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Koleopterologische Rundschau	83	169–172	Wien, September 2013

Tropicus mipkae sp.n. from Ecuador (Coleoptera: Heteroceridae)

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Abstract

Tropicus mipkae sp.n. (Coleoptera: Heteroceridae) is described from Ecuador. It can be separated from all other species of the genus *Tropicus* PACHECO, 1964 by the morphology of the aedeagus. A key for the identification of all species known from Ecuador is presented.

Key words: Coleoptera, Heteroceridae, *Tropicus*, taxonomy, new species, Ecuador.

Introduction

Only five species of Heteroceridae are known to occur in Ecuador, one of them belonging to the genus *Heterocerus* FABRICIUS, 1792 (*H. coheni* SKALICKÝ, 2007 from Los Rios) and the others to *Tropicus* PACHECO, 1964 (*T. bartolozzii* MASCAGNI, 1994 from Manabi; *T. cordilleraensis* SKALICKÝ, 2008 and *T. trifidus* SKALICKÝ, 2007 from Napo and *T. riosensis* SKALICKÝ, 2007 from Los Rios) (MASCAGNI 1994, SKALICKÝ 2007, 2008a).

In the present paper a sixth species is described from Ecuador, *T. mipkae* sp.n. (Los Rios). In adjacent Peru five species of Heteroceridae are known (*T. bartolozzii* MASCAGNI, 1994; *T. maxwelli* SKALICKÝ, 2009; *H. steineri* SKALICKÝ, 2006; *T. trifidus* SKALICKÝ, 2007; and *T. westerduijni* SKALICKÝ, 2009), all from Loreto (SKALICKÝ 2009). I do not know any record of Heteroceridae from adjacent Colombia.

Tropicus is a New World genus characterized by 9-segmented antennae and by the presence of a well developed process on the dorsal ridge of the male mandibles. Knowledge of this genus is quickly increasing: 12 species were originally described (PACHECO 1964), 51 species were mentioned in the last check list (SKALICKÝ 2008a). SKALICKÝ (2009) described two additional species. Hence the new species described herein represents the 54th species of this genus.

The genus *Tropicus* is subdivided into three species groups (*pusillus*, *imperator* and *minutus*) based mainly on the spiculum gastrale and the aedeagus (PACHECO 1964).

Tropicus mipkae sp.n.

TYPE MATERIAL: **Holotype** ♂: "ECUADOR Los Rios prov. San Eduardo env. 28 July 1982 D. W. Malecek lgt." (collection of S. Skalický, Ústí nad Orlicí, Czech Republic).

DESCRIPTION: Total length 2.50 mm (to apex of labrum); elytra 1.50 mm long, 0.95 mm wide across shoulders. Body pale brown, head brown to black, pale brown anteriorly, pronotum brown with darker spot, elytron with darker diffuse spots (Fig. 1). Legs and ventral surface pale brown. Labrum (Fig. 2) oval, not serrate at apex, with dense short setae. Mandibles (Fig. 3) somewhat curved, bluntly dentate, dorsal subapical tooth imperceptible, rounded, dorsal process of dental lobe short with simple spike. Prostheca without prosthecal notch, with series of sparse teeth. Clypeus without pair of anterior horns, anterior margin shallowly emarginate; coarsely granular, setae short, adjacent. Head finely granular, setae sparse and short except for long setae above eyes. Antennae 9-segmented, with 6-segmented club. Antennomere 1 triangular, antennomere 2 square, half the length of 1, antennomere 3 very short, oval. First two antennomeres with long erect setae, club setae very short and adjacent. Pronotum oval, 1.7 times as wide as long, as wide

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as base of elytra; pronotal base completely rimmed. Surface of pronotum granular, without longer punctures, punctures approximately 0.5 diameter of eye facets; setae short, sparse, adjacent, without longer setae. Scutellum triangular, pointed. Elytra without longitudinal furrows, without scutellar depressions, humeral depressions very deep, short, extending obliquely almost to one third of the length of elytra. Surface of elytra finely granular with intermixed coarse granules approximately 1.5 times as large as eye facets. Setae short, semierect, yellowish and sparse. Ventral surface relatively densely and coarsely granular; setae adjacent, yellowish, short. Epipleural ridge absent. Metaventrite without post-mesocoxal ridge. Mesoventrite neither spinose nor tuberculate in front of each mesocoxa. Prosternal spine short, rounded. Post-metacoxal line absent. Stridulatory arch marked, without striae. Protibia with nine stout spines, mesotibia with nine weak spines. Spines of metatibia weak, concealed by setae. Spiculum gastrale Y-shaped (Figs. 4–5, broken), 0.75 mm long; except posterior membrane well sclerotized, arms are curved and almost touching in the middle. Aedeagus (Figs. 6–7) 0.75 mm long, elongate, well sclerotized, basal portion tubular with very short parameres, internal sac present.

Female: unknown.

DIFFERENTIAL DIAGNOSIS: Based on the shape of the aedeagus and spiculum gastrale *T. mipkae* belongs to the *T. imperator* group sensu PACHECO (1964). This group contains four species with similar elongate aedeagus. In three of them (*T. tucumanensis* PACHECO, 1964 from Argentina and Bolivia, *T. alpacinchensis* SKALICKÝ, 2002 from Argentina and *T. manni* SKALICKÝ, 2002 from Bolivia) the aedeagus has the form of a simple open tube without parameres and the spiculum gastrale has simple arms (with thorns in *T. alpacinchensis*) (see PACHECO 1964: Figs. 441–445, SKALICKÝ 2002: Figs. 13–15, SKALICKÝ 2008b: Figs. 1–5). It seems that the fourth species with "tubular" aedeagus, *T. westerduijni* SKALICKÝ, 2009 from Peru, is by its morphology most closely related to *T. mipkae*. In both of them the aedeagus has the shape of a closed tube and the arms of the spiculum gastrale are dilated and bent, embracing the aedeagus. They can be distinguished by the different colour of pronotum and elytra (elytra black-brown, as well as pronotum, which lacks spots in *T. westerduijni*), different shape of scutellum (scutellum with rounded apex in *T. westerduijni*), shape of male genitalia and by the geographic distribution (Figs. 1–7; see also SKALICKÝ 2009: Figs. 6–11).

ETYMOLOGY: The new species is named after the nickname of my lovely cat Shery.

Key to the Heteroceridae from Ecuador

1 Antennae 11-segmented (*Heterocerus*) ..... *H. coheni*

– Antennae 9-segmented (*Tropicus*) 2

2 Spiculum gastrale with long median process (SKALICKÝ 2007: Figs. 26–30) ..... *T. trifidus*

– Spiculum gastrale without median process 3

3 Aedeagus tube-like (Figs. 6–7) ..... *T. mipkae*

– Aedeagus Y-shaped (MASCAGNI 1994: Fig. 2) ..... *T. bartolozzii*

– Aedeagus formed differently 4

4 Process of the dorsal ridge of male mandible developed as simple short spine (SKALICKÝ 2008a: Figs. 1–5) ..... *T. cordilleraensis*

– Process of the dorsal ridge of male mandible long with two spines (SKALICKÝ 2007: Figs. 20–25) ..... *T. riosensis*

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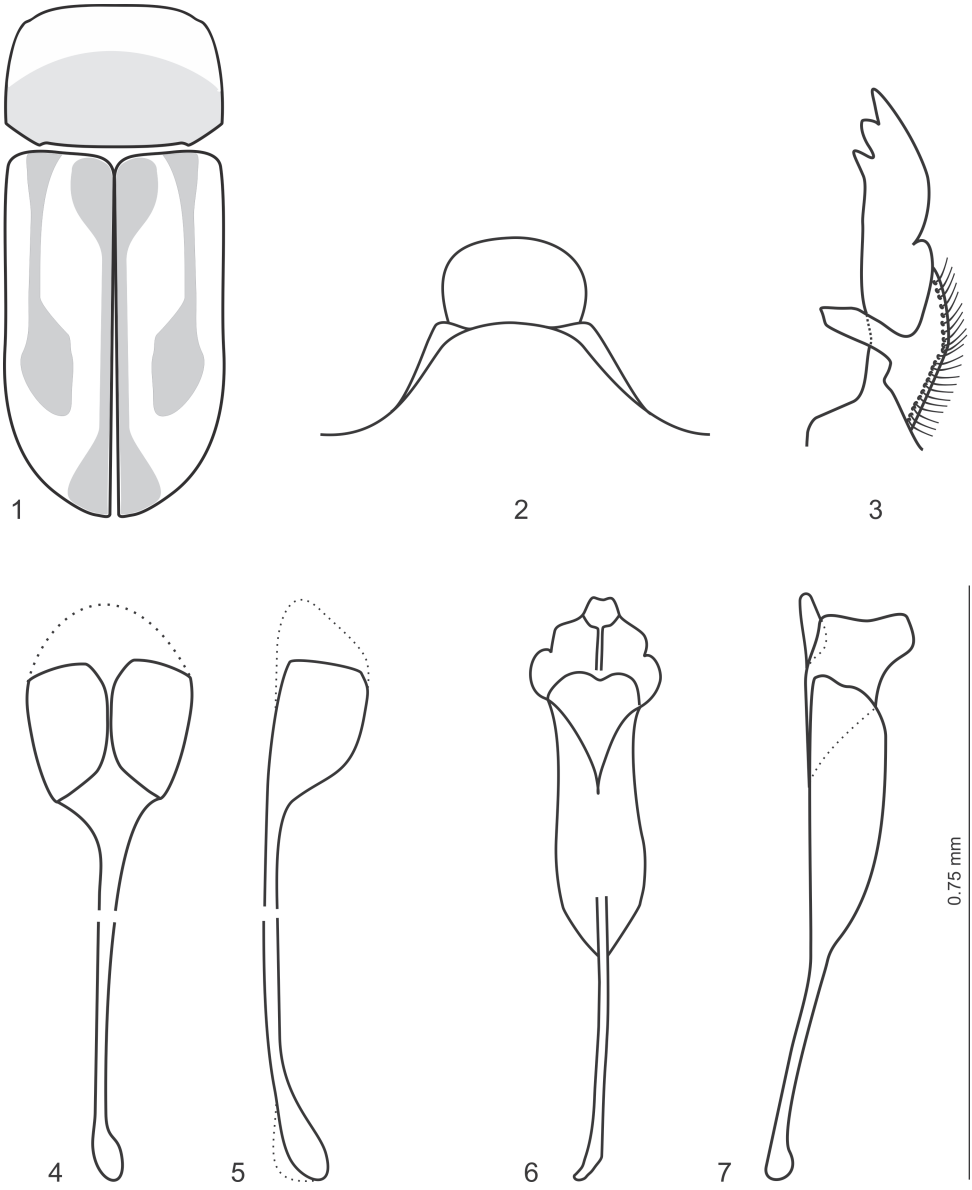

Figs. 1–7: *Tropicus mipkae* holotype: 1) pronotum and elytra, dorsal view; 2) labrum, dorsal view; 3) left mandible, dorsal view; 4) spiculum gastrale, dorsal view; 5) spiculum gastrale, lateral view; 6) aedeagus, dorsal view; 7) aedeagus lateral view. Figs. 1–3 not to scale.

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Acknowledgements

I wish to thank Dr. Josef Jelínek (National Museum, Prague, Czech Republic) for valuable comments and for reading the manuscript.

References

MASCAGNI, A. 1994: Descrizione di una nuova specie di *Tropicus* Pacheco dell'Ecuador (Coleoptera Heteroceridae). – Bolletino della Società entomologica italiana 126 (2): 134–136.

PACHECO, F. 1964: Sistemática, filogenia y distribución de los Heterocéridos de América (Coleoptera: Heteroceridae). – Monografias del Colegio de Post-Graduados: No. 1. Chapingo, México: Escuela Nacional de Agricultura, Colegio de Post-Graduados, 209 pp.

SKALICKÝ, S. 2002: New species and new records of Heteroceridae from Argentina and Paraguay (Coleoptera: Heteroceridae). – Koleopterologische Rundschau 72: 169–182.

SKALICKÝ, S. 2007: New species of Heteroceridae from the New World (Coleoptera: Heteroceridae). – Koleopterologische Rundschau 77: 171–187.

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 Entomologischer Verein 33 (1/2): 17–25.

SKALICKÝ, S. 2009: New species and new records of Heteroceridae from Peru. – Koleopterologische Rundschau 79: 273–277.

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Zeitschrift/Journal: Koleopterologische Rundschau

Jahr/Year: 2013

Band/Volume: 83_2013

Autor(en)/Author(s): Skalicky Stanislav

Artikel/Article: Tropicus mipkae sp.n. from Ecuador (Coleoptera: Heteroceridae). 169-172