

A new species of *Opatrinus*  
(Coleoptera: Pedinini: Tenebrionidae) from Cuba.

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### Abstract

A new species of an endemic tenebrionid beetle, *Opatrinus armasi*, is described from the environs of San Antonio de los Baños, Havana Province. The new species is found living syntopically in this area with the more widespread *O. pullus*. Comparisons with various populations of this latter species are made. Photographs of the beetles, drawing of pronotum, as well as males genitalia of both species are given.

### Introduction

The genus *Opatrinus* in the West Indies is represented by 3 species: *O. gemellatus* Olivier 1795 (Trinidad, Grenada, San Vincent, Bequia, Moustique, Guadalupe, Antigua, Saint Kitts, Saint Croix, as well as Northern part of South America); *O. puertoricensis* Marcuzzi, 1977 (Puerto Rico and Jamaica) and *O. pullus* Sahlberg, 1823 (Mexico, Guatemala, Colombia, Venezuela, Jamaica, Puerto Rico and Cuba). *Opatrinus anthracinus* Mulsant and Rey 1852, is considered a synonym of *O. pullus* (*vide* Marcuzzi 1984).

*Opatrinus pullus* is well distributed in our territory, being found all over the main island of Cuba, as well as on the Isle of Youth (former Isle of Pines) and Cayo Coco (Archipelago Sabana - Camagüey). Despite the fact that some of the coastal specimens from Eastern Provinces (Granma, Santiago de Cuba, Las Tunas) and from the Peninsula of Guanahacabibes (Western extreme of Cuba) are smaller than individuals from the other populations, they do not exhibit any other morphological differences (including male genitalia) that would induce us to split them taxonomically. The populations that dwell sympatrically with *O. pullus* in the environs of San Antonio de los Baños, Havana, are clearly different, and are here described.

### *Opatrinus armasi*, new species (Figures 1A, 2B, and 2D)

HOLOTYPE MNHNCU-500 (Male). Collected May 3, 1980, 2.5 km NW of San Antonio de los Baños, Havana Province, by Rubén Regalado. Deposited in

Museo Nacional de Historia natural, La Habana 2, Cuba.

PARATYPES: MNHNCU - 501 to 518 and 1141; 1146 to 1148; 1150 to 1156; 1158; 1159; OHG 1185 and 1189 (Orlando H. Garrido private collection). Same data as Holotype. Numbers 501 to 518 deposited with Holotype, the rest in (O.H.G.).

ASSOCIATED MATERIAL: OHG-1160 to 1179 are labeled 2.0 km NW of San Antonio de los Baños, April 22, 1988, Rubén Regalado; OHG-114) is labeled Rivera del Río Ariguanabo, April 22, 1988, Rubén Regalado; OHG-1104 to 1106 are labeled San Antonio de los Baños, May 15, 1987, Luis de Armas.

DIAGNOSIS: Differs from *Opatrinus pullus* (Figs. 1B and 2C) by the following characters: less lustrous, especially the pronotum; segments of antenna wider; pronotum longer, with the edges conspicuously crenate and with the apex more acute (figs. 1A and 2D), with depressions in the margin of the disk of pronotum; shorter elytra with more marked punctures; scutellum smaller; wing less developed; tarsal segments with hairy pads wider in the male, especially the protarsi; mesosternum with the median vertical depression less developed.

DESCRIPTION: Head densely punctured; gena well developed; upper border of clypeus bifurcate; emarginated eyes kidney-shape, constricted towards the edges of the head, enlarging again in the inferior part.



**Figure 1.** A) *Opatrinus armasi* n. sp. Paratype, female OHG - 1185, collected 2.5 km from San Antonio de los Baños, La Habana. B) *Opatrinus pullus* Sahlberg, female OHG - 1195, collected 2.5 km from San Antonio de los Baños, La Habana.

Antenna with hairs in each segment, gradually enlarged toward the terminal segment which is the widest; the second segment largest, the third segment a bit smaller, but longer than the rest.

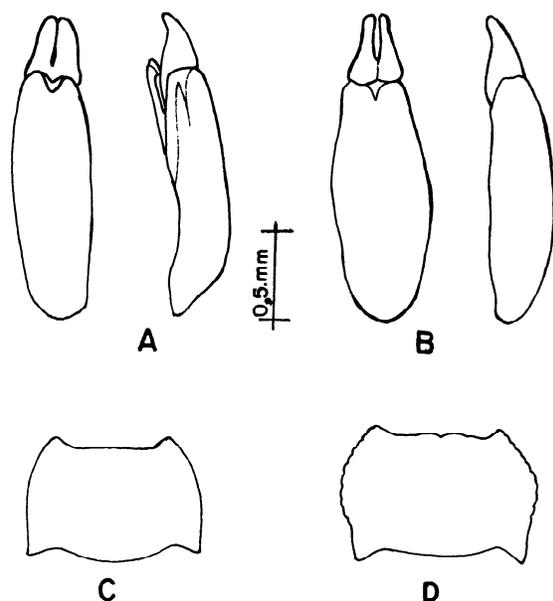
Pronotum heavily convex, wider than long, longitudinal elevation on the superior portion of the disk heavily punctured; a couple of depressions in the inferior lateral area, two more elongated depressions on the medium inferior part; lateral edges conspicuously crenate; base sinuate, similar to the apical edge.

Scutellum almost rounded, with few punctures. Elytra convex, most conspicuously on the center of the disk; elytra not fused at suture; each elytron with 9 rows of well defined punctures, the last row practically coinciding with the lateral borders; punc-

tures deeper and more conspicuous in the external rows. Wingless.

Pro-, meso- and metafemora well developed, and practically similar in size and shape, finely hairy; tibia also similar in shape, with hair on the inferior border well developed; tibia with two more conspicuous spines on the inferior apex that are clearly differentiated from the hair of the first tarsal segments.

Mentum densely punctured, with a lustrous black lanceolated and smooth medially plaque; prosternum practically smooth, with few punctures; pro-episternum densely punctured. Mesosternum medially punctured; meso-episternum heavily punctured; metasternum lustrous, practically smooth, with more scattered small hairs,



**Figure 2.** *Opatrinus pullus* Sahlberg: A) male genitalia, and C) pronotum. *Opatrinus armasi* n. sp. B) male genitalia: and D) pronotum. Magnified in Microscope Stereoscope Wild, Type 256575.

hairs more numerous and with some slight punctured toward the extremes; trochanters slightly hairy and punctured.

Sternites of abdomen with punctures less developed on segment I and more heavily punctured on segment VI. Uniformly black in color, including femora, tibiae, and antennae; the tarsi and the terminal antennal pubescence segments are chestnut.

**MEASUREMENTS:** Total length 10.3 mm; pronotum length 2.8 mm; widest part of pronotum 4.4 mm; length of elytra 6.7 mm; widest part of elytra 2.6 mm.

**VARIATION:** The whole series, with the associated material, includes 54 specimens. The external morphological characters are homogeneous, with the most variation in body size, as well as the location, extension and number of pronotum depressions.

Length of body:  $X = 10.4$  (9.2-11.2); length of pronotum:  $X = 2.7$  (2.6-3); widest part of the pronotum:  $X = 4.4$ . (4.0-4.8); length of elytra:  $X = 6.7$  (6.0-7.5); widest part of elytra:  $X = 2.5$  (2.2-2.9).

**COMPARISONS:** *Opatrinus armasi* differs from related species in the morphology of pronotum, which is conspicuously crenate in *armasi* and practically smooth in the other species (see Diagnosis). The male genitalia also differ from *Oportoricensis*, *O. pullus*, *O. gemellatus*, *O. gridelly* and *O. Lüderwaldti* (Fig. 2). (Marcuzzi 1982: 250-252).

**EXAMINED MATERIAL:** *Opatrinus armasi*: 3, (San Antonio de los Baños); 1, (Cañada del Río Ariguanabo); 32, (2.5 km NW San Antonio de los Baños); 19 (2.0 km NW San Antonio de los Baños). *O. pullus*: 10, (El Veral y Punta Holandés, Península of Guanahacabibes, Soroa, Pinar del Río); 41, (Managua, 20 y 25 km NW San Antonio de los Baños, Caimito, Alquizar, Tapaste, Santa Fé, Vedado, provincia Habana); 14 (Atabey, Bosque de la Habana, Monte Barreto, Ampliación de Almendares, Marianao, provincia Habana; 2, (Varadero, Martí, Provincia Matanzas; 3, (Puerto Manatí, Provincia de Tunas); 4, (La Gran Piedra, Cubitas, Siboney); 2, (Las Coloradas, Niquero, provincia de Granma).

**TYPE LOCALITY:** 2.5 km NW from San Antonio de los Baños, Havana Province.

**HABITAT:** All individuals from the different localities were collected under stones, in marshes, or in open areas.

**DISTRIBUTION:** An endemic species, so far confined to various localities near Ariguanabo River in San Antonio de los Baños, Havana Province.

**ETYMOLOGY:** Dedicated to the discoverer, our friend and colleague, Luis de Armas, who has been increasing our collections with his collecting over the past several years.

**DISCUSSION:** It is interesting to point out the restricted distribution of this new taxon compared with that of *Opatrinus pullus*, since both live sympatrically in the same habitat. Throughout Cuba *O. pullus* shows a preference for coastal biotypes, but can be found inland. *Opatrinus pullus* populations are uniform in morphology with the exception of the ones previously mentioned that inhabit the Eastern provinces and Península of Guanahacabibes. The animals from these regions are similar among themselves regarding size; they are smaller than individuals from other populations, but do not offer any other morphological

character of importance. The external genitalia of the male are also identical; therefore, it is not wise to split them taxonomically, and especially for lacking meristic data from foreign populations.

### Acknowledgements

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RESUMEN. Se describe *Opatrinus armasi* como nueva especie endémica para Cuba. Vive sintópicamente con la otra especie cubana *Opatrinus pullus* en la localidad tipo de San Antonio de los Baños, Habana. Se hacen comparaciones con distintas poblaciones de *O. pullus*. Se da la media y los extremos de la longitud del cuerpo, largo del pronótum, mayor ancho del pronótum, largo del élitro y mayor ancho del élitro. Se ilustra el pronótum y el animal entero de ambas especies, así como la genitalia del macho.

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