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Distribution and Synonymy of some Caribbean Bees of the Genera *Megachile* and *Coelioxys* (Hymenoptera: Megachilidae)

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During a visit to United States museums I was able to examine Neotropical bees and study the holotypes of *Megachile barbadensis*, *M. carlotensis*, *M. salti*, *M. maura* and *Coelioxys uhlerii*. I also studied the holotypes of *M. curta* and *M. singularis*, deposited in the Gundlach collection at Instituto de Ecología y Sistemática, La Habana (IES). The following collections were reviewed: Academy of Natural Sciences of Philadelphia (ANSP); Museum of Comparative Zoology at Harvard (MCZ); United States National Museum, Smithsonian Institution (USNM); American Museum of Natural History (AMNH); Florida State Collections of Arthropods, Gainesville (FSCA); Museo Nacional de Historia Natural de Cuba; and Museo Charles Ramsden, Santiago de Cuba. Species distribution was determined by specimens identified in the collections. Following are the ranges of the different species and some resulting new synonyms.

Megachile (Leptorachis) curta Cresson. Cuba, Isla de La Juventud, Dominican Republic, Jamaica and Mexico (Cancún, Quintana Roo).

Megachile curta Cresson, 1865. Proc. Entomol. Soc. Philadelphia, 4:178. Male. Holotype depository: Gundlach collection, IES.

Megachile curta tibialis Cresson, 1869. Trans. Amer. Entomol. Soc. 2:296. Female. Specimens depository: Gundlach collection, IES.

Megachile salti Mitchell, 1927. Psyche 34:51. Male and female. Holotype depository: MCZ. (new synonym).

This species shows great variation in the integumental coloration of the legs and smaller variation in pubescence color. This variation does not justify the consideration of subspecies, since it occurs within populations and has no geographical pattern. In males, the color of the integument of the legs ranges from totally reddish brown to entirely black. In other specimens only the tibia are reddish brown. Females may have reddish brown legs with dark tarsus, or have completely black legs.

At the AMNH there is a male identified in 1915 by H. Friese as *Megachile cubensis*, an unpublished manuscript name. T. Griswold (pers. comm.) has encountered a similar situation created by Friese while studying the osmiines in the Berlin collection.

Megachile (Melanosarus) singularis Cresson. Cuba.

Megachile singularis Cresson, 1865. Proc. Entomol. Soc. Philadelphia, 4:177. Male. Holotype depository: Gundlach collection, IES.

Megachile maura Cresson, 1865. Proc. Entomol. Soc. Philadelphia, 4:179. Female. Holotype depository: ANSP. (new synonym).

Megachile carlotensis Mitchell, 1927. Psyche 34:55. Male. Type depository: MCZ. (new synonym).

The presence of both sexes in a single trap nest at Güines, La Habana (xii. 88) (Genaro, 1996; unpubl. data), confirms the suspected synonymy of *M. maura* and *M. carlotensis* (Mitchell, 1927). The remarkable sexual dimorphism of the species of the subgenus *Melanosarus* (females black and males reddish brown) has led to erroneous identifications. In spite of the fact that these species belong to the same subgenus, Mitchell (1927) does not mention the existence of *M. singularis* in the differential diagnosis of *carlotensis*. An analysis of the types and the comparison of the original descriptions of *M. singularis* and *M. carlotensis* indicate that both refer to the same species.

Megachile (Pseudocentron) luctifera Spinola. St. Vincent, St. Thomas, St. George, St. Croix, Dominica, Barbados, Martinique, Grenadines and Colombia.

Megachile luctifera Spinola, 1841. Ann. Soc. Entomol. France 10:142. Female.

Megachile binotata Guérin, 1845. Iconogr. Règne Anim. 7:450. Female.

Megachile flavitarsata Smith, 1853. Catal. Hym. British Mus. 1:183. Male. Holotype depository: British Museum Natural History. (new synonym)

Megachile barbadensis Cockerell, 1937. Entomol. 70:111. Male. Holotype depository: USNM (new synonym).

This conspicuous species, because of the abdomen shining black with marginals white hair bands on the first terga, is well distributed throughout the Lesser Antilles, and has been described by several authors from several islands. The holotype of *M. barbadensis*

examined at USNM agrees with the original description of *M. flavitarsata*.

Coelioxys (Cyrtocoelioxys) tridentata (Fabr.) Cuba.

Apis tridentata Fabricius, 1775. Syst. Entomol. 52:387. Female. Lectotype depository: Kiel collection at the Universitetets Zoologisches Museum, Copenhagen.

Coelioxys uhlerii Cresson, 1865. Proc. Entomol. Soc. Philadelphia 4:186. Female. Holotype depository: ANSP. (new synonym).

The type locality of this species had been a puzzle mainly due to the incomplete original description, the inexact data regarding its origin (indicated as Insular America), and to the scarcity of specimens in collections. Examination of type material done by Moure (1960) defined its taxonomical situation and allowed further study. Although I have not studied the type of *Coelioxys tridentata*, Moure's lectotype description indicates that both names designate the same species, and that the type locality is Cuba. I revised eight females and two males. The sixth sternum of the female end in a strong and long spine margined by short setae which distinguish this species from all the others in the *Cyrtocoelioxys* subgenus. The form of the sixth metasomal sternum is an important character to separate subgenera and species.

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