

New faunistic records of Heteroceridae, mainly from Brazil, with description of a new species of *Heterocerus* FABRICIUS, 1792 (Coleoptera: Heteroceridae)

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Abstract

Heterocerus sazhnevi sp.n. (Coleoptera: Heteroceridae) from Brazil (Mato Grosso) is described, illustrated and compared with *H. rawlinsi* MASCAGNI, 1933. A checklist of the Heteroceridae from Brazil is provided. Several new faunistic records are presented: *Heterocerus boliviensis* (PACHECO, 1964), *H. similis* GROUVELLE, 1892, *Tropicus borysi* SKALICKÝ, 2006, and *T. squamosus* PACHECO, 1964 from the Brazilian state of Mato Grosso, *T. imperator* PACHECO, 1964 from the Brazilian state of Minas Gerais, and *T. ladonnae* IVIE & STRIBLING, 1984 from Brazil (Mato Grosso) and Guyana.

Key words: Coleoptera, Heteroceridae, *Heterocerus*, *Tropicus*, taxonomy, new species, new records, Brazil, Mato Grosso, Minas Gerais, Guyana.

Introduction

The family Heteroceridae currently comprises about 370 known, morphologically uniform species distributed all over the world, except Antarctica. They live in shallow tunnels in damp soil at the margins of all types of water. For digging these tunnels they are equipped with a number of strong spines on the tibiae.

The exact phylogenetic position of this family has not yet been firmly established, however, recent a molecular analysis confirms that this group belongs to Byrrhoidea (KUNDRATA et al. 2017). The family is divided into five genera: *Augyles* SCHIÖDTE, 1866, *Elythomerus* WATERHOUSE, 1874, *Heterocerus* FABRICIUS, 1792, *Micilus* MULSANT & REY, 1872 and *Tropicus* PACHECO, 1964.

During the study of Heteroceridae collected in the Brazilian states of Mato Grosso and Minas Gerais, I identified a new species, which is described in the present paper. This species is close to *H. rawlinsi* MASCAGNI, 1933 from the Brazilian state of Rio Grande do Sul. In addition, new distributional records of several species of *Tropicus* are presented.

Material and methods

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

CEMT	Setor de Entomologia da Coleção Zoológica, Universidade Federal de Mato Grosso, Cuiabá, Brazil
CJO	Coll. Jan Sýkora, Olomouc, Czechia
CSU	Coll. S. Skalický, Ústí nad Orlicí, Czechia
NHML	The Natural History Museum, London, England
NMPC	National Museum, Prague, Czechia
NMW	Naturhistorisches Museum Wien, Vienna, Austria

Separate labels are indicated by double slashes, locality data are cited verbatim in quotation marks, remarks and comments are given in square brackets.

Checklist of the Heteroceridae of Brazil

At present 30 species of Heteroceridae (12 species of *Heterocerus* and 18 species of *Tropicus*) are known to occur in Brazil (MASCAGNI 1993, MASCAGNI & MONTE 2010, MILLER 1992, PACHECO 1964, 1975, SKALICKÝ 2003, 2006). Their occurrence in the individual federal states of Brazil is listed below. New faunistic records are underlined.

- Heterocerus assimilis* GROUVELLE, 1896: Rio de Janeiro
Heterocerus boliviensis (PACHECO, 1964): Amazonas, Mato Grosso
Heterocerus ciliaticollis STEINHEIL, 1869: Santa Catarina
Heterocerus fumidus (PACHECO, 1964): Paraná
Heterocerus ingeniosus (PACHECO, 1964): Minas Gerais, São Paulo
Heterocerus jaechi SKALICKÝ, 2003: Piauí
Heterocerus meridianus (PACHECO, 1975): Amazonas
Heterocerus parnaguaensis SKALICKÝ, 2003: Piauí
Heterocerus rawlinsi MASCAGNI, 1933: Rio Grande do Sul
Heterocerus sazhnevi sp.n.: Mato Grosso
Heterocerus similis GROUVELLE, 1892: Santa Catarina, Mato Grosso
Heterocerus splendidus PACHECO, 1964: Rio Grande do Sul
- Tropicus aratus* MILLER, 1992: Amazonas, Pará
Tropicus borysi SKALICKÝ, 2006: Goiás, Mato Grosso
Tropicus braza MILLER, 1992: Amazonas, Paraná
Tropicus braziliensis SKALICKÝ, 2006: Goiás
Tropicus carus PACHECO, 1964: Rondônia
Tropicus davidsoni MASCAGNI, 1993: Pará
Tropicus goiasensis SKALICKÝ, 2006: Goiás
Tropicus imperator PACHECO, 1964: Mato Grosso, Minas Gerais
Tropicus infidus MILLER, 1992: Amazonas, Pará
Tropicus insidiosus (GROUVELLE, 1896): Amazonas, Rio de Janeiro
Tropicus ladonnae IVIE & STRIBLING, 1984: Mato Grosso
Tropicus plaumanni PACHECO, 1964: São Paulo
Tropicus sagittarius PACHECO, 1964: Amazonas
Tropicus sparus MILLER, 1992: Bahia, Pará, Pernambuco
Tropicus speciosa MILLER, 1992: Rio de Janeiro
Tropicus squamosus PACHECO, 1964: Mato Grosso
Tropicus tuberculatus PACHECO, 1964: Santa Catarina
Tropicus vicinus MILLER, 1992: Amazonas, Pará

Taxonomy

Heterocerus sazhnevi sp.n.

TYPE MATERIAL: **Holotype** ♂: “[Brazil, Mato Grosso] Poconé - MT. 28.III.1998 Heteroceridae Arm. lum. Mata” (CEMT). **Allotype** (♀): same data as holotype (CEMT). **Paratypes** (19 exs.): 1 ♂, same data as holotype (NMW); 4 ♂♂, 3 ♀♀: “[Brazil, Mato Grosso] Poconé - MT 26.IV.1998 Heteroceridae Arm. lum. Mata” (1 ♂ CSU, 1 ♂ CEMT, 1 ♂ NHML, 1 ♂ destroyed); 1 ♂, 1 ♀: “[Brazil, Mato Grosso] Poconé - MT 26.IV.1998 Heteroceridae Arm. lum. Acuri” (CEMT); 1 ♂: “[Brazil, Mato Grosso] Poconé - MT. 24.V.1998 Arm. lum. Mata” (CEMT); 1 ♂: “[Brazil, Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/VIII/ 2002 Armadilha Luminosa col.” (NMPC); 1 ♂: “[Brazil, Mato Grosso] Sesc Pantanal - MT. [Várzea Grande] 05/VII/ 2003 Armadilha Pano col.” (CEMT); 3 ♂♂: “[Brazil, Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VIII/ 2003 Armadilha Luminosa col.” (1 ♂ CSU, 1 ♂ CEMT, 1 ♂ NHML); 1 ♂: “[Brazil, Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VII/ [20]05 Armadilha Luminosa col.” (CEMT); 2 ♂♂: “[Brazil, Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 07/VIII/ 2003 Armadilha Luminosa col.” (CEMT).

DESCRIPTION: Holotype ♂: Total length 3.50 mm (to apex of labrum); elytra 2.50 mm long, 1.30 mm wide across shoulders. Ground colour dark brown, pronotum and elytra with pale brown pattern as in Fig. 1. Clypeus and head brown to black; legs pale brown, margin of tibiae darker. Ventral surface brown, abdomen with pale brown margins. Labrum as in Fig. 2, visible part twice as wide as long, softly serrate in median portion, surface densely granulate, setae dense, semierect, yellowish, intermixed with long erect ones. Mandibles (Fig. 3) strong with acute apex, dorsal subapical tooth short, rounded. Prosthema with strong and long teeth, without notch. Clypeus without pair of anterior horns, anterior margin deeply emarginate, surface granulate like labrum, setae dense, short, yellowish. Head finely granular, setae sparse, short, intermixed with long erect setae above eyes. Antennae 11-segmented, with 7-segmented club; antennomeres II with setae as long as antennal club. Pronotum oblong, 1.92 times as wide as long, as wide as base of elytra; pronotal base completely rimmed; surface finely regularly granulate, without longer punctures; setae semi-erect, yellowish, becoming longer laterally. Scutellum pointed, triangular. Elytra without longitudinal furrows; humeral depressions short, extending obliquely to one fifth of length of elytron, scutellar depressions shallow and short. Surface of elytra very finely granulate with longer punctures; setae of elytra short, sparse, semierect. Epipleural ridge absent. Ventral surface relatively densely and coarsely granulate; setae adjacent, short. Metaventricle with post-mesocoxal ridge. Mesoventricle with spines in front of each mesocoxa. Post-metacoxal line absent. Stridulatory arch marked with striae. Protibia with 10 stout spines, mesotibia and metatibia with eight weak and long spines. Spiculum gastrale (Fig. 4) 0.95 mm long; V-shaped, arms connected by membrane apically. Aedeagus (Figs. 5–8) 1.00 mm long, well sclerotized. Parameres and phallobase fused, lateral flaps of parameres ending in distinct tooth, supporting sheath without border posteriorly. Penis with well sclerotized long processus accessories at left side, internal sac present.

Paratype (allotype) ♀: Total length 3.85 mm (to apex of labrum); elytra 2.35 mm long, 1.55 mm wide across shoulders. Pronotum, 1.95 times wider than long, slightly wider than base of elytra. Externally similar to male.

DIFFERENTIAL DIAGNOSIS: The aedeagus of *H. sazhnevi* sp.n. is similar to that of *H. rawlinsi* MASCAGNI, 1933 from Brazil (see MASCAGNI 1993: figs. 3–4). It differs from the latter in the elytral pattern and in some aedeagal details.

ETYMOLOGY: Dedicated to my friend, Dr. A.S. Sazhnev (Chernyshevsky Saratov State University, Russia), Russian heterocerid specialist.

VARIABILITY: Size: length 3.50–4.20 mm (both sexes). Elytral longitudinal ridges barely present in some paratypes.

Distributional notes

Heterocerus boliviensis (PACHECO, 1964)

MATERIAL EXAMINED:

BRAZIL: 1 ♂, 1 ♀: “[Mato Grosso] Poconé - MT. 28.II.1998 Heteroceridae Arm. lum. Acuri.” (CEMT); 1 ♂, 1 ♀: “[Mato Grosso] Poconé - MT. 28.III.1998 Heteroceridae Arm. lum. Mata.” (CEMT); 2 ♂♂, 2 ♀♀: “[Mato Grosso] Poconé - MT 26.IV.1998 Heteroceridae Arm. lum. Acuri.” (CEMT, NHML); 2 ♂♂, 3 ♀♀, 1 ex. (sex not examined): “[Mato Grosso] Poconé - MT. 26.IV.1998 Heteroceridae Arm. lum. Mata.” (CEMT, NHML); 2 ♀♀: “[Mato Grosso] Poconé - MT. 24.V.1998 Heteroceridae Arm. lum. Mata.” (CEMT); 1 ♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 15/XI/ 2001 Armadilha Luminosa col.” (CEMT); 1 ♀, 2 exs. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 13/IV/[20]02 Armadilha Luminosa col.” (CEMT); 1 ex. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 15/IV/ 2002 Armadilha Luminosa col.” (CEMT); 1 ex. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 12/VI/ 2002 Armadilha Luminosa col.” (CEMT); 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 08/VIII/ 2002 Armadilha Luminosa col.” (CEMT); 2 ♂♂: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/VIII/ 2002 Armadilha Luminosa col.” (CEMT); 1 ex. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 07/IX/ 2002 Armadilha Luminosa col.” (CEMT); 1 ♂, 1 ♀, 3 exs. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/X/[20]02 Armadilha Luminosa col.” (CEMT); 9 ♂♂, 4 exs. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VIII/ 2003 Armadilha Luminosa col.” (CEMT, NHML, NMPC); 1 ♂: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 07/VIII/ [20]03 Armadilha Luminosa col.” (CEMT); 2 ♂♂: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 07/VIII/ 2003 Armadilha Luminosa col.” (CEMT); 8 ♂♂, 8 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VII/ [20]05 Armadilha Luminosa col.” (CEMT, NHML); 1 ♀: “[Mato Grosso] Chapada dos Guimarães - MT 25/05/08 Arm. Luminosa Ramos, A. F. Col. // Heteroceridae” (CEMT).

DISTRIBUTION: Bolivia, Brazil (Amazonas, Mato Grosso) (PACHECO 1964, 1975, MASCAGNI & MONTE 2010). First record for Mato Grosso.

Heterocerus similis GROUVELLE, 1892

MATERIAL EXAMINED:

BRAZIL: 1 ♂: “[Mato Grosso] Poconé - MT. 23.VI.1998 Heteroceridae Arm. lum. Acuri” (CEMT); 1 ex. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 15/XI/ 2001 Armadilha Luminosa col.” (CEMT); 1 ♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 11/VI/ 2002 Armadilha Luminosa col.” (CEMT); 1 ♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VIII/ 2003 Armadilha Luminosa col.” (CEMT); 2 ♂♂, 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VII/ [20]05 Armadilha Luminosa col.” (CEMT, NHML).

DISTRIBUTION: Argentina, Bolivia, Brazil (Santa Catarina, Mato Grosso), Chile, Paraguay, Uruguay, Venezuela (PACHECO 1964, 1975, MASCAGNI & MONTE 2010, SKALICKÝ 2002, 2004, 2008a). First record for Mato Grosso.

Heterocerus sp.

MATERIAL EXAMINED:

BRAZIL: 1 ♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 15/XI/2001 Armadilha Luminosa col.” (CEMT).

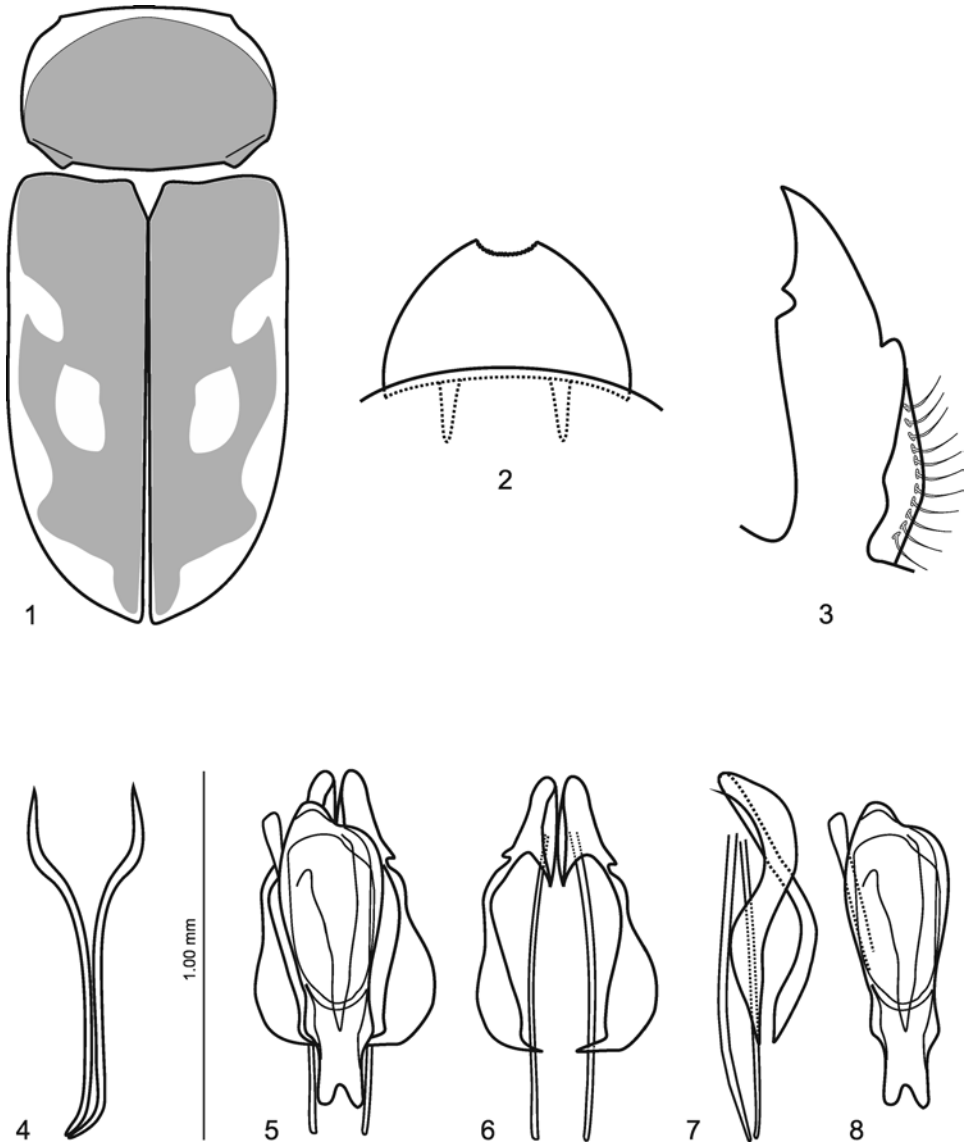
Tropicus borysi SKALICKÝ, 2006

MATERIAL EXAMINED:

BRAZIL: 1 ♀: “[Mato Grosso] Poconé - MT. 23.VI.1998 Heteroceridae Arm. lum. Acuri” (CEMT); 3 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 14/V/ 2002 Armadilha Luminosa col.” (1 CSU, 2 CEMT); 2 ♂♂, 7 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/VIII/ 2002 Armadilha Luminosa col.” (CSU, CEMT, NHML, NMPC); 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/X/[20]02 Armadilha Luminosa col.” (CEMT, NMPC); 1 ♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 06/XI/ 2002 Armadilha Luminosa col.” (CEMT); 1 ex. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea

Grande] 05/VIII/ 2003 Armadilha Luminosa col.” (CEMT); 1 ♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VII/[20]05 Armadilha Luminosa col.” (CEMT).

DISTRIBUTION: Brazil (Goiás, Mato Grosso) (SKALICKÝ 2006). First record for Mato Grosso.



Figs. 1–8: *Heterocerus sazhnevi* sp. n., holotype: 1: pronotum and elytra, dorsal view; 2: labrum, dorsal view; 3: left mandible, dorsal view; 4: spiculum gastrale, dorsal view; 5: aedeagus, dorsal view; 6: parameres and phallobasis, dorsal view; 7: same, lateral view; 8: penis, dorsal view. Figs. 1–3 not to scale.

***Tropicus imperator* PACHECO, 1964**

MATERIAL EXAMINED:

BRAZIL: 1 ♀: “[Minas Gerais] Ijaci MG - BRASIL XI - 2002 Col. Julio L. // Coleção A.M.BELLO.” (CEMT).

DISTRIBUTION: Argentina, Bolivia, Brazil (Mato Grosso, Minas Gerais), Paraguay (PACHECO 1964, MASCAGNI & MONTE 2010, SKALICKÝ 2002). First record for Minas Gerais.

***Tropicus ladonnae* IVIE & STRIBLING, 1984**

MATERIAL EXAMINED:

BRAZIL: 1 ♂: “Chal. Guimarae [? Chapada dos Guimarães, Mato Grosso] 26-III-01 MT Hinazaki.R.D.” [handwritten] (CEMT); 1 ♀: “[Mato Grosso] Poconé - MT. 23.VI.1998 Heteroceridae Arm. lum. Acuri.” (CEMT); 1 ♀: “[Mato Grosso] Poconé - MT. 23.VI.1998 Heteroceridae Arm. lum. Acuri // Heteroceridae.” (CEMT); 1 ♂: “[Mato Grosso] Poconé - MT. 24.VI.1998 Arm. lum. Mata.” (CEMT); 1 ♂, 4 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 13/IV/[20]02 Armadilha Luminosa col.” (CEMT); 1 ♂, 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 14/V/ 2002 Armadilha Luminosa col.” (CEMT); 1 ex. (sex not examined): “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 15/IV/ 2002 Armadilha Luminosa col.” (CEMT); 5 ♂♂, 5 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 11/VI/ 2002 Armadilha Luminosa col.” (CSU, CEMT, NHML); 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 12/VI/ 2002 Armadilha Luminosa col.” (CEMT); 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/VIII/ 2002 Armadilha Luminosa col.” (CEMT); 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 07/IX/ 2002 Armadilha Luminosa col.” (CEMT); 2 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 06/VII/ 2003 Armadilha Pano col.” (CEMT); 3 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 07/VIII/ 2003 Armadilha Luminosa col.” (CEMT); 11 ♂♂, 16 ♀♀: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 05/VII/[20]05 Armadilha Luminosa col.” (CSU, CEMT, NHML, NMPC).

GUYANA: 1 ♂, 2 ♀♀: “Charity, 7°23'N, 58°36'W, near Pomeroy River” (1 ♂, 1 ♀ CJO, 1 ♀ CSU)

DISTRIBUTION: Brazil (Mato Grosso), Guyana, Trinidad (IVIE & STRIBLING 1984). First record for Brazil and Guyana.

NOTE: Some male paratypes (CSU) differ from the original description in the shape of the mandibles, the process of the dorsal ridge being small and externally similar to the female.

***Tropicus squamosus* PACHECO, 1964**

MATERIAL EXAMINED:

BRAZIL: 1 ♂: “[Mato Grosso] Sesc Pantanal - MT [Várzea Grande] 09/X/2002 Armadilha Luminosa col.” (CEMT).

DISTRIBUTION: Argentina, Bolivia, Brazil (Mato Grosso), Paraguay (BAMEUL 1995, PACHECO 1964, MASCAGNI & MONTE 2010, SKALICKÝ 2008b). The record above is the first exact record of *Tropicus squamosus* from Brazil; BAMEUL (1995) recorded this species from “Nord-Est du Brésil” without further details.

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References

- BAMEUL, F. 1995: Un nouveau *Tropicus* Pacheco de la Guadeloupe (Coleoptera, Heteroceridae). – Bulletin de la Société entomologique de France 100 (5): 475–480.
- IVIE, M.A. & STRIBLING, J.B. 1984: Taxonomic and nomenclatorial notes on Caribbean *Tropicus* Pacheco (Coleoptera: Heteroceridae). – Proceedings of the Entomological Society of Washington 86 (4): 946–950.
- KUNDRATA, R., JÄCH, M.A. & BOCAK, L. 2017: Molecular phylogeny of the Byrrhoidea-Buprestoidea complex (Coleoptera, Elateriformia). – Zoologica Scripta 46 (2): 150–164.
- PACHECO, F. 1964: Sistemática, filogenia y distribución de los heteroceridos de America (Coleoptera: Heteroceridae). – Monografías del Colegio de Post-Graduados: No. 1. Chapingo, México: Escuela Nacional de Agricultura, Colegio de Post-Graduados, 209 pp.
- PACHECO, F. 1975: Descripción de dos especies sudamericanas de *Efflagitatus* Pacheco (Coleoptera: Heteroceridae) y notas acerca de la distribución de otras tres especies. – Folia Entomológica Mexicana 31–32: 117–126.
- MASCAGNI, A. 1993: La collezione eteroceridologica del Carnegie Museum of Natural History di Pittsburgh (U.S.A.), con descrizione di quattro nuove specie (Coleoptera: Heteroceridae). – Opuscula Zoologica Fluminensia 103: 1–12.
- MASCAGNI, A. & MONTE, C. 2010: Three new species and new records of Heteroceridae from the Neotropical Region (Coleoptera: Heteroceridae). – Koleopterologische Rundschau 80: 159–166.
- MILLER, W.V. 1992: New species of *Tropicus* from South America (Coleoptera: Heteroceridae). – The Coleopterists Bulletin 46 (4): 384–393.
- SKALICKÝ, S. 2002: New species and new records of Heteroceridae from Argentina and Paraguay (Coleoptera: Heteroceridae). – Koleopterologische Rundschau 72: 169–182.
- SKALICKÝ, S. 2003: New species of Heteroceridae from Argentina, Brazil and Chile (Insecta: Coleoptera). – Mitteilungen des Internationalen Entomologischen Vereins 28 (1/2): 1–12.
- SKALICKÝ, S. 2004: *Tropicus migueli* n. sp. from Paraguay (Coleoptera: Heteroceridae). – Mitteilungen des Internationalen Entomologischen Vereins 29 (1/2): 11–16.
- SKALICKÝ, S. 2006: Description of six new species of [the] genus *Tropicus* Pacheco 1964 (Coleoptera: Heteroceridae). – Entomologica Basiliensia 28: 73–82.
- SKALICKÝ, S. 2008a: New species of *Tropicus* Pacheco, 1964 from Paraguay and Ecuador (Coleoptera: Heteroceridae). – Entomologica Basiliensia 30: 27–34.
- SKALICKÝ, S. 2008b: *Tropicus manni* n. sp. from Bolivia (Coleoptera: Heteroceridae). – Mitteilungen des Internationalen Entomologischen Vereins 33 (1/2): 17–25.

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Buchbesprechung

(Fortsetzung von p. 36)

Bei *Typhlodessus* (p. 144) sitzt der Punkt in der Verbreitungskarte nicht ganz an der richtigen Stelle. Zu ergänzen wäre, dass *T. monteithi* von Luis Deharveng (Muséum national d'histoire naturelle, Paris, Frankreich) bald nach der Originalbeschreibung am Typenfundort mehrfach wiederentdeckt wurde. Belege befinden sich im Muséum national d'histoire naturelle (Paris, Frankreich) und im Naturhistorischen Museum Wien (Österreich).

Bei *Hyphoporus* steht unter „Classification“ (p. 206): „This group is very similar to *Hyphoporus* [sollte wohl *Herophydrus* heißen], ...“.

Leider finden sich auch im Literaturverzeichnis, besonders in deutschsprachigen Zitaten, viele Fehler inklusive einiger ulkiger Wortkreation: „Derrt ders ...“ [= Der Ort der ...] (Schmitz & Komnick, 1976), „Dystischiden“ [= Dytisciden] (Schaefflein, 1968), „Wasserkii fem“ [= Wasserkäfern] (sowas passiert, wenn man Zitate aus einem PDF herauskopiert und danach nicht mehr kontrolliert) (Schildknecht, 1970), „Arbeitsgememeinschaft [= Arbeitsgemeinschaft]“ (Wewalka, 1969). Eines der Zitate hat nur noch wenig Ähnlichkeit mit dem Original, und der Zeitschriftentitel entstammt der Phantasie: „Beir, M. 1928: Di Larva von *Lancetes claussi* Mull. *Zhurnal Wissen Insektenbiologische* 23: 164–172“ [= Beier, M. 1928: Die Larve von *Lancetes claussi* Müll. (Col., Dytisc). *Zeitschrift für wissenschaftliche Insektenbiologie* 23: 164–172].

Bei Böcher (1988) fehlt der Titel der Publikation: „Böcher, J. 1988: [The Coleoptera of Greenland.] *Meddelelser om Grønland, Bioscience* 26: 1–100“.

Die Arbeit von Nilsson (1983) in *Aquatic Insects* 5: 9–15 ist irrtümlich zweimal gelistet, und zwar als 1983a und als 1983b, interessanterweise mit deutlich voneinander abweichenden Titeln.

Gozis (1910–1914) ist alphabetisch falsch eingereiht. Letztlich sind noch weitere falsch wiedergegebene Autorennamen („Bena“ [= Bená], „Garcia“ [García], „Gomez-Zurita“ [Gómez-Zurita], „Hajek“ [= Hájek], „Riha“ [= Řiha], „Schroder“ [= Schröder], „Stastny“ [= Šťastný]) sowie ein paar falsche Silbentrennungen („Sch-weizerischen“ (2 ×), „Be-iträge“, „Ge-lbrandkäfers“) zu nennen. Letztere sind unerklärlich, denn mit nur ein paar Mausklicks lässt sich im Internet jedes Wort ganz schnell und problemlos auf korrekte Silbentrennung prüfen.

Die Heftnummern bei den Zeitschriftenbänden fehlen generell.

Wirklich schwere Fehler oder Mängel konnte ich aber Gott sei Dank im gesamten Werk nicht erkennen. Daher fällt das endgültige Resümee positiv aus.

Der Verkaufspreis ist auf der Homepage der Johns Hopkins University Press mit \$ 150.- angegeben. Trotz der vielen Farbseiten erscheint mir dieser Preis für ein Buch dieses Umfangs sehr hoch. Ich habe aber im Internet aber auch wesentlich günstigere Angebote gefunden.

Zum Schluss möchte ich noch einmal auf die eingangs erwähnte Problematik der sich rasant ändernden Gattungssystematik zurückkommen. Der Inhalt des Buches wird ohne Zweifel schon in wenigen Jahren überholt sein. Um dem entgegenzuwirken, könnten die Autoren etwa alle 5–10 Jahre eine aktualisierte Neuauflage, als E-book oder als Internet-PDF, herausgeben. In so einer Neuauflage ließen sich auch die zahlreichen kleinen, mehr oder weniger peinlichen Fehler leicht korrigieren. Allerdings würde ich dann einen anderen Titel wählen. „Diving Beetles of the World. Systematics and Biology of the Dytiscidae“ klingt ein wenig hochtrabend und entspricht nicht ganz dem Inhalt. Zumindest der Zusatztitel sollte unbedingt auf „Systematics and Biology of the genera of Dytiscidae“ geändert werden.