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A NEW SPECIES OF *NEMOMYDAS* AND A NEW RECORD FOR *BALIOMYDAS GRACILIS* (DIPTERA: MYDIDAE) FROM HISPANIOLA

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ABSTRACT

A new species of mydas fly, *Nemomydas dominicanus* is described from two males collected from the Dominican Republic, the first record of this genus from Hispaniola. A new record for *Baliomydas cubanus* (Curran) is noted for the Dominican Republic.

Key Words: Diptera, Mydidae, *Nemomydas*, new species, Dominican Republic.

RESUMEN

Se describe una nueva especie de Mydidae, *Nemomydas dominicana*, en base a dos machos colectados en Republica Dominicana, el primer registro de este genero para la Hispaniola. Se señala el nuevo registro de *Baliomydas cubanus* (Curran) para la Republica Dominicana.

Translation provided by authors.

A recent survey of orthopteroids and associated insects throughout the Dominican Republic has provided the opportunity to collect large numbers of robber flies (Asilidae), which are being studied in collaboration with Dr. A. Scarbrough (Towson University). Among these flies, the junior author collected four specimens of mydas flies belonging to two species. These represent the second and third known species of this family known from the Caribbean island of Hispaniola.

Mydidae have a worldwide distribution. Six subfamilies and 23 genera of these flies are known from the New World (Papavero & Artigas 1990). The only Mydidae previously recorded from the Greater Antilles are *Baliomydas cubanus* (Curran), *B. gracilis* (Macquart), and *B. tricolor* (Wiedemann) from Cuba and *Ceratomydas darlingtoni* Papavero and Wilcox from the Dominican Republic. A male and female of *B. gracilis*, previously known only from Cuba, were recently collected from the Dominican Republic.

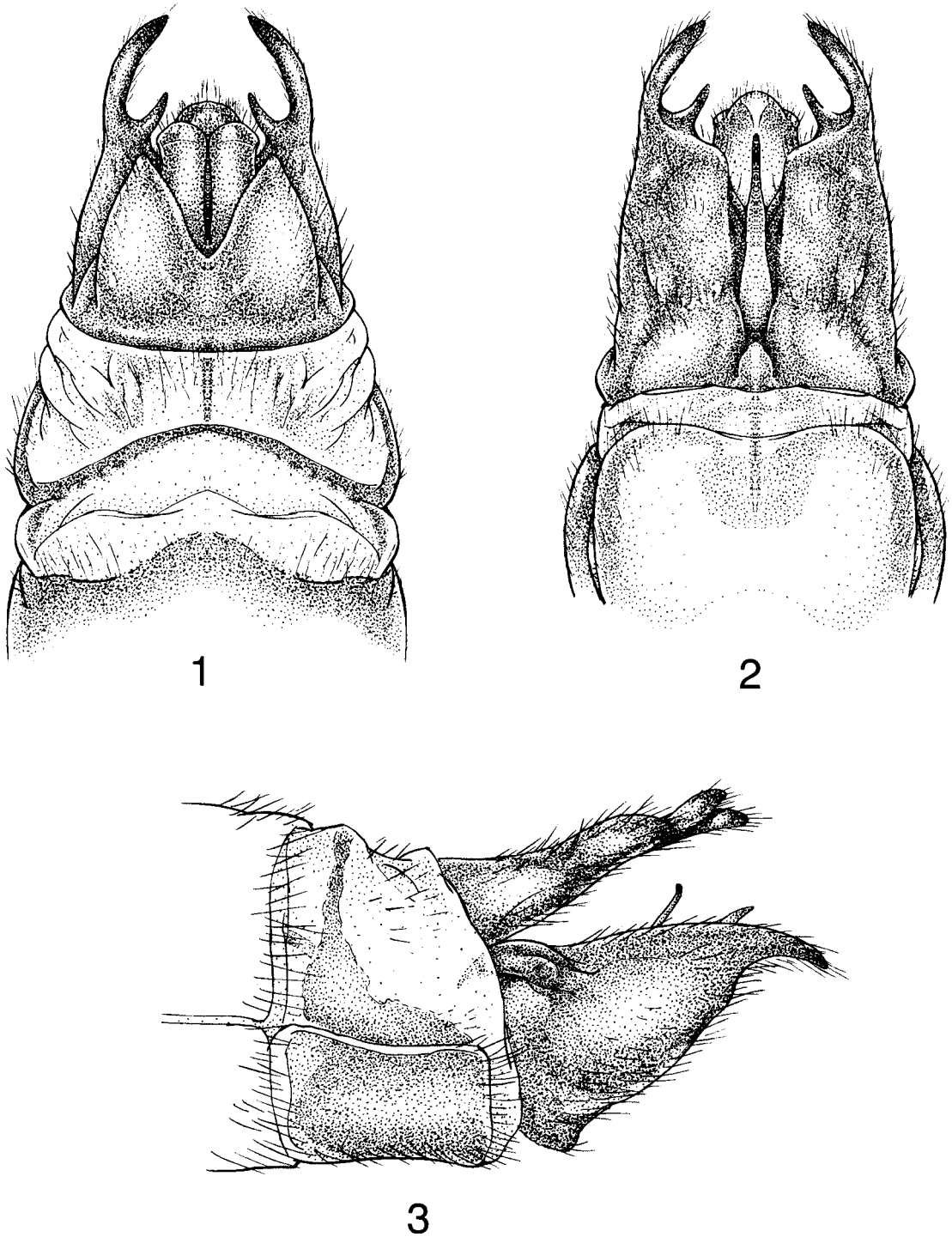
Two of the above specimens represent a new species of *Nemomydas* Curran, a genus that includes 20 species distributed in the United States, Mexico, Central America, Taiwan and Japan (Nagatomi & Tawaki 1985; Kondratieff & Welch 1990; Papavero & Artigas 1990; Welch & Kondratieff 1990; Welch & Kondratieff 1991; Welch & Kondratieff 1994; Fitzgerald & Kondratieff 1998) and with perhaps an undescribed species from Cuba (Alayo & Garcés 1990). These authors provide a generalized illustration of a representative of the genus. No material from Cuba was available to the authors.

Nemomydas dominicanus n. sp.

Figs. 1-3.

Male—Length 15.1 mm. Head black, orbital margin of compound eyes gray pollinose, antennae 3.5 mm long; mystax anteriorly with black hairs, laterally and posteriorly with white hairs; antennae bases with black hairs; occiput with black hairs, inner edge of orbital margin with patch of white hairs; antennae black with tinge of gray pollinose apically; proboscis long, 1.5× as long as subcranial cavity, black and brown. Scutum black, generally shiny, with pair of submedian thin white pollinose stripes slightly converging posteriorly, a pair of wide pollinose stripes, posteriorly directed forward as a wedge; short black hairs dorsally, longer white hairs laterally and posteriorly; scutellum black with a tinge of gray pollinose; postnotum black with lateral gray pollinose areas; katatergite with long white hairs. Wings hyaline, venation typical for genus, longitudinal veins brown, M₁ ending on costa, first posterior cell open. Halter brown. Fore- and midfemur brown, black dorsally, hindfemur brown basally, black distally, tibia and tarsi of fore-, mid-, and hindlegs brownish black, all hairs and bristles black. Abdominal tergites shiny black, posterior margins of tergites 1-7 yellow, bulla brown, setae black appressed, tergites 1-2 with long white hairs. Terminalia black, ventral digitate process of gonocoxite large, tapered at apex (Figs. 1-3). Aedeagus tube-like distally, swollen basally (Figs. 1-3).

Female—Unknown.



Figs. 1-3. *Nemomydas dominicanus*, n. sp. Male terminalia. 1. dorsal, 2. ventral, 3. lateral.

Material examined: Holotype ♂: Dominican Republic: RD-097 La Malena de Boca Chica, 69°33.408'W, 21-III-2003, D. Perez, B. Hierro, S. Medrano (day). Paratype ♂: Dominican Republic, Santo Domingo Prov., nr. sea level, 18°25.461'N, RD-226, 2 km SE Montecristi, Montecristi Prov.,

44 m, dry forest, 19°50.127'N 71°37.252'W, 17-IV-2004, D. Perez, B. Hierro. Both the holotype and paratype deposited at the National Museum of Natural History (NMNH), Smithsonian Institution, Washington, D.C.

Etymology—In reference to the Dominican Republic.

Habitat—Both localities of *N. dominicanus* are coastal scrub forest. At Boca Chica the forest is of a mixed deciduous type growing on a limestone substrate, with trees growing in between soil pockets. At Montecristi located in the northwestern corner of the country, the habitat is xeric with sandy soil. The tall bunch grass *Leptochloosis virgata* (Poaceae) is one of the dominant plant species of this low forest. The great distance between these localities hints of a wider distribution for this species on the island.

Remarks—The male of *N. dominicanus* is similar to three other species that have a combination of black abdominal tergites with yellow transverse posterior margins and tube-like aedeagus. These include *N. loreni* Welch and Kondratieff (Costa Rica, Welch & Kondratieff 1991), *N. melanopogon* Steyskal (Florida, Welch & Kondratieff 1994) and *N. venosus* (Loew) (Colorado, Kansas west to Arizona and Mexico, Kondratieff & Welch 1990). The brown wings, long proboscis, 2.6× as long as the subcranial cavity of *N. loreni* (hyaline wings, proboscis, 1.5× as long as the subcranial cavity in *N. dominicanus*), the short proboscis, 0.2× as long as the subcranial cavity in *N. melanopogon* (long proboscis 1.5× as long as the subcranial cavity in *N. dominicanus*), and the large thumblike ventral process of the gonocoxite, completely white mystax in *N. venosus* (tapered ventral process (Figs. 1-3), mixed white and black mystax in *N. dominicanus*) will allow separation of the species. The male terminalia in lateral view resembles *N. fronki* Kondratieff and Welch, but the completely black coloration of *N. fronki* easily distinguishes it from *N. dominicanus*.

The record for *B. gracilis* is given below.

DOMINICAN REPUBLIC: RD-053 Matadero, 11 km N entrance to Honduras, 10 km W Baní, Peravia Prov., 28-VII-2002, 18°24.367'N 70°25.703'W, 1,600 ft., D. Perez, R. Bastardo, 1 ♂, 1 ♀. Deposited at Museo Nacional de Historia Natural, Santo Domingo (MHND).

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