



<http://dx.doi.org/10.11646/zootaxa.3635.5.2>

<http://zoobank.org/urn:lsid:zoobank.org:pub:5E6A3AFD-89BF-441F-A826-A075C932D42D>

## ***Macrostylopyga* gen. nov., a new genus of cockroaches (Dictyoptera: Blattidae), with descriptions of two new species**

LEONID N. ANISYUTKIN<sup>1,3</sup>, ALEXANDR E. ANICHKIN<sup>2,3</sup> & NGUYEN VAN THINH<sup>3</sup>

<sup>1</sup>Zoological Institute of the Russian Academy of Sciences, Universitetskaya Emb. 1, 199034 Saint Petersburg, Russia.

E-mail: [dictyoptera@zin.ru](mailto:dictyoptera@zin.ru)

<sup>2</sup>A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninsky pr. 33, Moscow, 119071 Russia

<sup>3</sup>Joint Russian-Vietnamese Research and Technological Center, Ho Chi Minh City, Vietnam

### **Abstract**

The genus *Macrostylopyga* **gen. nov.** and two species (*M. grandis* **sp. nov.** and *M. bidupi* **sp. nov.**) are described. A detailed morphological description with special attention to the male genitalic structures is provided. Some aspects of the evolution of wingless cockroaches are briefly discussed.

**Key words:** morphology, new taxa, paedomorphosis, Laos, South-East Asia, Vietnam

### **Introduction**

Despite long and active investigations, the cockroach fauna of South-East Asia is far from its complete description and many taxa still remain undescribed. This paper describes a new genus and two new species of the subfamily Blattinae (Blattidae), with special attention to the male genitalia and tarsal structures.

The new genus belongs to the blattid group with strongly reduced flight organs, previously united in the genus *Neostylopyga* Shelford, 1911. The external morphology of these cockroaches is rather poor in characters, contrary to the very complicated structure of the male genitalia. At the present time, the structure of the male genitalia and tarsal structures remain insufficiently studied. In our opinion, fine structures of the male genitalia are crucial for reconstruction of blattid phylogeny, whereas the tarsal structures can reflect adaptations to their life style.

### **Material and methods**

The fauna of cockroaches was studied in the forests in two regions of southern Vietnam: the lowland semideciduous monsoon forests of the Dong Nai Culture and Nature Reserve and the mountain forests on the Da Lat Plateau, in the Bi Dup–Nui Ba Nature Reserve.

The Dong Nai Culture and Nature Reserve is located in Dong Nai province, at the elevations of 70–100 m. The relief of the studied region is flat or gently undulating. The local monsoon climate is characterized by distinct seasonality, with annual average temperature and precipitation being approximately 26°C and 1941.6 mm (Nguyen *et al.* 2000). Rains fall mainly between May and November. The period from December to March is virtually rainless. The forests are polydominant. The overstory consists of Dipterocarpaceae, Anacardiaceae, Elaeocarpaceae, Irvingiaceae, Lauraceae, Meliaceae, and others (about 350–400 species of trees from 49 families) (Kuznecov 2003).

The Bi Dup–Nui Ba Nature Reserve is located on the Da Lat Plateau (Lam Dong province), at elevations of more than 1400 m. This region has a monsoon climate with annual precipitation of about 1862.2 mm, the peak of the moist season occurring in September–October, and an annual average air temperature of no more than 20°C