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One new genus of cockroach in the Neotropical subfamily Nyctiborinae (Dictyoptera: Blattodea: Ectobiidae)

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Abstract

The genus *Nyctantonina* **gen. nov.** and its two species *Nyctantonina breviclasma* **sp. nov.** and *Nyctantonina pteromacrotata* **sp. nov.** are described and illustrated. Dichotomous key to identify the species of genus is given.

Key words: Guatemala, Mexico, male genital sclerites, Nyctantonina gen. nov.

Introduction

The subfamily Nyctiborinae Kirby (Blattodea: Ectobiidae) is characterized by the presence of a fine silky pubescence covering the tegmina and pronotum in all of its constituent species (Shelford 1908). Nyctiborine species show variations in size from medium-sized (20–30 mm) to very large (90 mm), as well as in coloration, ranging from dark brown to combinations of yellow and/or orange with black. There are also behavioral differences among the species of Nyctiborinae, particularly in their circadian cycles and food preferences. About half of the members of the group have diurnal habits, an uncommon behavior within the Blattodea (Bell *et al.* 2007). For example, species of *Paratropes* Serville, 1839, *Eunyctibora* Shelford, 1908 and *Eushelfordia* Hebard, 1924 can be collected during the day on vegetation. Most nyctiborines have detritivorous habits, consuming mainly decaying plant material (pers. obs.). Some species of *Nyctibora* Burmeister, 1838 have a preference for dead animals, whereas species of the genus *Paratropes* feed on pollen and nectar (Perry 1978).

On the other hand, the taxonomic history this group is poorly known. Shelford (1908) cataloged five genera and 30 species for the subfamily and published the only existing generic level key for the group. Since then, different authors have described new genera and species in isolated works (Roth 1973; Albuquerque 1974; Albuquerque & Lopes 1977; Rocha e Silva & Aguiar 1978; Grandcolas 1993; Deans & Roth 2003; Salazar 2004; Lopes & Oliveira 2007, 2008); today the subfamily has nine genera and 63 described species distributed from Mexico to Argentina (Beccaloni 2007).

This work describes a new genus and two new species for this subfamily.

Material and methods

Observations of external morphological characters were made with Leica MS5 and MZ16 stereomicroscopes (magnification 10–64x and 7–115x), equipped with an ocular graticule for measurements of lengths and ratios. Drawings were prepared with a Leica EC3 digital camera attached to the stereoscope. Based on the digital image, illustrations were made with illustration software, in order to highlight features of taxonomic significance. The methods for dissecting male genitalia followed Gutiérrez (2001). The descriptions are based on male specimens. The morphological terminology follows Torre-Bueno (Nichols 1989). Specific structures such as wings, sutures of head and genital sclerites were described in accordance with Crampton (1925), Klass (1995) and Roth (2003). The term L31 is used here for the first time; it refers to the sclerotized region of the genital sclerite L3 (see Klass 1995 to