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## A new species of *Euconnomorphus* FRANZ from Bolivia (Coleoptera: Staphylinidae: Scydmaeninae)

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ABSTRACT. *Euconnomorphus boliviensis* n. sp. from Bolivia (east of the Andes) is described, and its diagnostic characters are discussed and illustrated. This is the second known species of *Euconnomorphus*, a genus previously recorded only from Peru.

Key words: entomology, taxonomy, Coleoptera, Staphylinidae, Scydmaeninae, Cyrtoscydmini, *Euconnomorphus*, new species, Neotropical, Bolivia.

### INTRODUCTION

The genus *Euconnomorphus* FRANZ, 1980 included so far only a single species, *E. pilosissimus* FRANZ, 1980 from Peru. The genus was recently revised and redefined, as a part of a revision of genera belonging to the ‘*Euconnus* complex’ (JAŁOSZYŃSKI 2012). *Euconnomorphus* is highly similar to some subgenera of *Euconnus* THOMSON, 1859 and its diagnostic characters comprise an elongate head with a long, subconical vertex projecting dorso-caudad; the tempora and sides of pronotum with dense, strongly erect bristles; the fronto-clypeal groove absent; the maxillary palpomere III strongly elongate and slender; the mandible with a broad basal part and abruptly narrowing, slender distal part with a single mesal submedian tooth; the pronotum bell-shaped, with four ante-basal foveae; the basisternal part of prosternum about as long as the procoxal cavities; the prosternum without an intercoxal process or carina; the mesoventral intercoxal process long, narrow and strongly expanding ventrally (keel-shaped); the mesoventrite without setose and asetose lateral impressions behind the anterior ridge; the mesothorax with two pairs of deep lateral foveae; the metacoxae narrowly separated by a subtrapezoidal metaventral intercoxal process; each elytron with a single

rudimentary and asetose basal fovea; and the parameres with broad sheath-like bases surrounding median lobe and with slender apical parts. These structures were illustrated and discussed by JAŁOSZYŃSKI (2012). The only known male of *E. pilosissimus* is also unique among allied taxa in having a papilla with a long brush of setae on each elytral apex and modified abdominal sternites, with remarkable groups of setae, expansions and projections.

In the present paper a new species of *Euconnomorphus* is described, based on a specimen from Bolivia. The measurements and terminology are adopted after JAŁOSZYŃSKI (2012). The type material is deposited in the Museum of Natural History, University of Wrocław, Wrocław, Poland (MNHW).

#### TAXONOMY

### ***Euconnomorphus boliviensis* n. sp.**

(Figs 1-3, 5-7)

#### NAME DERIVATION

Locotypical; after the country name Bolivia.

#### DIAGNOSIS

Male: abdominal sternites non-modified; aedeagus with strongly elongate and slender apical projection. Females and their diagnostic characters unknown.

#### DESCRIPTION

*Male*. Body (Fig. 1) large, moderately slender, strongly convex; length 2.50 mm; pigmentation uniformly dark brown, except for slightly lighter appendages; vestiture slightly lighter than cuticle.

Head broadest at large and bean-shaped eyes, length 0.55 mm, width 0.50 mm; vertex sub-conically expanded dorso-caudad; frons weakly convex; supraantennal tubercles weakly raised but distinct. Punctures on head dorsum unremarkable, fine and sparse; setae long, dense and erect, in addition to basic vestiture each gena with elongate 'cushion' of short and very dense setae. Antennae long and slender, gradually thickening distally, length 1.20 mm; antennomeres I-VI elongate (III only slightly); VII-X each about as long as broad; XI about twice as long as broad.

Pronotum bell-shaped, broadest near middle, length 0.65 mm, width 0.63 mm; anterior margin short and nearly straight; lateral margins in posterior 3/4 broadly and nearly evenly rounded, in anterior fourth slightly constricted; posterior corners obtuse and weakly marked; posterior margin arcuate; base of pronotum with two pairs of shallow and small ante-basal foveae: indistinct and nearly circular lateral foveae and more distinct, transversally elongate sub-lateral foveae; additionally pronotum with short sub-lateral oblique carina extending from posterior margin of each lateral fovea to hind corner. Punctures on disc as fine as those on frons and vertex; vestiture dense, long and erect.

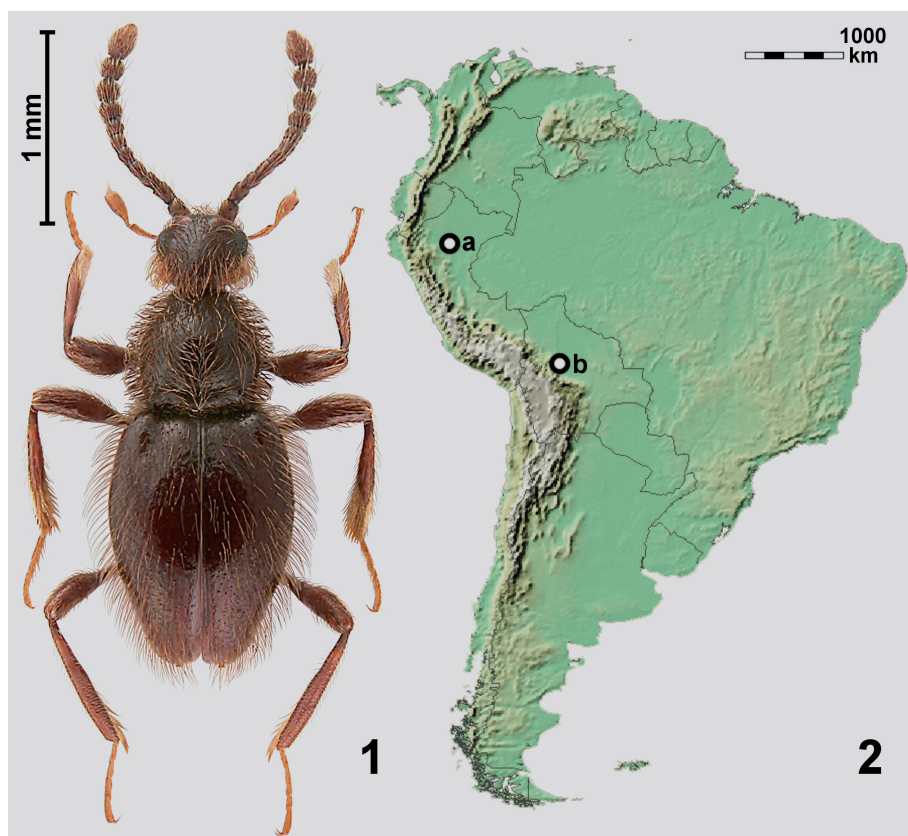
Elytra oval, broadest between middle and anterior third, length 1.30 mm, width 1.00 mm, EI 1.30. Humeri prominent; basal impressions short and shallow; each elytron in apical region with small mushroom-shaped papilla bearing distal brush of long setae (Fig. 3). Punctures larger than those on pronotum but superficial; vestiture long, moderately dense, strongly erect. Metathoracic wings about twice as long as elytra.

Legs slender and long, all tibiae nearly straight; protibiae with dense patch of spatulate setae in distal third of internal margin forming slightly concave elongate area; mesotibiae in distal half of internal margin with dense brush of long setae; metatibiae with short, sparse and erect setae on distal 2/3 of dorsal surface and elongate brush of long and dense setae along distal third of internal margin.

Abdominal sternites non-modified.

Aedeagus (Figs 5-7) 0.45 mm in length, with very short basal capsule and abruptly delimited, long and slender apical projection strongly curved dorsally; internal armature symmetrical and complicated, darkly sclerotized; parameres largely fused to walls of median lobe, only apices remaining free, each bearing three long apical setae.

*Female.* Unknown.



1-2. Dorsal habitus and distribution of *Euconnomorphus* FRANZ. 1 – Male holotype of *E. boliviensis* n. sp.; 2 – Distribution of *Euconnomorphus*: a – *E. pilosissimus* FRANZ, b – *E. boliviensis* n. sp.

## TYPE MATERIAL

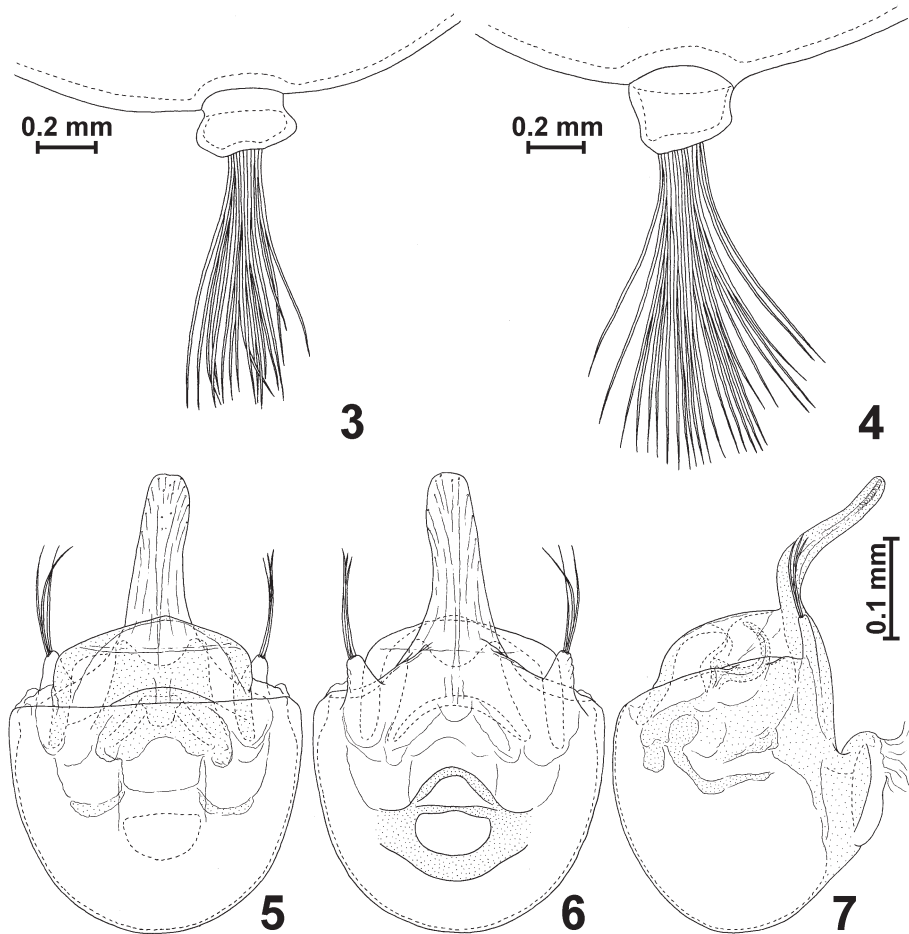
Holotype (male), two labels: "**BOLIVIA:** "Villa Tunari / El Puente, 350 m / S16°59' W65°24', 5-8.xi.2007 / sifting forest litter / V. Grebennikov leg." [white, printed], "*EUCONNOMORPHUS* / *boliviensis* m. / det. P. JAŁOSZYŃSKI, '13 / HOLOTYPUS" [red, printed] (MNHW).

## DISTRIBUTION

Central Bolivia, east of the Andes (Fig. 2b).

## REMARKS

*Euconnomorphus boliviensis* is highly similar to *E. pilosissimus*. Besides clearly different aedeagi, these two species differ in the body length (*E. boliviensis* 2.50 mm vs.



3-4. Apical papilla on right elytron: 3 – *Euconnomorphus boliviensis* n. sp., 4 – *E. pilosissimus* FRANZ. 5-7. Aedeagus of *Euconnomorphus boliviensis* n. sp.: 5 – dorsal, 6 – ventral, 7 – lateral

2.85 in *E. pilosissimus*), pigmentation (dark brown *E. boliviensis* vs. distinctly lighter, reddish-brown *E. pilosissimus*), abdominal sternites (in *E. pilosissimus* sternites IV–VI bearing sublateral groups of divergent setae, V–VI with a pair of sublateral expansions and VI with a long median projection; sternites entirely non-modified in *E. boliviensis*) and the shape of apical elytral papillae (mushroom-shaped in *E. boliviensis* vs. subcylindrical in *E. pilosissimus*). The finding of *Euconnomorphus* in Bolivia significantly extends southwards the known range of this genus (Fig. 2).

The aedeagus of the only known specimen of *E. pilosissimus* was partly distorted when examined for the study published by JALOSZYŃSKI (2012). The aedeagus of *E. boliviensis* is perfectly preserved and it was possible to verify the arrangement of the parameres in relation to the median lobe. Previously the parameres in *Euconnomorphus* were found to have extremely broadened basal parts embracing the median lobe; the conclusion based on the present study is that the parameres are in fact largely fused with the lateral walls of median lobe.

#### ACKNOWLEDGMENTS

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