A new genus and species of the subfamily Osoriinae from the Neotropical Region (Coleoptera: Staphylinidae: Osoriinae)

U. Irmler

Abstract

A remarkable species representing a new genus due to the setation and an extraordinary hook-like structure on the 5th abdominal segment was found in collections originating from Ecuador. The new genus and species *Lispinuncus pulcher* belongs to the subtribe Lispinina of the rove beetle subfamily Osoriinae. The systematic position of the new genus is shortly discussed. Important morphological and anatomical details are illustrated.

Key words: Coleoptera, Staphylinidae, Osoriinae, Neotropical Region, new genus, new species, systematics, taxonomy.

Introduction

In the collections of the Snow Entomological Collections, Natural History Museum, Kansas (SEC) and the Canadian National Collection, Ottawa (CNC), a remarkable species has been found, that is certainly closely related to the genera of the subtribe Lispinina. Several apomorphic characters justify the establishment of a new genus. Thus, at least six genera exist in the subtribe Lispinina, *Lispinus* ERICHSON, 1840, *Neolosus* BLACKWELDER, 1942, *Liberiana* BLACKWELDER 1942, *Nacaeus* BLACKWELDER, 1942, *Tanea* BLACKWELDER, 1952, and the new genus *Lispinuncus* (HERMAN 2001, IRMLER 2003). While the five hitherto known genera are distributed in all tropical and subtropical regions, the new genus seems to be geographically restricted to a small area in Ecuador (Fig. 11). It was collected at adjacent mountainous locations between 1500 and 2500 m elevation a few kilometres south of the city of Baeza.

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*Lispinuncus* gen.n.

TYPUS GENERIS: *Lispinuncus pulcher* sp.n.

DESCRIPTION: The new genus *Lispinuncus* is characterised mainly by two autapomorphies: a pair of hooks at the posterior edge of the 5th abdominal segment and the densely setose portion of the head mediad and posteriad from the eyes.

Like in the other genera of Lispinina, the number of tarsomeres in *Lispinuncus* is five and a prosternal process is existing. The first tarsomere is extremely small and scarcely detectable. The mandibles are relatively strong with an outer prominent carinate structure and a basal tooth at the inner side. In addition to the above mentioned setation, the head has a pair of setae from the eyes.

The anterior and lateral edges of the pronotum are also densely furnished with setae and several additional setiferous punctures in a depressed diagonal row. The lateral setae of pronotum, elytra, and abdomen are extremely long, the abdominal sternites are lacking a strigose structure but show a coarse punctation and rhomboidly reticulate microsculpture instead.
Figs. 1–9: *Lispinuncus pulcher*; 1) fore body; 2) antenna; 3) 5th abdominal tergite; 4) left mandible and labrum; 5) mouth parts in ventral view; 6) aedeagus (left: lateral view, right: ventral view); 7) spermatheca; 8) front leg (left), middle leg (middle), hind leg (right); 9) prosternum. Scale bars: 1, 2, 3, 9 (1 mm); 4, 5, 6, 8 (0.1 mm).
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Fig. 10: Lispinuncus pulcher, surface of head (A), pronotum (B), elytra (C), and view on the hooks of the 5th abdominal segment (D)

ETYMOLOGY: The generic epithet is a combination of Lispinus and the Latin word uncus meaning “hook”. It refers to the systematic placement near Lispinus and the pair of hooks on the 5th abdominal segment.

SYSTEMATIC POSITION: The main character of Lispinina is the presence of a prosternal process. The new genus Lispinuncus also has a prosternal process which, at the current state of knowledge, clearly puts it in the same subtribe. It shares a different set of characters with each of the other five genera: the pronotal shape (with a deep lateral emargination) is shared with
Nacaeus and Tannea; the coarse punctuation of the abdominal tergites is shared with Liberiana, Lispinus and Neolosus (punctuation fine in Nacaeus and Tannea); strigae on abdominal sternites are absent as in Liberiana, Nacaeus and Tannea (present in Lispinus and Neolosus); the spermatheca is built as in Liberiana, Nacaeus and Lispinus.

Finely strigate abdominal sternites are also found in the genus Allotrochus FAGEL, which most likely belongs to the subtribe Clavilispinina due to the open procoxal fissure (NEWTON 1990). An open procoxal fissure is also present in the genus Lispinodes SHARP, 1880 (placed in the subtribe Glyptomina; see HERMAN 2001), which is similar to Lispinuncus in the general surface structure and the dorsoventral depression, but is generally smaller in size (SHARP 1880).

With a phylogenetic analysis at the tribe and subtribe level still pending, it is nearly impossible to evaluate to which of the Lispinina genera Lispinuncus is most closely related.

**Lispinuncus pulcher sp.n.**

**TYPE MATERIAL:** Holotype ♂: Ecuador: “Napo, 4.2 km S of Cosanga of Baeza-Tena Road, then 2.9 km W on pipeline access road, (0°40'55"S, 77°56'09"W) 2350 m elevation, 5.Nov.1999, leg. Z.H. Falin, (ECU1F99 102) collected by pyrethrum fogging of fungusy logs” (SEC). Paratypes: Ecuador: 2 ♂♂, 4 ♀♀, “Napo, Baeza-Tena Road, 15 km W of Cosanga, (0°37'19"S, 77°50'01"W) 2150 m elevation, 7.Nov.1999, leg. Z.H. Falin, (ECU1F99 120) collected under bark of downed logs” (SEC, UIC); Ecuador: 1 ♀, “Napo, 2 km S Orityacu and 22 km S Baeza, 1500 m elevation, 4–5.III.1976, leg. J.M. Campbell” (CNC).

**DIAGNOSIS:** The species is easily differentiated from species of the related genera by the characteristic hooks of the 5th abdominal segment.

**DESCRIPTION (Fig. 1–10):** Length: 6.4 mm. Colour: black; legs and antennae brown; abdominal tergites at posterior edge dark reddish. Head: 0.60 mm long, 0.95 mm wide; with distinct isodiametrically reticulate microsculpture on disc and with dull surface; supraantennal bulges well developed with weak microsculpture and shiny surface; punctuation on disc distinct, but scarcely visible within dense and deep microsculpture; discal punctures without hairs; distance between punctures slightly wider than diameter of punctures; a diagonal stripe from anterior edge of eyes to neck with coarse punctures, each with an extremely long yellow hair; anterior edge distinctly margined; between middle and supraantennal bulges a long yellow hair on each side near front margin; eyes well developed and prominent; behind the short temples with a small neck, marked dorsally by an indistinct transverse depression. Antennae: short and thick; shorter than head and pronotum combined; antennomere 2 quadrate, following ones conical and with long setae at their anterior edge; antennomeres 3 and 4 not wider than long, following ones wider than long; antennomeres 7–10 much thicker than preceding ones, forming an indistinct club; last antennomere distinctly smaller than penultimate. Pronotum: 0.90 mm long, 1.00 mm wide; widest slightly behind middle; straightly narrowed toward anterior edge and deeply emarginate toward posterior angles; a deep semicircular depression from lateral emargination to anterior angles; sides not margined except for a small part at anterior edge of lateral emargination; with same isodiametrically reticulate microsculpture as on disc of head; surface dull; punctuation similar to that on head, but irregularly distributed on disc; with a small smooth impunctate midline; at each side of midline with a curved longitudinal depression; depression and adjacent parts of disc with similar punctuation as on disc of head; distance between punctures moderately wider than diameter of punctures; laterally with deeper and denser punctures, each puncture with an extremely long yellow hair; also at anterior edge with a transverse stripe with deep punctures and long yellow hairs; anterior edge not margined, posterior edge finely margined. Elytra: 1.40 mm long, 1.25 mm wide; with dense and deep isodiametrically reticulate microsculpture as on pronotum and with dull surface; punctuation well developed, but scarcely visible within dense microsculpture; punctures on disc without hairs.
lateral punctures denser and deeper than on disc and with extremely long yellow hairs; on each side of scutellum with a flat depression; scutellum with isodiametrical microsculpture on disc and smooth areas laterally and posteriorly. Legs: first three tarsomeres with extremely long yellow hairs on underside; tibiae at apex with a row of large spines; middle tibia at its outer apex with a longitudinal row of small spines. Abdomen: abdominal tergites deeply and moderately densely punctate; punctures with extremely long yellow hairs pointing diagonally to middle; surface slightly less dull than on elytra, but with similar microsculpture; abdominal tergite 5 with a pair of hooks laterally.

ETYMOLOGY: The specific name derives from the Latin word for “nice”.

Fig. 11: Sampling locations of *Lispinuncus pulcher* in the Napo district of Ecuador.

Zusammenfassung

References


Prof. Dr. Ulrich IRMLER
Ecology-Centre, Christian-Albrechts Universität, Olshausenstr. 40, D – 24098 Kiel, Germany
(uirmler@ecology.uni-kiel.de)