

A new species of *Talanus* (Coleoptera:Tenebrionidae) from Puerto Rico, with commentaries on *Talanus cribrarius*

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ABSTRACT. A new species of beetle of the genus *Talanus* (Tenebrionidae:Talanini) from southern slope of Cordillera Central, Puerto Rico is described. It is the second species known from the island. Comments on another West Indian species of the same genus are also provided. *Talanus* genus is reported for the first time from Dominican Republic.

Key words: Coleoptera, Tenebrionidae, *Talanus*, new species, Puerto Rico.

INTRODUCTION

The genus *Talanus* is represented by small species that do not surpass 10 mm. They are rather lustrous with uniform coloration, predominantly brown with variations from light brown to sooty black. The punctured elytra are with or without striae. Males are smaller and all or some have a sort of spine-shaped tubercle in the under surface of tibia.

The tribe Talanini is monogeneric, because the genus *Dignamptus* Le Conte, has been designated under the synonymy of *Talanus* Jacqueline du Val by Champion (1887) and Triplehorn (1968). The distribution of this genus is practically throughout Neotropical region. It is represented in Central and South America, as well as in some Caribbean islands (Cuba, Puerto Rico, Guadeloupe, Dominica, Grenada and St. Vincent), and also in the southern United States (Texas and Florida).

In total there are about 34 described species, four of them are from the southern United States (Blackwalder, 1945; Triplehorn, 1968), and only five from the West Indies, where they are poorly known (Marcuzzi, 1984), but see also the discussion. Although some authors have conferred the genus *Talanus* to Macklin, the true author is Jacquelin du Val (1857) as Triplehorn (1968) makes clear. On Puerto Rico only a single species had been reported, *Talanus insularis* (Macklin), but there is no specimen to confirm this. Champion (1896), however, considered three specimens collected on the island of Grenada as referring to this species. Marcuzzi (1984) mentions Grenada with a question mark.

Between 1995 and 2004 expeditions were undertaken to several regions of Puerto Rico, not only with entomological purposes, but also with ornithological and herpetological objectives. Among the material obtained in June of 1998, a single female specimen of *Talanus* was secured, but it differs not only from *T. insularis*, but also from other known species. In September 2004, two males were obtained with black lights. For this new species we propose to name it as,

Talanus victoris sp. nov

(Fig. 1)

Diagnosis. Piceus semi-lustrous all over including antennae and legs. Shoulders brighter, underparts less lustrous. Head and pronotum heavily punctured. Elytrae coarsely punctured, with punctures rounded and larger. Pyramidal; spine-like triangles present on underside of tibia in each leg. Base of pronotum with two parallel depressions at middle. Females slightly larger and lighter,

less piceus.

Description. Coloration. Piceus semi-lustrous all over on the upperparts, including antennae and members., with shoulders brighter and underparts less lustrous.

Head. Narrower than pronotum, eyes convex, with almost the same width as the apical portion of pronotum, well separated from each other, very protruding with silver facets. Strongly punctured, with larger punctures toward the base. Thinner at gena, as well as on vertex and clypeus. Mental in triangle shape and smooth as well as the gula, very slightly marked. Palps dark and lustrous, with the same color of femora. Inferior parts of head behind the eyes and mouth parts longitudinally striated. Punctures of head half the size of the pronotum ones. The ones from clypeus even smaller than the ones from base. Pronotum. Longer than wide, broad, arquated on sides, slightly narrower toward the apex and wider at middle. Well delimited borders, especially at angles that are in rectal angle. Heavily punctured, with punctures uniformly sprayed on surface, excepting the base that is completely smooth. A conspicuous sinuous depression on each side, between the exterior border and disk. Base with two parallel depressions in the middle.

Elytra. Elongated, uniformly parallel, with very well delimited borders, humeral angles almost in rectal angle. About eight rows of punctures very well delimited but separated from each other, without striae. These are roundish with a tiny one in the middle. Each puncture well separated. Only in the first row closer to the median suture do these punctures seem closer. The space among the rows of punctures is completely smooth. These rows of punctures extend below to the apical border of elytra. Underparts. Mesosternum punctured, except the region where it joins the trochanters of the second pair of legs, smooth. Metasternum practically smooth, with very few isolated punctures. It is the most lustrous part of the ventral region, as well as sternites, very vaguely punctured. Proepisternum strongly punctured as well as prosternum, that narrows into a tongue-shape between the first trochanters.

Legs. Femurs rather wide and slightly arquated. Finely punctured in both surfaces as well as tibiae that are narrower and practically straight. Pyramidal spine-like triangles present on the inner sides of tibiae in the three members. Tarsus with pubescence more yellowish. Protibiae with straight yellow bristles in the apical end. Yellow pubescence of tarsus denser than tibiae's. Legs very long. Metafemur reaching superior portion of last sternite. Tarsus very long. Four first articles practically of same size. Females lacking the spine-like structures.

Antennae. Rather short, do not reach the base of pronotum. Articles progressively larger toward the tip, where the terminal one is the largest, practically double in size than the three preceding ones and oblong in shape. All articles covered with fine yellowish pubescence. Articles 10, 9 and 8 practically of the same size; more pubescent and truncate in shape; 7th a bit smaller.

Variation. The female is similar to the male paratype in coloration, being lighter and less piceus than the male holotype. Also lacks the spine-like appendages of the legs of both males. In size, it is slightly larger, 8.6mm, while both males measures 8 mm and 7.5 mm. Male and female paratypes lacks the two parallel depressions at the base of the pronotum presented in the male holotype.

Types. Holotype, HPPR-865. Male, PUERTO RICO, Hacienda Paraíso, Real Anón, about 13 km NE of Ponce, 31.viii. 2004, colls. O. H. Garrido and A. Perez Asso, black lights. Deposited at Museo Nacional de Historia Natural de Cuba (MNHNCu). **Allotype.** MNHNCu-O. H G. 2662. Female, PUERTO RICO, Hacienda Paraíso, Real Anón, about 13 km NE of Ponce, 6.vi.1998, coll. O. H. Garrido. Deposited in the collection of Hacienda Paraíso, Puerto Rico. **Paratype.** HPPR-866. Male, same data of holotype, but collected on 1.ix.2004. Deposited in the collection of Hacienda Paraíso, Puerto Rico.

Etymology. This species is named in honor of Victor L. González, who provided the authors with lodging and transportation for the faunal investigation.

Distribution. So far encountered on the southern slopes of Cordillera Central of Puerto Rico, north of Ponce.

DISCUSSION

Apparently, the scant number of taxa in this genus is probably related to scarce collecting rather than a zoogeographical phenomenon. It is inconceivable that a small island such as Grenada can have four species of *Talanus*, while none are found in other larger islands such as Jamaica or Hispaniola. Up to the present, only one species had been reported for the islands of Cuba (*Talanus cribrarius*) and Puerto Rico (*Talanus insularis*); however, there are representatives of at least two more Cuban species in the private collection of the senior author. The new Puerto Rican finding highlights confusion regarding this group.

Talanus cribrarius is the only taxon reported in Cuba despite the fact that there are at least two other species represented there. For Grenada, Champion (1896) reports a male specimen that he said he compared with another one (assigned to *T. cribrarius*) from the F. Bate collection. This author points out that the specimen presents a small "tooth on the undersurface of tibiae. It has a short sharp tooth on the inner side of each of the tibiae." Nevertheless, males of *T. cribrarius* from Cuba present these "teeth" only in the first two pair of legs (pro and mesotibiae), and none in the metatibiae. On the other hand, the other two undescribed Cuban species present these "teeth" in all three pairs of legs. Additionally, under *T. insularis* Champion points out that the other three specimens from Grenada and Puerto Rico "are less elongated and much smaller than *cribrarius*." If we take into consideration that the larger specimens of *T. cribrarius* do not even reach 6 mm (5.45 mm), and that the other specimens of undescribed species from Cuba measure only 4.3 and 4.2 mm, "much smaller" specimens ought to be as small as 3 mm; and that is not the case with any *Talanus* specimen so far deposited as having been collected in Puerto Rico. This situation leads to the speculation that the *T. cribrarius* specimen Champion assigned to Grenada is in reality another species, or possibly similar to one of the new undescribed Cuban ones. An analogous situation is likely with the three *T. insularis* specimens from Grenada that Champion uses as the basis for assigning the species to Puerto Rico.



Fig. 1. *Talanus victori* sp. nov: Habitus of male holotype HPPR- 965.

According to the original description of *Talanus cribrarius* (Jacquelin du Val, 1857), of the three presumed Cuban taxa, *T. cribrarius* belongs to the larger species, but it has only "small teeth" on the inner part of tibiae of the first two pair of legs. Perhaps there are existing specimens unidentified or misidentified of this genus in museums or scientific institutions; but we are confident that future serious collecting will increase the number of species of the genus, especially in the Caribbean islands of Jamaica and Hispaniola.

Since only scarce information on *T. cribrarius* is available, we offer some brief comments regarding the material available in Cuban collections. Males of *T. cribrarius* exhibit semi-triangular spine-like tubercles only on the inner surface of pro and mesotibiae, and none in the metafemur. Females do not have any of the above mentioned characters. The punctures on the elytra are very distinct from *T. victori* sp. nov. and are punctate-striate. Male OHG.459 from La Güira, Pinar del Río, exhibits spines in the first pair of legs, but nothing is discernible in the other two pairs. Male OHG 1943 and 598 from Almendares, Havana city, have spines in all first two pairs of legs, while a female OHG 1994 from Santa Fé, La Habana, have none. On the other hand, a male OHG.917 from Sierra de Anafe, La Habana, presents spines in the three pair of legs. Female 2447 from the

same locality, presents none. Male OHG 1905 from Corralillo, Las Villas, displays spines in the three pair of legs, the ones in the third pair similar to the other two. Male OHG.1942 from Almendares, also presents spines in all pair of legs, but the ones from the third pair are not exactly alike other two. In measurements, the longest specimen is 4.45 mm x 2.5 mm. The smallest one from Corralillo is 4.2 mm x 1.0 mm.

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