# A new species of *Terapus* Marseul, 1863 (Coleoptera: Histeridae: Haeteriinae) from Peru

## Новый вид *Terapus* Marseul, 1863 (Coleoptera: Histeridae: Haeteriinae) из Перу

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KEY WORDS: Coleoptera, Histeridae, Haeteriinae, *Terapus antonkozlovi*, new species, Peru КЛЮЧЕВЫЕ СЛОВА: жесткокрылые, карапузики, Haeteriinae, *Terapus antonkozlovi*, новый вид, Перу

ABSTRACT. Description of a new species of clown beetles, *Terapus antonkozlovi* **sp.n.** from Peru, is given. The description based on material collected by flight interception traps.

РЕЗЮМЕ. Описывается новый вид карапузиков *Terapus antonkozlovi* **sp.n.** из Перу. Описание базируется на материале, собранном оконными ловушками.

#### Introduction

The obligate myrmecophilous genus *Terapus* includes 18 species and distributed from southern USA to Brazil and Argentina [Mazur, 2011; Degallier *et al.*, 2021]. The biology of these beetles is largely unknown, except for their host association with colonies of ants of the genus *Pheidole* [Hinton, 1945]. South American *Terapus* fauna is still insufficiently studied, discovery of the number of new species is expected [Westwood, 1874; Desbordes, 1914; Bruch, 1922; Reichensperger, 1926, 1933; Degallier, 1998]. Herein, the third new Peruvian *Terapus* is described.

#### Material and methods

Using flight interception traps in tropical forest of upper Peruvian Amazonia, we collected unknown species of *Terapus*. The specimens were preserved in 70% ethanol. The photographs of habitus were taken with a Canon EOS M50 Mark II and Canon MP-E 65 mm Macro lens. Illustrations of genitalia were prepared with digital camera Canon EOS 6d attached to a Carl Zeiss AXIO Scope A1.

Measurements are abbreviated as follows: L — total length of pronotum and elytra, without head, propygidium and pygidium, Lp — pronotal length, Le — length of elytron along

elytral suture, Wpb — pronotal width across base, We — elytral width across humeri, H — distance from metaventrite to maximal high of elytra, measured in lateral position.

#### Results and discussion

Genus *Terapus* Marseul, 1863 *Terapus antonkozlovi* Sokolov **sp.n.** Figs 1–12.

MATERIAL. Holotype, &, labeled: "Peru, Junin department, Satipo province, near Rio Venado village, 11°11.787'S  $74^{\circ}46.168^{\circ}W$ , h = 1122 m., 20.04–18.05.2018, flight interception trap, leg. A.V. Sokolov. / HOLOTYPE Terapus antonkozlovi sp.n. A. Sokolov des. 2025". Holotype is deposited in Zoological Institite RAS, Saint-Petersburg (ZIN). Paratypes: 2 specimens, collected together with holotype, 3 specimens, collected in same locality 14-29.06.2019, 1 specimen 22.09-18.10.2017, 1 specimen 20.10-10.11.2021, 2 specimens 20-30.11.2022 (deposited in author's collection, CAS), 1 specimen (male) collected in same locality 14-29.06.2019 (deposited in private collection of Thomas Théry, CTT), 3 specimens labeled: "Peru: Junín, ~ 15 km NW Satipo, near Rio Venado village at 11°11'40"S 74°46'8"W, 1195 m., window trap, 6-15.02.2019, leg. A.V. Petrov" (deposited in California State Collection of Arthropods, Sacramento, CA, USA), 3 specimens labeled: "Peru: Junín, ~ 15 km NW Satipo, near Rio Venado village at 11°11.872'S 74°46.200'W, 1100 m, 14.02.2013, leg. A.V. Petrov" (deposited in California State Collection of Arthropods, Sacramento, CA, USA).

DESCRIPTION. Habitus as illustrated (Figs 1–4). L = 2.2–2.3 mm, We = 1.5–1.6 mm, H = 1.4 mm. Body elongate, oval, pitch-brown to black, moderately convex dorsally, pronotal sides slightly divergent anterad, elytra wider at base than pronotum, maximal width at humeri. Antennae, mouthparts and legs of same color or paler. Body covered with short yellowish setae, head, pronotum, elytra and pygidia partly with long reddish setae.

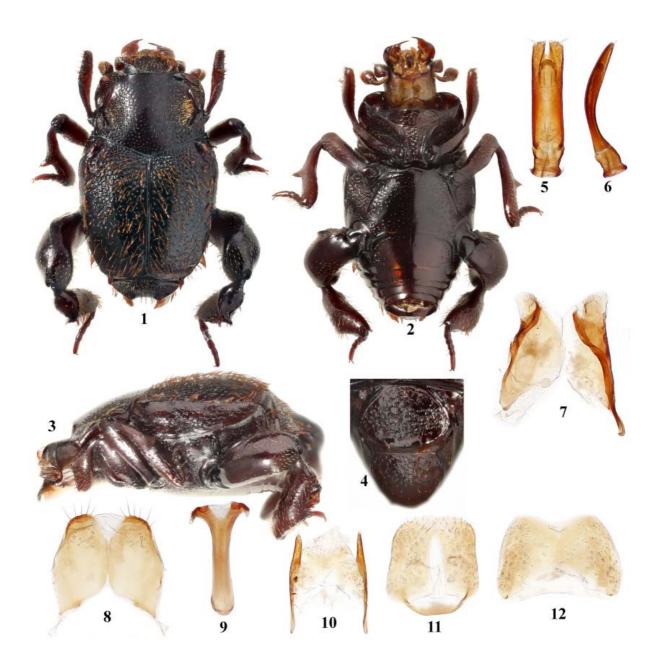
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Head punctured deeply and densely, without smooth intervals, punctures of irregular form. Frons flat, convergent supraorbital keels interrupted before epistoma. Head covered with yellowish setae, as long as a diameter of puncture. Supraorbital keels with fringe of long curved reddish setae. Epistoma barely convex at apex. Labrum four times wider than long, lacking puncturation, anterior edge nearly straight. Mandibles flattened, weakly concave on basal half, punctured somewhat sparser than frons, with fine short setae.

**Pronotum** wider than long, nearly quadrate. Lp = 0.9-1.0 mm, Wpb = 1.2-1.25 mm. Anterior margin broadly arcuate, feebly

sinuate at middle. The anterolateral corners obliquely truncate. Lateral sides slightly divergent anterad, maximal width near anterior two-thirds, sinuate inwardly in posterior third. Pronotal disc flattened, punctures small and sparse (3–4), laterally much larger and denser (0.2–0.5), along anterior margin nearly absent. Disc covered with short setae, laterally with dense longer yellowish setae. Marginal pronotal stria complete at sides and anteriorly. Lateral sides with elevated impunctate anterior and posterior trichome processes, with long scattered yellowish setae, becoming denser on tips. Lateral anterior process extends from anterior four-fifth to middle, narrowly connected



Figs 1–12. *Terapus antonkozlovi* sp.n.: 1–3 — habitus; 4 — propygidium and pygidium; 5–6 — aedeagus; 7 — 9-th and 10-th tergite; 8 — 8-th abdominal segment; 9 — 9-th sternite; 10–12 — female genitalia; 1, 4, 5, 7–12 — dorsal view; 2 — ventral view; 3, 6 — lateral view. **Рис. 1–12.** *Terapus antonkozlovi* sp.n.: 1–3 — габитус; 4 — пропигидий и пигидий; 5–6 — эдеагус; 7 — 9-й и 10-й тергиты; 8 — 8-й брюшной сегмент; 9 — 9-й стернит; 10–12 — гениталии самки; 1, 4, 5, 7–12 — сверху; 2 — снизу; 3, 6 — сбоку.

with posterior one. Glabrous sinuous trichome gap situated inward of processes.

Elytra widest at humeri, slightly narrowed to apex, covered with long reddish setae. Le = 1.35–1.42 mm. We = 1.5–1.6 mm. Anterolateral corners with relatively deep oblique setiferous foveae. Elytral puncturation in basal third coarse and dense (0.2), laterally from base to apical third punctures larger and deeper, especially near humeri and narrow band along apical margin. Medially from basal third along suture and in apical third punctures smaller and sparser (2–3). Narrow impunctate band extend from base across humeri to apex along lateral margin. In place of subhumeral stria from base extend row of punctures with dense long reddish setae, in apical third continued as fine stria. Puncturation of epipleura coarse and dense at middle, basally and apically with small punctures or irregularly spaced punctiform strioles.

**Propygidium** in 1.5 times wider than long, divided by semicircular elevated keel into two perpendicular planes, the anterior one four times wider than the posterior (Fig. 4). The keel broadly interrupted at middle, lacking punctures, posterior part of propygidium without punctures, anterior part with moderately coarse puncturation, interspersed by smaller punctures. Upper edge of keel bearing dense fringe of long reddish setae, similar setae sparsely covered disc of propygidium.

**Pygidium** cordiform, about as wide as long, with sparse long reddish setae, near apex on each side present short dense row of curve reddish setae. Punctures larger than on propygidium, apical third glabrous, in one female pygidial punctures occupies basal third only. Lateral margin elevated, apically effaced evenly. Each side of visible from above parts of fifth ventrite bearing dense brush of long reddish setae.

Ventral surface bearing scattered short yellowish setae. Prosternal lobe subopaque, punctures coarse and dense. Prosternal alae between the lobe and propleura with wave-like microsculpture. Carinal prosternal striae strongly divergent in front and meeting with impressed prosternal suture. Space between carinal striae flattened and strongly punctured. Internal lateral striae absent. External lateral striae impressed, united with carinal striae before suture, broadly divergent, unite basally from meeting of alae and propleura. Basal emargination narrow and shallow opposite mesoventral projection.

Mesoventrite and metaventrite slightly convex, smooth. Metaventrite laterally with fine and scattered puncturation (2.0–2.5), at sides punctures coarser. Marginal mesoventral stria impressed with fine microsculpture, complete along anterior margin, nearly reaches laterally base of lateral metaventral stria. This stria impressed and finely crenulate, abbreviated near metacoxa. Longitudinal suture of metaventrite very shallow. Lateral disk of metaventrite coarsely and very densely punctured. Recurrent metaventral stria absent. In place of metepimeral-metepisternal suture elevated keel extend from metacoxal, covered with ground puncturation and row of short reddish setae. Metepimeron with shining oval "mirror", surrounded by punctures. First abdominal ventrite mostly glabrous, with a few large punctures at sides. Lateral stria strongly curved, runs around and behind metacoxa, almost reaches metepimeron. Line of large dense punctures extends along lateral stria.

All femora and tibiae glabrous, bearing yellowish setae, tibial setae noticeably longer. Pro- and mesofemora elongate. Metafemur curved, expanded, strongly thickened, with sharp

longitudinal keel from base till middle on lateral side. Basal angle with deep rounded emargination. Protibia elongate, with indistinct angle at middle, with 11–13 spines. Mesotibia have strongly prominent tooth at apical third with two acute spurs on the tip. Metatibia curved, expanded, thickened. Deep sinuate tarsal groove situated on lateral margin, occupies about two-third of tibial length. Internal edge of the groove with dense reddish setae. External edge forming slender anguliform prominent with two denticles in basal third, the prominent impressed inwardly near these denticles. All tarsal claws small, about one-third of length of ultimate tarsomere, nearly straight. Male genitalia as in Figs 5–9. Female genitalia as in Figs 10–12.

COMPARATIVE REMARKS. The new species close to *T. seagorum* Degallier et Tishechkin, 2021 [Degallier et al., 2021], known from French Guiana, Ecuador and Peru. It differs by denser and coarser puncturation of dorsal side, longer reddish setae, different shape of metafemur and metatibia, propygidium with row of reddish setae.

ETYMOLOGY. The new species is named after my good friend, field entomologist and collector of beetles Anton O. Kozlov, Moscow.

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