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## Taxonomic notes on American *Heriades* Spinola, 1808 and *Leioproctus* Smith, 1853 (Hymenoptera: Megachilidae, Colletidae)

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The purpose of this paper is to document the males of *Leioproctus rosellae* Gonzalez in Gonzalez & Florez, 2011 (Colletidae, Paracolletini) and *Heriades tayrona* Gonzalez & Griswold, 2011 (Megachilidae, Osmiini), two solitary bee species recently described based on females from the Caribbean coast of Colombia. *Leioproctus rosellae* is currently known only from the holotype, while *H. tayrona* is known from a few specimens from the type locality. The discovery of these species in northern Colombia considerably extended the distribution of *Leioproctus* Smith (*sensu* Michener, 2007) and *Heriades* Spinola in the Western Hemisphere. In the Americas, *Leioproctus* was known from Chile and Argentina to central Peru and northeastern Brazil, while *Heriades* was known from southern Canada to Panama and the Greater Antilles (Michener 2007). The discovery of *H. tayrona* also represented the first record of the tribe Osmiini for South America.

The specimens described herein were collected by sweep netting bushes along banks near the city of Santa Marta, Magdalena, Colombia (see below). The sampling area was characterized by small fragments of dry forests among abandoned pastures and secondary vegetation. *Viguiera mucronata* S.F. Blake (Asteraceae) was the predominant plant in bloom. Specimens are deposited in the Instituto de Ciencias Naturales (ICN), Universidad Nacional de Colombia, Bogotá, Colombia, and in the Snow Entomological Collection (SEMC), Division of Entomology, University of Kansas Natural History Museum, Lawrence, Kansas, USA. Morphological terminology follows that of Engel (2001) and Michener (2007), except for torulus herein used instead of antennal alveolus. Measurements were taken using an ocular micrometer.

## Heriades (Neotrypetes) tayrona Gonzalez & Griswold, 2011

(Figures 1-14)

**Diagnosis.** This species can be easily recognized by the following combination of characters: female clypeus with a narrow (about two-fifths of basal width of clypeus), shallow median emargination on the distal margin delimited laterally by a small tubercle; ocelli very small in both sexes, slightly larger (1.2–1.4 times) than the diameter of punctures in the interocellar area; and basal metasomal terga uniformly punctate, with punctures smaller than those on scutum and separated by a puncture width or less. Male sterna five and six are similar to those in *H. currani*; it can be distinguished by the larger ocelli.

**Description** (Male). As in the female (cf. Gonzalez and Griswold 2011), except: Body length, 5.2 mm; forewing length, 3.5 mm. Compound eyes about twice as long as broad, two times wider than gena in profile; intertorular distance 1.8 times torulorbital distance; interocellar distance 4.3 times median ocellar diameter, about as long as ocelloccipital distance, slightly longer than ocellocular distance; labrum without small median tubercle basally; mandible with condylar ridge not abruptly angled, outer ridge and acetabular carina not abruptly ending in tubercle; clypeus 1.6 times broader than long, distal margin slightly concave, without shallow median emargination delimited by small tubercle; scape 1.9 times longer than wide, 0.6 times torulocellar distance; pedicel about as long as broad, slightly longer than first flagellomere 1.4 times broader than long, about half length of second; second flagellomere 1.3 times longer than broad, about as long as third. Sixth and seventh terga, second to eighth sterna, and genital capsule as in figures 4–14.