miss. Mex. Orth., p. 69; KIRBY, 1904, Syn. Cat. Orth. 1, p. 108; REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 269; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 194; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 32.

Type: ♂, Surinam.

Distribution: French and British Guiana; Surinam; Bolivia.

Leiden Museum: 1 ♂, Hebiwerie, Coppename Exp., 7.xii.1943; 1 ♂, Langsoela, Coppename Exp., 23.xii.1943; 1 ♀, Coppename, first camp, Coppename Exp., 28.xii.1943; 1 ♂, Nassau Mts., 9.iii.1949; 1 ♀, Nassau Mts., 7.iii.1949; 1 ♂, 1 ♀, km. 14.6, 11.x.1949; 1 ♀, same data, 24.x.1949.

This species was recorded by HEBARD (1921, p. 205) from Gourdonville and Charvein, French Guiana, as *N. holosericea* Burmeister, and by REHN (1906) from British Guiana as *tomentosa*. In the original description SERVILLE mentioned the antennae as being annulate. HEBARD (1926, p. 194) recorded specimens which agreed in all characters except the annulation of the antennae, and he supposed this character to be the result of discoloration. PRINCIS (1951, p. 32), however, reported a specimen in the Copenhagen collection which has a yellow ring of 12 segments in the middle of the left antenna (the right is damaged). He supposes that the specimens of HEBARD have been incorrectly determined and may belong to *N. tenebrosa* Walk. In that species, however, the average size is smaller than in *tomentosa*. None of the specimens in the Leiden Museum exhibit an annulate antenna.

Measurements: length of body ♂ 35.1–40.3, ♀ 37.2–40.2; length of pronotum ♂ 8.3–9.0, ♀ 9.1–9.7; width of pronotum ♂ 11.9–13.2, ♀ 13.1–14.2; length of tegmen ♂ 39.5–40.1, ♀ 38.2–41.8 mm.

**Nyctibora tenebrosa** Walker

*Nyctibora tenebrosa* WALKER, 1868, Cat. Blatt. Br. Mus., p. 147; KIRBY, 1904, Syn. Cat. Orth. I, p. 108; HEBARD, 1926, Proc. Acad. Nat. Sci., Phila. 78, p. 195, pl. XVI fig. 1.

Type: ♀, Demerara.

Distribution: French Guiana; Surinam and British Guiana.

Leiden Museum: 1 ♂, Republiek, 26.XII.1946; 1 ♀, Republiek, 15.XI.1951; 1 ♀, Paramaribo, x.1939; 1 ♀, Sectie O, 13.XI.1941; 1 ♀, Toekoemoetoe, Schmidt, 11.IX.1944.

In *N. tenebrosa* the wings are smaller than in *N. tomentosa*, but their variability is rather wide. At present the following quotation from HEBARD (1926, p. 195) still holds: "Both are sufficiently variable to make the validity of *tenebrosa* uncertain until much more material can be examined."

Measurements: length of body ♂ 24.5, ♀ 24.4–28.5; length of pronotum ♂ 7.2, ♀ 7.8–8.5; width of pronotum ♂ 10.4, ♀ 11.2–11.4; length of tegmen ♂ 27.3, ♀ 29.8–31.7 mm.

**Nyctibora dichropoda** Hebard

*Nyctibora dichropoda* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 195, pl. XVI fig. 2.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1018).

Distribution: This species is only known from French Guiana (type locality).

According to HEBARD (1926, p. 195) *N. dichropoda* is characterized by the "strikingly pale extensor surfaces of the tibiae and the simple, roundly produced male supra-anal plate."

**Megaloblatta** Dohrn

1887 *Megaloblatta* DOHRN, Stett. Ent. Zeit. 48, p. 408.

Genotype: *Megaloblatta blaberoides* (= *Epilampra blaberoides*) (Walker).

**Megaloblatta insignis** (Serville)

*Kakerlac insignis* SERVILLE, 1839, Hist. Nat. Ins. Orth., p. 67.

*Blatta insignis*, BLANCHARD, 1840, Hist. Ins. 3, p. 6, pl. 1 fig. 2.

*Periplaneta insignis*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 237; KIRBY, 1904, Syn. Cat. Orth. 1, p. 142.

*Megaloblatta insignis*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 197.

Type: ♀, Cayenne.

Distribution: French Guiana.

According to HEBARD (1926, p. 197) the following characters are found in this species: interocular space in the male narrow (1.2 mm), femora and tibiae ferruginous, and tarsi chestnut brown. It is one of the largest cockroaches, with tegmina exceeding 75 mm in length. HEBARD is not quite sure about the specific value of the limb coloration.

**Paratropes** Serville

1839 *Paratropes* SERVILLE, Ins. Orth., p. 117.

1865 *Paratropa*, BRUNNER, Nouv. Syst. Blatt., p. 148.

1908 *Paratropes*, SHELFORD, Genera Insect. 74, p. 3.

Genotype: *Paratropes lycooides* Serville.

**Paratropes elegans** (Burmeister)

*Ph(oraspis) elegans* BURMEISTER, 1838, Handb. Ent. 2, p. 493.

*Paratropes subsericeus* SAUSSURE, 1862, Rev. Zool. (2) 14, p. 229; SAUSSURE, 1864, Mém. Mex. Blatt., p. 63, pl. 1 fig. 8; REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 269.

*Paratropa elegans*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 150.

*Paratropa subsericea*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 152.

*Paratropes bivittata* WALKER, 1868, Cat. Blatt. Br. Mus., p. 150..

*Paratropes elegans*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 109; REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 160; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 206; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 197; ROCHA E SILVA, 1957, Bol. Mus. Nac. Rio de Janeiro (n.s.) 150, p. 4, figs. 1-5.

Type: Surinam?

Distribution: Surinam; French and British Guiana; Brazil.

Leiden Museum: 1 ♂, Lelydorp, Carillio, 18.vi.1939; 1 ♀, Table Mountain, Schmidt, VIII-IX.1944.

Measurements: length of body ♂ 15.3, ♀ 16.6; length of pronotum ♂ 4.9, ♀ 5.6; width of pronotum ♂ 8.6, ♀ 9.5; length of tegmen ♂ 21.1, ♀ 22.2 mm.

#### **Paratropes phalerata (Erichson)**

*Blatta (Nyctibora) phalerata* ERICHSON, 1848, in Schomb., Brit. Guiana 3, p. 580.  
*Paratropes lycus* SAUSSURE, 1862, Rev. Zool. (2) 14, p. 228; SAUSSURE, 1864, Mém. Mex. Blatt., p. 59, pl. 1 fig. 6.

*Paratropes phalerata*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 152.  
*Paratropes phalerata*, KIRBY, 1904, Syn. Cat. Orth. x, p. 110; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 89, footnote 114; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 197; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 365.

Type: "Guiana".

Distribution: Brazil; British and French Guiana; Trinidad.

#### **Pseudischnoptera Saussure**

1869 *Pseudischnoptera* Saussure, Rev. Zool. (2) 21.

Genotype: *Pseudischnoptera lineata* (= *Blatta lineata*) (Olivier).

#### **Pseudischnoptera lineata (Olivier)**

*Blatta lineata* OLIVIER, 1789, Encycl. Méthod., Ins. 4, p. 17; BEAUVOIS, 1805, Ins. Afr. Amér., p. 228, Orth. pl. 11c fig. 5; SERVILLE, 1839, Ins. Orth., p. 98.  
*Thrysocera lineata*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 126.  
*Pseudischnoptera lineata*, SAUSSURE, 1870, Miss. Mex. Orth., p. 67; KIRBY, 1904, Syn. Cat. Orth. x, p. 86; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 204, pl. xi fig. 14; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 197; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 199.

Type: No locality given by OLIVIER.

Distribution: French Guiana.

This species shows no pilosity, and the tarsal claws are not as asymmetrical as in most Nyctiborinae.

## EPILAMPRINAE

### **Epilampra** Burmeister

1838 *Epilampra* BURMEISTER, Handb. Ent. 2, p. 504.

Genotype: *Epilampra maculicollis* (= *Blatta maculicollis*) (Serville).

### **Epilampra abdomen-nigrum** (De Geer)

*Blatta abdomen-nigrum* DE GEER, 1773, Mém. Hist. Ins. 3, p. 504, pl. XIV fig. 5.  
*Blatta livida* DE GEER, 1773, Mém. Hist. Ins. 3, p. 538, pl. XXXIII fig. 6.  
*E(pilampra) brevis* BRUNNER, 1892, Proc. Zool. Soc. London, p. 203, pl. xv fig. 3; BRUNNER, 1906, Journ. N. Y. Ent. Soc. 14, p. 141.  
*Epilampra maya* REHN, 1902, Trans. Am. Ent. Soc. 29, p. 3; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 97.  
*Epilampra abortivipenna* REHN, 1903, Trans. Am. Ent. Soc. 29, p. 273.  
*Epilampra abortivipennis*, REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 269.  
*Epilampra maya brachyptera* HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 210, pl. XIII figs. 9–10.  
*Epilampra abdomen-nigrum*, SHELFORD, 1907, Trans. Ent. Soc. London, p. 460; REHN, 1916, Trans. Am. Ent. Soc. 42, p. 237; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 206; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 198; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 218, pl. XVII figs. 2–3; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 365; HEBARD, 1929, ib., p. 396; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 117; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 155.

Type: ♂, Surinam.

Distribution: Brazil; French and British Guiana; Surinam; Panama; Nicaragua; Costa Rica; Mexico; Jamaica; Puerto Rico; Guadeloupe; Dominica; St. Lucia; St. Vincent; Grenada; Trinidad.

Leiden Museum: 1 ♀, Paramaribo, W. C. van Heurn, 1911; 1 ♀, Paramaribo, x.1950; 2 ♂♂, Lelydorp, Surinam, 13.i.1940; 2 ♂♂, 1 ♀, Nanni, Nickerie, 28.ix.1941; 1 ♀, Albina, 2.xi.1948; 1 ♀, Coronie road, 23.xii.1948.

*E. abdomen-nigrum* is a strongly variable species. The size and the development of the wing, in particular, show great variability. In some specimens the tegmina extend beyond the apex of the abdomen; this holds for male as well as for female specimens. In other specimens, however, the alar organs are distinctly abbreviated.

In some of the Surinam specimens from the Leiden collection, the tegmina and wings project just beyond the abdominal apex; in others the tegmina fall short of the abdominal apex by a distance of a few millimetres.

Measurements: length of body ♂ 16.2–20.2, ♀ 21.2–27.6; length of pronotum ♂ 4.6–5.3, ♀ 5.6–6.7; width of pronotum ♂ 6.2–6.9, ♀ 7.3–8.7; length of tegmen ♂ 14.2–16.2, ♀ 16.3–20.1 mm.

### **Epilampra grisea (De Geer)**

*Blatta grisea* DE GEER, 1773, Mém. Hist. Ins. 3, p. 540, pl. XIV fig. 9.

*Epilampra grisea*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 125; SHELFORD, 1907, Trans. Ent. Soc. London, p. 462; REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 160; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 206; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 198; REHN, 1932, Ark. Zool. 24A, 11, p. 54; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 2.

*Epilampra lucifuga* REHN, 1903, Trans. Am. Ent. Soc. 29, p. 271; REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 270.

Type: Surinam.

Distribution: Surinam; French Guiana; British Guiana; Brazil (Manaos); Venezuela.

Leiden Museum: 1 ♀, Paramaribo, Botanical Garden, x.1950; 1 ♀, Lelydorp, 15.xii.1938; 1 ♂, Lelydorp, H. Heyde, VIII.1944; 1 ♂, 1 ♀, Republiek, 5.ix.1948; 1 ♀, Republiek, 4.ix.1948; 3 ♀♀, Republiek, 3.ix.1948; 1 ♀, Republiek, 29.v.1955; 1 ♀, Republiek, 30.iv.1943; 1 ♀, Zanderij, 24.III.1946; 1 ♀, Matta, Br., 2.II.1955; 3 ♂♂, 1 ♀, Potribo, 13.xii.1954; 1 ♂, Groningen, W. C. van Heurn, 1911; 1 ♂, Nanni, Nickerie, 2.x.1941; 1 ♂, Tafelberg, Schmidt, VIII–IX.1944; 1 ♀, Toekemoetoe, Saramacca, Schmidt, 11.IX.1944; 1 ♂, Herminadorp, Marowijne, 8.II.1949; 1 ♀, Zwampenkamp, 21.II.1948.

According to HEBARD (1926, p. 198), *E. arctata* Walker from British Guiana is probably a synonym.

*E. grisea* (De Geer) is a very common cockroach in Surinam. It can easily be recognized by the paired trigonal patches on the pronotum.

**Epilampra guianae** Hebard

*Epilampra guianae* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 198, pl. xvi fig. 3.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1020).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, Lelydorp, H. Heyde, viii.1941; 1 ♂, Moengotapoe, 24.ix.1948; 1 ♂, Herminadorp, Marowijne, 9.ii.1949; 1 ♂, Wia Wia, 23.xi.1948; 1 ♀, Republiek, 3.ix.1948; 1 ♂, Republiek, 5.ix.1948; 1 ♂, Wanecreek, 29.ix.1948; 1 ♂, Wanecreek, 2.x.1948; 1 ♀, Wanecreek, 30.ix.1948; 1 ♀, Zwampenkamp, 13.xi.1948; 1 ♂, idem, 14.xi.1948; 1 ♂, idem, 15.xi.1948; 1 ♂, idem, 17.xi.1948; 1 ♀, idem, 19.xi.1948; 2 ♂♂, 2 ♀♀, third camp, km. 14.9, 14.x.1948; 1 ♂, 2 ♀♀, third camp, 24.x.1948; 1 ♂, third camp, 26.x.1948; 1 ♂, 1 ♀, Djai Kreek, 10.x.1948.

*Epilampra guianae* is one of the most common *Epilampra* species in Surinam and is often captured on light. It is related to *E. crossea* Saussure, but according to HEBARD it can be distinguished by "its larger size, more uniform coloration, pronotum with minute punctulations all dark brown, tegmina with numeral trunk not as much darkened, and adjacent portion of marginal field without a pale streak."

*E. cinerascens* Brunner differs from *guianae* in "the smaller size, testaceous head and apparently immaculate margins of the tegmina and wings" (HEBARD, 1926, p. 199).

Measurements: length of body ♂ 15.5–20.3, ♀ 21.5–25.1; length of pronotum ♂ 3.9–4.8, ♀ 4.9–5.7; width of pronotum ♂ 4.9–5.6, ♀ 5.9–6.8; length of tegmen ♂ 16.7–18.4, ♀ 20.1–23.3 mm.

**Epilampra crossea** Saussure

*Epil(ampra) crossea* SAUSSURE, 1864, Rev. Mag. Zool. 16, p. 323; SAUSSURE, 1864, Mém. Hist. Mex. Blatt., p. 133; KIRBY, 1904, Syn. Cat. Orth. 1, p. 126; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 200.

Type: ♀, Brazil.

Distribution: Brazil; French Guiana; Surinam.

Leiden Museum: 1 ♀, Potrivo, 13.xii.1954.

First report from Surinam. This specimen corresponds with the individuals reported by HEBARD from St. Jean du Maroni, French Guiana, in that the whitish streak laterad of the humeral trunk continues on the sides of the pronotum, and in that the dark punctulations inside this streak are tawny instead of black.

Measurements: length of body 18.1, length of pronotum 4.1, width of pronotum 5.3, length of tegmen 19.1 mm.

**Epilampra azteca** Saussure

*Epilampra azteca* SAUSSURE, 1868, (in part), Rev. Mag. Zool. (2) 20, p. 356; SAUSSURE, 1870; (in part), Miss. Mex. Orth., p. 82, pl. II fig. 45; SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Amer., Orth. I, p. 65; GIGLIO-TOS, 1898, Boll. Mus. Zool. Torino 13, 311, p. 7; REHN, 1902, Trans. Am. Ent. Soc. 29, p. 3; REHN, 1903, ib., p. 271; KIRBY, 1904, Syn. Cat. Orth. I, p. 125; REHN, 1916, Trans. Am. Ent. Soc. 42, p. 237; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 96; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 206; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 200; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 365; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 117; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 156.

Type: Mexico.

Distribution: Mexico; Panama; Colombia; Ecuador; Brazil (Pará); French Guiana; Surinam; Trinidad.

Leiden Museum: 1 ♀, Guyana goudplacer, W. C. van Heurn, X.1911; 1 ♀, Nassau Mts., 3.III.1949; 1 ♀, Ritsbos, km. 14.9, 14.X.1948.

These specimens are the first to be reported from Surinam. *E. azteca* can readily be distinguished from the other *Epilampra* species by its typical pronotal markings and small size.

Measurements: length of body 17.6–21.7, length of pronotum 4.3–4.9, width of pronotum 5.4–6.1, length of tegmen 18.0–19.6 mm.

**Epilampra opaca** Walker

*Epilampra opaca* WALKER, 1858, Cat. Blatt. Br. Mus., p. 206; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 201; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 368.

Type: ♀, Demerara, British Guiana (British Museum).

Distribution: French and British Guiana; Surinam.

Leiden Museum: 1 ♀, Nassau Mts., 12.II.1949; 1 ♀, Nassau Mts., 14.II.1949; 1 ♀, Wia Wia, 20.XI.1948; 1 ♂, Moengotapoe, 31.X.1948; 1 ♀, Savannah, km. 11.6, 12.X.1948; 1 ♂, Lelydorp, H. Heyde, III.1944.

First reports from Surinam.

This species has been recorded as *E. maculicollis* by REHN (1906) from British Guiana, and by HEBARD (1921) from French Guiana.

HEBARD (1926, p. 201) says: "This species may prove to be a synonym of the Brazilian *E. maculicollis* (Serville), and the Ecuadorean *E. stigmosa* Giglio-Tos may fall in the same synonymy. Numerous distinct, though easily confused, species are known to belong to this group and, until a better concept of the distribution and individual variation within these is formed, we believe it best to use the name *opaca*."

Measurements: length of body ♂ 20.9, ♀ 28.4–29.1; length of pronotum ♂ 4.7, ♀ 5.9–6.7; width of pronotum ♂ 6.2, ♀ 7.6–8.5; length of tegmen ♂ 20.7, ♀ 25.1–28.1 mm.

#### **Epilampra conspersa Burmeister**

*E(pilampra) conspersa* BURMEISTER, 1838, Handb. Ent. 2, p. 505; BRUNNER, 1865, Nouv. Syst. Blatt., p. 190; SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Amer. Orth. 1, p. 64, pl. IV fig. 38 (Guianan specimen only); KIRBY, 1904, Syn. Cat. Orth. 1, p. 126; REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 160; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 206; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 201; PRINCIS, 1946, Förh. Kungl. Fysiogr. Sällsk. Lund 16, p. 153.

Type: Brazil (Pará).

Distribution: Brazil; French Guiana; Surinam.

Leiden Museum: 1 ♂, Wilhelmina Mts., 31.VIII.1943; 1 ♀, Lelydorp, 10.IV.1939.

First report from Surinam.

Measurements: length of body ♂ 22.4, ♀ 25.4; length of pronotum ♂ 5.0, ♀ 6.2; width of pronotum ♂ 6.5, ♀ 7.7; length of tegmen ♂ 22.5, ♀ 28.2 mm.

#### **Epilampra cinnamomea Hebard**

*Epilampra cinnamomea* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 202, pl. XVI fig. 4.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1021).

Distribution: Only known from French Guiana.

According to HEBARD (1926, p. 202) *E. cinnamomea* is "extremely close to *E. conspersa* (Burmeister), differing only in the general cinnamon instead of buffy brown coloration, mikado brown instead of mummy brown microscopic dots of

head and pronotum, ferruginous instead of blackish brown margins of the ventral surface of the pronotal lateral lobes and marginal field of the tegmina and proximal abdominal sternites with triangular yellowish markings instead of an immaculate ventral surface of the abdomen."

It is to be expected that the distribution of this species extends into Surinam, since it has been collected on the French side of the Marowijne river (= Maroni).

#### **Epilampra taira Hebard**

*Epilampra taira* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 204, pl. xvi fig. 5.

Type: ♀, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1022).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♀, Nassau Mts., 3.III.1949.

First report from Surinam.

*E. taira* is a large and easily distinguishable species. The pronotal disc is dark in the centre, but the lateral margins are pale with a large number of dark punctae. The tegmina are finely maculate, except as regards the proximal marginal fields, which are also pale with numerous punctae; the maculae at the base of the humeral trunk are darker than elsewhere on the tegmina.

Measurements: length of body 35.6, length of pronotum 8.6, width of pronotum 11.4, length of tegmen 32.1 mm.

#### **Epilampra fusca Brunner**

*Epilampra fusca* BRUNNER, 1865, Nouv. Syst. Blatt., p. 170.

Type: Venezuela.

Distribution: Venezuela; British Guiana.

The measurements of the specimen reported by REHN from British Guiana are: length of body 41.5, length of pronotum 9.2, greatest width of pronotum 11.5, length of tegmen 38.5, greatest width of tegmen 12 mm.

#### **Epilampra egregia Hebard**

*Epilampra egregia* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 205, pl. xvi fig. 6.

Type: ♀, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1023).

Distribution: French Guiana; Surinam.

Leiden Museum: 1 ♀, Nassau Mts., 14.II.1949.

Amsterdam Museum: 1 ♂, Suriname, Tresling, 1908.

Only the highly modified female of this species was known. Its tegmina are reduced to squamiform appendages and the wings are completely absent; the face is flat and roughened. The symmetrically trapezoidal pronotum has eight strong, rounded, longitudinal rugae on the caudal margin. The caudal margins of the meso- and metanotum and the first six tergites also show decided longitudinal rugae.

♂. A description of the previously unknown male follows here.

Size medium, form depressed. Head with facial portion not as flattened as in female; area between eyes and ocellar spots strongly impresso-punctate; between the antennal sockets runs a transverse, slightly V-shaped sulcus; ventrally to this sulcus the face is coarsely roughened and punctate. Ocellar spots clearly indicated. Interocular space about half the width between the antennal sockets. Pronotum cucullate, considerably smaller than in female, its lateral portions deflexed; the cephalic and lateral margins evenly convex to the latero-caudal angles, which are broadly rounded into the caudal margin; caudal margin broadly convex, showing a slight production mesad and at the "shoulders"; caudal margin between the "shoulders" has eight strong, longitudinal, shining rugae. Disc of pronotum impresso-punctate.

Tegmina and wings fully developed, broad, projecting beyond apex of supra-anal plate by about pronotal length. The tegminal veins raised, except the sunken anal vein. Abdominal tergites with latero-caudal angles feebly produced, rounded rectangulate. Supra-anal plate subchitinous, its lateral margins convex, convergent to the bilobate apex. Subgenital plate asymmetrical, dextral side of the margin concave from the insertion of the dextral style to the transversely subtruncate mesal margin; the sinistral side between the insertion of the sinistral style and the mesal margin is nearly straight, a semicircular area between the insertion of the sinistral style and the caudal margin is subchitinous and yellowish. Cephalic femora with ventro-cephalic margin armed with a few (4) heavy, well-spaced spines, succeeded by a row of small, piliform spines, with one heavy elongate distal spine.

Face dark blackish-brown; vertex, ocellar spots, mouth parts and sulcus between the antennal sockets buffy. Pronotum india-buff with tawny and blackish mummy-brown punctae and rugae; tegmina subhyaline, old ivory with small tawny dots scattered over the surface; the anal sulcus and axillary veins tawny; dorsal surface of abdomen old ivory, the tergites with small blackish-brown cephalo-lateral dots near the margin of the foregoing tergite; ventral surface of abdomen chestnut-brown with broad ochraceous buff lateral margins.

The measurements of the male are: length of body 18.6, length of pronotum 4.4, width of pronotum 6.5, length of tegmen 19.5, width of tegmen 6.2 mm.

The characters of the female specimen agree completely with those of the type described by HEBARD. There are only minor differences in the measurements, these being: length of body 21.5, length of pronotum 5.5, width of pronotum 10.4, greatest exposed (internal) length of tegmen 4.5, width of tegmen 2.8, greatest width of abdomen 12.5 mm.

**Hyporhicnoda** Hebard

1919 *Hyporhicnoda* HEBARD, Mem. Am. Ent. Soc. 4, p. 98.

Genotype: *Hyporhicnoda reflexa* (= *Rhincnoda reflexa*) (Saussure).

**Hyporhicnoda maronensis** Hebard

*Hyporhicnoda maronensis*, HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 207, pl. XII fig. 5; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 207.

Type: ♀, La Forestière, upper Maroni river, French Guiana (Paris).

Distribution: French Guiana; Surinam.

Amsterdam Museum: 2 ♀♀, Lucie Rivier area, Exp., VII-VIII. 1926.

First report from Surinam.

The two specimens from the Lucie Rivier agree with HEBARD's type. They also show the pale suffusions on the cephalic margin of the pronotum. Their measurements agree fairly well with those of the type; length of body 26.5-29.7, length of pronotum 8.4-8.5, width of pronotum 11.9-12.5, greatest width of body 14.5 mm.

**Leurolestes** Rehn & Hebard

1914 *Wattenwyliella* REHN & HEBARD, Ent. News 25, p. 217 (May; not of Carl, April 1914).

1914 *Leurolestes* REHN & HEBARD, Proc. Acad. Nat. Sci. Phila. 66, p. 379.

1917 *Leurolestes*, HEBARD, Mem. Am. Ent. Soc. 2, p. 160.

Genotype: *Leurolestes pallidus* (= *Nauphoeta pallida*) (Brunner).

**Leurolestes pallidus** (Brunner)

*Blatta laevigata* SERVILLE (not of Beauvois, 1805), 1839, Hist. Nat. Ins. Orth., p. 98.

*N(auphoeta) pallida* BRUNNER, 1865, Nouv. Syst. Blatt., p. 286.

*Nauphoeta marginalis* WALKER, 1868, Cat. Blatt. Br. Mus., p. 41.

*Phoetalia pallida*, KIRBY, 1904, Syn. Cat. Orth. I, p. 116.

*Phoetalia laevigata*, REHN & HEBARD (not *Blatta laevigata* of Beauvois, 1805), 1910, Ent. News 21, p. 103; REHN, 1910, Bull. Am. Mus. Nat. Hist. 28, p. 73.

*Phaetalia laevigata*, SHELFORD (not *Blatta laevigata* of Beauvois, 1805), 1910, Gen. Ins. fasc. 101, Blattidae, Epilamprinae, p. 8.  
*Wattenwyliella pallida*, REHN & HEBARD, 1914, Ent. News 25, p. 216.  
*Leurolestes pallidus*, REHN & HEBARD, 1914, Proc. Acad. Nat. Sci. Phila. 66, p. 379; HEBARD, 1917, Mem. Am. Ent. Soc. 2, p. 161, pl. vi figs. 9-10; HEBARD, 1921, Trans. Am. Ent. Soc. 47, p. 135; HEBARD, 1924, Proc. Acad. Nat. Sci. Phila. 76, p. 128; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 203.  
*Phaetalia pallida*, PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 157.

Type: ♂, Cuba.

Distribution: REHN & HEBARD (1927, p. 203) write as follows concerning the distribution: "Outside the West Indies the species is known from southern Florida (Key West and Key Largo), Central America (Mexico, Guatemala), Brazil and the Canary Islands (Teneriffe). There appears every probability that its presence in Florida, Central America, Brazil and the Canaries is due to accidental introduction from the West Indies, which we feel are the original home of the species."

Leiden Museum: 1 ♀, Paramaribo, Botanical Garden, 3.II.1942; 1 ♂, Lelydorp, flying at light, H. Heyde, XII.1944; 1 ♂, second base camp, Coppenename Exp., 3.X.1943; 1 ♀, Potribo, 13.XII.1954.

#### **Notolampra Saussure**

1862 *Notolampra* SAUSSURE, Rev. Zool. (2) 14, p. 227.

Genotype: *Notolampra cassidea* (= *Phoraspis cassidea*) (Burmeister).

#### **Notolampra punctata (Saussure)**

*T(horax) punctata* SAUSSURE, 1872, Mélang. Orth. 4, p. 125.  
*Notolampra punctata*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 111; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 198.

Type: ♀, Brazil.

Distribution: Brazil; French Guiana.

## PSEUDOMOPINAE

## KEY OF THE KNOWN GUIANAN GENERA OF PSEUDOMOPINAE

This preliminary key has an artificial character, and is only intended as an aid to locating the Guianan genera of the subfamily.

1. Antennae in proximal half hirsute to plumose . . . . . *Pseudomops* Serville
- Antennae in proximal half not hirsute to plumose. . . . . 2
2. Intercalated triangle very broad and conspicuous, curling in a tube when the wings are at rest. (Ulnar vein with one complete branch, and numerous transverse veinlets, and bases of these toward fold of the wing) . . . . . *Dasyblatta* Hebard
- Intercalated triangle not curling in tube when the wings are at rest . . . . . 3
3. Ulnar vein of wing with all rami complete, reaching to distal margin of wing . . . . . 4
- Ulnar vein of wing with distal rami complete and reaching to distal margin of wing, proximal rami incomplete and short, diverging toward dividing vein and not reaching distal margin of wing. (Ischnopterae) . . . . . 22
4. Ventro-cephalic margin of cephalic femora with a row of spines which decrease suddenly in size mesad, those distad and before apical group being piliform, termed "type B", or armed with a row of spines which are entirely piliform . . . . . 5
- Ventro-cephalic margin of cephalic femora with a row of spines which decrease gradually in size, termed "type A". (Arolia present). . . . . 11
- Ventro-cephalic margin of cephalic femora unarmed except in distal third, where it is supplied with short, stout spines, terminating in two heavier, elongate distal spines (fig. 10). Discoidal sectors of tegmina strongly oblique). . . . . *Leuropeltis* Hebard
5. Interocular space showing a transverse ridge (fig. 28) (tarsal claws un-specialized; tegmina with discoidal sectors oblique; dorsal surface of male strongly specialized) . . . . . *Doradoblatta* nov. gen.
- Interocular space showing no ridge . . . . . 6
6. Pulvilli and arolia absent. (Limbs stout, ventro-cephalic margin of cephalic femora has a row of piliform spines, with two heavy distal spines. Tegmina with discoidal sectors oblique. Dorsal surface of male abdomen specialized. Wings with costal veins very weakly clubbed, ulnar vein with branches extremely distal or lacking, intercalated triangle very small) . . . . . *Ceratinoptera* Brunner
- Pulvilli and arolia present . . . . . 7
7. Pulvilli on fourth tarsal joint only . . . . . 8

- Pulvilli on all four proximal tarsal joints. (Ventro-cephalic margin of cephalic femora with group of three heavy distal spines) . . . . . 10
- 8. Tegmina and wings strongly reduced in both sexes. (Ventro-cephalic margin of cephalic femora with a group of three heavy distal spines. Dorsal surface of male specialized; supra-anal plate of male divided into large irregular lobes; moderately large arolia present between the simple, symmetrical tarsal claws) . . . . . *Anisopygia* Saussure
- Tegmina and wings fully developed in male and fully developed or moderately reduced in female . . . . . 9
- 9. Ventro-cephalic margin of cephalic femora with group of three heavy distal spines. General form depressed, deplanate, delicate. Tegmina elongate, with discoidal sectors perfectly longitudinal. Dorsal surface of male abdomen with sixth tergite specialized . . . *Euphyllodromia* Shelford
- Ventro-cephalic margin of cephalic femora with group of two elongate spines distad. Head very strongly deplanate, eyes narrowly separated in both sexes. Tegmina and wings fully developed in male, moderately reduced in female; discoidal sectors oblique. Seventh dorsal abdominal segment of male with or without a decided gland mesad. . . . . . *Dendroblatta* Rehn
- 10. Tegmina with discoidal sectors oblique. Dorsal surface of male specialized. (Tarsal claws symmetrical. Wings with costal veins very briefly and decidedly clubbed; intercalated triangle small but moderately well developed. Tegmina and wings fully developed in both sexes) . . . . . *Eudromiella* Hebard
- Tegmina with discoidal sectors longitudinal. Dorsal surface of male un-specialized. (Tarsal claws symmetrical. Wings with costal veins clubbed, anterior field very narrow; intercalated triangle rather strongly developed. Head with vertex convex, interocular space wide. Pronotum strongly convex for group) . . . . . *Chromatonotus* Hebard
- 11. Tegmina with discoidal sectors oblique. (Tarsal claws unspecialized) . . . 12
  - Tegmina with discoidal sectors longitudinal . . . . . 14
- 12. Wings with costal veins not clubbed, ulnar vein with a great number of branches, intercalated triangle subobsolete. Dorsal surface of male abdomen unspecialized . . . . . *Macrophyllodromia* Saussure & Zehntner
- Wings with costal veins weakly clubbed, ulnar vein with few branches, intercalated triangle present (small in *Supella*). Dorsal surface of male abdomen specialized . . . . . 13
- 13. Ventro-cephalic margin of cephalic femora with three heavy distal spines; ventro-caudal margin of cephalic femora armed with (three or four and one distal) spines. Tegmina and wings fully developed in both sexes . . . . . *Sciablatta* Hebard
- Ventro-cephalic margin of cephalic femora with two heavy distal spines; ventro-caudal margin of cephalic femora unarmed. Interocular-ocellar

- area raised and flattened, particularly in male. Tegmina and wings fully developed in male, reduced in female . . . . . *Supella* Shelford
14. Ventro-cephalic margin of cephalic femora with group of three heavy distal spines . . . . . 15
- Ventro-cephalic margin of cephalic femora with group of two heavy distal spines . . . . . 18
15. Tarsal claws unspecialized; pulvilli of first three tarsal joints very small, rounded distad. No large arolia present. Discoidal vein of wings with a minimum of branches . . . . . *Blattella* Caudell
- Tarsal claws symmetrical, decidedly lamellate, the margins of the flange serrulate . . . . . 16
16. Male abdomen with fifth abdominal tergite reflexed laterad, forming pockets on each side . . . . . *Nahublattella* nov. gen.
- Fifth abdominal tergite of male abdomen not reflexed laterad . . . . . 17
17. Male abdomen with seventh tergite decidedly specialized. Pulvilli large and acutely produced. Arolia large . . . . . *Lophoblatta* Hebard
- Male abdomen with seventh tergite unspecialized or with a small median specialized area on the sixth and seventh tergites. Pulvilli not acutely produced . . . . . *Neoblatella* Shelford (*adspersicollis* group)
18. Ventro-caudal margin of cephalic femora with two spaced and one distal spine. (Size small for the group. Dorsal surface of male abdomen unspecialized) . . . . . *Cariblatta* Hebard
- Ventro-caudal margin of cephalic femora with three or more spaced and one distal spines. (Dorsal surface of male abdomen unspecialized or specialized) . . . . . 19
19. Sharp ridge developed between the ocellar spots. (Size small for the group, form slender. Interocular space wide, flattened to the interocellar ridge. Pronotum decidedly flattened. Wings with costal veins heavily clubbed, intercalated triangle distinct. Male subgenital plate without styles, dorsal surface of male abdomen unspecialized) . . . . . *Arawakina* Hebard
- No sharp ridge between the ocellar spots . . . . . 20
20. Pronotum with longitudinal bars. Tegmina strikingly bicolorous . . . . . *Trioblatella* nov. gen.
- Pronotum and tegmina not as strikingly bicolorous . . . . . 21
21. The two elongate distal spines of the ventro-cephalic margin of the cephalic femora are preceded by a minute spine which is little longer than those preceding it . . . . . *Imblattella* nov. gen.
- The two distal elongate spines of the ventro-cephalic margin of the cephalic femora are not preceded by a minute spine which is little longer than those preceding it . . . . . *Amazonina* Hebard

22. Ventro-cephalic margin of cephalic femora armed with heavy proximal spines, succeeded distad by a series of minute, closely-set piliform spines and finally three heavy elongate distal spines . . . . . 23
- Ventro-cephalic margin of cephalic femora armed distad with two large spines. (Tegminal discoidal sectors longitudinal to weakly oblique. Ultimate and penultimate palpal articles disproportionately inflated. Tarsal claws asymmetrical. Arolia large. Specialization of dorsal male abdomen limited to proximal tergite) . . . . . *Cahita* Hebard
23. Pronotum with disc bearing a pair of distinct diverging sulci. (Tegmina well developed, at least in the male sex. Discoidal sectors of tegmina weakly radiating. Discoidal vein of wing undivided. Sixth and seventh tergites of male highly specialized, the sixth bearing a moderately projecting pair of chitinous "combs" mesad on ventral surface . . . *Ischnoptera* Burmeister
- Pronotum has disc smooth and evenly convex without sulci. (Tegmina and wings fully developed. Wings with area between discoidal vein and anterior margin broader than in *Ischnoptera*. Intercalated triangle large and distinct, larger than in any other genus of the Ischnopterites) . . . . . *Xestoblatta* Hebard

### **Ceratinoptera** Brunner

1865 *Ceratinoptera* BRUNNER, Nouv. Syst. Blatt., p. 75.

1916 *Ceratinoptera*, HEBARD, Trans. Am. Ent. Soc. 42, p. 127.

Genotype: *Ceratinoptera picta* Brunner

### **Ceratinoptera picta** Brunner

*Ceratinoptera picta* BRUNNER, 1865, Nouv. Syst. Blatt., p. 76, pl. 1 figs 4a-4e; KIRBY, 1904, Syn. Cat. Orth., p. 99; HEBARD, 1916, Trans. Am. Ent. Soc. 42, p. 129, fig. 2; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 30; HEBARD, 1924, Proc. Acad. Nat. Sci. Phila. 76, p. 122; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 146; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 18; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 165.

*Phyllodromia* (?) *binotata* BRUNNER, 1906, Journ. N.Y. Ent. Soc. 14, p. 140.

Type: ♂, Brazil.

Distribution: Brazil; French Guiana; Peru; Colombia; Panama; Guatemala; Trinidad.

This species has been reported from St. Laurent du Maroni, French Guiana, by HEBARD.

**Dendroblatta Rehn**

1916 *Dendroblatta* REHN, Trans. Am. Ent. Soc. 42, p. 231.

Genotype: *Dendroblatta sobrina* Rehn

**Dendroblatta callizona Rehn**

*Dendroblatta callizona* REHN, 1928, Trans. Am. Ent. Soc. 54, p. 126, pl. xviii fig. 1, pl. xix figs. 2-4; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 164.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila., type no. 5433).

Distribution: British Guiana; Surinam; Trinidad.

Leiden Museum: 1 ?, Paramaribo, Surinam, 5.III.1947.

The specimen in Leiden Museum is damaged and the abdomen is missing. It is the first to be reported from Surinam. The facial, pronotal and tegminal patterns agree completely with the descriptions given by REHN. The measurements are: length of pronotum 3.1, width of pronotum 4.1, length of tegmen 12.5, width of tegmen 3.9 mm.

**Dendroblatta insignis Hebard**

*Dendroblatta insignis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 146, pl. xii fig. 10.

Type: ♀, Godebert, Maroni, French Guiana (Hebard collection, type no. 994).

Distribution: Known from French Guiana and Peru.

*D. insignis* and *D. callizona* differ in size (*callizona* being much smaller); in the pronotal dark barring, which is transverse in *insignis* and longitudinal in *callizona*; and in the dark tegminal markings, which reach the apex of the tegmen in *callizona*.

**Dendroblatta cnephaia Hebard**

*Dendroblatta cnephaia* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 148, pl. xii figs. 11-12.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 995).

Distribution: Only reported from French Guiana.

Unlike the other *Dendroblatta* species, *D. cnephaia* shows no striking contrasts in its coloration.

**Eudromiella** Hebard

1919 *Eudromiella* HEBARD, Mem. Am. Ent. Soc. 4, p. 34.

Genotype: *Eudromiella bicolorata* Hebard

**Eudromiella inexpectata** (Rehn)

*Blattella inexpectata* REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 268.

*Eudromiella inexpectata*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 149 pl. XIII figs. 1-2; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 345.

Type: ♀, Demerara.

Distribution: British and French Guiana.

This species will probably also be found in Surinam.

The pronotum and tegmina are immaculate; the male subgenital plate closely resembles that of *E. chopardi*.

**Eudromiella chopardi** Hebard

*Eudromiella chopardi* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, pl. XII figs. 13-15.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 996).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, 1 ♀, Gran Soela, Litani, 9.VII.1939; 1 ♀, Table Mt., VIII-IX.1944; 1 ♀, Lucie Rivier, Exp., VII-VIII.1926.

This is one of the *Eudromiella* sp. with a bivittate pronotum and bicolored tegmina. The measurements are as follows: length of body ♂ 10.6, ♀ 8.2–11.8; length of pronotum ♂ 2.8, ♀ 2.2–3.0; width of pronotum ♂ 3.7, ♀ 3.1–?; length of tegmen ♂ 12.1, ♀ 9.2–11.1 mm.

#### ***Eudromiella maroni* Hebard**

*Eudromiella maroni* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 151, pl. XII figs. 16–17.

Type: ♂, Nouveau Chantier, lower Maroni river, French Guiana (Hebard collection, type no. 997).

Distribution: French Guiana.

Closely related to *E. chopardi*, but according to HEBARD it differs in having a distinctly narrower interocular space and in being smaller in size and less lamelloid.

#### ***Macrophyllodromia* Saussure & Zehntner**

1893 *Macrophyllodromia* SAUSSURE & ZEHNTNER, Biol. Centr. Am. Orth. 1, p. 46.  
1919 *Macrophyllodromia*, HEBARD, Mem. Am. Ent. Soc. 4, p. 41.

Genotype: *Macrophyllodromia maximiliana* (= *Pseudophyllodromia maximiliana*) (Saussure).

#### ***Macrophyllodromia nigrigena* Hebard**

Fig. 11

*Macrophyllodromia nigrigena* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 152, pl. XII figs. 17–19.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 998).

Distribution: French and British Guiana; Surinam.

Leiden Museum: 1 ♂, Copename Exp., second camp, 9.XII.1943.

First specimen reported from Surinam. It agrees closely with the type of HEBARD, and can easily be distinguished by the bicolorous femora, the male genitalia (fig. 11),

and the bivittate pronotum with dotted lateral portions. The measurements are: length of body 19.5, length of pronotum 4.7, width of pronotum 6.9, length of tegmen 21.7, width of tegmen 6.8 mm.

#### **Anisopygia Saussure**

1893 *Anisopygia* SAUSSURE, Soc. Entom. 8, p. 57.

1893 *Anisopygia*, SAUSSURE & ZEHNTNER, Biol. Centr. Am. Orth. 1, p. 49.

Genotype: *Anosopygia jocosicluna* Saussure.

#### **Anisopygia decora Hebard**

*Anisopygia decora* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 154, pl. xiv fig. 14.

Type: ♀, Roches de Kourou, French Guiana (Hebard collection, type no. 1035).

Distribution: French Guiana.

According to HEBARD the "elongate, trigonal, lateral tegminal pads, and maculations of the metanotum and distal portion of the abdomen" readily distinguish females of *A. decora* from its relatives.

#### **Sciablatta Hebard**

1922 *Sciablatta* HEBARD, Trans. Am. Ent. Soc. 47, p. 115.

Genotype: *Sciablatta mamatoco* Hebard.

#### **Sciablatta galibi Hebard**

*Sciablatta galibi* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 156, pl. xiv fig. 15; REHN, 1932, Ark. Zool. 24A, 11, p. 20.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1015).

Distribution: Known from French Guiana and Brazil (Manáos).

REHN (l.c.) points out that in *S. galibi* and *S. mamatoco* the discoidal sectors of the tegmina are merely of the radiating type, and not really oblique, as described for the genus.

#### **Sciablatta poecila** Hebard

*Sciablatta poecila* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 196, pl. ix figs. 12-15; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 157.

Type: ♂, St. Jean du Maroni, French Guiana (Paris Museum).

Distribution: French and British Guiana.

In this species the discoidal sectors of the tegmina are decidedly oblique.

#### **Cariblatta** Hebard

1916 *Cariblatta* HEBARD, Trans. Am. Ent. Soc. 42, p. 147.

Genotype: *Cariblatta punctulata* (= *Blatta punctulata*) (Beauvois).

#### **Cariblatta personata** Rehn

*Cariblatta personata* REHN, 1916, Trans. Am. Ent. Soc. 42, p. 228, pl. xiv figs. 9-10; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 157; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 40, fig. 40.

Type: ♀, Ceará Mirim, Rio Grande do Norte, Brazil (Acad. Nat. Sci. Phila., type no. 5236).

Distribution: Brazil and French Guiana.

#### **Amazonina** Hebard

1929 *Amazonina* HEBARD, Trans. Am. Ent. Soc. 55, p. 353.

Genotype: *Amazonina platystylata* (= *Neoblattella platystylata*) (Hebard).

**Amazonina platystylata (Hebard)**

Fig. 12

*Neoblattella platystylata* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 198, 229, pl. ix figs. 21–23, pl. x fig. 1; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 163; REHN, 1932, Ark. Zool. 24A, 11, p. 24.

*Amazonina platystylata*, HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 355; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 40; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 8.

Type: ♂, Igarapé-Assú, Brazil (Acad. Nat. Sci. Phila., type no. 5376).

Distribution: Brazil; French and British Guiana; Surinam; Venezuela.

Leiden Museum: 1 ♂, 1 ♀, Republiek, 5.ix.1948; 1 ♀, third camp, savanna km. 16, 13.x.1948; 1 ♀, third camp, savanna km. 16, 15.x.1948; 1 ♂, savanna km. 11.6, 12.x.1948; 1 ♀, near Tonckens rapids, Coppenename, 4.viii.1943. Amsterdam Museum: 1 ♂, Botanical Garden, D. Piet, 8.xi.1950.

These specimens are the first reported from Surinam. *A. platystylata* is one of the most common species in the Guianas (fig. 12).

**Amazonina conspersa (Brunner)**

*P(hyllodromia) conspersa* BRUNNER, 1865, Nouv. Syst. Blatt., p. 106; KIRBY, 1904, Syn. Cat. Orth. 1, p. 94; BRUNER, 1906, Journ. N.Y. Ent. Soc. 14, p. 139.

*Neoblattella conspersa*, REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 156; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 260, pl. ix fig. 20; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 162; REHN, 1932, Ark. Zool. 24A, 11, p. 24.

*Amazonina conspersa*, HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 353; HEBARD, 1931, Konowia 10, p. 257; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 40.

Type: ♂, Brazil.

Distribution: N. Argentina; Brazil (Amazonia); Peru (Rio Ucayali); French and British Guiana; Surinam; Trinidad.

PRINCIS (1951, p. 40) reported a specimen from Paramaribo, this being the first reported from Surinam.

**Lophoblatta Hebard**

1929 *Lophoblatta* HEBARD, Trans. Am. Ent. Soc. 55, p. 350.

Genotype: *Lophoblatta pellucida* (= *Blatta pellucida*) (Burmeister).

**Lophoblatta pellucida (Burmeister)**

Fig. 13

*Bl(atta) pellucida* BURMEISTER, 1838, Handb. Ent. 2, p. 498.

*Phylodromia pellucida*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 109; KIRBY, 1904, Syn. Cat. Orth. 1, p. 95.

*Neoblaettella pellucida*, REHN, 1916, Trans. Am. Ent. Soc. 42, p. 230; REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 157; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 163.

*Lophoblatta pellucida*, HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 350, pl. XIII fig. 8.

Type: Brazil (Para).

Distribution: Brazil; French Guiana; Surinam.

Leiden Museum: 1 ♀, Wia Wia, 22.xi.1948.

Measurements: length of body 8.6, length of pronotum 2.2, width of pronotum 2.9, length of tegmen 9.7 mm.

**Lophoblatta arawaka Hebard**

Fig. 14

*Lophoblatta arawaka* HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 350, pl. XIII figs. 6-7; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 8; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 164.

Type: ♂, Caparo, Trinidad (Hebard collection, type no. 1144).

Distribution: Trinidad; Venezuela; British Guiana; Surinam.

Leiden Museum: 1 ♂, 2 ♀♀, Republiek, 4+6.ix.1948; 1 ♀, Moengotapoe, 16.ix.1948; 1 ♀, Paramaribo, Douglas, 1919; 1 ♀, Nannikreek, Nickerie, 30.ix.1941; 1 ♀, Lelydorp, 13.i.1940.

Amsterdam Museum: 1 ♀, Paramaribo, Botanical Garden, D. Piet, 11.xi.1950.

*L. arawaka* is closely related to *L. pellucida*, from which it differs in the slightly broader interocular space and less distinct concavity between the produced areas of the male subgenital plate (fig. 14). PRINCIS & KEVAN (1955) collected their specimens "in grass; on full-grown maize; under vegetable refuse; under garden refuse; on cut sugar-cane fodder for dairy".

Measurements: length of body ♂ 11.4, ♀ 9.7-12.7; length of pronotum ♂ 2.9, ♀ 2.9-3.3; width of pronotum ♂ 4.2, ♀ 4.2-4.9; length of tegmen ♂ 10.8, ♀ 11.7-15.3 mm.

**Lophoblatta brevis** Rehn

Fig. 15

*Lophoblatta brevis* REHN, 1937, Ann. Mag. Nat. Hist. (10) 20, p. 197, pl. v figs. 1-2.

Type: ♂, Upper Essequibo river, British Guiana (British Mus. Nat. Hist.).

Distribution: British Guiana and Surinam.

Leiden Museum: 1 ♀, Feticreek, Litani, Surinam, 13.viii.1939.

This species differs from *L. arawaka* and *pellucida* in its smaller size; abbreviate form; the fact that the tegmina do not extend beyond the cercal apices; its reduced wings (fig. 15); and less elongate palpi and cerci (REHN, l.c.).

This specimen is the first reported from Surinam. It differs from the specimen described by REHN in the coloration, which is much lighter. In other respects it corresponds well with REHN's description.

Measurements: total length 12.8, length of pronotum 3.2, width of pronotum 4.6, length of tegmen 9.6, length of wing 7.5 mm.

**Neoblattella** Shelford

1911 *Neoblattella* SHELFORD, Ent. Month. Mag. (2) 22, p. 155.

1916 *Neoblattella*, HEBARD, Trans. Am. Ent. Soc. 42, p. 148 (footnote).

Genotype: *Neoblattella adspersicollis* (= *Blatta adspersicollis*) (Stål).

We restrict *Neoblattella* to the species of the "adspersicollis group".

**Neoblattella adspersicollis** (Stål)

*Blatta adspersicollis* STÅL, 1861, Kongl. Svensk. Freg. Eugenie's Resa, Zool. I, p. 308; SAUSSURE, 1870, Miss. Mex. Orth., p. 35, pl. 1 fig. 22.

*Phyllodromia adspersicollis*, BRUNNER, 1865, Nouv. Syst. Blatt., p. 107; KIRBY, 1904, Syn. Cat. Orth. I, p. 94.

*Blatta nahua* SAUSSURE, 1858, Rev. Zool. (2) 20, p. 355; SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Am. Orth. I, p. 42, pl. IV figs. 19-21.

*Blatta latimarco* WALKER, 1868, Cat. Blatt. Br. Mus., p. 97.

*Blatta latimargo* WALKER, 1868, Cat. Blatt. Br. Mus., p. 236 (index).

*Blatta nahua*, var. *minor*, SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Am. Orth. I, p. 43.

*Blattella adspersicollis*, REHN & HEBARD, 1905, Proc. Acad. Nat. Sci. Phila. 57, p. 32.

*Neoblattella adspersicollis*, HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 198, p. 232.

Type: ♂, Rio de Janeiro, Brazil.

HEBARD (1921, p. 232) reported a specimen from La Forestière, French Guiana, in a table intended to show the variation of the tegminal length in *N. adspersicollis*. However, the same author stated later (1926, p. 164) that this specimen is not referable to *adspersicollis*.

#### **Neoblattella binodosa** Hebard

*Neoblattella binodosa* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 165, pl. XIII figs. 13–16.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1002).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, 1 ♀, Litani, Feticreek, 7+18.VIII.1939; 1 ♀, Lawa, 29.VIII.1939; 2 ♀♀, Swamp camp, km. 23.8, 14.IV. + 21.IX.1948; 1 ♀, Donderbari, 12.XII.1945; 1 ♀, Bakhuis Mts., Coppenname, 13.XII.1943.  
Amsterdam Museum: 1 ♂, 3 ♀♀, Lucie Rivier area, Exp., VII–VIII.1926.

First reports from Surinam. *N. binodosa* is closely related to *poeциlops*, from which it differs in the wider interocular space, the less heavily marked head and pronotum, and the different male genital specialization.

The specimens show only slight variation in the small dots on the pronotum and the markings of the head. They agree very closely with the description and figures given by Hebard.

Measurements: length of body ♂ 16.5, ♀ 15.1–17.0; length of pronotum ♂ 4.0, ♀ 4.5–5.0; width of pronotum ♂ 5.7, ♀ 5.8–6.8; length of tegmen ♂ 17.2, ♀ 17.0–19.8 mm.

#### **Neoblattella poecilops** Hebard

*Neoblattella poecilops* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 164, pl. XIII figs. 9–12.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1001).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, 1 ♀, Nassau Mts., 14+17.III.1949; 1 ♀, third camp, km. 14.9, 14.X.1948; 1 ♂, Paloemeu, Sawaniboto rapid, 27.III.1952; 1 ♂, Paloemeu, Tapanahony Exp., Van Stockum, 1904.

First report from Surinam.

The pronotal markings show some variation in intensity.

Measurements: length of body ♂ 15.5–18.5, ♀ 17.5–19.7; length of pronotum ♂ 4.1–4.3, ♀ 4.2–4.5; width of pronotum ♂ 5.5–5.8, ♀ 5.5–6.1; length of tegmen ♂ 18.7–19.5, ♀ 18.5–19.5 mm.

#### **Neoblattella longior Hebard**

*Neoblattella longior* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 167, pl. XIV figs. 1–2.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1004).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♀, Nassau Mts., Marowijne, 17.XI.1949.

First report from Surinam.

The pronotal marking agrees closely with that in HEBARD's figure of the type.

Measurements: length of body 17.6, length of pronotum 4.3, width of pronotum 5.5, length of tegmen 18.0 mm.

#### **Neoblattella unifascia Hebard**

*Neoblattella unifascia* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 166, pl. XIII figs. 17–18.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 1003).

Distribution: Only reported from French Guiana.

According to HEBARD this species can be distinguished from its relatives by the immaculate pronotum, and by the head, which is immaculate except for a broad dark interocular bar.

#### **Neoblattella guianae Hebard**

*Neoblattella guianae* HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 356, pl. XIII fig. 9.

Type: ♂, Kartabo, British Guiana (Acad. Nat. Sci. Phila., type no. 5478).

Distribution: British and French Guiana.

According to Hebard *guianae* is very close to *longior*, but its markings are weaker and it is larger.

**Nahublattella nov. gen.**

This genus has been erected to include the species of the "nahua group" of *Neoblattella*, and *Blatta nahua* Saussure (later assigned to *Neoblattella*) is designated as genotype. The new genus shows a strong affinity with the restricted *Neoblattella* (the "adspersicollis group"), but may be distinguished by the fifth abdominal tergite, which, in the male sex, is reflexed laterad, forming a pocket on each side (fig. 16).

The genus *Nahublattella* shows the following characters.

Cephalic femora have ventro-cephalic margin armed with a series of spines which decrease gradually in size and length distad, a few of the more distal being chaetiform, terminating in three elongate distal spines; ventro-caudal margin armed with 5 (4) large spines. Tegmina with discoidal sectors longitudinal. Wings fully developed, costal veins not clubbed distad. Dorsal surface of male abdomen strongly specialized, lateral portions of fifth tergite strongly reflexed, forming a longitudinal pocket on each side. Tarsal claws symmetrical, the prominent flanges decidedly toothed. Pulvilli present on four tarsal joints, arolia well developed.

Genotype: *Blatta nahua* Saussure.

**Nahublattella aristonice (Hebard)**

Fig. 16

*Neoblattella aristonice* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 170, pl. XIV figs. 4-6; pl. XVII fig. 14.

Type: ♂, Charvein, lower Maroni river, French Guiana (Hebard collection, type no. 1006).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, Manbari rapid, Marowijne, 26.II.1952.

The specimen from the Leiden Museum is the first to be reported from Surinam and from outside French Guiana.

The males of this species may easily be distinguished by the hirsute abdominal tergites.

Measurements: length of body 16.0, length of pronotum 3.5, width of pronotum 4.6, length of tegmen 16.8 mm.

#### **Nahublattella incompta Hebard**

*Neoblattella incompta* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78 p. 169 pl. XIV fig. 3.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1005).

Distribution: The type from French Guiana is unique.

Closely related to *aristonice* but differing in the larger size, the broader interocular space, and larger lateral pockets of the male fifth abdominal tergite.

#### **Imblattella nov. gen.**

This genus has been erected to include the species of the "impar group" of *Neoblattella*. The most important difference between the species of the new genus and the restricted *Neoblattella* ("adspersicollis group") consists in the number of elongate distal spines on the ventro-cephalic margin of the cephalic femora, viz. three in *Neoblattella* and two in the new genus. The two distal spines, however, are preceded by a minute spine which is little longer than those preceding it. This distinguishes the new genus from the closely related genus *Amazonina*.

*Imblattella* shows the following characters: cephalic femora have ventro-cephalic margin armed with elongated spines which gradually decrease in size distad, terminating in two elongate spines; these spines are preceded by a minute spine which is little longer or heavier than those preceding it. Tegmina with discoidal sectors

longitudinal. Wings fully developed; costal veins heavily clubbed distad; dorsal surface of male abdomen unspecialized.

Genotype: *Imblattella impar* (= *Neoblattella impar*) (Hebard).

**Imblattella litosoma** (Hebard)

Fig. 17

*Neoblattella litosoma* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 159, pl. XIII figs. 7-8; REHN, 1932, Ark. Zool. 24A, 11, p. 23.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 1000).

Distribution: Brazil (Rio Purús); French Guiana; Surinam.

Leiden Museum: 1 ♀, Nassau Mts., Marowijne, 9.III.1949; 1 ♂, Nassau Mts., Marowijne, 18.II.1949; 1 ♂, Feticreek, Litani, 12.VIII.1939; 1 ♀, Waramapan soela, 30.VII.1939; 1 ♀, third camp, km. 14.9, 14.X.1948.

First report from Surinam. The specimens agree closely with the description given by HEBARD (fig. 17). In the females, however, the ventral surface of the abdomen is not unicolorous but has median suffusions of brown on the proximal sternites. Moreover, in most specimens the pronotum shows clearly-defined spots instead of the suffused cephalad squares.

Measurements: length of body ♂ 10.7, ♀ 10.1-11.0; length of pronotum ♂ 2.3-2.5, ♀ 2.2-2.4; width of pronotum ♂ 3.2, ♀ 3.2; length of tegmina ♂ 11.5-11.9, ♀ 11.5-11.7 mm.

**Trioblattella nov. gen.<sup>1)</sup>**

This genus has been proposed to include the species of the "eudromielloides" or "berlandi group" of *Neoblattella*. In 1921 HEBARD designated the "berlandi group", to which he referred *Neoblattella fasciata* (Brunner), *N. eudromielloides* Hebard and *N. berlandi* Hebard. In 1926 (p. 172) the same author, in his description of *N. callosoma*, stated: "We refer this species and its allies to what we term the Eudromielloides Group".

The new genus is distinguished by the dark longitudinal bars

<sup>1)</sup> Named after the Trios, an Amerindian tribe living in the Guianas.

on the pronotum (except in *fasciata*), the strikingly bicolorous tegmina, and its graceful structure.

Its striking similarity in coloration to *Eudromiella* Hebard is only superficial, since wide structural differences exist between the two genera.

The new genus shows the following characters: cephalic femora have ventro-cephalic margin armed with spines, which decrease gradually in length and size distad, terminating in two elongate spines, of which the more distal is the longer. Tegmina with discoidal sectors longitudinal. Wings with intercalated triangle distinct to large; apices of costal veins heavily clubbed. Dorsal surface of male abdomen unspecialized. Tarsal claws symmetrical, flange bearing teeth, the last tooth not half as large as the point of the claw. Tegmina strikingly bicolorous.

Genotype: *Trioblattella eudromielloides* (= *Neoblattella eudromielloides*) (Hebard).

#### **Trioblattella callosoma (Hebard)**

*Neoblattella callosoma* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 172, pl. XIV figs. 7-8.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 1007).

Distribution: French and British Guiana.

This species may be expected to occur in Surinam.

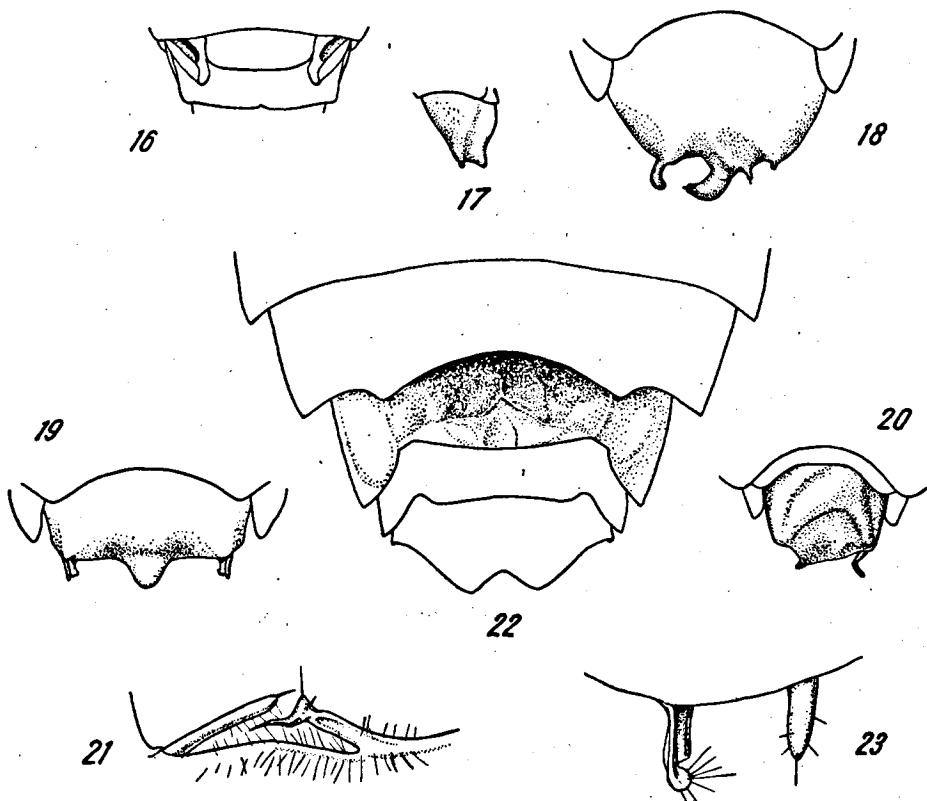
The following two species may not be placed in the restricted *Neoblattella*, but at present it is not possible to recognize their real generic position. For this reason they will be called "Neoblattella" here.

#### **„Neoblattella“ titania (Rehn)**

Fig. 18

*Blattella titania* REHN, 1903, Trans. Am. Ent. Soc. 29, p. 267.

*Neoblattella titania*, REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 157; HEBARD,



- Fig. 16. *Nahublattella aristonice* (Hebard) — Dorsal view of the fifth abdominal tergite of male.
- Fig. 17. *Imblattella litosoma* (Hebard) — Lateral view of the subgenital plate of male after HEBARD.
- Fig. 18. "Neoblattella" *titania* (Rehn) — Ventral view of subgenital plate of male after HEBARD.
- Fig. 19. "Neoblattella" *nodipennis* Hebard — Ventral view of subgenital plate of male after HEBARD.
- Fig. 20. *Ischnoptera rehni* Hebard — Ventral view of subgenital plate of male after HEBARD.
- Fig. 21. *Xestoblatta castanea* Hebard. — Caudal view of subgenital plate of male, showing specialized styles.
- Fig. 22-23. *Xestoblatta surinamensis* nov. spec. — 22. Dorsal view of abdomen of male. — 23. Styles on subgenital plate of male.

1919, Trans. Am. Ent. Soc. 45, p. 100; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 160, pl. XIII fig. 6; REHN, 1932, Ark. Zool. 24A, 11, p. 24.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila.).

Distribution: British and French Guiana; Surinam; Brazil (Rio Autaz, Igarapé-assú, Pará).

Leiden Museum: 1 ♂, third camp, km. 14.9, flying at light, 25.x.1948.

The ventro-cephalic margin of the cephalic femora is armed with spines which decrease gradually in size distad, terminating in two elongate spines, of which the more distal is the longer. The tegmina delicate, with eight longitudinal discoidal sectors; spurious veins and cross veins between the veins, except in the marginal field; the veins, spurious veins and cross veins ochraceous-buff, darker near the apex of the tegmen. For subgenital plate see fig. 18.

Measurements: length of body 9.2, length of pronotum 2.0, width of pronotum 3.2, length of tegmen 11.6 mm.

The highly specialized subgenital plate agrees completely with the figure given by Hebard.

#### „Neoblaatella” nodipennis Hebard

Fig. 19

*Neoblaatella nodipennis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 161, pl. XIII figs. 3-5.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 999).

Distribution: French Guiana and Surinam;

Leiden Museum: 1 ♂, Nassau Mts., 17.III.1949; 1 ♀, third camp, 21.x.1948.

The highly specialized symmetrical male subgenital plate, and the small nodes on the tegmina, are characteristic of *nodipennis* (fig. 19). This species also has but two distal spines on the ventro-cephalic margin of the cephalic femora.

The measurements: are length of body ♂ 11.5, ♀ 12.6; length of pronotum ♂ 2.4, ♀ 2.8; width of pronotum ♂ 3.6, ♀ 3.9; length of tegmen ♂ 13.5, ♀ 13.6 mm.

#### Arawakina Hebard

1926 *Arawakina* HEBARD, Proc. Acad. Nat. Sci. Phila. 78, p. 174.

Genotype: *Arawakina frontalis* Hebard

**Arawakina frontalis** Hebard

*Arawakina frontalis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 175, pl. XIV figs. 9-10.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila., type no. 5425).

Distribution: British and French Guiana.

This genus includes only a single species. The sharp ridge between the ocellar spots, the untoothed flange of the tarsal claws, and the lack of styles distinguish the genus from the related *Neoblattella*. Since *A. frontalis* occurs in French and British Guiana it may also be expected in Surinam.

**Leuropeltis** Hebard

Fig. 10

1921 *Leuropeltis* HEBARD, Proc. Acad. Nat. Sci. Phila. 73, p. 198

Genotype: *Leuropeltis atopa* Hebard.

**Leuropeltis atopa** Hebard

*Leuropeltis atopa* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 200, pl. X figs. 11-13; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 176.

Type: ♂, Gourdonville, French Guiana (Paris Museum).

The female of this species is still unknown.

**Ischnoptera** Burmeister

1838 *Ischnoptera* BURMEISTER, Handb. Ent. 2, p. 500.

1916 *Ischnoptera*, HEBARD, Trans. Am. Ent. Soc. 42, p. 338.

Genotype: *Ischnoptera morio* Burmeister (selected by KIRBY, 1906).

**Ischnoptera galibi** Hebard

*Ischnoptera galibi* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 180, pl. xv figs. 4-7.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 1010).

Distribution: French Guiana; Surinam.

Leiden Museum: ♀, Albina, 28.x.1948.

*I. galibi* is one of the smaller species of the genus. The pronotum is a shining blackish-brown, margined with ochraceous-buff cephalad and laterad; cephalad more narrowly than laterad. The outer margin of the chestnut-brown tegmina is ochraceous buff.

Measurements: length of body 9.1, length of pronotum 2.1, width of pronotum 3.1, length of tegmina 8.7 mm.

**Ischnoptera paramacca** Hebard

*Ischnoptera paramacca* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 181, pl. xv figs. 8-9.

Type: St. Jean du Maroni, French Guiana (Hebard collection, type no. 1011).

Distribution: French Guiana; Surinam.

Leiden Museum: 3 ♂♂, Wia Wia, 21.xi.1948; 1 ♀, Wia Wia, 20.xi.1948; 2 ♂♂, Nassau Mts., 10+14.III.1949; 1 ♂, 1 ♀, Swamp camp, km. 23.8, 16.xi.1948; 1 ♂, 2 ♀♀, third camp, 17+23.x.1948; 1 ♀, Albina, 28.x.1948; 1 ♂, Republiek, 10.xi.1946; 1 ♀, Republiek, 15.xi.1951.

Slightly larger than the former species, but also one of the smaller *Ischnoptera* species. Pronotum solidly shining blackish-brown.

The measurements are: length of body ♂ 9.5-10.6, ♀ 9.4-10.4; length of pronotum ♂ 1.8-2.1, ♀ 1.8-2.0; width of pronotum ♂ 2.8-3.1, ♀ 2.9-3.2, length of tegmen ♂ 9.2-10.5, ♀ 8.5-9.5 mm.

**Ischnoptera rehni** Hebard

Fig. 20

*Ischnoptera rehni* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 177, pl. xv figs. 1-3.

Type: ♂, St. Laurent du Maroni, French Guiana (Hebard collection, type no. 1009).

Distribution: French and British Guiana; Surinam.

Leiden Museum: 1 ♂, 1 ♀ Tibiti savanna, 6+9.I.1949; 1 ♀, Moengotapoe, 30.X.1948; 1 ♀, Republiek, 5.IX.1948; 1 ♀, Gansee, H. Heyde, 5.VIII.1951; ?, Wia Wia, 21.XI.1948.

First reports from Surinam.

Closely related to *I. clavator* Rehn, but distinguished by the male subgenital plate (fig. 20).

Measurements: length of body ♂ 11.7, ♀ 11.5–13.0; length of pronotum ♂ 2.5, ♀ 2.6–3.1; width of pronotum ♂ 3.4, ♀ 3.8–4.1; length of tegmen ♂ 12.5, ♀ 11.8–12.2 mm.

#### ***Ischnoptera stygia* Hebard**

*Ischnoptera stygia* Hebard, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 176, pl. xvii figs. 16–17.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1008).

Distribution: French and British Guiana; Surinam.

Leiden Museum: 1 ♀, Feticreek, Litani, 18.VII.1939; 1 ♀, Zanderij, 24.III.1946.

First report from Surinam.

One of the larger species of the genus. Related to *I. atrata* Hebard, but differing from that species in the male genital characters. The specimens agree closely with the description of HEBARD.

Measurements: length of body 17.2–20.4; length of pronotum 4.2–4.3; width of pronotum 5.5–6.2; length of tegmen 20.2–21.0 mm.

#### ***Ischnoptera hercules* Rehn**

*Ischnoptera hercules* REHN, 1928, Trans. Am. Ent. Soc. 54, p. 130, pl. xix fig. 1.

Type: ♂, Kartabo, British Guiana (Acad. Nat. Sci. Phila., type no. 5448).

Distribution: British Guiana; Surinam.

Leiden Museum: 1 ♂, Zuidcreek, Coppenname Exp., 15.VIII.1943; 1 ♂, Nassau Mts., 3.III.1949.

Amsterdam Museum: 1 ♂, Lucie Rivier, Exp., VII–VIII.1926.

This is the largest known neotropical *Ischnoptera*, and, as REHN says, "it might casually be mistaken for a *Periplaneta*."

These specimens are the first to be reported since the description of the type. They agree well with REHN's description and figure.

Measurements: length of body 24.8 (one specimen damaged); length of pronotum 5.6–6.3; width of pronotum 7.4–8.4; length of tegmen 25.9–27.0 mm.

### **Ischnoptera rufa (De Geer)**

*Blatta rufa* DE GEER, 1773, Mém. Hist. Ins. 3, p. 539, pl. XLIV fig. 7.

*Blatta rufescens* BEAUVOIS, 1805, Ins. Recueil. Afr. Am., p. 183, Ort. pl. 1b fig. 7. ?*I(schnoptera) fumata* BURMEISTER, 1838, Handb. Ent. 2, p. 500.

*Ischnoptera terminalis* WALKER, 1868, Cat. Blatt. Br. Mus., p. 122.

*Blatta erythrina* WALKER, 1868, Cat. Blatt. Br. Mus., p. 219.

*Ischnoptera conformis* SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Amer. Orth. 1, p. 37, pl. 3 fig. 25.

*Ischnoptera rufa rufa*, HEBARD, 1916, Trans. Am. Ent. Soc. 42, p. 346, pl. XVII figs. 3–4; HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 70, pl. IV fig. 8; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 358; HEBARD, 1929, ib., p. 395; HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 115; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 159.

Type: Surinam.

Distribution: Surinam; British Guiana; Brazil; Colombia; Panama; Costa Rica; Nicaragua; USA (New Orleans); West Indies.

This species has been divided into three geographic races, viz. typical *rufa*, *rufa debilis* (Costa Rica) and *rufa occidentalis* (from Nicaragua northward as far as Mexico). The typical *rufa* reaches the easternmost part of its distribution area in Surinam.

Leiden Museum: 1 ♂, Paramaribo, W. C. van Heurn, 1911; 1 ♂, Paramaribo, 9.xii.1945; 1 ♂, Paramaribo, Botanical Gardens, 29.v.1955.

The supra-anal plates of our specimens do not agree with HEBARD's figure (1916, pl. XVII fig. 4) but the paired secondary sexual processes of the sixth dorsal abdominal segment and the distal portion of the titillator agree completely with his figures (1916, pl. XVII fig. 3 and 1919, pl. IV fig. 8).

Measurements: length of body 12.5–16.0; length of pronotum 3.2–3.8; width of pronotum 4.7–5.0; length of tegmen 13.6–16.5 mm.

### **Ischnoptera rubiginosa Walker**

*Ischnoptera rubiginosa* WALKER, 1868, Cat. Blatt. Br. Mus., p. 121; REHN, 1903, Trans. Am. Ent. Soc. 29, p. 264; KIRBY, 1904, Syn. Cat. Orth. 1, p. 85.

Type: ♀, Santarem, Brazil (British Museum).

Distribution: Brazil; British Guiana (Bartica).

The specimens reported from Bartica by REHN "seem referable to Walker's species". "They agree perfectly with his description except that the costal stripe on the tegmina, instead of extending "to three-fourths of the length", is very much weakened and indistinct beyond the middle."

#### **Xestoblatta** Hebard

1916 *Xestoblatta* HEBARD, Trans. Am. Ent. Soc. 42, p. 370.

Genotype: *Xestoblatta carrikeri* Hebard.

#### **Xestoblatta castanea** Hebard

Fig. 21

*Xestoblatta castanea* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 184.

Type: ♀, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1012).

Distribution: French Guiana; Surinam.

Leiden Museum: 1 ♂, Wia Wia, 27.xi.1948; 1 ♀, Nassau Mts., 3.III.1949; 1 ♀, Temoimarem, Toemoek Hoemak Mts., 26.VII.1939.

The specimen from Wia Wia is the first male to be captured, and will be described here.

♂. The male closely resembles the female, but is somewhat smaller. Dorsal surface of the abdomen not specialized. The truncate subgenital plate is somewhat produced in the middle, and from this median production the dextral style extends sinistrad; the dextral style is concavely flattened, its head expanding into a sinistral uncinate projection and a blunt cone bearing a long hair; the sinistral style extends from the point where the short lateral margin of the plate curves into the concave left half of the hind margin; the sinistral style is cylindrical, with a moderately clubbed apex which bears a slender thorn on top (fig. 21).

Measurements of male: length of body 17.6, length of pronotum 4.5, width of pronotum 6.4, length of tegmen 19.5, width of tegmen 5.7 mm.

The females agree completely with HEBARD's description.

Measurements of the female specimens: length of body 17.5-19.5; length of pronotum 4.3-4.7; width of pronotum 6.3-6.5; length of tegmen 19.0-20.1 mm.

**Xestoblatta nyctiboroides** (Rehn)

*Ischnoptera nyctiboroides* REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 266.  
*Xestoblatta nyctiboroides*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 184,  
pl. xv fig. 10.

Type: ♀, Demerara, British Guiana (Bruner's collection).

Distribution: British and French Guiana.

A male from Igarapé-Assú, Pará, Brazil, was described by HEBARD as the male of *nyctiboroides* (HEBARD, 1916, p. 373), but later turned out to represent a distinct species. In 1926 HEBARD proposed the name *X. para* for it, and at the same time described the real male of *X. nyctiboroides*.

This species has not yet been encountered in Surinam, but the reports from British and French Guiana make it most probable that it occurs in that country.

**Xestoblatta surinamensis** nov. spec.

Fig. 22-23

Type: 1 ♂, Tibiti savanna, Suriname Exp. 1948-1949, D. C. Geijskes, 12.I.1949.

Size medium for the genus. Interocular space narrow (0.6 mm), about half the distance between antennal sockets; the small ocellar areas weakly defined. Pronotum as characteristic of the genus, evenly convex; greatest width meso-caudad; caudal margin broadly angulate-convex. Dorsal surface of abdomen specialized; the first four tergites with caudo-lateral angles acute-angulately produced; caudal margin of fifth tergite with two small lateral emarginations and a broad median emargination; sixth tergite with a large deep median depression, its caudal margin with strongly produced caudo-lateral angles; seventh tergite concealed; eighth tergite with strongly produced caudo-lateral angles, its caudal margin with small concave emarginations at the base of the produced angles (fig. 22). Supra-anal plate transverse, produced and bilobate between the cerci. The broad, roundly produced subgenital plate bears meso-distad the clubbed, dextral style, and sinistrad from it the ligulate sinistral style is inserted (fig. 23).

Allotype: ♀, Nassau Mts., D. C. Geijskes, 11.III.1949.

Agrees with male except in following features. Form broader, interocular space broader. Tegmina and wings less elongate. Dorsal surface of abdomen with caudo-lateral angles of first five tergites acute-angulate; sixth tergite with strongly produced caudo-lateral angles; seventh and eighth tergite very narrow; the bluntly produced latero-caudal angle of the seventh tergite is ventrally developed into a small, rounded body with a lateral pore.

Ulnar vein of wing with complete and incomplete rami. Intercalated triangle large.

Coloration: head ochraceous-buff, tinged with ochraceous-tawny between the antennal sockets, labrum mummy-brown.

Pronotum with disc tawny to ochraceous-tawny, the lateral margins broadly ochraceous-buff; most of the specimens with a few, very small mummy-brown flecks. Tegmina evenly tinged with ochraceous-tawny, except the marginal field, which is ochraceous-buff. Limbs and ventral surface ochraceous-buff to ochraceous-tawny (in some specimens tawny, which may be the result of discoloration); the median portion of the abdomen in the lighter specimens tawny, in the darker specimens cinnamon-brown to Prout's brown; each segment with a small lateral blotch of mummy brown.

The coxae each with two small dots of mummy brown, the proximal being slightly larger than the distal. Wings transparent, tinged with cinnamon brown, this colour darkest in area in front of anal vein; intercalated triangle clear.

Measurements: length of body ♂ 19.8, ♀ 18.7–21.0; length of pronotum ♂ 4.0, ♀ 4.2–4.4; width of pronotum ♂ 5.5, ♀ 6.2–6.3; length of tegmen ♂ 18.4, ♀ 18.9–19.5 mm.

#### Cahita Hebard

1923 *Cahita* Hebard, Trans. Am. Ent. Soc. 47, p. 167.

1926 *Galibia* Hebard, Proc. Acad. Nat. Sci. Phila. 78, p. 185.

1937 *Cahita*, Rehn, Trans. Am. Ent. Soc. 43, p. 209.

Genotype: *Cahita nahua* (= *Ischnoptera nahua*) (Saussure).

**Cahita insignis (Hebard)**

*Galibia insignis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 186, pl. xv  
figs. 11–13.

*Cahita insignis*, REHN, 1937, Trans. Am. Ent. Soc. 63, p. 217.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 1019).

Distribution: Up to now this species has only been encountered in French Guiana, on the French bank of the Maroni river, which flows between French Guiana and Surinam.

The interstyilar part of the subgenital plate of the males is divided into two processes which bear a great number of recurved, chaetiform spinules.

**Euphyllodromia Shelford**

1908 *Euphyllodromia* SHELFORD, Gen. Ins. 73, p. 17.

1919 *Euphyllodromia*, HEBARD, Mem. Am. Ent. Soc. 4, p. 82.

Genotype: *Euphyllodromia angustata* (= *Blatta angustata*) (Latreille), (selected by HEBARD, 1919, p. 82).

**Euphyllodromia literata (Burmeister)**

*Bl(atta) literata* BURMEISTER, 1838, Handb. Ent. 2, p. 497.

*Blatta alternans* SERVILLE, 1839, Hist. Nat. Ins. Orth., p. 114.

*Pseudophyllodromia literata*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 97.

*Euphyllodromia literata*, HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 201; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 187; REHN, 1932, Ark. Zool. 24A, 11, p. 31.

Type: Surinam.

Distribution: The Guianas to central Amazonia (at least as far as Teffé).

Leiden Museum: 1 ♂, Lelydorp, 25.x.1938; 1 ♀, Kabelstation, 22.ix.1938; ?, Gansee, H. Heyde, 15.III.1950; ?, Tibiti savanna, 6+11.I.1949; ?, Wia Wia, 19+26.XI.1948; 1 ♀, km. 6.2, 22.XI.1948.

In 1921 HEBARD (1921, p. 201) synonymized *Blatta alternans* Serville and *Pseudophyllodromia pavonacea* Rehn with *Blatta literata* Burmeister. The author of *pavonacea*, however, listed a number of characters in which the two species differ and which make *pavonacea* a distinct species (REHN, 1932, p. 31).

**Euphyllodromia pavonacea (Rehn)**

*Pseudophyllodromia pavonacea* REHN, 1903, Trans. Am. Ent. Soc. 29, p. 262;  
 REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 264.  
*Euphyllodromia pavonacea*, REHN, 1932, Ark. Zool. 24A, 11, p. 32.

Type: ♂, Bartica, British Guiana (Acad. Nat. Sci. Phila.).

Distribution: British and French Guiana; Surinam.

Leiden Museum: 1♂, 1♀, Nassau Mts., 9.III.1949.

The specimens recorded here fully agree with REHN's description. These are the first records from Surinam.

*E. pavonacea* differs from *literata* in the following features: medio-caudal pale element of the pronotal pattern connected with the medio-cephalic pale element, the former at most but narrowly divided caudad by a dark tongue projecting cephalad, this being accompanied on each side caudad by a small dark dot; the oblique dark bordering and caudad-diverging elements of the pronotal pattern are incomplete or mere clouds caudad toward the caudo-lateral angles; the tegminal discoidal field has three false nervures, and the contiguous portions of the cross nervures are strikingly lined with creamy white (REHN, 1932).

Measurements: length of body 11.8, length of pronotum 2.1, width of pronotum 3.8, length of tegmen 11.6 mm.

**Euphyllodromia marowijnensis<sup>1)</sup> nov. spec.** Fig. 24-25

Type: ♀, Nassau Mts., Surinam, D. C. Geisks, 24.III.1949.

This species is related to *E. literata* (Burmeister) and *E. pavonacea* (Rehn), from which it differs in the pronotal pattern and in the interocular and inter-antennal markings.

♀. — Size medium for the genus. Head subpyriform, the greatest width (across eyes) nearly equal to greatest depth of head; eyes relatively prominent; occipital line straight (seen from ventral side); interocular space narrow, about half space between antennal sockets.

Pronotum strongly transverse, greatest length contained nearly twice in greatest width; caudal margin with a median, weakly

<sup>1)</sup> From Marowijne, the administrative district in which the Nassau Mts. lie.

produced, rounded obtuse angulation; lateral margins strongly arcuate; discal sulci well developed.

Tegmina elongate, extending beyond apex of abdomen by a distance about equal to length of pronotum. Dorsal surface of abdomen unspecialized.

Subgenital plate with concave margin mesad to the cercal bases, convexly produced margin of the median section with a deep narrow median fissure, the lobes thus formed being angulately rounded and covered with a number of radiating hairs.

Head light ochraceous-buff. Occiput has four deep mummy-brown, nearly black, parallel, longitudinal stripes, with narrow ochraceous-buff lines between them; the dark stripes continue into a transverse band of mummy brown which runs subparallel to the internal eye margin from the point where this margin diverges strongly; the band ends laterad in the poorly defined ocellar spots; between the antennal sockets runs a very broad mummy-brown band; the face has two cinnamon-brown suffused spots close together on the lower part; labrum cinnamon-brown (fig. 24).

Pronotum ochraceous-buff with a light buff band along the caudal margin; the pronotal pattern mummy-brown. General outline of the complicated pronotal pattern subpyriform; the medio-cephalic pale element is nearly connected with the medio-caudal pale element, and is separated from it by a swallowtail-like figure; from the medio-caudal part of the pattern a triangular tongue projects cephalad between the forks of the swallowtail; cephalo-lateral part of the pattern has one large and some smaller pale areas (fig. 25).

Tegmina as in *E. literata*.

Ventral surface of abdomen tawny, laterad deepening into Prout's brown; subgenital plate Prout's brown, proximally washed with ochraceous-tawny. Legs light ochraceous-buff, except coxae, which are Prout's brown with a paler centre; distal extremity and dorsal margin of femora with Prout's brown infuscation; tibiae with washed Prout's brown on extensor surface, darkest at base of tibial spines.

Measurements: length of body 10.2, length of pronotum 2.1, width of pronotum 4.0, length of tegmina 10.5 mm.

### Euphyllodromia variegata (Walker)

*Blatta variegata* WALKER, 1868, Cat. Blatt. Br. Mus., p. 112.  
*P(seudophyllodromia) lineolata* SAUSSURE, Mél. Orth. 2, 4, p. 99.  
*Pseudophyllodromia variegata*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 98.  
*Pseudophyllodromia lineolata*, KIRBY, 1904, Syn. Cat. Orth. 1, p. 98; REHN, 1916,  
Trans. Am. Ent. Soc. 42, p. 235.  
*Euphyllodromia variegata*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 188  
REHN, 1932, Ark. Zool. 24A, 11, p. 42.

Type: ♂, Pará, Brazil (British Museum).

Distribution: Brazil; French Guiana; Surinam. REHN (1932, p. 43): "variegata ranges from the Manaos district eastward to the lower Amazon and northward to French Guiana".

Leiden Museum: 2 ♂♂, Nassau Mts., 1+3.III.1949.

First record from Surinam.

The dark pronotal disc of *E. variegata* has a median pair of narrow, caudad diverging, slightly sinuate pale lines, which reach from the cephalic to the caudal margin; lateral margins broadly pale. Occiput has five distinct pale longitudinal lines, which end at the point where the internal eye margin diverges laterad.

Measurements: length of body 8.9, length of pronotum 2.3, width of pronotum 3.5, length of tegmen 9.2 mm.

### Euphyllodromia prona (Rehn)

*Pseudophyllodromia prona* REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 264.  
*Euphyllodromia prona*, REHN, 1932, Ark. Zool. 21A, 11, p. 39.

Type: ♂, ♀, Demerara, British Guiana (Bruner's collection).

Distribution: This species has only been recorded from British Guiana.

The following quotation is from the original description by REHN (1906, p. 265). "Head with three median, longitudinal, closely placed, parallel ochre yellow lines on the interocular space, the face with five transverse maculations of the same color, the dorsal one a complete fine line, the second, between the antennae, a broad V-shaped mark, the third a row of four subcircular maculations, the fourth, on the clypeal suture, a thick, narrowed mesad line, the fifth a simple line across the clypeus; eyes walnut brown; antennae strongly infuscate except a brief ferruginous proximad section. Pronotum with the disc clove brown, a narrow median line and the lateral section pale ochre yellow, a spot on the caudal section of the pale lateral sections clove brown; caudal margin narrowly pale."

**Euphyllodromia fasciatella (Saussure)**

*Pseudophyllocladomia fasciatella* SAUSSURE, 1868, Rev. Zool. (2) 20, p. 99; SAUSSURE, 1870, Miss. Mex. Orth., p. 45, pl. 1 figs. 26-26a; REHN, 1903, Trans. Am. Ent. Soc. 29, p. 261; KIRBY, 1904, Syn. Cat. Orth. 1, p. 98; REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 264.

*Euphyllodromia fasciatella*, HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 360.

Type: ♂, Surinam.

Distribution: Surinam and British Guiana.

**Euphyllodromia chopardi Hebard**

*Euphyllodromia chopardi* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 202, pl. xv figs. 1-2; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 189; REHN, 1932, Ark. Zool. 24A, 11, p. 38.

Type: ♂, Bartica, British Guiana (Ac. Nat. Sci. Phila., type no. 5369).

Distribution: French and British Guiana; Brazil. REHN (1932, p. 38): "the species ranges from the Guianas to central Amazonia, apparently not occurring in the general vicinity of Pará or other localities near the mouth of the Amazon."

According to HEBARD and REHN there is considerable variation in the pronotal pattern, owing to differences in intensity of infuscation. This species is a close relative of SAUSSURE's *fasciatella*, and occurs with that species (REHN, 1932).

**Euphyllodromia elegans (Shelford)**

*Pseudophyllocladomia elegans* SHELFORD, 1907, Ann. Mag. Nat. Hist. (7), 19, p. 34. *Euphyllodromia elegans*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 188 (in part; French Guianan records only); REHN, 1928, Trans. Am. Ent. Soc. 54, p. 136, pl. xviii fig. 3.

The present specific name has been erroneously used for *E. tupi* Rehn by REHN (1916, Trans. Am. Ent. Soc. 42, p. 235) and HEBARD (1921, Trans. Am. Ent. Soc. 47, p. 129), and for *E. atropos* Rehn by HEBARD (1926, Proc. Acad. Nat. Sci. Phila. 78, p. 188; in part).

In *E. tupi*, the interocular space is distinctly narrower than the distance between the antennal sockets; in *elegans*, the interocular space is broad, the antennae are piliform, non-incrassate and sparsely pilose without pale annulus distad (REHN, 1928).

**Euphyllodromia atropos Rehn**

*Euphyllodromia atropos* REHN, 1928, Trans. Am. Ent. Soc. 54, p. 137, pl. xviii fig. 4, pl. xix fig. 13.

Type: ♀, Mallali, British Guiana (Acad. Nat. Sci. Phila., type no. 5457).

Allotype: ♂, Zanderij Island, Boven Para District, Surinam (Acad. Nat. Sci. Phila.).

Distribution: British Guiana and Surinam.

Amsterdam Museum: 1 ♂, Zanderij 1, D. Piet, 29.xi.1950.

The allotype has been reported from Zanderij Island in the upper Para, but no island of this name is known in Surinam. The specimen was probably collected at Zanderij 1 (one!), and the 1 has been misinterpreted as an abbreviation for island. The specimen from Amsterdam Museum comes from the same locality and agrees with the description of the allotype in every respect.

The present species can easily be distinguished by the anal field of the tegmina, which has a clear hyaline median area crossed by two dark axillary veins.

Measurements: length of body 8.4, length of pronotum 2.1, width of pronotum 3.7, length of tegmen 10.1 mm.

**Chromatonotus Hebard**

1919 *Chromatonotus* HEBARD, Am. Ent. Soc. 4, p. 44.

Genotype: *Chromatonotus lamprus* Hebard

**Chromatonotus notatus (Brunner)**

*P(hyllodromia) notata* BRUNNER, 1893, Proc. Zool. Soc. London 41, p. 602, pl. lii figs. 1a–b; BRUNNER, Journ. N.Y. Ent. Soc. 14, p. 139.

*Chromatonotus notatus*, HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 45 (footnote); HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 154; REHN & HEBARD, 1927, Bull. Am. Mus. Nat. Hist. 54, p. 99; PRINCIS, 1955, Bol. Ent. Venez. II, p. 3; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 159.

Types: ♂, ♀, St. Georges and Balthazar, Grenada, B.W.I.

Distribution: Grenada; Trinidad; Venezuela; Surinam; French Guiana.

Leiden Museum: 2 ♀♀, Wia Wia, 25+26.xi.1948; 1 ♀, Grancreek, Marowijne, 29.vi.1939.

This species has not previously been recorded from Surinam. The facial markings are clear in only one of the specimens.

Measurements: length of body 9.5–10.0, length of pronotum 2.1–2.3, width of pronotum 3.2–3.5, length of tegmen 9.5–10.2 mm.

### **Dasyblatta** Hebard

1921 *Dasyblatta* HEBARD, Proc. Acad. Nat. Sci. Phila. 73, p. 224.

Genotype: *Dasyblatta thaumasia* Hebard.

### **Dasyblatta thaumasia** Hebard

Fig. 26-27

*Dasyblatta thaumasia* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 225, pl. IX figs. 9–11.

Type: ♂, Pará, Brazil (Acad. Nat. Sci. Phila., type no. 5377).

Distribution: Brazil (Pará); Surinam.

Leiden Museum: 1 ♀, Republiek, 3.IX.1948; 1 ♀, third camp, km. 15.3, 15.X.1948; 1 ♂, Sectie O, 4.XI.1942.

This species is very distinctive and may readily be recognized by the broad, conspicuous, intercalated triangle (fig. 26), which is curled and tubuliform when at rest, and by being clothed with microscopic hairs.

The male specimen fully agrees with HEBARD's description and with figures of the type from Pará (fig. 27). The description of the female follows here: Republiek, D. C. Geijkes, 3.IX.1948 (Leiden Museum).

♀. – Closely resembles male in size and development of tegmina and wings. Differs in the following characters: eighth tergite symmetrical, the latero-caudal angles slightly produced caudad and curved upward dorsad; supra-anal plate not as broadly rounded distad as in male; subgenital plate broadly convex, symmetrical.

Measurements: length of body ♂ 9.8, ♀ 9.5; length of pronotum ♂ 2.4, ♀ 2.5; width of pronotum ♂ 2.9, ♀ 3.5; length of tegmen ♂ 10.1, ♀ 10.1 mm.

### **Supella** Shelford

1911 *Supella* SHELFORD, Ent. Month. Mag. 47, p. 155.

1917 *Supella*, HEBARD, Mem. Am. Ent. Soc. 2, p. 46.

Genotype: *Supella supellectilium* (= *Blatta supellectilium*) (Serville).

**Supella supellectilium (Serville)**

Types: ♂, ♀, Mauritius.

Distribution: cosmopolitan, circumtropical domestic species.

Leiden Museum: ♀, Paramaribo, in house, 25.II.1940.

**Doradoblatta nov. gen.**

This genus has been proposed to include the new species *D. coppenamensis*, described here. The new genus corresponds with *Phidon* Rehn in a large number of features, but it may at once be distinguished by the form of the face and the simple discoidal sectors of the tegmina.

Generic description: head broadly pyriform; area between eyes and ocellar spots on a plane different from area below the antennal sockets; the latter area is raised in the median; interocular space broad, broader than area between antennal sockets (fig. 28). Pronotum transverse, lateral margins weakly deflexed, oblique sulci of pronotal disk weak; cephalic margin broadly arcuate, narrower than caudal margin, lateral margins arcuate. Tegmina fully developed, with discoidal sectors oblique. Wings with proximal costal veins thickened from near base; ulnar vein with complete branches, the proximal one may be interrupted in the middle; intercalated triangle small but moderately well-developed. Dorsal surface of male abdomen strongly specialized; supra-anal plate symmetrical, strongly transverse; subgenital plate broadly rounded, with specialized styles mesad. Ventro-cephalic margin of cephalic femora with elongate spines, succeeded by a row of minute chaetiform spines terminating distad in two elongate spines. Tarsal claws unspecialized, symmetrical. Small, apical pulvilli on fourth joint only.

Genotype: *Doradoblatta coppenamensis* nov. spec.

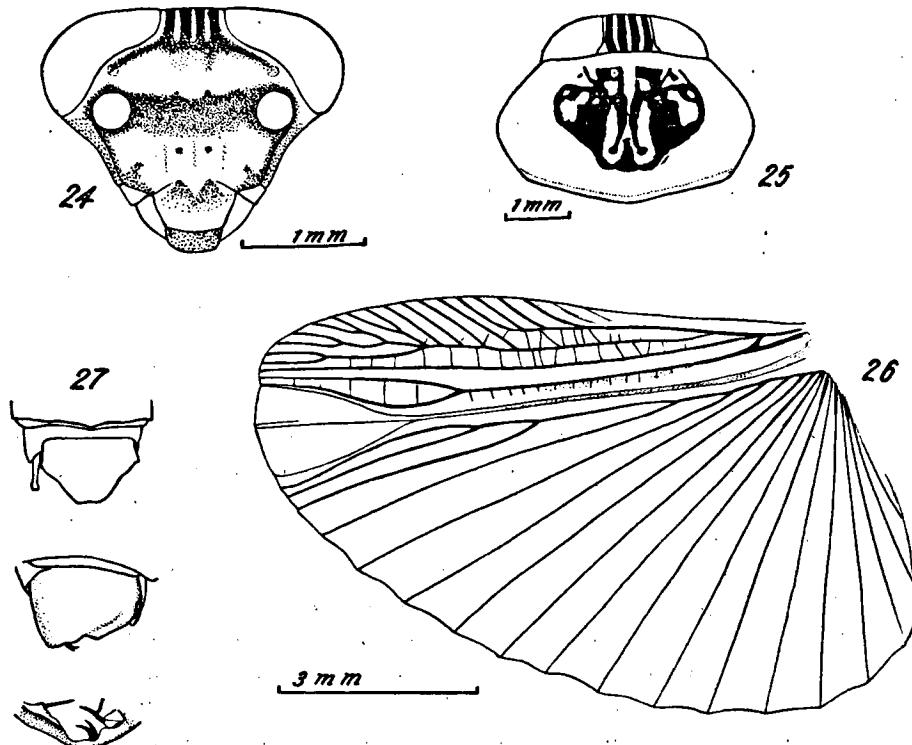
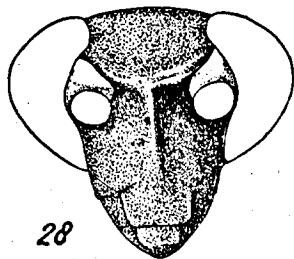


Fig. 24-25. *Euphyllodromia marowijnensis* nov. spec. — 24. Cephalic view of head.  
— 25. Dorsal view of pronotum.

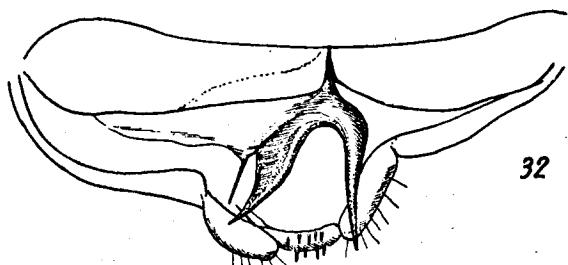
Fig. 26-27. *Dasyblatta thaumasia* Hebard — 26. Wing. — 27. Dorsal view of distal portion of abdomen, and ventral and caudal view of subgenital plate of male.

Fig. 28-34. *Doradoblatta coppennamensis* nov. spec. — 28. Cephalic view of head.  
— 29. Tegmen. — 30. Wing. — 31. Seventh tergite of male. — 32.  
Dorso-caudal view of supra-anal plate of male. — 33. Dorsal view of  
pronotum. — 34. Caudal view of subgenital plate of male.

85

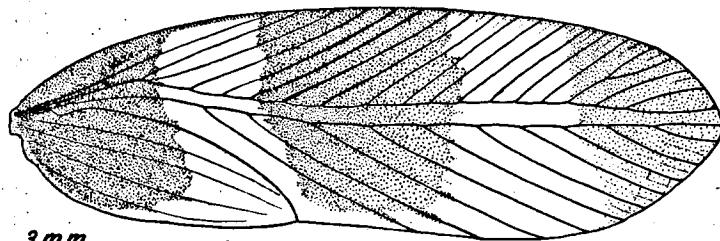


28



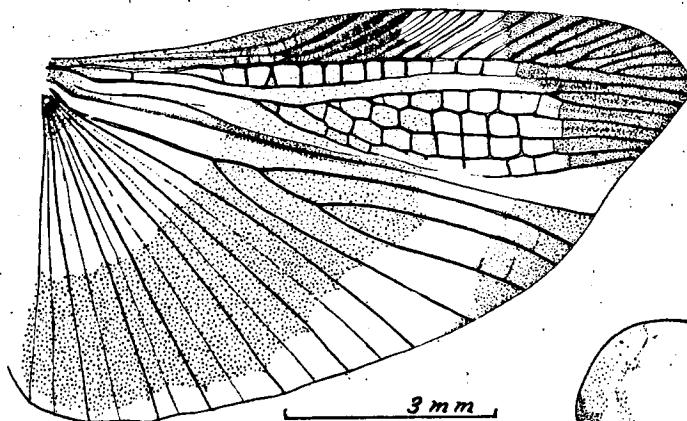
32

29



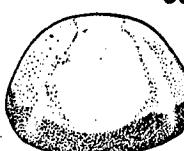
3 mm

30



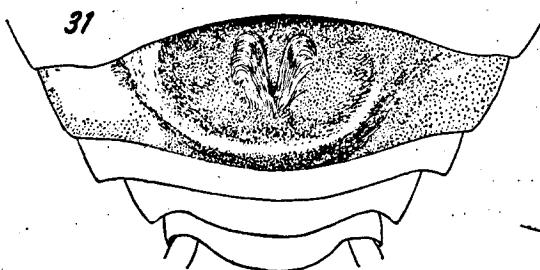
3 mm

33

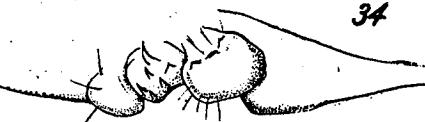


1mm

31



34



1mm

**Doradoblatta coppenmensis nov. spec.**

Fig. 30-34

Type: ♂, Wilhelmina Mts., Coppenname Exp., D. C. Geijskes, 31.viii.1943.

The following characters may be added to those given in the generic description.

Ocellar spots distinct.

Tegmina and wings extending beyond the long, slender cerci. Tegmina with (10) discoidal sectors decidedly oblique (fig. 29). Wings with the (8) proximal costal veins thickened from near base (elongate clavate), the (about 9) distal ones non-clavate; medio-discoidal area slightly broader than medio-ulnar area, with numerous cross-veinlets which divide the area into rectangular areolets; ulnar vein with (5) complete branches, the proximal one sometimes interrupted in the middle; numerous cross-veins between the branches of the ulnar; axillary vein triramous (fig. 30).

Dorsal surface specialized. Seventh tergite with a semicircular depression mesad, this area being flanked by a broad rounded ridge convergent caudad; the centre of the depressed area is furnished with two tufts of agglutinated hairs which curl outward cephalad (fig. 31).

Subgenital plate symmetrical, caudal margin broadly rounded; mesad two lobes (specialized styles), between which the margin curls inward and bears a number of curved spines. Beneath the supra-anal plate a pair of heavy plates projects ventrad; between these and the subgenital plate a strongly chitinized fork, consisting of two curved spines (one of the spines is flat and thorn-like, the other more horn-like) and a hair-like spine (figs 32 and 34).

Head blackish mummy-brown, ocelli and antennal sockets warm buff, eyes nearly black. Antennae mummy-brown. Pronotum with lateral and narrow cephalic margins translucent, pale ochraceous-buff, the centre of the disc ochraceous-buff; caudal margin broadly margined with blackish mummy-brown (fig. 33).

Tegmina translucent pale ochraceous-buff with three broad mummy-brown bands; the first runs from the tegminal base to halfway up the anal vein; the second covers the area from the end of the anal vein up to about three-fifths of the tegminal length;

the third brown band covers the top of the tegmen. Wings transparent; a semicircular area running from the middle of the front margin to the meso-caudal margin is tinged with mummy brown, most heavily in the costal area; at the top of the wing another semicircular area, is heavily tinged with mummy brown. Dorsal surface of the abdomen mummy-brown, except first tergites and caudal margin of supra-anal plate, which are ochraceous-buff. Ventral surface of abdomen and legs blackish mummy-brown, except the light ochraceous-buff hind coxae.

♀, Allotype: Paloemeu, Tapanahony Exp., Van Stockum, VIII.1904.

Badly damaged. Agrees with male in all respects except those of the non-specialized abdomen, the simple narrow supra-anal plate, and the triangularly incised subgenital plate.

Measurements: length of body ♂ 8.1, ♀ damaged; length of pronotum ♂ 2.1, ♀ 2.5; width of pronotum ♂ 3.1, ♀ 3.2; length of tegmen ♂ 10.3, ♀ 10.1 mm.

#### **Pseudomops Serville**

1831 *Pseudomops* Serville, Ann. Sci. Nat. 22, 85, p. 41.

1838 *Thrysocera* Burmeister, Handb. Ent. 2, p. 498 (in part)

1917 *Pseudomops*, HEBARD, Mem. Am. Ent. Soc. 2, p. 154.

Genotype: *Pseudomops elongata* (= *B(latta) oblongata*) (Linnaeus).

The wide individual variation in colour and the extensive distribution of this genus have caused much confusion, since most species descriptions were based on the pronotal and tegminal colour pattern. Moreover, the older descriptions are very short and inadequate.

#### **Pseudomops affinis (Burmeister)**

*Thrysocera affinis* BURMEISTER, 1838, Handb. Ent. 2, p. 499.

*Thrysocera crinicornis*, SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Am. Orth. 1, p. 33 (not *T. crinicornis* Burmeister).

*Pseudomops affinis*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 190; HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 361.

Type: Surinam.

Distribution: Surinam; French and British Guiana; Brazil (Pará).

Leiden Museum: ♀, Rust en Werk, 15.v.1939; ♀, Gansee, Surinam river, H. Heyde, 11.III.1950.

Amsterdam Museum: ♀, Albina, Marowijne, D. Piet, 27.I.1951.

The species *P. luctuosa* (Saussure), *P. affinis* (Burmeister) and *P. crinicornis* (Burmeister) are closely related and have often been confused. Whether or not the characters used to distinguish these species are really of specific value is a point that still remains to be proved. The following quotations may give an impression of the complications.

HEBARD (1926, p. 190): "There is no doubt but that the material recorded by Saussure and Zehntner from Cayenne represents this species. Brazil was also given by them, that record based on the specimen twice previously correctly recorded by Saussure. The male, recorded and described as *affinis* by Walker, from "St. Paul" Brazil, may represent it or a closely allied species. Rehn's record of *affinis* from Igarapé-Assú, Pará, Brazil, represents a distinct species, allied to *affinis* but probably nearer *P. hirticornis* (Burmeister), described from Pará."

In a footnote on the same page HEBARD says, regarding *P. hirticornis*: "That name was placed as a synonym of *affinis* by Brunner in 1865. We believe that it represents a Brazilian species, allied to but distinct from the Guianan *affinis*. Kirby recognized *hirticornis* as valid in 1904, but Shelford followed Brunner in 1906, disregarding the indications that that author had discussed material as *affinis* which probably represented two species."

The same author stated in 1929 (p. 361): "The Para female, except that it is more intensively colored, agrees in every way with the female from St. Jean du Maroni, French Guiana, discussed by us in 1926.

That from Kartabo may represent a distinct species. The pronotum is solidly black, except for very narrow lateral and caudal margins, and the translucent areas of the tegmina, except in the costal field, are much more obscured. This individual is seen to agree closely with the male described as *Pseudomops affinis* var. ? from "St. Paul" (= São Paulo, Brazil) by Walker in 1868.

We know that numerous species of this group exist and that in some are shown wide individual color variation. Until better understood, the differences between the specimens here recorded had best be attributed to that."

Measurements: length of body 9.2–10.2, length of pronotum 3.1–3.5, width of pronotum 3.2–3.4, length of tegmen 10.5–10.6, length of style 3.5 mm.

#### *Pseudomops luctuosa* (Saussure)

*Thyrsocera luctuosa* SAUSSURE, 1870, Miss. Sci. Mex. Zool. 6, p. 48, pl. 1 figs. 27–27a.  
*Pseudomops luctuosa*, HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 189;  
REHN, 1932, Ark. Zool. 24A, 11, p. 50.

*Pseudomops crinicornis*, REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 263 (not  
*P. crinicornis* Burmeister).

Type: Surinam.

Distribution: Surinam; French Guiana; Brazil (Teffé, Central Amazon).

The present species has often been confused with its relatives *P. crinicornis* (Burmeister) and *P. affinis* (Burmeister), as appears from the following quotations.

HEBARD (1926, p. 189): "We have carefully considered *P. crinicornis* (Burmeister), described from Pará, Brazil, and find that *luctuosa* is exceedingly closely related. Walker's description of a female from Pará, adds to the original data on that species the statement that the apical half of the antenna is whitish toward its base. In *luctuosa*, known only from females, the antennae are solidly black."

In all other described features these species appear to agree fully, but that difference is apparently so marked, that it seems unwise to place *luctuosa* as a synonym of *crinicornis*, as Kirby did in 1904.

Unfortunately Saussure and Zehntner recorded material from Cayenne as *crinicornis* which actually represents *P. affinis* (Burmeister), at that time wholly ignoring *luctuosa*. That incorrect determination was accepted by Shelford in 1906, who consequently stated that *luctuosa* was quite distinct from *crinicornis* (the comparison being actually made with material of *affinis*)."

The same author stated (p. 190): "Our attitude that *luctuosa* from the Guianas and upper Amazon probably represents a distinct, though closely related, species from *crinicornis* from Pará, Brazil, is strengthened by the fact that, when similar forms of the rarer Blattidae occur in these two regions, they are specifically separable in many cases."

REHN (1932, p. 50), writing about a specimen from Rio Autaz, Brazil, remarked: "This individual fully agrees with Cayenne specimens recently reported by Hebard. Whatever may prove to be the true relationship of Burmeister's *crinicornis*, described from Pará, this individual and those from Cayenne are Saussure's *luctuosa* beyond question."

This species is now known from Surinam. Cayenne and the central and west-central Amazon (Teffé). Whether it is replaced in the lower Amazon by a different species (i.e. *crinicornis*), as has been suggested by Hebard, remains to be determined. Personally I feel this is quite possible, as numerous parallel cases are known to exist."

#### **Pseudomops brunneri (Saussure)**

*Thysocera brunneri* SAUSSURE, 1869, Rev. Zool. (2) 21, p. 111; SAUSSURE, 1870, Miss. Sci. Mex., Zool. 6, p. 49.

*Pseudomops brunneri*, HEBARD, 1929, Trans. Am. Ent. Soc. 55, p. 361; REHN, 1932, Ark. Zool. 24A, 11, p. 46.

Type: ♀, Surinam.

Distribution: Surinam; British Guiana; Brazil (Manaos); Bolivia.

Leiden Museum: 2 ♂♂, Coronie road, 17+23.xii.1948; 1 ♂, Herminadorp, Marowijne, 9.ii.1949; 4 ♀♀, Charlesburg, Paramaribo, 21.xii.1939, 7.i.1940, 13.iv.1940, and 16.vii.1941; 1 ♀, Botanical Gardens, Paramaribo, 25.i.1940; 1 ♂, 1 ?, Sorgvliet plantation, 8.i.1939; 1 ?, Peperpot plantation, 14.xi.1950; 1 ♂, third camp, km. 16.5, 15.x.1948.

Amsterdam Museum: 1 ♂, 2 ♀♀, Albina, Marowijne, D. Piet, 27.i.1951; 1 ♀, Peperpot plantation, near Paramaribo, D. Piet, 14.xi.1950.

Our series greatly varies in intensity of the pronotal pattern. In some specimens the pattern is only vaguely suggested, by a mere washed ochraceous-buff; in others it is ochraceous-tawny, with or without small black dots; and, finally, in a number of cases the pronotal design or part of it is black. The cephalad part of the pattern is sometimes divided mesad, and looks like two dots, while in others it is solid black. The crescent band along the hind margin is sometimes darker than the cephalad part, but in other cases its coloration is less intense. The large series is, however, constant in these differences. Moreover, the six males show exactly the same genital features.

As far back as 1870 SAUSSURE pointed to the great variability of the pronotal pattern, as may be shown by the following quotation: "Cette espèce a sûrement des couleurs très-variables; il est probable que la tâche du prothorax devient souvent brune avec bordure complète jaune, élargie sur les côtés."

One of the *P. affinis* specimens has a pronotal pattern which has the same outlines as the darker specimens from our *brunneri* series, but is much darker. It agrees with the specimen reported by HEBARD (1926, p. 190) from French Guiana ("the triangular margins on each side are only indicated").

In my opinion there is a possibility that *P. affinis* is merely a melanistic form of *P. brunneri*. However, since we have no continuous series and no males of *affinis*, nothing can be proved at present.

Measurements: length of body ♂ 9.6–10.5, ♀ 9.2–10.1; length of pronotum ♂ 2.9–3.2, ♀ 2.8–3.2; width of pronotum ♂ 2.6–3.0, ♀ 3.0–3.2; length of tegmen ♂ 9.5–10.5, ♀ 9.5–10.6 mm.

### **Pseudomops oblongata (Linnaeus)**

*B(latta) oblongata* LINNAEUS, 1758, Syst. Nat. ed. 10, p. 425; DE GEER, 1773, Mém. Ins. 3, p. 541, pl. 44 figs. 11–12.

*Thrysocera oblongata*, BURMEISTER, 1838, Handb. Ent. 2, p. 449.

*Pseudomops oblongatus*, REHN, 1902, Trans. Am. Ent. Soc. 29, p. 2.

*Pseudomops oblongata*, REHN, 1903, Trans. Am. Ent. Soc. 29, p. 260; KIRBY, 1904, Syn. Cat. Orth. 1, p. 75; SHELFORD, 1906, Trans. Ent. Soc. Lond. 1906, p. 252; Shelford, 1907, Trans. Ent. Soc. Lond. 1907, p. 464; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 189.

Type: Surinam.

*P. oblongata* (L) and *P. intercepta* (Burmeister) are closely related. They differ

in pronotal pattern, but since that character is of little taxonomic value in the present genus, the *intercepta* may represent only the more intensively coloured specimens of *oblongata*.

The type was collected in Surinam, and *oblongata* was later also reported from French and British Guiana. The pronotal pattern was described by SHELFORD (1906) as follows: "the disc of pronotum is marked by two dark points which may be joined and by a crescentic dark band near the posterior margin."

## ANAPLECTINAE

### Riatia Walker

1868 *Riatia* WALKER, Cat. Blatt. Br. Mus., p. 66.

1919 *Lissoblatta* HEBARD, Mem. Am. Ent. Soc. 4, p. 10.

Genotype: *Riatia pallicornis* Walker

### Riatia fulgida (Saussure)

*Anaplecta fulgida* SAUSSURE, 1862, Rev. Zool. (2) 14, p. 163; SAUSSURE, 1864, Mém. Mex. Blatt., p. 50; SAUSSURE, 1970, Miss. Mex. Orth., p. 19, pl. I fig. 12; SAUSSURE & ZEHNTNER, 1893, Biol. Centr. Am. Orth. 1, p. 28, pl. IV fig. 16; BRUNNER, 1865, Nouv. Syst. Blatt., p. 66; KIRBY, 1904, Syn. Cat. Orth. 1, p. 68; REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58, p. 263.

*Lissoblatta fulgida*, HEBARD, 1919, Mem. Am. Ent. Soc. 4, p. 10.

*Riatia fulgida*, HEBARD, 1933, Trans. Am. Ent. Soc. 59, p. 111.

Type: Guatemala.

Distribution: Central America (Mexico, Guatemala, Costa Rica); British Guiana?

REHN (1906, p. 263) reported two males and two females from Demerara, British Guiana, but no records from South America have been made since. It is possible that REHN was dealing with one of the closely related *Riatia* species, such as *R. orientis* (Hebard).

### Riatia orientis (Hebard)

*Lissoblatta orientis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 135, pl. XII fig. 1.

*Riatia orientis*, PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 69; PRINCIS & KEVAN, 1955, Opusc. Ent. 20, p. 166; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 9.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 987).

According to HEBARD *R. orientis* is closely related to *R. fulgida* (Saussure), from Central America, differing in the male genitalia. In the females no differences between the two species are known.

#### ***Riatia distincta* (Hebard)**

*Lissoblatta distincta* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 136, pl. XIV figs. 11-12.

Type: ♂, La Forestière, upper Maroni river, French Guiana (Hebard collection, type no. 1013).

Distribution: French Guiana; Surinam.

Leiden Museum: 1 ♂, Poeloegoedoe, Marowijne, 30.VIII.1939.

This is the first report since the description of the unique type. The male genital characters and the form of the tegmina of this badly damaged specimen agree completely with those of the type.

Measurements: length of pronotum 1.6, width of pronotum 2.1, length of tegmen 5.7, width of tegmen 1.9 mm.

#### ***Riatia stylata* (Hebard)**

*Lissoblatta stylata* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 137, pl. XII fig. 2.

Type: ♂, St. Jean du Maroni, French Guiana (Hebard collection, type no. 988).

Distribution: French Guiana; Surinam.

Leiden Museum: 1 ♂, Wia Wia, 26.XI.1948.

The highly specialized male genitalia agree completely with the description of the type. According to HEBARD *R. stylata* can be distinguished from the Central American *R. flabellata* (Saussure & Zehntner) only by the specialized styles.

Measurements: length of body 5.5, length of pronotum 1.6, width of pronotum 2.1, length of tegmina 5.0 mm.

**Anaplecta Burmeister**

1838 *Anaplecta* BURMEISTER, Handb. Ent. 2, p. 494.  
 1919 *Anaplecta*, HEBARD, Mem. Am. Ent. Soc. 4, p. 13.

Genotype: *Anaplecta lateralis* Burmeister (selected by KIRBY, 1904).

**Anaplecta pulchella Rehn**

*Anaplecta pulchella* REHN, 1906, Proc. Acad. Nat. Sci. Phila. 58; p. 262; HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 195; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 144.

Type: ♀, Demerara, British Guiana (Hebard collection, type no. 509).

Distribution: British and French Guiana; Surinam.

Leiden Museum: 1 ♀, third camp, km. 15, 15.x.1948; 1 ♀, Wilhelmina Mts., 27.VIII.1943; 5 ♀♀, Nassau Mts., 5, 7, 14, 15+19.III.1949.

The present species can easily be distinguished by the distinctive coloration of the face, tegmina and wings. The specimens in the Leiden collection agree fully with the description of the type.

Measurements: length of body 7.5–9.0, length of pronotum 1.8–2.0, width of pronotum 2.6–2.9, length of tegmina 8.0–8.5 mm.

**Anaplecta minutissima (De Geer)**

*Blatta minutissima* DE GEER, 1773, Mém. Hist. Ins. 3, p. 542, pl. XIV figs. 13–14.  
*Anaplecta minutissima*, BURMEISTER, 1838, Handb. Ent. 2, p. 494; BRUNNER, 1865, Nouv. Syst. Blatt., p. 64; KIRBY, 1904, Syn. Cat. Orth. I, p. 67; REHN, 1918, Proc. Acad. Nat. Sci. Phila. 70, p. 145, footnote 3; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 138.

Type: Surinam.

Distribution: Surinam; French Guiana.

Leiden Museum: 1 ♂, Republiek, 5.IX.1948.

The pronotum is a very clear hyaline, with a deep, shining, blackish mummy-brown, urn-shaped patch in the centre, which starts at the cephalic margin but does not reach the caudal margin.

Measurements: length of body 3.9, length of pronotum 1.1, width of pronotum 1.6, length of tegmen 3.8, length of wing (from wing base to top) 5.2 mm.

**Anaplecta pygmaea nov. spec.**

Fig. 35-36

Type: ♂, Paramaribo, Douglas, 1919.

The unique type is damaged. This is a very small species, of ochraceous-tawny coloration.

Size small. Head longer than broad; an arcuate rounded ridge on the interocular area of the face, above the ocellar areas and mesad between the antennal sockets.

Pronotum rectangulate-ovate, surface weakly convex. Tegmina with convex costal margin, costal veins 8; discoidal venation strongly reduced, one straight and one strongly curved discoidal vein, the latter with a branch which joins the main stem, enclosing a lens-shaped area (fig. 35). Wings with very simple venation in medio-discoidal area; median vein strongly curved, with five to six branches; discoidal vein simple, joining the median vein distad; appendicular field longer than broad (fig. 36).

Supra-anal plate produced between the cerci, the lateral margins convergent, rather sharply rounding into the caudal margin. Subgenital plate slightly asymmetrically trapezoidal. Styles very small.

Head, ventral and dorsal surface of abdomen ochraceous-tawny; lateral and caudal margin of pronotum subhyaline; tegmina pale ochraceous, subhyaline. Cerci pale ochraceous.

Measurements: length of body 2.7, length of pronotum 0.8, width of pronotum 1.2, length of tegmen 2.9, length of wing (extended) 5.5 mm.

**Anaplecta maronensis Hebard**

*Anaplecta maronensis* HEBARD, 1921, Proc. Acad. Nat. Sci. Phila. 73, p. 194, pl. ix fig. 3; HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 144.

Type: ♀, La Forestière, upper Maroni river, French Guiana (Paris Museum).

Distribution: French Guiana and Surinam.

Leiden Museum: 1 ♂, Coppenname Exp., fifth camp, 10.VIII.1943.

First report since the description of the type. The coloration of the present specimen agrees well with that of the type. The wings are heavily tinged with mummy brown, most heavily in the appendicular field and medio-discoidal area. The number of tegminal costal veins (8), and of the discoidal sectors (2), are the same as in the type.

Measurements: length of body 4.4, length of pronotum 1.1, width of pronotum 1.7, length of tegmen 3.7, length of appendicular field of wing 2.5 mm.

#### *Anaplecta insignis* Hebard

*Anaplecta insignis* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 140, pl. XII fig. 5.

Type: ♀, Nouveau Chantier, French Guiana (Hebard collection, type no. 990).

Distribution: French and British Guiana; Surinam.

Leiden Museum: 1 ♀, Post Groningen, W. C. van Heurn, IX.1911.

The specimen in the Leiden Museum is the first reported from Surinam. The distinctive tegminal and pronotal colour patterns agree fully with those of the type.

Measurements: length of body 4.1, length of pronotum 1.2, width of pronotum 1.7, length of tegmen 4.7 mm.

#### *Anaplecta subsignata* Hebard

Fig. 37

*Anaplecta subsignata* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 139, pl. XII figs. 3-4.

Type: ♂, Nouveau Chantier, French Guiana (Hebard collection, type no. 989).

Distribution: French Guiana; Surinam.

Leiden Museum: 2 ♀♀, Feticreek, Litani, 10.VIII.1939.

Wings suffused with light ochraceous-buff in appendicular field and costal area. For venation of the wing see fig. 37.

Measurements: length of body 6.0, length of pronotum 1.6, width of pronotum 2.0; length of tegmen 5.8, length of appendicular field of wing 2.2 mm.

**Anaplecta suffusa** Hebard

Fig. 38

*Anaplecta suffusa* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 141, pl. XII figs. 6-7; PRINCIS, 1955, Bol. Ent. Venez. 11, p. 99.

Type: ♂, St. Laurent du Maroni, French Guiana (Hebard collection, type no. 991).

Distribution: French and British Guiana; Surinam; Venezuela.

Leiden Museum: 1 ♀, Nassau Mts., 19.III.1949; ♀, third camp, km. 14.9, 14.x.1948.

Wings strongly suffused with mummy brown in appendicular field and costal area, the latter with yellowish subhyaline margin in front of thickened costal veins; the remainder of the wing weakly suffused with mummy brown. For venation see fig. 38.

Measurements: length of body 6.1-7.5, length of pronotum 1.6-1.8, width of pronotum 2.0-2.4, length of tegmen 6.1-7.2, length of wing from base to top of appendicular field 7.1-8.7, length of appendicular field 2.0-2.7 mm.

**Anaplecta pluto** Hebard

*Anaplecta pluto* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 142, pl. XII fig. 8; PRINCIS, 1951, Spol. Zool. Mus. Haun. 12, p. 69.

Type: ♀, Nouveau Chantier, French Guiana (Hebard collection, type no. 992).

Distribution: French Guiana and Surinam.

PRINCIS reported a specimen from Paramaribo, collected by CHRISTIANS in 1913.

**Anaplecta poecila** Hebard

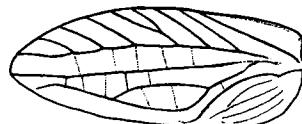
*Anaplecta poecila* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 143, pl. XII fig. 9.

Fig. 35-36. *Anaplecta pygmaea* nov. spec. — 35. Tegmen. — 36. Wing.

Fig. 37. *Anaplecta subsignata* Hebard — Wing.

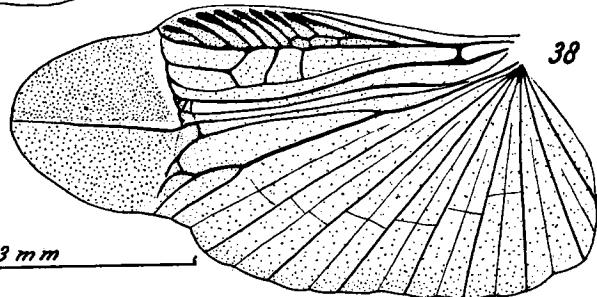
Fig. 38. *Anaplecta suffusa* Hebard — Wing.

Fig. 39-40. *Anaplecta guianae* nov. spec. — 39. Tegmen. — 40. Dorsal view of pronotum.



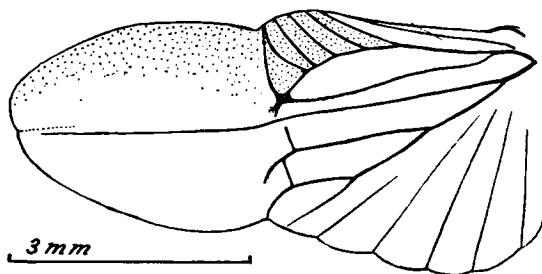
35

1.5 mm



38

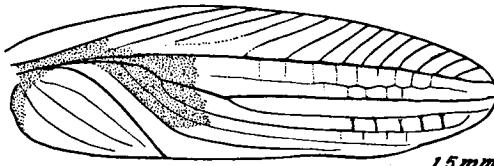
3 mm



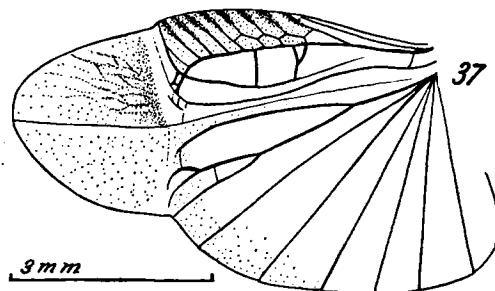
36

3 mm

39



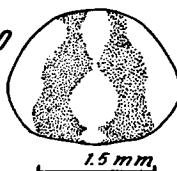
1.5 mm



37

3 mm

40



1.5 mm

Type: ♀, La Forestière, upper Maroni river, French Guiana (Hebard collection, no. 993).

Distribution: French and British Guiana.

**Anaplecta guianae nov. spec.**

Fig. 39-40

The present species is nearest the Panamanian *A. gemma* Hebard, from which it differs in the pronotal and tegminal markings. Its tegminal pattern is intermediate between those of *A. gemma* Hebard and *A. falcifer* Hebard, the dark brown patch being slightly more extensive than in *gemma* but much smaller than in *falcifer*. The pronotal pattern is very distinct, differing from that of *gemma*, which is merely a weakly suggested dark marking. Size rather large for the *bivittata* group.

Head slightly longer than broad; from each ocellar spot a rounded arcuate ridge runs above the antennal sockets. Ocellar spots distinct. Pronotum weakly convex, outline elliptical with a caudal truncation.

Tegmina narrow, the costal margin weakly convex to the narrowly rounded apex; the (12-13) costal veins are simple; five longitudinal discoidal sectors (fig. 39). Wings with about 8, distally clubbed, costal veins; the medio-discoidal area with a few transverse veinlets, the distal one forming an angle of about 90 degrees at one-third of its length from the median vein; a longitudinal branch runs distad from this angle; appendicular field slightly more than one-third the length of the remaining portion of the wing (measured from the wing base to end of the base of appendicular field). Supra-anal plate broadly trigonal, caudal margin rounded angulate, with numerous hairs. Subgenital plate roundly produced; its medio-distal area valvular.

Head Prout's brown with a pale median vertical suffusion on the occiput and between the antennal sockets. Pronotum with two broad meso-lateral longitudinal bands of blackish brown; the lateral margins of the bands are bisinuate; area between the bands hour-glass-shaped, ochraceous-buff; lateral borders of pronotum broadly

transparent buffy (fig. 40). Tegmina transparent, ochraceous-buff, with a well defined, blackish chestnut-brown patch meso-proximad in the discoidal field which sends a broad ray of the same colour along the humeral trunk into the basal part of the anal field.

Measurements: length of body 7.2, length of pronotum 1.7, width of pronotum 2.3, length of tegmen 6.8, length of appendicular field 2.1, length of remaining part of wing 5.9 mm.

Type: ♀, third camp, km. 14.9, D. C. Geiskses, 14.x.1948; Leiden Museum.

The type is unique.

#### **Maraca** Hebard

1926 *Maraca* HEBARD, Proc. Acad. Nat. Sci. Phila. 78, p. 144.

Genotype: *Maraca fossata* Hebard.

#### **Maraca fossata** Hebard

*Maraca fossata* HEBARD, 1926, Proc. Acad. Nat. Sci. Phila. 78, p. 145, pl. XIV fig. 13.

Type: ♀, La Forestière, upper Maroni river, French Guiana (Hebard collection, type no. 1014).

Distribution: Only known from the type locality.

#### REFERENCES

- BOLIVAR, I., 1901. Un nuevo ortóptero mirmecófilo Attaphila Bergi. *Comm. del Mus. nac. Buenos Aires* 1, no. 10, p. 331-336.
- BOLIVAR, I., 1905. Les blattes myrmécophiles. *Mitt. Schweiz. Ent. Ges.* 11, no. 3, p. 134-141.
- BRUNER, L., 1906. Report on the Orthoptera of Trinidad, West Indies. *Journ. New York Ent. Soc.* 14, p. 135-163.
- BRUNNER VON WATTENWYL, K., 1865. *Nouveau Système des Blattaires*, p. xi, 1-426, pls. 1-13.

- BRUNNER V. WATTENWYL, C., 1893. On the Orthoptera of the Island of Grenada, West Indies. *Proc. Zool. Soc. London* 1893, p. 599–611, pl. 52.
- BURMEISTER, H., 1838. *Handbuch der Entomologie*, vol. 2, part 2a, p. i–viii, 397–756.
- CAUDEL, N. A., 1922. Report on Orthoptera and Dermaptera collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. *Un. Iowa Stud. Nat. Hist.* 10, no. 1, p. 19–44, 2 figs.
- GEER, CH. DE, 1773. *Mémoires pour servir à l'histoire des Insectes*, vol. 3, p. 525–542, pls. 25 and 44.
- GIGLIO-TOS, E., 1898. (Viaggio del Dr. Enrico Festa nella Repubblica dell'Ecuador e regione vicine), VI. Ortotteri. *Boll. Mus. Zool. Anat. comp. Torino* 13, no. 311, p. 1–108.
- GRIFFINI, A., 1896. Ortotteri raccolti nel Darien dal dott. E. Festa. *Boll. Mus. Zool. Anat. comp. Torino* 11, no. 236, p. 1–12, 1 fig.
- GURNEY, A. B., 1937. Studies in certain genera of American Blattidae (Orthoptera). *Proc. Ent. Soc. Wash.* 39, no. 5, p. 101–112, pl. 8.
- HEBARD, M., 1916. Certain features found in the genus Panchlora, with other observations and the description of one new species (Orthoptera, Blattidae). *Ent. News* 27, p. 217–222, 1 fig.
- HEBARD, M., 1916. Two new dark-colored species of the genus Eurycotis (Orthoptera, Blattidae). *Ent. News* 27, p. 263–266, 1 fig., pl. 14.
- HEBARD, M., 1916. Critical notes on certain species of the genus Blaberus (Orthoptera, Blattidae). *Ent. News* 27, p. 289–296, pl. 15.
- HEBARD, M., 1916. The genus Ceratinoptera (Orthoptera, Blattidae, Pseudomopinae). *Trans. Am. Ent. Soc.* 42, p. 125–134, 4 figs.
- HEBARD, M., 1916. A new genus, Cariblatta, of the group Blattellites (Orthoptera, Blattidae). *Trans. Am. Ent. Soc.* 42, p. 147–186, pls. 11–13.
- HEBARD, M., 1916. Studies in the group Ischnopterites (Orthoptera, Blattidae, Pseudomopinae). *Trans. Am. Ent. Soc.* 42, p. 337–383, pls. 16–19.
- HEBARD, M., 1917. The Blattidae of North America north of the Mexican boundary. *Mem. Am. Ent. Soc.* 2, p. 1–284, pls. 1–10; index p. i–v.
- HEBARD, M., 1919. Studies in the Dermaptera and Orthoptera of Colombia. First paper. Dermaptera and Orthopterous Families Blattidae, Mantidae and Phasmidae. *Trans. Am. Ent. Soc.* 45, p. 89–179, pls. 16–23.
- HEBARD, M., 1919. A new genus and species of roach from the United States and tropical North America (Orthoptera; Blattidae; Panchlorinae). *Trans. Am. Ent. Soc.* 45, p. 299–302, 2 figs.
- HEBARD, M., 1919. A new Central American genus and species of the Group Blattellites (Orthoptera; Blattidae; Pseudomopinae). *Trans. Am. Ent. Soc.* 45, p. 303–306, 3 figs.
- HEBARD, M., 1919. The Blattidae of Panama. *Mem. Am. Ent. Soc.* 4, p. 1–148, pls. 1–4; index p. i–vi.
- HEBARD, M., 1921. Studies in the Dermaptera and Orthoptera of Colombia. Second Paper. Dermaptera and Orthopterous Families Blattidae, Mantidae and Phasmidae. *Trans. Am. Ent. Soc.* 47, p. 107–169, pls. 8–10.

- HEBARD, M., 1921. Mexican Records of Blattidae (Orthoptera). *Trans. Am. Ent. Soc.* 47, p. 199–220, pl. 13.
- HEBARD, M., 1921. South American Blattidae from the Museum National d'Histoire Naturelle, Paris, France. *Proc. Acad. Nat. Sci. Phila.* 73, 193–304 p., pls. 9–15.
- HEBARD, M., 1924. Studies in the Dermaptera and Orthoptera of Ecuador. *Proc. Acad. Nat. Sci. Phila.* 76, p. 109–248, pls. 5–10.
- HEBARD, M., 1926. The Blattidae of French Guiana. *Proc. Acad. Nat. Sci. Phila.* 78, p. 135–244, pls. 12–17.
- HEBARD, M., 1929. Previously unreported tropical American Blattidae (Orthoptera) in the British Museum. *Trans. Am. Ent. Soc.* 55, p. 345–388, pls. 13–14.
- HEBARD, M., 1929. Supplementary notes on Panamanian Dermaptera and Orthoptera. *Trans. Am. Ent. Soc.* 55, p. 389–400, pl. 15.
- HEBARD, M., 1931. Die Ausbeute der deutschen Chaco-Expedition 1925/26. Orthoptera. *Konowia, Ztschr. syst. Insektenk.* 10, p. 257–285, 1 pl., 12 figs.
- HEBARD, M., 1932. New species and records of Mexican Orthoptera. *Trans. Am. Ent. Soc.* 58, p. 201–371, pls. 17–21.
- HEBARD, M., 1933. Studies in the Dermaptera and Orthoptera of Colombia. Supplement to papers one to five. *Trans. Am. Ent. Soc.* 59, p. 13–67, pls. 2–3.
- HEBARD, M., 1933. Notes on Panamanian Dermaptera and Orthoptera. *Trans. Am. Ent. Soc.* 59, p. 103–144, pls. 6–7.
- PRINCIS, K., 1946. Colombianische Blattodeen, gesammelt von Herrn G. Dahl und Frau M. Althén-Dahl in den Jahren 1936–1939. *Kungl. Fysiogr. Sällsk. Lund Förhandl.* 16, p. 144–158, 7 figs.
- PRINCIS, K., 1946. Drei neue neotropische Blattodeen. *Kungl. Fysiogr. Sällsk. Lund Förhandl.* 16, p. 159–166.
- PRINCIS, K., 1946. Zur Kenntnis der Gattung *Blaberus* Serv. (Blatt.). *Opusc. Ent.* 11, p. 139–146, 10 figs.
- PRINCIS, K., 1949. The Blattaria described by Carl Peter Thunberg. *Opusc. Ent.* 14, p. 61–67, 5 figs.
- PRINCIS, K., 1951. Neue und wenig bekannte Blattarien aus dem Zoologischen Museum, Kopenhagen. *Spol. Zool. Mus. Haun.* 12, p. 1–72, pls. 1–6.
- PRINCIS, K., 1952. Reports of the Lund University Chile Expedition 1948–1949. 8. Blattariae. *Lunds Univ. Årsskr. (N.F. Avd. 2)* 48, p. 1–11, 7 figs.
- PRINCIS, K., 1955. Liste der von P. Cornelius Vogl in Venezuela gefangenen Blattarien. *Bol. Ent. Venezol.* 11, nos. 1 & 2, p. 1–10, 1 fig.
- PRINCIS, K. & D. K. McE. KEVAN, 1955. Cockroaches (Blattariae) from Trinidad, B.W.I., with a few records from other parts of the Caribbean. *Opusc. Ent.* 20, p. 149–169, 8 figs.
- REHN, J. A. G., 1902. A contribution to the knowledge of the Orthoptera of Mexico and Central America. *Trans. Am. Ent. Soc.* 29, p. 1–34.
- REHN, J. A. G., 1903. Notes on West Indian Orthoptera, with a list of the species known from the Island of Porto Rico. *Trans. Am. Ent. Soc.* 29, p. 129–136.
- REHN, J. A. G., 1903. Studies in American Blattidae. *Trans. Am. Ent. Soc.* 29, p. 259–290.

- REHN, J. A. G., 1905. Notes on the Orthoptera of Costa Rica, with descriptions of new species. *Proc. Acad. Nat. Sci. Phila.* 57, p. 790–843, 21 figs.
- REHN, J. A. G., 1906. Records and descriptions of non-saltatorial Orthoptera from British Guiana. *Proc. Acad. Nat. Sci. Phila.* 58, p. 262–278.
- REHN, J. A. G., 1910. On some Orthoptera from Porto Rico, Culebra and Vieques Islands. *Bull. Am. Mus. Nat. Hist.* 28, p. 73–77, 1 fig.
- REHN, J. A. G., 1916. The Stanford Expedition to Brazil, 1911. Dermaptera and Orthoptera I. *Trans. Am. Ent. Soc.* 42, p. 215–308, 42 figs.
- REHN, J. A. G., 1918. On a collection of Orthoptera from the state of Pará, Brazil. *Proc. Acad. Nat. Sci. Phila.* 70, p. 144–236, pls. 1–2.
- REHN, J. A. G., 1928. New or little known neotropical Blattidae (Orthoptera). Number one. *Trans. Am. Ent. Soc.* 54, p. 125–194, pls. 18–21.
- REHN, J. A. G., 1930. New or little known neotropical Blattidae (Orthoptera). Number two. *Trans. Am. Ent. Soc.* 56, p. 19–71, pls. 1–5.
- REHN, J. A. G., 1932. Wissenschaftliche Ergebnisse der Schwedischen entomologischen Reisen des Herrn Dr. A. Roman in Amazonas 1914–1915 und 1923–1924. *Arkiv. Zool.* 24A, no. 11, p. 1–73, 3 pls.
- REHN, J. A. G., 1932. New or little known neotropical Blattidae (Orthoptera). Number three. *Trans. Am. Ent. Soc.* 58, p. 103–137, pls. 7–9.
- REHN, J. A. G., 1933. On the Dermaptera and Orthoptera of Chile. Part one. *Trans. Am. Ent. Soc.* 59, p. 159–190, 7 figs., pl. 9.
- REHN, J. A. G., 1937. New or little known neotropical Blattidae (Orthoptera). Number four. *Trans. Am. Ent. Soc.* 63, p. 207–259, pls. 14–17.
- REHN, J. A. G., 1937. A new species of Blattidae from British Guiana. *Ann. Mag. Nat. Hist. (10)* 20, p. 197–203, pl. 5.
- REHN, J. A. G. & M. HEBARD, 1905. A contribution to the knowledge of the Orthoptera of South and Central Florida. *Proc. Acad. Nat. Sci.* 57, p. 29–55, 1 pl.
- REHN, J. A. G. & M. HEBARD, 1914. On the Orthoptera found on the Florida Keys and in extreme southern Florida. II. *Proc. Acad. Nat. Sci. Phila.* 66, p. 373–412, 7 figs.
- REHN, J. A. G. & M. HEBARD, 1927. The Orthoptera of the West Indies. Number 1. Blattidae. *Bull. Am. Mus. Nat. Hist.* 54, p. 1–320, pls. 1–25.
- ROCHA E SILVA, I., 1955. Sobre alguns Nyctiborinae Brasileiros com descrição de uma espécie nova (Blattidae). *Bol. Mus. Nac. Rio de Jan. (nov. ser.) Zool.* 127, p. 1–39, 46 figs.
- ROCHA E SILVA, I., 1956. Redescrição de Euphyllodromia peruviana (Saussure) e descrição de uma espécie nova. (Blattidae-Pseudomopinae). *Bol. Mus. Nac. Rio Jan. (nov. ser.) Zool.* 144, p. 1–10, 12 figs.
- SAUSSURE, H. DE, 1870. Études sur les Insectes Orthoptères. Famille des Blattides. *Miss. Scient. Mex., Rech. Zool.* VI, p. 1–123, pls. 1–2.
- SAUSSURE, H. DE & L. ZEHNTNER, 1893–1894. Insecta, Orthoptera, Blattidae. *Biol. Centr.-Am. I.*, p. 13–123, pl. 2 figs. 21–25, pl. 3 figs. 1–35, pl. 4 figs. 1–42, pl. 5 figs. 1–31, pl. 6 figs. 11–17.

- SHELFORD, R., 1906. Studies of the Blattidae. I. Remarks on the Sub-families Ectobiinae and Phyllodromiinae. *Trans. Ent. Soc. Lond.* 1906, p. 231-280, pls. 14-16.
- SHELFORD, R., 1907. Studies of the Blattidae (continued). V. The types of Blattidae described by Francis Walker, and now in the Hope Museum, Oxford. *Trans. Ent. Soc. Lond.* 1906, p. 487-509, pl. 30 figs. 1-9.
- SHELFORD, R., 1907. Studies of the Blattidae. VII. A new genus of Symbiotic Blattidae. *Trans. Ent. Soc. Lond.* 1906, p. 515-518, pl. 30 figs. 10-12.
- SHELFORD, R., 1907. Studies of the Blattidae. VIII. The Blattidae described by Linnaeus, De Geer and Thunberg. *Trans. Ent. Soc. Lond.* 1907, p. 455-468.
- SHELFORD, R., 1907. On some new species of Blattidae in the Oxford and Paris Museums. *Ann. Mag. Nat. Hist. (7)* 19, p. 25-49.
- STOLL, C., 1813. *Les Blattes, in Représtation exactement colorée après nature des Spectres ou Phasmes, des Mantes, des Sauterelles, des Grillons, des Criquets et des Blattes, qui se trouvent dans les quatres parties du monde, l'Europe, l'Asie, l'Afrique et l'Amérique.* Amsterdam, sixième genre, Les Blattes, p. 1-8, pls. 1d-5d.
- WALKER, F., 1868. *Catalogue of the specimens of Blattariae in the Collection of the British Museum,* 239 pp.