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Proposition of a new species group in *Edessa* Fabricius, 1803 (Hemiptera: Heteroptera: Pentatomidae: Edessinae)

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Abstract

The **pudibunda** group of *Edessa* is here proposed to include *Edessa pudibunda* Stål, 1862, *Edessa picticornis* Stål, 1872, *Edessa godmani* Distant, 1881, *Edessa punctata* Santos & Fernandes **sp. nov.**, *Edessa luteomaculata* Santos & Fernandes **sp. nov.**, *Edessa nigriventris* Santos & Fernandes **sp. nov.** and *Edessa nigradorsata* **sp. nov.** This group is restricted to Central America. Descriptions, measurements and illustrations of the metasternal process, male and female external genitalia and distributional map are provided. Lectotypes of *E. godmani* and *E. picticornis* are here designated.

Key words: **pudibunda** species group, Central America, Taxonomy, new species, Neotropical region

Introduction

The subfamily Edessinae consists of six genera and approximately 300 known species, which are basically distributed across Neotropical region. Most of the species of Edessinae (about 270) belong to the genus *Edessa*, which became a ‘depository of species’ (Fernandes and Doesburg, 2000) due to unclear generic boundaries. A great number of species were described in this genus between years 1850–1910 and hundreds of new species still need to be described (personal data).

Fernandes and Doesburg (2000) pointed out the necessity of arranging species in small groups to simplify and organize studies instead of continuing to add new species to the genus, as was done in the past. The group here proposed is part of this approach and comprehends three described and four new species.

Some recent studies have showed that *Edessa* is very diverse in shape (Silva et al. 2006; Fernandes and Campos, 2011; Silva and Fernandes, 2012) and the taxonomic review, currently underway, is crucial to define clear boundaries for both the genera and the subfamily.

The group here proposed includes three known species and four undescribed species distributed across the mountains of Central America. Species belonging to this group are poorly known, actually not more than the original descriptions. Stål (1862) described *Edessa pudibunda* from a male collected in Mexico. Stål (1872) described *Edessa picticornis* from a pair collected in Oaxaca, Mexico, and considered this species as belonging to the subgenus *Ascera* Say, 1832; he also listed *E. pudibunda* as separate from the other species that we are considering in this group. Distant (1881) described *Edessa godmani* from a pair collected at Capetilo, Guatemala. All species were included in the catalogs of Lethierry and Severin (1893) and Kirkaldy (1909) without any additional comments.

Material and methods

In order to complete this study 233 specimens were borrowed from 10 collections: California Academy of Science, San Francisco, USA (CAS); David Rider Collection, Fargo, USA (DAR); Instituto Nacional de Biodiversidad,

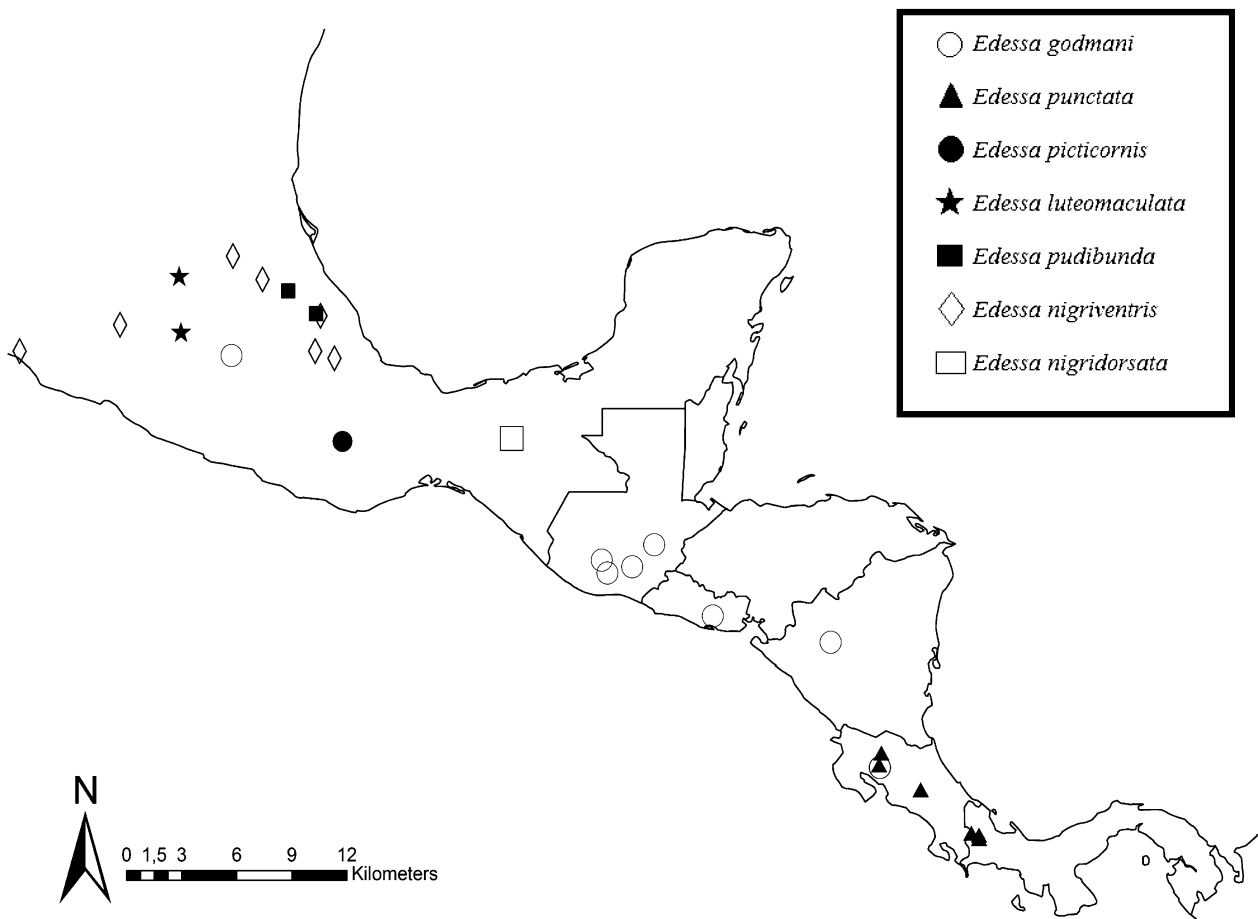


FIGURE 56. Distribution of the species of the **pudibunda** group.

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