

New species and new records of Heteroceridae from Argentina (Coleoptera: Heteroceridae)

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Abstract

A new species of Heteroceridae, *Heterocerus kocouri* sp.n. (Coleoptera: Heteroceridae), is described from Argentina. *Tropicus alvicornis* MASCAGNI, 1989, *T. bartolozzii* MASCAGNI, 1994, *T. sanisidroensis* SKALICKÝ, 2002 and *T. tuberculatus* PACHECO, 1964 are reported from Argentina for the first time. In addition, new Argentinian province records are provided for *Heterocerus ciliaticollis* STEINHEIL, 1869, *Tropicus squamosus* PACHECO, 1964 and *T. tucumanensis* PACHECO, 1964. A checklist of the Heteroceridae known from Argentina is provided.

Key words: Coleoptera, Heteroceridae, *Heterocerus*, *Tropicus*, taxonomy, new species, faunistics, new records, South America, Argentina.

Introduction

The expeditions of M. Snížek (Brno) and S. Jákl (Prague) in five provinces of Argentina (Chaco, Córdoba, Corrientes, Salta and Tucumán) in 2009, 2010 and 2012, yielded a total of 2484 specimens of Heteroceridae. The material included 11 species, one of which, *Heterocerus kocouri* sp.n., is new to science. Four species, namely *Tropicus alvicornis* MASCAGNI, 1989, *T. bartolozzii* MASCAGNI, 1994, *T. sanisidroensis* SKALICKÝ, 2002 and *T. tuberculatus* PACHECO, 1964, are recorded from Argentina for the first time, and four species are new for certain Argentinian provinces.

All specimens mentioned in the present paper are deposited in the author's collection (CSU). Locality data are cited verbatim between "quotation marks". The author's remarks are given in square brackets.

Checklist of the Heteroceridae of Argentina

At present, 22 species of Heteroceridae (13 species of *Heterocerus* FABRICIUS, 1792 and nine species of *Tropicus* PACHECO, 1964) are known to occur in Argentina. The checklist is based on the data provided in this article and on the following references: GROUVELLE (1905), MASCAGNI & MONTE (2010), PACHECO (1964), SKALICKÝ (2002, 2003), TRÉMOUILLES (1992, 1999, 2002). Their occurrence in the individual provinces of Argentina is listed. New records are underlined. The values in the square brackets refer to the number of specimens collected by M. Snížek and S. Jákl.

Heterocerus

<i>bruchi</i> GROUVELLE, 1905	Buenos Aires, Río Negro
<i>splendidus</i> (PACHECO, 1964)	
[see TRÉMOUILLES 1992: 24]	
<i>catamarcensis</i> SKALICKÝ, 2003	Catamarca
<i>ciliaticollis</i> STEINHEIL, 1869	Chaco, <u>Corrientes</u> [15], Formosa, Santa Fe, Tucumán

<i>jujuyensis</i> TRÉMOUILLES, 1999	Jujuy
<i>kocouri</i> sp.n.	<u>Salta</u> [3]
<i>pachecoi</i> SKALICKÝ, 2002	Santiago del Estero
<i>penai</i> MASCAGNI & MONTE, 2010	Tucumán
<i>quadraticollis</i> GROUVELLE, 1905	Tucumán
<i>reticulatus</i> (PACHECO, 1964)	Formosa, Chaco, Santa Fe
<i>santacrusensis</i> TRÉMOUILLES, 1999	Catamarca, Salta, Tucumán
<i>similis</i> GROUVELLE, 1896	Buenos Aires, Chaco [501], Catamarca, Corrientes [89], Córdoba [498], Formosa, Jujuy, Mendoza, Misiones, Río Negro, Salta [213], Santa Fe, Santiago del Estero, Tucumán [8]
<i>validus</i> GROUVELLE, 1905	Buenos Aires
<i>woodruffi</i> (PACHECO, 1975)	Chaco, Jujuy, Salta [1], Santiago del Estero, Tucumán

Tropicus

<i>albicornis</i> MASCAGNI, 1989	<u>Corrientes</u> [8]
<i>alpacinchensis</i> SKALICKÝ, 2002	Catamarca, La Rioja
<i>bartolozzii</i> MASCAGNI, 1994	<u>Corrientes</u> [303], <u>Salta</u> [248], <u>Chaco</u> [53]
<i>bergi</i> (GROUVELLE, 1905)	Buenos Aires, Entre Ríos, Salta [6], Santa Fe, <u>Chaco</u> [31]
<i>imperator</i> PACHECO, 1964 [see TRÉMOUILLES, 1992: 24]	
<i>milleri</i> MASCAGNI, 1993	Misiones
<i>sanisidroensis</i> SKALICKÝ, 2002	<u>Corrientes</u> [2]
<i>squamosus</i> PACHECO, 1964	<u>Chaco</u> [122], Córdoba [12], <u>Salta</u> [276], Santa Fe, Santiago del Estero
<i>tuberculatus</i> PACHECO, 1964	<u>Chaco</u> [20]
<i>tucumanensis</i> PACHECO, 1964	<u>Salta</u> [7], Tucumán

***Heterocerus kocouri* sp.n.**

TYPE MATERIAL: **Holotype** ♂ (CSU): “ARGENTINA NC; J.V.GONZALEZ; El Tunal 20.1.2010; Salado riv. Snížek.”, “HOLOTYPE HETERO CERUS kocouri Skalický det. Skalický 2019” [red label], “collection S.Skalický (CSU) CZECH REPUBLIC”. **Paratypes** (CSU): 2 ♀♀: same data as holotype, but with red “Allotype” resp. “Paratype” label.

DESCRIPTION: Holotype: Total length 5.40 mm (to apex of labrum); elytra 3.20 mm long, 1.90 mm wide across shoulders. Body brown to black, elytra with pale brown pattern as in Fig. 1, pronotum with diffuse reddish anterolateral spots (Fig. 1); mandibles reddish; labrum brown to black, pale brown laterally; antennae and legs pale brown, protibiae with darker lateral margin. Ventral surface dark brown, epipleuron pale brown.

Labrum (Fig. 2): visible part almost as wide as long, rounded, anterior angles emarginate, serrate, finely granulate; setae short, adjacent, with intermixed thin long erect setae. Mandibles (Fig. 2) somewhat curved, strong with acute apex, dorsal subapical tooth acute, well developed. Prostheca without prosthecal notch, with series of sparse teeth. Clypeus (Fig. 2) without pair of anterior horns, anterior margin shallowly convex; coarsely granular, setae short, dense, adjacent.

Head finely granular, punctures approximately 1.2 diameter of eye facets; setae sparse and short except for long erect setae above eyes. Antennae 11-segmented, with 7-segmented club. Scape triangular, pedicel oval with setae as long as club. Pronotum oval, 1.5 times wider than long, as wide as base of elytra; pronotal base completely rimmed. Surface of pronotum finely granular, punctures approximately 0.5 diameter of eye facets, without longer punctures; setae short, sparse, adjacent, longer laterally. Scutellum triangular, pointed. Each elytron with only two shallow furrows next to suture, which do not reach the elytral base; without scutellary depressions, humeral depressions deep, short, extending obliquely almost to shoulders. Surface of elytra finely granular with intermixed coarse and dense granules approximately 1.5 larger than eye facets. Setae of elytra short, semi-erect, yellowish and sparse. Ventral surface relatively densely and finely granular with short, adjacent, yellowish setae. Epipleural ridge absent. Prosternal spine short, rounded. Mesoventrite with pair of short rounded spines in front of each mesocoxa. Metaventrite with a post-mesocoxal ridge. Post-metacoxal line incomplete. Stridulatory arch marked, with striae. Protibia with 10 stout spines, meso- and metatibia with nine weak spines.

Spiculum gastrale V-shaped (Fig. 3); arms narrow, firmly connected apically, 1.05 mm long, well sclerotized. Aedeagus (Figs. 4–7) 0.75 mm long, elongate, well sclerotized; parameres long, partially separated from medial plate of phallobase, supporting sheath rimmed basally; penis without internal sac, with two long separate spines.

Allotype ♀: Total length 4.70 mm (incl. labrum); elytra 2.90 mm long, 1.75 mm wide across shoulders. Pronotum slightly narrower than base of elytra. Externally similar to male.

DIFFERENTIAL DIAGNOSIS: According to the shape of the aedeagus and the spiculum gastrale, *H. kocouri* sp.n. is closely related to *H. ciliaticollis*. It differs from the latter in the elytral pattern, total length (3.3–4.1 mm in *H. ciliaticollis*) shape of the pronotum, absence of prosthecal notch (present in *H. ciliaticollis*) and in the morphology of the male genitalia (Figs. 1–7; PACHECO 1964: figs. 291–298).

DISTRIBUTION: This species is so far known only from Argentina (Salta Province).

ETYMOLOGY: The new species is named after the nickname of the collector's cat.

Heterocerus ciliaticollis STEINHEIL, 1869

MATERIAL EXAMINED (Argentina):

Corrientes: 15 exs.: "ARGENTINA NE; S of Corrientes; River Parana; 16.1.2009 Snížek lgt."

DISTRIBUTION: Argentina, Bolivia, Brazil, Paraguay (MASCAGNI & MONTE 2010, PACHECO 1964, SKALICKÝ 2002, 2004, 2008a, 2016).

Heterocerus similis GROUVELLE, 1896

MATERIAL EXAMINED (Argentina):

Chaco: 2 exs.: "ARGENTINA NC; Gran Chaco; SW of Casteli; 18.1.2009 Snížek lgt."; 327 exs.: "ARGENTINA NC; Gran Chaco Salada [Salado] riv. S of Macapilo (SE Salta) 20.1.2009 Snížek lgt."; 172 exs.: "ARGENTINA, Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2010 St. Jakl lgt."

Córdoba: 1 ex.: "ARGENTINA NC 30km SE Córdoba 6.1.2010; lgt. M. Snížek"; 77 exs.: "ARGENTINA NC; N of Córdoba 1100m W of Ascochinga Sierra de Córdoba N. 3.1.2012 Snížek lgt."; 371 exs.: "ARGENTINA NC N of Córdoba 1100m; W of Ascochinga Sierra de Córdoba N. 8.1.2012; Snížek lgt."; 1 ex.: "ARGENTINA NC N of Córdoba 1100m; W of Ascochinga Sierra de Córdoba N. 22.1.2012; Snížek lgt."; 48 exs.: "ARGENTINA, Córdoba prov. SIERRA DE POCHO ASCOCHINGA env, 1300 m alt 7-10.1.2010 St. Jakl lgt."

Corrientes: 89 exs.: "ARGENTINA NE; S of Corrientes [town] River Parana; 16.1.2009 Snížek lgt."

Salta: 1 ex.: "ARGENTINA N; S of Salta (50km) E of Coronel Moldes 23.1.2009; Snížek lgt."; 2 exs.: "ARGENTINA NW; Salta province Andes mts. N of Cachi; 2600m; 25.1.2009 Snížek lgt."; 10 exs.: "ARGENTINA NC;

S of Salta; Roario de la Frontera 1.2.2009; Snížek lgt.”; 13 exs.: “ARGENTINA Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2021 St. Jakl lgt.”; 3 exs.: “ARGENTINA NC; J.V.GONZALEZ; S of Macapilo; Salado riv. 18.1.2010; Snížek lgt.”; 1 ex.: “ARGENTINA NC; J.V.GONZALEZ; El Tunal 20.1.2010; Salado riv. Snížek lgt.”; 64 exs.: “ARGENTINA NW; J.V.GONZALEZ S of Macapilo; 15.2.2010; Snížek lgt.”; 1 ex.: “ARGENTINA NW; SE of Salta 770m; E Coronel Moldes; 18.2.2010; Snížek lgt.”; 2 exs.: “ARGENTINA NW; N of Cafayate; 1900m; 55km S of Molinos 14.1.2012 Snížek lgt.”; 97 exs.: “ARGENTINA NW; S of Salta; E Coronel Moldes; 20.1.2012 Snížek lgt.”; 4 exs.: “ARGENTINA NW; 40km SE of Salta; 1300m; 24.1.2012; Smížek lgt.”; 15 exs.: “ARGENTINA, Salta prov. rd 16 to Joaquin V. Gonzales ALTINAL river crossing 20-21.1.2010 St. Jakl lgt”.

Tucumán: 6 exs.: “ARGENTINA NW; S of Santa Maria Ruta 40 2200m; (W of Tucuman) 26.1.2012; Snížek lgt.”; 2 exs.: “ARGENTINA NW; W of Catamarca N of Chumbicha (W Tucuman); 1100m 27.1.2012 Snížek lgt”.

DISTRIBUTION: Argentina, Bolivia, Brazil, Chile, Paraguay, Uruguay, Venezuela (MASCAGNI & MONTE 2010, PACHECO 1964, SKALICKÝ 2002, 2004, 2008a, 2016, 2017).

Heterocerus woodruffi (PACHECO, 1975)

MATERIAL EXAMINED (Argentina):

Salta: 1 ♂: “ARGENTINA NC; Gran Chaco Salada riv.; S of Macapilo (SE Salta) 20.1.2009 Snížek lgt.”.

DISTRIBUTION: Argentina, Bolivia, Brazil, Paraguay (MASCAGNI & MONTE 2010, PACHECO 1975, SKALICKÝ 2002).

Tropicus alcornis MASCAGNI, 1989

MATERIAL EXAMINED (Argentina):

Corrientes: 8 exs.: “ARGENTINA NE; S of Corrientes; River Parana; 16.1.2009 Snížek lgt.”.

DISTRIBUTION: Argentina (first record), Bolivia, Paraguay, Venezuela (MASCAGNI & MONTE 2010, SKALICKÝ 2008b).

Tropicus bartolozzii MASCAGNI, 1994

MATERIAL EXAMINED (Argentina):

Chaco: 53 exs.: “ARGENTINA, Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2010 St. Jakl lgt”.

Corrientes: 303 exs.: “ARGENTINA NE; S of Corrientes; River Parana; 16.1.2009 Snížek lgt.”.

Salta: 125 exs.: “ARGENTINA NC; Gran Chaco Salada riv.; S of Macapilo (SE Salta) 20.1.2009 Snížek lgt.”; 1 ex.: “ARGENTINA N; Salta prov. Chicoana riv.; W of El Carril; 28.1.2009 Snížek lgt.”; 36 exs.: “ARGENTINA NC; S of Salta; Roario de la Frontera 1.2.2009; Snížek lgt.”; 20 exs.: “ARGENTINA NC; J.V.GONZALEZ; S of Macapilo; Salado riv. 18.1.2010; Snížek lgt.”; 5 exs.: “ARGENTINA NC; J.V.GONZALEZ; El Tunal 20.1.2010; Salado riv. Snížek lgt.”; 44 exs.: “ARGENTINA NW; J.V.GONZALEZ S of Macapilo; 15.2.2010; Snížek lgt.”; 2 exs.: “ARGENTINA NW; S of Salta; E Coronel Moldes; 20.1.2012 Snížek lgt.”; 15 exs.: “ARGENTINA, Salta prov. rd 16 to Joaquin V. Gonzales ALTINAL river crossing 20-21.1.2010 St. Jakl lgt”.

DISTRIBUTION: Argentina (first record), Bolivia, Ecuador, Paraguay, Peru (MASCAGNI 1994, SKALICKÝ 2002, 2009, 2019).

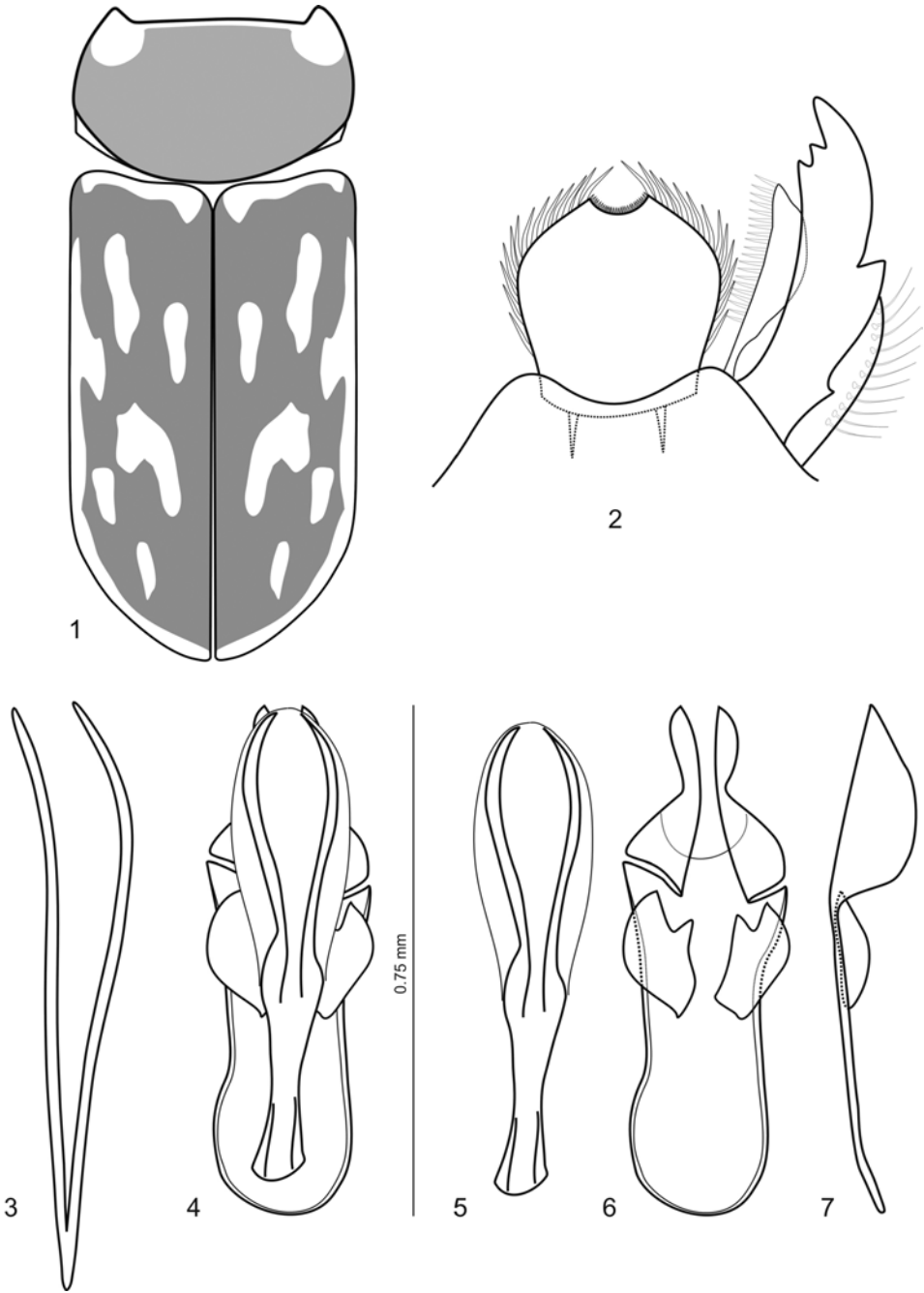
Tropicus bergi (GROUVELLE, 1905)

MATERIAL EXAMINED (Argentina):

Salta: 5 exs.: “ARGENTINA NC; Gran Chaco Salada riv.; S of Macapilo (SE Salta) 20.1.2009 Snížek lgt.”; 1 ex.: “ARGENTINA N; Salta prov. Chicoana riv.; W of El Carril; 28.1.2009 Snížek lgt.”.

Chaco: 31 exs.: “ARGENTINA Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2021 St. Jakl lgt”.

DISTRIBUTION: Argentina, Bolivia, Brazil, Paraguay (PACHECO 1964, MASCAGNI & MONTE 2010, SKALICKÝ 2002).



Figs. 1–7: *Heterocerus kocouri* holotype: 1) pronotum and elytra, dorsal view; 2) labrum, right mandible, prostheca and clypeus, dorsal view; 3) spiculum gastrale, dorsal view; 4) aedeagus, dorsal view; 5) penis, dorsal view; 6) parameres, tegmen and supporting sheath, dorsal view; 7) same, lateral view. Figs. 1–2 not to scale.

***Tropicus sanisidroensis* SKALICKÝ, 2002**

MATERIAL EXAMINED (Argentina):

Corrientes: 2 exs.: "ARGENTINA NE; S of Corrientes; River Parana; 16.1.2009 Snížek lgt.".

DISTRIBUTION: Argentina (first record), Paraguay (SKALICKÝ 2002).

***Tropicus squamosus* PACHECO, 1964**

MATERIAL EXAMINED (Argentina):

Chaco: 122 exs.: "ARGENTINA, Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2010 St. Jakl lgt".

Córdoba: 12 exs.: "ARGENTINA, Cordoba prov. SIERRA DE POCHO ASCOCHINGA env, 1300 m alt 7-10.1.2010 St. Jakl lgt".

Salta: 20 exs.: "ARGENTINA, Salta prov. rd 16 to Joaquin V. Gonzales ALTINAL river crossing 20-21.1.2010 St. Jakl lgt"; 256 exs.: "ARGENTINA N; Salta prov. Chicoana riv.; W of El Carril; 28.1.2009 Snížek lgt.".

DISTRIBUTION: Argentina, Bolivia, Brazil, Paraguay (PACHECO 1964, MASCAGNI & MONTE 2010, SKALICKÝ 2017).

***Tropicus tuberculatus* PACHECO, 1964**

MATERIAL EXAMINED (Argentina):

Chaco: 20 exs.: "ARGENTINA, Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2010 St. Jakl lgt.".

DISTRIBUTION: Argentina (first record), Bolivia, Brazil, Paraguay (PACHECO 1964, SKALICKÝ 2016, 2019).

***Tropicus tucumanensis* PACHECO, 1964**

MATERIAL EXAMINED (Argentina):

Salta: 1 ex.: "ARGENTINA NC; Gran Chaco Salada riv.; S of Macapilo (SE Salta) 20.1.2009 Snížek lgt.", 1 ex.: "ARGENTINA N; Salta prov. Chicoana riv.; W of El Carril; 28.1.2009 Snížek lgt."; 5 exs.: "ARGENTINA NW; S of Salta; E Coronel Moldes; 20.1.2012 Snížek lgt.".

DISTRIBUTION: Argentina, Bolivia (PACHECO 1964, SKALICKÝ 2008b).

***Tropicus* sp. (females)**

MATERIAL EXAMINED (Argentina):

Córdoba: 6 exs.: "ARGENTINA, Cordoba prov. SIERRA DE POCHO ASCOCHINGA env, 1300 m alt 7-10.1.2010 St. Jakl lgt".

Chaco: 37 exs.: "ARGENTINA, Chaco prov. 400 m alt, Rd 16, 30 km S of Pampa de los Guanacos 17-20.1.2010 St. Jakl lgt".

Corrientes: 10 exs.: "ARGENTINA NE; S of Corrientes; River Parana; 16.1.2009 Snížek lgt.".

Salta: 11 exs.: "ARGENTINA NC; J.V.GONZALEZ; S of Macapilo; Salado riv. 18.1.2010; Snížek lgt."; 4 exs.: "ARGENTINA NC; J.V.GONZALEZ; El Tunal 20.1.2010; Salado riv. Snížek lgt".

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