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Two new species and subspecies of *Leptusa* from Nepal and Montenegro (Coleoptera: Staphylinidae, Aleocharinae)

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Abstract: *Leptusa* (*Drepanoleptusa*) *helambuica* nov.sp. (Nepal: Langtang National Park) and *L.* (*Micropisalia*) *abdominalis mikii* nov.ssp. (Montenegro: Durmitor) are described, illustrated, and distinguished from similar species and subspecies.

Key words: Coleoptera, Staphylinidae, Aleocharinae, *Leptusa*, Palaearctic region, Nepal, Montenegro, taxonomy, new species, new subspecies.

Introduction

According to the recent Palaearctic catalogue, the speciose genus *Leptusa* KRAATZ 1856 is represented in the Palaearctic region by approximately 350 species, subspecies not considered (SMETANA 2004). The deadline of this catalogue for the inclusion of described species was the end of 2001. Since then, numerous additional species have been described, mostly from the Eastern Palaearctic region, and various synonymies and other taxonomic changes have been proposed, so that, at present, nearly 400 species (plus numerous subspecies) are known from the Palaearctic. Recently examined material of Staphylinidae included yet two further taxa, a species from Nepal and a subspecies from Montenegro, which proved to be undescribed and which are treated below.

2. Material and methods

The material referred to in this study is deposited in the following public institutions and private collection:

NME Naturkundemuseum Erfurt (M. Hartmann)

OÖLL..... Oberösterreichisches Landesmuseum/Biologiezentrum Linz (F. Gusenleitner)

cAss..... author's private collection

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena) with a drawing tube. For the photographs a digital camera (Nikon Coolpix 995) was used.

Head length was measured from the anterior margin of the clypeus to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra.

3. Species descriptions and additional records

Leptusa (Micropisalia) abdominalis mikii nov.ssp. (Figs 1-9)

Type material: Holotype ♂: "Montenegro, Durmitor, Zabljak, Crno Jezero, 13.VI.2008, lg. Stévanović / Holotypus ♂ *Leptusa abdominalis mikii* ssp. n. det. V. Assing 2008" (cAss).
Paratypes: 10 exs.: same data as holotype (OÖLL, cAss).

Description: 1.7-2.3 mm. Habitus as in Fig. 1. Coloration: body blackish, with the forebody sometimes slightly paler, dark-brown to blackish-brown; legs brown; antennae reddish to reddish-brown.

Head of subcircular shape, approximately as wide as long; punctation moderately sparse and extremely fine, barely noticeable; integument with distinct microsculpture. Eyes small, approximately 1/3 the length of postocular region in dorsal view. Antennae moderately long and moderately incrassate apically; antennomere X nearly twice as wide as long.

Pronotum (Fig. 2) of rather variable shape, 1.12-1.18 times as wide as long and 1.07-1.15 times as wide as head, maximal width in anterior half; lateral margins straight or, rarely, weakly sinuate in posterior half (dorsal view); punctation and microsculpture similar to those of head, or microsculpture more pronounced.

Elytra short, at suture approximately 0.55 times as long as pronotum, at sutural angle gaping (Fig. 2); humeral angles almost obsolete; elytral disc usually with more or less pronounced diagonal impression; punctation sparse, more distinct than that of head and pronotum, and sexually dimorphic; interstices with shallow, but distinct microreticulation. Hind wings reduced.

Abdomen 1.20-1.25 times as wide as elytra, maximal width at segment VI; punctation sparse and fine; microsculpture shallow, less pronounced than that of forebody; tergite VII with weakly pronounced sexual dimorphism, its posterior margin without palisade fringe.

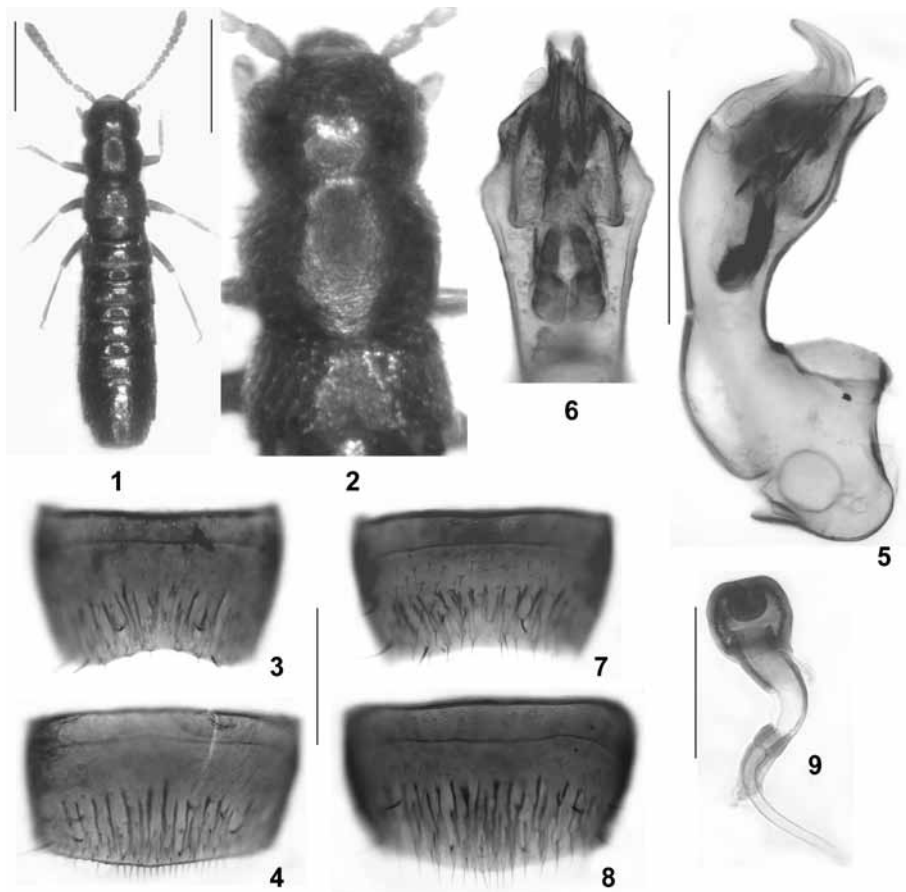
♂: elytra with somewhat granulose punctation; tergite VII with some oblong granula, but without distinct keels in posterior half; posterior margin of tergite VIII distinctly concave (Fig. 3); sternite VII unmodified; sternite VIII broadly and weakly convex posteriorly (Fig. 4); median lobe of aedeagus as in Figs 5-6.

♀: elytral punctation distinct, but not granulose; tergite VII unmodified; posterior margin of tergite VIII weakly concave (Fig. 7); posterior margin of sternite VIII weakly convex (Fig. 8); spermatheca as in Fig. 9.

Etymology: The subspecies is dedicated to the Serbian coleopterist Miroslav ("Miki") Stévanović, who collected the type series.

Comparative notes: The subgenus *Micropisalia* SCHEERPELTZ 1948 comprises six species distributed in the region from the Eastern Alps to Ukraine and Bosnia-Herzegovina. The most widespread species of this subgenus is the polytypical *L. abdominalis* (MOTSCHULSKY 1858), which was previously represented in the region by six subspecies, with the southernmost representative, *L. a. bosnica* EPPELSHEIM 1892, distributed in Bosnia-Herzegovina and Croatia. The new subspecies considerably extends the distribution of *L. abdominalis* towards the south. It is distinguished from all other subspecies by the much darker coloration (other subspecies: forebody bright reddish to

brownish-red; legs reddish), as well as by the morphology of the aedeagus (shape of ventral process both in lateral and in ventral view, internal structures) and by the shape of the spermatheca. For illustrations of the primary sexual characters of the other subspecies of *L. abdominalis* see PACE (1989) and Figs 21-22.

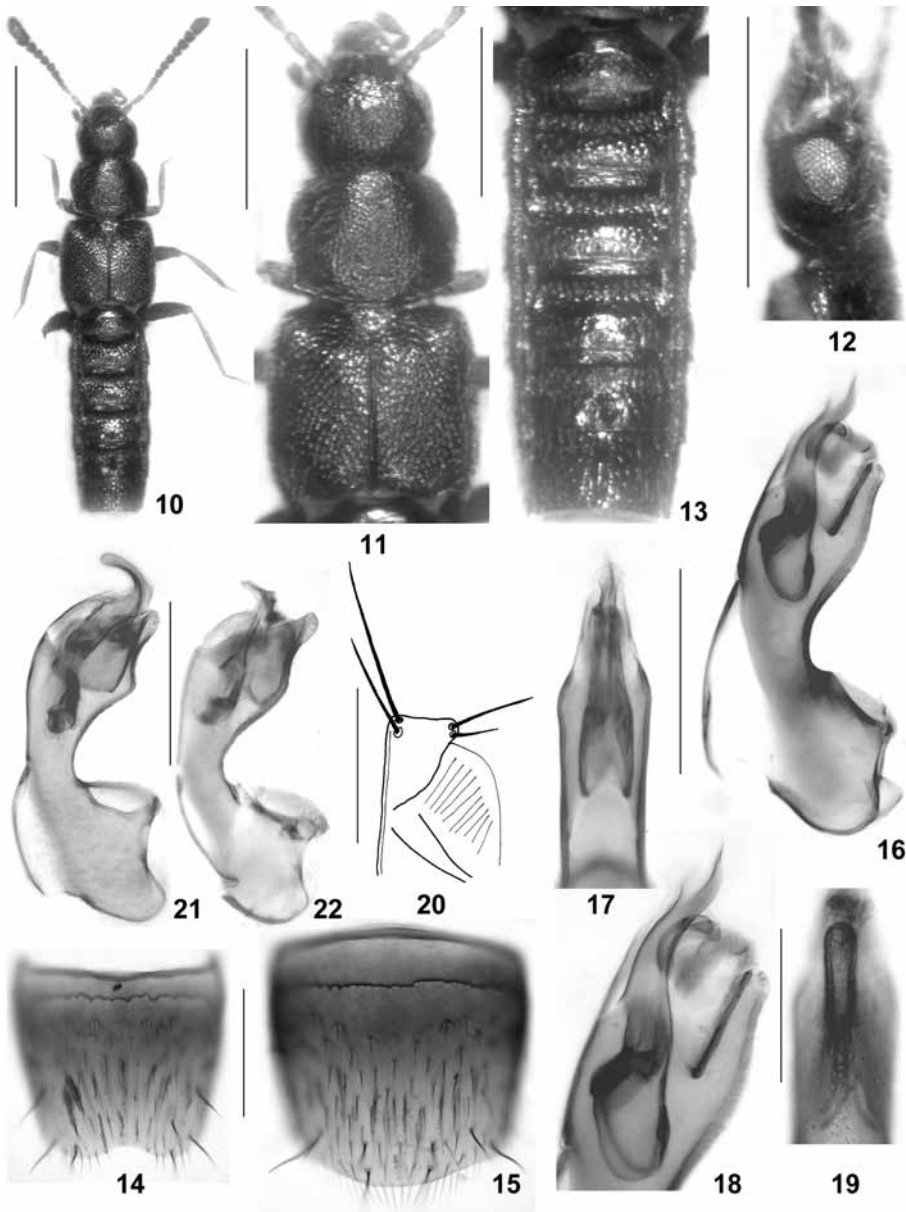


Figs 1-9: *Leptusa abdominalis mikii* nov.ssp.: (1) habitus; (2) forebody; (3) male tergite VIII; (4) male sternite VIII; (5) median lobe of aedeagus in lateral view; (6) apical portion of median lobe of aedeagus in ventral view; (7) female tergite VIII; (8) female sternite VIII; (9) spermatheca. Scale bars: 1: 0.5 mm; 2-8: 0.2 mm; 9: 0.1 mm.

Distribution and bionomics: The type locality is situated in the Durmitor range in Montenegro. Additional bionomic data are not available.

***Leptusa (Drepanoleptusa) helambuica* nov.sp.** (Figs 10-20)

Type material: Holotype ♂: "Nepal Helambu, Gopte near Tharepati, 85°28'E, 28°03'N, 3250 m, 6.9.97, lg. Fabrizi & Ahrens / Holotypus ♂ *Leptusa helambuica* sp.n. det. V. Assing 2008" (NME).



Figs 10-22: *Leptusa helambuica* nov.sp. (10-20), *L. abdominalis abdominalis* (MOTSCHULSKY) (21), and *L. abdominalis bosnica* EPPELSHEIM (22): (10) habitus; (11) forebody; (12) head in lateral view; (13) male abdomen; (14) male tergite VIII; (15) male sternite VIII; (16, 21-22) median lobe of aedeagus in lateral view; (17) apical portion of median lobe of aedeagus in ventral view; (18-19) apex of median lobe in lateral and in ventral view; (20) apical lobe of paramere. Scale bars: 10: 1.0 mm; 11-13: 0.5 mm; 14-17, 21-22: 0.2 mm; 18-20: 0.1 mm.

Description: 3.1 mm. Habitus as in Fig. 1. Coloration: head and pronotum blackish; elytra blackish-brown, near suture and near posterior margin somewhat paler brownish; abdomen brown, with segments V-VI and anterior part of segment VII blackish; legs reddish-brown; antennae with antennomeres I-III reddish-yellow, IV-X gradually more infuscate, X blackish-brown, and XI reddish-brown.

Head of subcircular shape, weakly transverse; punctures dense and large, but very shallow; interstices very narrow, much narrower than punctures, and with distinct microsculpture (Fig. 11). Eyes large (Fig. 12), distinctly longer than postocular region in dorsal view. Antennae of moderate length, apically moderately incrassate, antennomere X approximately 1.5 times as wide as long.

Pronotum 1.3 times as wide as long and 1.3 times as wide as head, maximal width in anterior half; lateral margins weakly sinuate in posterior half (dorsal view); punctation and microsculpture similar to those of head (Fig. 11).

Elytra approximately 1.25 times as wide and at suture 1.1 times as long as pronotum; humeral angles pronounced; punctation coarse (much more so than that of pronotum) and dense (Fig. 11); interstices without microsculpture. Hind wings fully developed. Legs slender; metatarsomere I longer than II, but shorter than the combined length of II and III.

Abdomen approximately 0.8 times as wide as elytra, segments III-VI subparallel; tergites III-V with pronounced, tergite VI with very shallow anterior impressions, these impressions with very coarse and dense punctation; remainder of tergal surfaces with much finer and sparser punctation (Fig. 13); interstices without evident microsculpture and glossy; posterior margin of tergite VII with pronounced palisade fringe.

♂: tergite VII with long median keel (Fig. 13); posterior margin of tergite VIII concave, not serrate (Fig. 14); sternite VII unmodified; sternite VIII broadly convex posteriorly (Fig. 15); median lobe of aedeagus with characteristic internal structures (Figs 16-19); apical lobe of paramere as in Fig. 20.

♀: unknown.

Etymology: The name (adjective) is derived from the region where the type locality is situated.

Comparative notes: *Leptusa helambuica* is distinguished from all its Himalayan congeners especially by the distinctive morphology of the median lobe of the aedeagus. The shape of the latter is somewhat similar to that of *L. manasluensis* ASSING from the Manaslu range, which, however, has a distinctly smaller and more slender body, much smaller eyes (approximately half as long as postocular region), shorter elytra (at suture distinctly shorter than pronotum), a less transverse pronotum (1.2 times as wide as long and 1.2 times as wide as head), a pronounced anterior impression on tergite VI (approximately as deep as that of tergite V), no median keel on the male tergite VII, and a median lobe of the aedeagus with completely different internal structures. For illustrations of the male sexual characters of *L. manasluensis* and of the other nine species of the subgenus *Drepanoleptusa* PACE known from Nepal see ASSING (2002) and PACE (1989), respectively.

Distribution and bionomics: The type locality is situated in the Langtang National Park to the north of Kathmandu, central Nepal. The holotype was collected at an altitude of 3240 m; additional bionomic data are not available.

Zusammenfassung

Leptusa (Drepanoleptusa) helambuica nov.sp. (Nepal: Langtang National Park) und *L. (Micropisalia) abdominalis mikii* nov.ssp. (Montenegro: Durmitor) werden beschrieben, abgebildet und von ähnlichen Arten und Unterarten unterschieden.

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