



A STUDY OF THE STRAIGHT-SNOUTED WEEVILS FROM PANAMA (COLEOPTERA: BRENTIDAE): NEW RECORDS AND FORGOTTEN SPECIES

Alfredo Lanuza-Garay

Universidad de Panamá, Centro Regional Universitario de Colón, Departamento de Zoología, Panamá, Rep. de Panamá.

Programa Centroamericano de Maestría en Entomología. Vicerrectoría de Investigación y Postgrado, Estafeta Universitaria, Universidad de Panamá.

Smithsonian Tropical Research Institute, Punta Galeta Marine Laboratory, Address: 0843-03092. Panamá, Rep. de Panamá <lanuzaa@si.edu>

ABSTRACT

Four species of Brentidae from Panama, *Brentus quadrilineatus* Sharp, 1895; *Hemipsalis crassa* Sharp, 1895; *Rhynchoneus belti* Sharp, 1895 and *Schoenfeldtia impressicollis* Senna, 1893 are reported. Two of them are reported (*B. quadrilineatus* and *H. crassa*) for the first time. While the geographical location for the other two species is not cited in Alessandra Sforzi & Luca Bartolozzi's *Brentidae of the World* (*R. belti* and *S. impressicollis*), therefore these species are considered forgotten species of the country. Here we present the taxonomy, diagnosis, type depositories, geographical distribution, material examined, and other relevant details for each species.

KEYWORDS

Coleoptera, Brentidae, taxonomy, Panama, first records.

ESTUDIO DE LOS GORGOJOS PICUDOS DE PANAMA (COLEOPTERA: BRENTIDAE): NUEVOS REGISTROS Y ESPECIES OLVIDADAS

RESUMEN

Se reportan cuatro especies de Brentidae para Panamá, *Brentus quadrilineatus* sharp, 1895; *Hemipsalis crassa* Sharp, 1895; *Rhynchoneus belti* Sharp, 1895 y *Schoenfeldtia impressicollis* Senna, 1893, dos de ellas se reportan por primera vez (*B. quadrilineatus* y *H. crassa*) mientras que la ubicación geográfica de las otras dos especies no está citada en *Los Brentidae del Mundo* de Sforzi & Bartolozzi (2004) (*R. belti* y *S. impressicollis* convirtiéndose en especies olvidadas del país. Se presenta su taxonomía, diagnosis, ubicación del espécimen tipo, distribución geográfica, material examinado, y otros elementos relevantes para cada una de las especies.

PALABRAS CLAVES

Coleoptera, Brentidae, taxonomía, Panamá, nuevos registros.

INTRODUCTION

Recently, Panamanian brentids have been object of several papers (Mantilleri & Sforzi, 2006, Lanuza & Vargas, 2014; Mantilleri *et al.*, 2014; Lanuza, 2015 unpublished data); nevertheless taxonomic studies on Brentidae in Panama are relatively rare. This poorly known group has not been reviewed since Sharp (1895) whose work the *Biologia Centrali-Americana* is still the most important reference for brentid species from Central America and Panama.

The book Brentidae of the World represents a necessary and important tool since recompilation of Kleine (1938) were made. For many years, a great many works on brentids have been published, but they were limited to specific geographical areas (Sforzi & Bartolozzi, 2004), in Panama, the knowledge of straight-snouted weevils is poor. The geographical distributions from each brentid species treated in this book is based only on published museums information and papers; nevertheless, Wolda *et al* (1998) from 1976 to 1978 collected specimens of Brentidae in seven places in the tropical region of Panama, this paper is not considered by Sforzi & Bartolozzi when they prepared their catalog, for this reason, species like *Teramoceroides*

belti (Sharp, 1895) (= *Teramocerus beltii* Sharp, 1895, *Schoenfeldtia impressicollis* Senna, 1893 or *Rhynchoneus beltii* Sharp, 1895) were not considered part of the Panamanian brentid fauna so far.

While I was studying some specimens of brentids in the collections of the Programa Centroamericano de Maestría en Entomología, and Museo de Invertebrados Graham B. Fairchild, Universidad de Panamá, two new records of brentids for Panama were discovered, and also I identified two species previously collected and reported in the country, that were not listed their geographical location by Sforzi & Bartolozzi (2004) in their book *Brentidae of the World*, becoming in forgotten species. This paper brings taxonomic information available about this brentids, new records (species without reference); diagnoses for the species are provided. The occurrence of this species in Panama expands their distribution into Central America.

The list of species in this work follows the order proposed by Sforzi & Bartolozzi (2004), and the acronyms used throughout the text are: IRSNB- Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium MIUP - Museo de Invertebrados G.B. Fairchild, Universidad de Panamá; Colección Entomológica, NHM- The Natural History Museum, London, United Kingdom, PCMENT - Programa Centroamericano de Maestría en Entomología, Universidad de Panamá, SMFD- Forschungsintitut und Naturmuseum Senckenberg, Frankfurt-am.Main, Germany.

Systematics

Brentinae (Brentini)

Brentus quadrilineatus Sharp, 1895

quadrilineatus Sharp, 1895: *Biol. Centr. Amer.* 4(6): 70 (*Brenthus*). NHM (Leptotype, Paraleptotype).

Diagnosis: Habitus (Fig. 1, dorsal view). Medium size, body blackish, shiny; head shorter than rostrum, glabrous, not grooved, slightly narrowed behind; prorostrum shorter than metarostrum and head together; broad, much dilated towards the tip in male, deeply

canaliculate for half its length, metarrostrum smooth, broad, shorter than prorrostrum; elytra with elongated yellow lines on the eight interstriae, puncturation in *B. quadrilineatus* are less obsolete than *B. clavipes*; femora clavate, each one bear with an small sharp tooth; front tibiae sublaminar with a small sharp tooth.

Examined material: PANAMA, Parque Natural Metropolitano, 1998, Forest Canopy, Col. H. Barrios, 1 (♂) (PCMENT).

The specie is known from México and Nicaragua; first record for Panama. Sharp (1895: 4(6) Plate 3, Fig. 6) illustrated the specie.

Brentinae (Arrhenodini)

***Hemipsalis crassa* Sharp, 1895**

crassa Sharp, 1895: *Biol. Centr. Amer.* 4(6): 34. NHM (Leptotype, Paraleptotype).

Diagnosis: Habitus (Fig. 2. dorsal view). Body reddish-brown; upper surface of metarrostrum with a very large deep depression; thorax short and broad; shining, not punctate and without pronotal groove; elytra red, each with numerous yellow lines, six or seven forma a transverse fascia behind the middle.

Examined material: Barro Colorado Island, September 3, 1997, Col. J. Pickering & D. Windsor (Light Traps), 1 (♀) (PCMENT).

According Sforzi & Bartolozzi (2004), the species is known only from Nicaragua, Brazil, Colombia, French Guiana and Paraguay; Sharp (1895: 4(6) Plate 2, Fig. 3, 3a) provide a dorsal view of the female and an underside view of head and rostrum of the male. This is the first record from Panama.

Brentinae (Arrhenodini)

***Rhynchoneus belti* Sharp, 1895**

belti Sharp, 1895: *Biol. Centr. Amer.* 4(6): 47. *vampirus* Senna, 1897: *Ann. Soc. Entomol. Belgique*, 47: 230 (*Arrhenodes*); syn. Soares, 1966: 276. NHM (*R. belti*: Leptotype, Paraleptotype); IRSNB (*A. vampyrus*: Holotype).

Diagnosis: Habitus (Fig.4, lateral view). This species can be distinguished from other Arrhenodini for having a tooth-like protuberances beneath the head.

Examined material: Barro Colorado Island, September 18-22, 1987 (Light Traps), 1 (♂) (PCMENT).

This species is known from Nicaragua; Brazil, Paraguay and Venezuela; Sharp (1895: 4(6) Plate 2, Fig. 14, 14a) provide a dorsal view and profile of the head and front of thorax of the female, Sforzi & Bartolozzi (2004: Fig. 16) provide a profile of the head of the male.

Wolda *et al.* (1998) refers to 8 specimens of *R. belti* from Barro Colorado Island and Las Cumbres, stored in the Charles W. O'Brien Collection (CWOB) under the name *Arrhenodes belti* (Sharp); nevertheless they are not cited by Sforzi & Bartolozzi (2004) for Panama.

Brentinae (Arrhenodini)

***Schoenfeldtia impressicollis* Senna, 1893**

impressicollis Senna, 1893 *Boll. della Società Entomol. Italiana*, 24: 121. SMFD (von Schönfeldt coll.) (Holotype).

Diagnosis: Habitus (Fig. 3. dorsal view). The species can be distinguished from any panamanian Arrhenodini or Brentidae because the prothorax of males has a more or less cornered process resembling

to *Belopherus* but this genus is distributed only in the Antilles (Cuba, Dominican Republic, Haiti, Jamaica and Puerto Rico); differs from the genus *Rhaphirhynchus* by the prostrum slightly dilated apically.



Fig. 1-3. Brentidae, habitus of adults: 1. *B. quadrilineatus* Sharp, 1895 (♂); Parque Natural Metropolitano, April 1th, 1998, Col. H. Barrios (PCMENT); 2. *Hemipsalis crassa* Sharp, 1895 (♀); Barro Colorado Island, September 3, 1997, Col. J. Pickering & D. Windsor (Light Traps) (PCMENT); 3. *Schoenfeldtia impressicollis* Senna, 1893 (♂); Barro Colorado Island, July 1-7, 1992 (Light Traps) (PCMENT).



Fig. 4. Brentidae, habitus of adults: *Rhynchoneus belti* Sharp, 1895 (♂) showing the tooth-like protuberance beneath the head of the male.

Examined material: Barro Colorado Island, July 1-7, 1992 (Light Traps), 1 (♂) (PCMENT); Barro Colorado Island, May 20-26, 1987 (Light Traps), 1 (♂) (PCMENT); Barro Colorado Island, November 12-18, 1986 (Light Traps), 1 (♂) (PCMENT); Barro Colorado Island, September 30 – October 6, 1992 (Light Traps), 1 (♀) (PCMENT); Barro Colorado Island, April 29 – May 5, 1987 (Light Traps), 1 (♀) (PCMENT).

The species is known only in Brazil; the genus *Schoenfeldtia* is considered South American (Bolivia (*S. sennai*), Brazil (*S. impressicollis*); Wolda *et al.* (1998) refers to 23 specimens of *S. impressicollis* from Barro Colorado Island and Corriente Grande, stored in the Charles W. O'Brien Collection (CWOB); nevertheless they aren't cited by Sforzi & Bartolozzi (2004) for Panama.

ACKNOWLEDGEMENTS

I would like to thank Diomedes Quintero and Roberto Cambra (MIUP), Hector Barrios and Cesar de León (PCMENT) for the loan of undetermined material; my sincere thanks to Luca Bartolozzi, Museo Zoologico "La Specola", Università di Firenze, Italy, for his support and useful comments. The author will never forget the constant support, his wife Ursula Vargas-Cusatti, gave him.

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Recibido abril de 2015, aceptado octubre de 2015.