

## DESCRIPTION OF A NEW SPECIES OF *CTENONEURA* HANITSCH FROM SABAH (BLATTARIA, POLYPHAGIDAE)

Roth, L. M., 1995. Description of a new species of *Ctenoneura* from Sabah (Blattaria, Polyphagidae). – Tijdschrift voor Entomologie 138: 117-119, figs. 1-8, table 1. [ISSN 0040-7496]. Published 15 June 1995.

A new species of *Ctenoneura* Hanitsch from Sabah is described. New collection records are given for two known species.

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Key words. – *Ctenoneura*; Blattaria, Polyphagidae; cockroaches; new species.

Princis (1963: 101; 1971: 1138) listed 15 species of *Ctenoneura*. I (Roth 1993: 83) added 12 new taxa in revising the genus and also provided a key to distinguish the adults; in a recent paper (Roth 1995), I transferred *Ctenoneura aberrans* Hanitsch to *Homopteroidea*. The genus is principally Malaysian, Indonesian, and Asian.

While my 1993 revision was in press, Dr. Roy Danielsson sent me a number of specimens of *Ctenoneura* from the Zoological Institute, Lund, Sweden (ZILS), of which at least one is new and is described below. Mr. Willem Hogenes of the Zoologisch Museum, Universiteit van Amsterdam, The Netherlands (ZMAN) sent me some material. New records of two known species are also presented below.

### SYSTEMATIC PART

#### Genus *Ctenoneura* Hanitsch

*Ctenoneura* Hanitsch, 1925: 100. – Roth 1993: 83 (revision).

Rediagnosis. – Tegmina and wings fully developed extending beyond end of abdomen. Right and left tegmina generally similar in venation and sclerotization, major veins not thickened, often densely reticulate with numerous cross veins, discoidal sector oblique (fig. 7). Hind wing usually with an intercalary vein (between the radial and media veins), cubitus vein with three to eight branches (usually more than three) that generally are parallel and reach, or almost reach the wing margin, and with numerous small cross veins connecting them (fig. 8). Front fe-

mur Type C<sub>1</sub>, pulvilli absent, tarsal claws symmetrical, simple, arolia present (small or subobsolete) or absent. Male: Abdominal terga unspecialized. Subgenital plate asymmetrical, usually with one stylus, or none. Female: subgenital plate valvular.

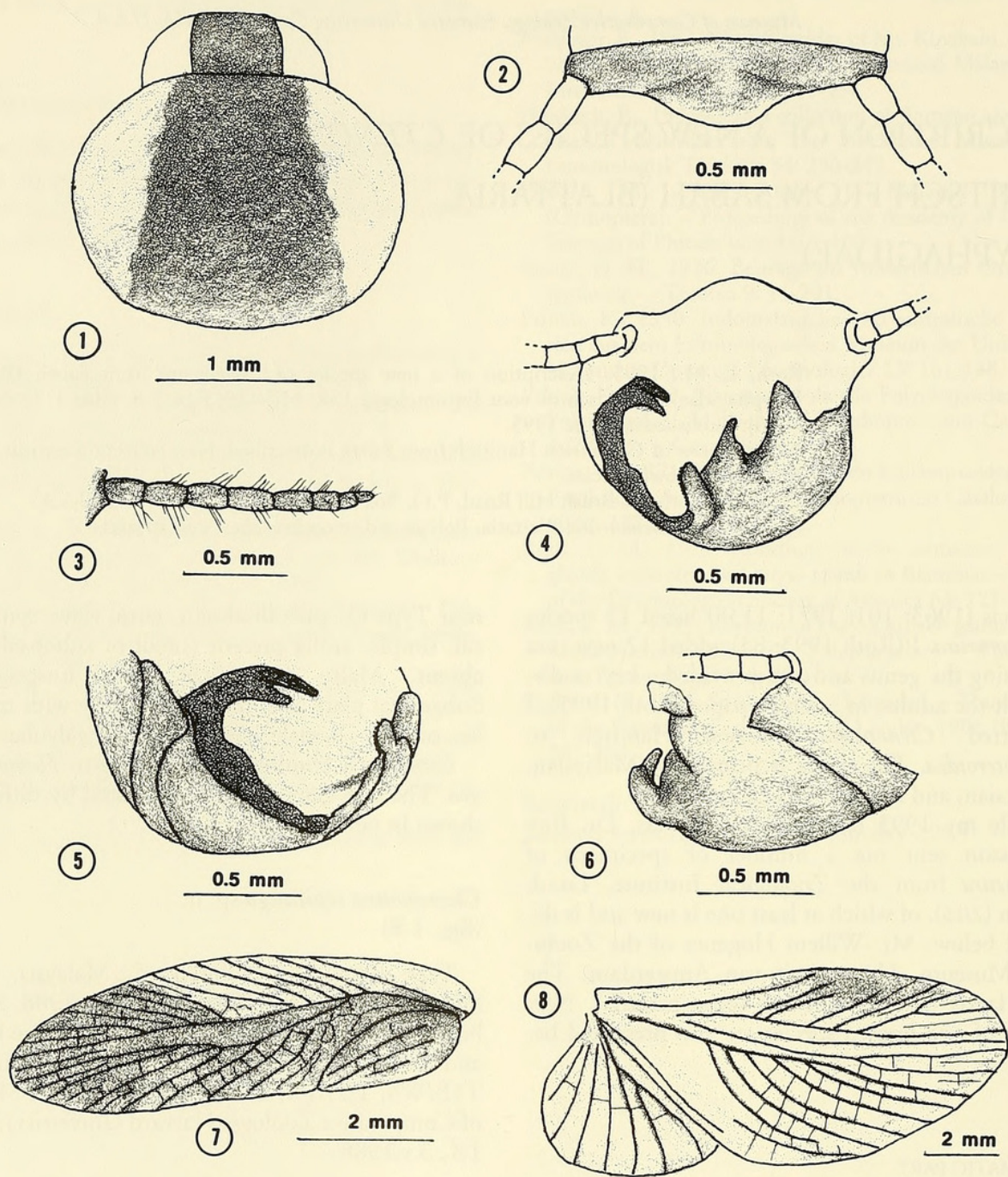
*Ctenoneura* Hanitsch is very close to *Homopteroidea*. The two genera can be separated by differences shown in table 1.

#### *Ctenoneura sipitanga* sp. n. (figs. 1-8)

Type material. – Holotype ♂, Malaysia, SABAH, Sipitang, Mendolong, T1B/W4, 15.iv.1988, S. Adebratt; in ZILS. – Paratypes. Sabah. ZILS: same locality and collector as holotype, T6/R, 1♂, 8.iii.1989, T1B/W4, 1♂, 15.iv.1988 (retained in the Museum of Comparative Zoology, Harvard University), T4/R, 1♂, 3.v.1988.

Description. – Male: Head well exposed, eyes large, bulbous, (fig. 1), interocular width slightly less than the distance between antennal sockets, ocellar spots very small. Pronotum suboval (fig. 1). Tegmina and wings fully developed extending well beyond end of the abdomen, the former with nonthickened veins and oblique discoidal sectors (fig. 7). Hind wing with an elongated subcostal vein that terminates, along with about four costal veins, in a swelling; intercalary vein present, simple, media vein bifurcate distad, cubitus vein with five curved, about equally spaced, parallel, simple branches (fig. 8). Front femur Type C<sub>1</sub>; pulvilli absent from all legs, tarsal claws simple, symmetrical, arolia minute. Abdominal terga unspecialized. Supraanal plate transverse, short, with midregion of the hind margin convexly rounded, entire





Figs. 1-8. *Ctenoneura sipitanga* sp. n., males from Sipitang, Sabah: 1. pronotum; 2. supraanal plate (dorsal); 3. cercus; 4. subgenital plate (end view); 5. subgenital plate (left lateral); 6. subgenital plate (right lateral); 7. left tegmen; 8. right hind wing.

(fig. 2). Subgenital plate asymmetrical, strongly convex, hind margin on the left side curved dorsad and forming an apically bifurcate spicular process; the right side has three dissimilar processes, two of them contiguous at the mid margin, and the third closer to the cercus; styli absent (figs. 4-6). Cerci without a terminal spine (fig. 3).

Colour. – Head reddish brown; antennae light brown. Pronotum with a dark reddish brown macula that extends from the anterior to the posterior margins, the wide lateral regions yellowish subopaque or opaque (fig. 1). Right and left tegmina similar, their humeral and proximal part of the costal vein zones

yellowish, the remainder reddish brown, hyaline (fig. 7). Hind wings with a yellowish tinge. Abdomen, cerci, and legs light brown, subgenital plate yellow its hind margin that forms the bifurcate process on the left side very dark brown (figs. 4, 5).

Female: Unknown.

Measurements (mm). – Length, 5.0-6.5; pronotum length  $\times$  width, 1.6-1.7  $\times$  2.1-2.2; tegmen length, 6.1-6.5; interocular width, 0.5.

Etymology. – The species is named after the locality, Sipitang [5°05'N 115°33'E].

Comments. – Most of the males of *Ctenoneura* are determined by differences in the shapes of their sub-



Table 1. Generic differences between *Ctenoneura* and *Homopteroidea*

| Character            | <i>Ctenoneura</i>  | <i>Homopteroidea</i>  |
|----------------------|--|---|
| Tegmina              | Right tegmen without a clear presutural zone.                | Right tegmen with a clear presutural zone.                  |
| Hind wing            | Intercalary vein present; cubitus vein with 3 to 8 branches. | Intercalary vein absent; cubitus vein with 2 or 3 branches. |
| Tarsal claws         | symmetrical, simple.   | symmetrical, serrated.                                      |
| Subgenital plate (♂) | Asymmetrical; with one left stylus or none.                  | Symmetrical; with a pair of small, similar styli.           |

genital plates (key, *in* Roth, 1993: 84). The very dark apically bifurcate process on the left hind margin of the subgenital plate (figs. 4, 5) distinguishes *sipitanga* from all other known *Ctenoneura*.

***Ctenoneura scutica* Roth**

*Ctenoneura scutica* Roth, 1993: 102, fig. 16 (♂).

Material examined.- SABAH. ZILS: Malaysia, Sabah, Sipitang, Mendolong, P11, 1♂, 10.iii.1989, S. Adebratt.

Comments. – The species is known only from Sabah.

***Ctenoneura major* Hanitsch**

*Ctenoneura major* Hanitsch: Roth, 1993: 96, fig. 9 (♀ & ♀).

Material examined. – SABAH. ZMAN: Borneo, Sabah, Kinabalu Nat. Park, sample Sab. 37, montane forest, understory at light, headquarters area Kiau View trail, 1560 m, 1♂, 18.xi.1989, M.J. & J. P. Duffels.

Comments. – This male is slightly smaller than the holotype which is from Mt. Murud, Sarawak. Its measurements (mm) are as follows: Length, 7.7; pronotum length × width, 2.1 × 2.8; tegmen length, 10.2; interocular width, 0.6.

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