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New species of Heteroceridae from Belize

(Insecta: Coleoptera)

Stanislav SKALICKÝ

Abstract: Two species of Heteroceridae from Belize (*Heterocerus lacyorum* **n. sp.** and *Tropicus belizensis* **n. sp.**) are described, illustrated and compared with similar species.

Key words: Taxonomy, Coleoptera, Heteroceridae, new species, Belize

Introduction

This paper is based on the study of Heteroceridae deposited in USNM, partially sorted and labeled as new species by Dr. W. V. MILLER. These species remained unpublished and, after Dr. MILLER stopped his activity in Heteroceridae, they were kindly sent to me by W. E. STEINER for the description.

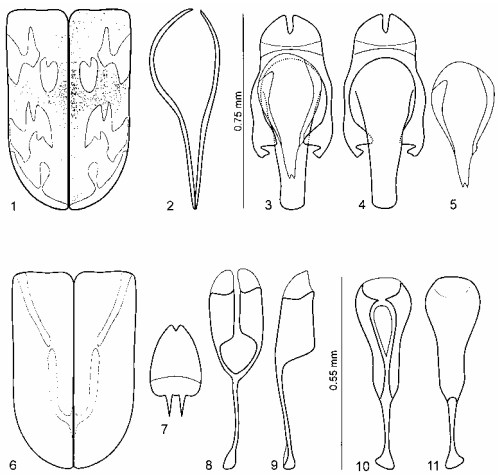
I do not know about any record of Heterocerid fauna from Belize (former British Honduras). Nevertheless, there are 2 species known from Guatemala, 11 species from Mexico and 1 species from Honduras (cf PACHECO (1964)). Later research or exploration of older collections may reveal the occurence of some of those species also in Belize.

The following acronyms are used in the text to indicate the depository of the material examined:

CSU -- Coll. S. SKALICKÝ, Ústí nad Orlicí, Czech Republic

USNM -- The Smithsonian Institution, National Museum of Natural History, Washington, D. C., USA

Separate labels are indicated by double slashes, locality data are cited verbatim in “quotation marks”. Author's remarks are given in square brackets.



Figs. 1–5: *Heterocerus lacyorum* **n. sp.**, holotype: 1: elytra, dorsal view; 2: spiculum gastrale, dorsal view; 3: aedeagus, dorsal view; 4: aedeagus, lateral view; 5: tegmen, dorsal view.

Figs. 6–11: *Tropicus belizensis* **n. sp.**, holotype: 6: elytra, dorsal view; 7: labrum, dorsal view; 8: spiculum gastrale, dorsal view; 9: the same, lateral view; 10: aedeagus, dorsal view; 11: aedeagus, lateral view. Figs. 1, 6, 7 not in scale.

Taxonomy

***Heterocerus lacyorum* n. sp.**

(Figs. 1–5)

Type material: Holotype ♂: "BRITISH HONDURAS [Belize] Corazal Town 16 - 20 April 1967 at black light George & Ruth Lacy" // "Paratype *Heterocerus grandiosa* n. sp. W. V. Miller" [yellow label] (USNM). Allotype ♀: the same data as holotype (USNM). Paratypes: 12 specimens (7 ♂♂, 5 ♀♀): the same data as holotype (USNM, 1 ♂ CSU); 4 specimens (♀♀) the same as holotype only: "29 April 1967" (USNM); 1 specimen (♀) the same as holotype only: "5 - 8 April 1967" (USNM); 1 specimen (♀) the same as holotype only: "4 -14 May 1967" (USNM); 2 specimens (♂♀) the same as holotype only: "29 April 1967" and "Holotype" respective "Allotype *Heterocerus grandiosa* n. sp. W. V. Miller" [red label] (USNM).

Description: Holotype ♂: Total length 4.60 mm (to the apex of labrum); elytra 2.75 mm long, 1.65 mm wide across shoulders. Body shiny, ground colour black brown, pronotum with narrow orange bordered lateral and anterior margins, elytra with orange pattern as in Fig. 1. Mandibles, antennae and legs reddish. Ventral surface black to brown. Labrum rounded, anterior angles emarginate, serrate, dense short setae intermixed with long setae laterally. Mandibles normally developed, with acute apex, dorsal subapical tooth well developed, rounded. Prostheca with long teeth, without notch. Antennae 11-segmented, with 7-segmented club, antennomeres 1 and 2 with sparse long erect setae. Clypeus without a pair of anterior horns, anterior margin shallowly emarginate, finely granular, with dense, short, pale setae. Head finely granular, setae sparse, short, intermixed with very long erect setae above eyes. Pronotum as wide as base of elytra, oval, pronotal base completely rimmed; densely regularly granulated, sparse, short semi-erect setae intermixed with long erect setae. Elytra without longitudinal furrows, without scutellar, with short humeral depressions. Surface of elytra finely granulated, with intermixed punctures approximately as large as 1.50 times eye facets. Epipleural ridges absent. Setae on elytra fair, short, semi-erect, intermixed with longer erect ones. Ventral surface sparsely setose. Metasternum without post-mesocoxal ridge. Mesosternum neither spinose nor tuberculate in front of each mesocoxa, prosternal spine narrow. Post-metacoxal line present. Stridulatory arch marked, with striae. Protibia with 10 stout spines, mesotibiae with 9 long weak spines. Spines of metatibia are weak, concealed by setae. Spiculum gastrale (Fig. 2) 0.8 mm long, V-shaped, arms connected by membrane apically. Aedeagus 0.75 mm long, well sclerotized, shape as in Figs. 3–5.

Paratype (Allotype) ♀: Total length 5.25 mm (to the apex of labrum); elytra 3.25 mm long, 2.00 mm wide across shoulders. Externally similar to male.

Differential diagnosis: *H. lacyorum* **n. sp.** is closely related to *H. fatuus* Pacheco, 1964 distributed in Mexico, New Jersey, New York and Pennsylvania (cf. PACHECO (1964)) and *H. crossi* Miller, 1995 from Mexico. It differs from the latter in the elytral pattern and in the morphology of male genitalia. Compare Figs. 181–187 in Pacheco (1964), Fig. 2 (a, b, c) in MILLER (1995) and Figs. 1–5 in this paper.

Etymology: Dedicated to George & Ruth LACY, collectors of the type series.

***Tropicus belizensis* n. sp.**

(Figs. 6–9)

Type material: Holotype ♂: "BRITISH HONDURAS [Belize] Corozal Town 16-20 April 1967 at black light George & Ruth Lacy" // "Paratype *Tropicus baccatus* n. sp. W. V. Miller" [yellow label] (USNM). Allotype ♀ the same data as holotype (USNM); Paratypes 4 (1♂, 3♀♀) the same data as holotype only: "29 April 1967" (♂ CSU, ♀♀ USNM) [one female specimen involved, without elytra]; 1 paratype (♂) the same data as holotype only: "4-14 May 1967" and second label: "Holotype *Tropicus baccatus* n. sp. W. V. Miller" [red label] (USNM); 1 specimen (♀) the same as holotype only: "29 April 1967" and second label: "Allotype *Tropicus baccatus* n. sp. W. V. Miller" [red label] (USNM).

Description: Holotype ♂: Total length 2.50 mm (to the apex of labrum); elytra 1.35 mm long, 0.85 mm wide across shoulders. Ground colour pale brown; pronotum brown with pale brown lateral and anterior margins, elytra with darker diffuse pattern as in Fig. 6. Body shiny. Labrum (Fig. 7) with acute apex, about 1.8 times longer than wide; surface finely granulated; setae fine, adjacent, intermixed with longer erect setae. Mandibles dentate; process of dorsal ridge well developed, pointed; dorsal subapical tooth pointed. Prostheca without prosthecal notch. Clypeus without pair of anterior horns; surface finely granulated; setae rare, semi-erect, yellowish, shiny. Antennae 9-segmented, with 6-segmented club. Pronotum 1.45 times wider than long, wider than base of elytra; pronotal base thinly rimmed; surface very finely granulated, without intermixed bigger punctures; setae semi-erect, yellowish, longer laterally. Scutellum triangular, pointed. Elytra without humeral and scutellar depressions, without longitudinal striae; surface very finely granulated without intermixed bigger punctures. Epipleura without epipleural ridges. Setae of elytra semi-erect, short, longer setae absent. Metasternum without post-mesocoxal ridge; abdomen without post-metacoxal ridge. Stridulatory arch marked with striae. Ventral surface finely granulated. Protibia with 9 stout, long spines, meso- and metatibia with uncertain number of thin spines. Spiculum gastrale 0.60 mm long, Y-shaped as in Figs. 8–9. Aedeagus 0.55 mm long, shape as in Figs. 10–11.

Paratype (Allotype) ♀: Total length 2.55 mm (to the apex of labrum); elytra 1.55 mm long, 0.90 mm wide across shoulders. Mandibles without dorsal process. Externally similar to male.

Differential diagnosis: Due to the shape of aedeagus and spiculum gastrale, *T. belizensis* sp.n. belongs to the *Pusillus* group sensu PACHECO (1964). This species is similar to *T. cithara* PACHECO, 1964 from the (U.S. ?) Virgin Islands and Saint Croix Island (West Indies) and *T. insidiosus* (Grouvelle, 1896) from Brazil. It can be distinguished from these two species by its genitalia, spiculum gastrale (without semi-sclerotic apodeme in joint arm in *T. insidiosus*) and by the combination of the following external characters: smaller size (total length 2.1 mm) and elytra without pattern in *T. cithara*; labrum short and rounded, process of the dorsal ridge of male mandibles poorly developed in *T. insidiosus*. (Compare Figs. 381–385 (for *T. cithara)*, Figs. 386–392 (for *T. insidiosus*) in PACHECO (1964) and Figs. 10–11 in this paper).

Etymology: The new species is named after the country of its origin.

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Author:
Stanislav SKALICKÝ, Dukla 322, CZ-56201 Ústí nad Orlicí, Czech Republic.
E-Mail: s.skalicky@worldonline.cz

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