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SCIENTIFIC NOTE

First Record of the Genus *Anomiopus* Westwood (Coleoptera: Scarabaeidae: Scarabaeinae) in Mexico

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The genus *Anomiopus* Westwood, 1842 is exclusively Neotropical. Most of its species are in South America, but two species occur in Central America: *Anomiopus panamensis* (Paulian, 1939) from Panama and Costa Rica (also in Colombia); and *Anomiopus cirulito* Cano, 2018 from Guatemala (Fig. 1) (Cano 2018). The first record of the genus in Mexico is presented herein.

Anomiopus comprises 61 valid species divided into three species-groups: *cuprarius* (with 10 species), *smaragdinus* (with 30 species), and *virescens* (with 21 species) (Canhedo 2004a, b, 2006; Vaz-de-Mello *et al.* 2011; Edmonds and Figueroa 2013; Figueroa and Edmonds 2015; Cano 2018). The ecological habits of *Anomiopus* are mostly unknown, although the adults of some species have been found to have myrmecophilous, coprophagous, or necrophagous habits (Halffter and Matthews 1966; Canhedo 2006). Adults have been collected using light traps, flight interception traps, and pitfall traps baited with cattle or human dung (Canhedo 2006; Figueroa and Edmonds 2015). Species have been collected in various environments, such as humid lowland forests, humid montane forests, and pastures, from

Fig. 1. Records of *Anomiopus cirulito* in Chiapas, Mexico and Petén, Guatemala (solid circles), and the northernmost record of *Anomiopus panamensis* in Costa Rica (solid square).

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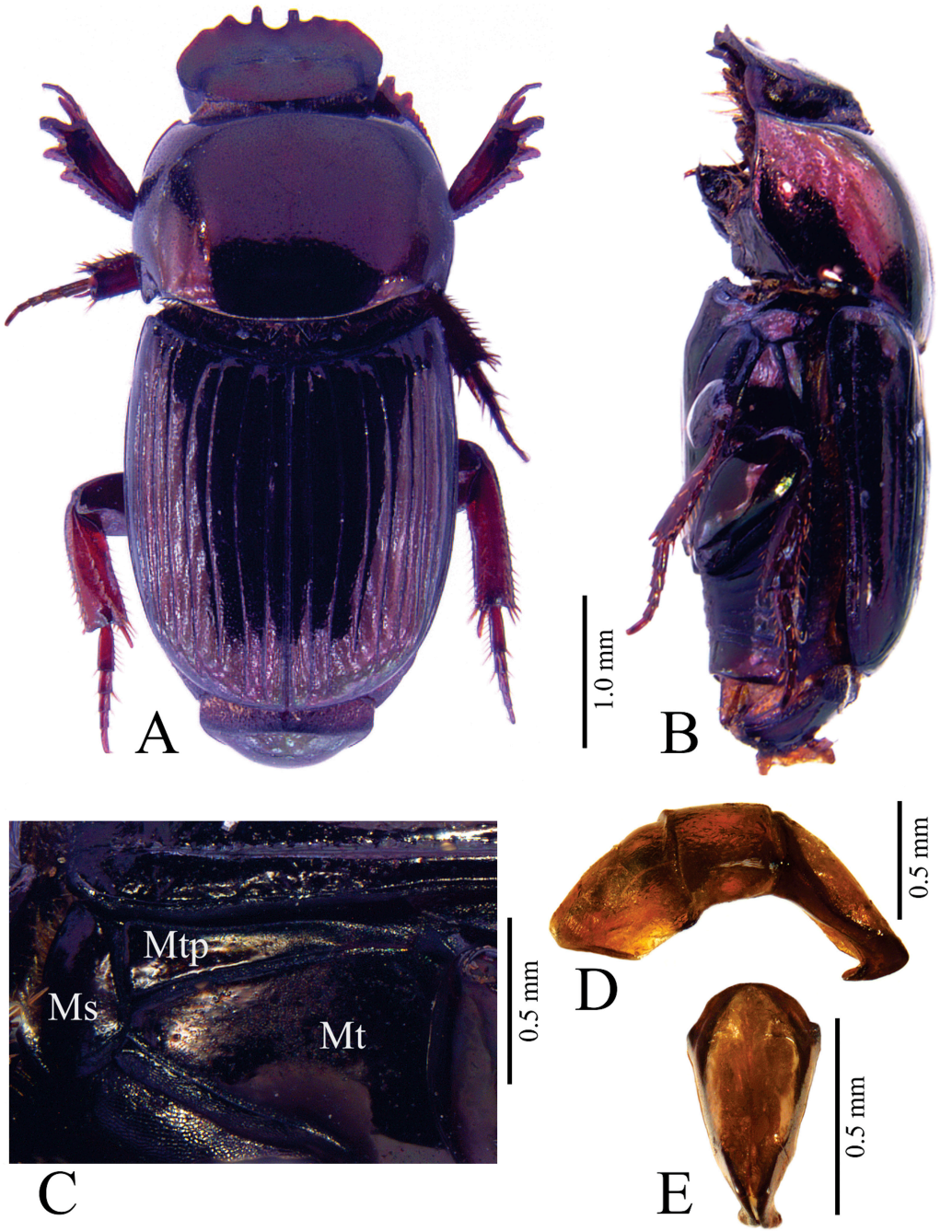

Fig. 2. *Anomiopus cirulito* collected in Nueva Betania, Palenque, Chiapas, Mexico. A–B) Dorsal and lateral habitus, respectively, C) Mesepimeron (Ms), metepisternum (Mtp), and metasternum (Mt) smooth, shiny, without micro-striations, D) Aedeagus, lateral view, E) Parameres, frontal view.

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sea level to 1,500 m (Canhedo 2006; Figueroa and Edmonds 2015).

The *cuprarius* species-group includes *Anomiopus cuprarius* (Harold, 1880), *A. panamensis*, and *A. cirulito*, among others. *Anomiopus cirulito* (Fig. 2) was described by Cano (2018) and represented, until our discovery, the northernmost species in the genus. It was collected in 2004 in a tropical forest of the Mayan Biosphere Reserve, Petén Department, Guatemala, 865 km north of the northernmost species record previously known for the genus, *A. panamensis*, which was collected in Costa Rica near the western border with Nicaragua (Cano 2018).

During field work in Palenque, Chiapas, Mexico, two specimens of *A. cirulito* matching the diagnostic characters (Fig. 2) provided by Cano (2018) were collected. The data on their labels are provided verbatim as follows: "MEXICO: Nueva Betania, Palenque, Chiapas, Selva 1, T2 vaca, Albina Demeza, Alonso Méndez Vásquez cols. 17°17'11"N, 91°39'43.43"W" (Fig. 1). The locality where these specimens were found corresponds with the Lowlands province (Halffter and Morrone 2017). The species in this province reflect the typical Neotropical distributional pattern of minimal penetration exhibited by South American and Central American species, whose penetration into Mexico is minimal and recent (from the Pleistocene to the present). These species follow tropical forests, particularly evergreen forests (Halffter 1976; Navarrete-Gutiérrez and Halffter 2008). This **new country record** of *A. cirulito* for Mexico is located 236 km east of the Guatemalan record reported by Cano (2018). The presence of the genus *Anomiopus* in Mexico is an interesting example of a recent and active penetration.

The specimens are deposited in the collection of F. Escobar-Hernández, Veracruz, Mexico and the Colección Entomológica "Dr. Miguel Ángel Morón Ríos" of the Instituto de Ecología, Veracruz, Mexico.

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