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On some species of *Leptusa* KRAATZ, primarily from Spain (Coleoptera: Staphylinidae, Aleocharinae)

V. ASSING

A b s t r a c t : Four species are (re-)described and illustrated: *Leptusa* (*Lasiopisalia*) *bellinorum* sp.n. (Spain: Cantábria), *L.* (*Dendroleptusa*) *samia* sp.n. (Greece: Samos), *L.* (*Stictopisalia*) *sarensis* PACE, and *L.* (*Aphaireleptusa*) *dissimulans* sp.n. (Japan). *Leptusa* (*Dysleptusa*) *cribripennis* KRAATZ, previously a synonym of *L. fuliginosa* (AUBÉ), is revalidated. The following synonymies are established: *L. lativentris lativentris* SHARP 1875 = *L. lativentris fitoensis* FAGEL 1967; *L. franziana* PACE 1981 = *L. scheerpeltzi* PACE 1983, syn.n.; *L. roscidavallensis* PACE 1981 = *L. guipuzcoensis* PACE 1983, syn.n.; *L. cantabrica* PAŚNIK 1998 = *L. tronqueti* PACE 1999, syn.n.; *L. cribripennis* KRAATZ 1856 = *L. vavrai* ROUBAL 1931, syn.n.; *L. gurgentepensis* PACE 1989 = *L. spoliata* ASSING 2002, syn.n. Based on recently collected material especially from Spain, additional records are presented and the distributions of five species are mapped.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, *Leptusa*, Palaearctic region, Spain, Greece, Turkey, Japan, distribution, taxonomy, revision, new species, new synonym.

1. Introduction

The genus *Leptusa* is represented by numerous species in the Palaearctic and other zoogeographic regions. The present knowlege on the taxonomy and diversity of this genus is still far from complete, as is suggested by the considerable number of new species described only in the recent past (e.g. ASSING 2002, 2003c). This even applies to southern Europe, although the staphylinid fauna of this region is better known than that of most other regions of the world. 32 species (subspecies not considered) have been reported from the Iberian peninsula (ASSING 2003c). Their biogeography is poorly known, which is reflected especially by the fact that most of these species have been recorded only from their respective type localities. New data show that they may be relatively widespread and that four names are synonymous.

An examination of new material from the Eastern Mediterranean and a study of types of a Central European species yielded a new species and two new synonyms. Due to an omission of a headline and of the specifications of the holotype preceding the description of *L. dissimulans* in ASSING (2002: 983), which went through unnoticed when correcting the proofs, *L. dissimulans* constitutes an unavailable name (ICZN 1999: Article 16.4). In order to make the name available, the description, including the specifications of the type and its repository, is presented again below.

2. Material and measurements

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

ISEA ..... Institute of Systematics and Evolution of Animals, Kraków (G. Paśnik)
NHMW ..... Naturhistorisches Museum Wien (H. Schillhammer)
NMP..... Národní Muzeum v Praze (J. Jelínek)
OÖLM..... Oberösterreichisches Landesmuseum Linz
cAss ..... author's private collection
cWun..... private collection Paul Wunderle, Mönchengladbach

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

3. New species, new records, and new synonymies

***Leptusa* (*Lasiopisalia*) *bellinorum* sp.n.** (Figs. 1-9)

Holotype ♂: E - No. 14, Cantabria, Picos de Europa, Fuente Dé, Peña Vieja, 1940 m, 43°09'37N, 04°48'18W, 17.VII.2003, V. Assing / Holotypus ♂ *Leptusa bellinorum* sp.n. det. V. Assing 2003 (cAss). Paratypes: 7♂♂, 6♀♀: same data as holotype (OÖLM, cAss, cWun).

Description: 1.9-2.4 mm. Habitus as in Fig. 1. Forebody light brown to dark brown, with the head somewhat darker than pronotum and elytra; abdomen yellowish brown, with segments V-VII distinctly infuscate; legs, antennae, and mouthparts testaceous.

Head in dorsal view of subcircular shape, slightly wider than long (Fig. 1); eyes small, less than half the length of temples in dorsal view; integument with extremely fine, barely noticeable puncturation and with distinct microreticulation.

Pronotum 1.10-1.15 times as wide as head and approximately 1.2 times as wides as long (Fig. 1); puncturation and microsculpture similar to those of head.

Elytra about as wide and at suture approximately 0.65 times as long as pronotum; puncturation rather coarse and granulose; microsculpture much shallower than that of head and pronotum. Hind wings completely reduced.

Abdomen widest at segment V, approximately 1.25-1.30 times as wide as elytra; with distinct, but shallow microreticulation; puncturation fine and not very dense, distinctly sparser on posterior than on anterior tergites; posterior margin of tergite VII without palisade fringe.

♂: tergite VII near middle of posterior margin with or without weakly defined oblong granulum; posterior margin of tergite VIII serrate and in the middle concave (Fig. 5); sternite VIII posteriorly distinctly pointed (Fig. 6); aedeagus with median lobe of highly distinctive shape, in lateral view strongly bent and in ventral view apically incised (Figs. 2-3); parameres with very long and distinctly curved apical lobes (Fig. 4).

♀: tergite VII unmodified; posterior margin of tergite VIII not serrate and in the middle

at most only weakly concave (Fig. 7); sternite VIII posteriorly obtusely pointed (Fig. 8); spermatheca as in Fig. 9.

Etymology: This highly distinctive species is dedicated to my son Jan Hagen Bellin and his mother Susanne Bellin, to whom I am grateful for their patient company and for the camouflage.

Comparative notes and systematics: *Leptusa bellinorum* is readily distinguished from all other species of the genus especially by its remarkably modified aedeagus (long bent median lobe, elongated long apical lobe of the paramere). Although the aedeagus is highly derived, its general morphology (internal structures, crista apicalis and crista proximalis), as well as the male secondary sexual characters suggest that *L. bellinorum* belongs to the subgenus *Lasiopisalia* PACE.

Distribution and bionomics: The type locality is situated in the Picos de Europa range, near the Peña Vieja, above Fuente Dé. The species was sifted from moss and from the roots of grass and cushion plants in the shade of rocks at an altitude of 1940 m, together with an undescribed species of *Cantaberella* TRONQUET, numerous specimens of *Leptusa franzi* PACE, and one specimen of *Euaesthetus hispanicus* COIFFAIT. For a photograph of the type locality see figure 1 in ASSING (2003b).

Leptusa (*Lasiopisalia*) *franziana* PACE (Map 1)

Leptusa scheerpeltzi franziana PACE 1981: 86.
Leptusa scheerpeltzi PACE 1983a: 78; **syn.n.**

Material examined: Spain: 1♂, Castilla y León, 50 km WNW Aguilar de Campoo, S Peña Prieta, 42°59N, 04°45W, 1500 m, 13.VII.2003, leg. Assing (cAss); 3 exs., Sierra de Ancares, leg. Franz (NHMW).

Comments: *Leptusa franziana* was previously known only from the Sierra de Ancares, the Peña Ubiña, and the Puerto de Pajares (type locality of *L. scheerpeltzi* PACE) in the west of the Cordillera Cantábrica (ASSING 2003c, PACE 1989). The new record shows that the species also occurs in the Picos de Europa range and is much more widespread than previously known (Map 1). According to PACE (1981), the nominal subspecies is distinguished from *L. f. scheerpeltzi* by the different shape of the pronotum, smaller eyes, the presence of a small median tubercle on the male tergite VII, and the different shape (lateral view) of the median lobe of the aedeagus. However, a comparison of specimens from various localities of the distribution (Sierra de Ancares, Peña Ubiña, Peña Prieta), including the type locality of *L. franziana* did not reveal any such differences, neither in the external characters mentioned, nor in the male primary and secondary sexual characters. Consequently, *L. scheerpeltzi* PACE is here considered a junior synonym of *L. franziana* PACE. For further details regarding the nomenclature of these names see the discussion in ASSING (2002: 975).

Leptusa (*Pisalia*) *deprehendens* PACE

Material examined: Spain: 3 exs., Peña Trevinca, leg. Franz (NHMW, cAss).

Comments: The above specimens were collected together with the types.

Leptusa (*Pisalia*) *cantabrica* PAŠNIK (Map 1)

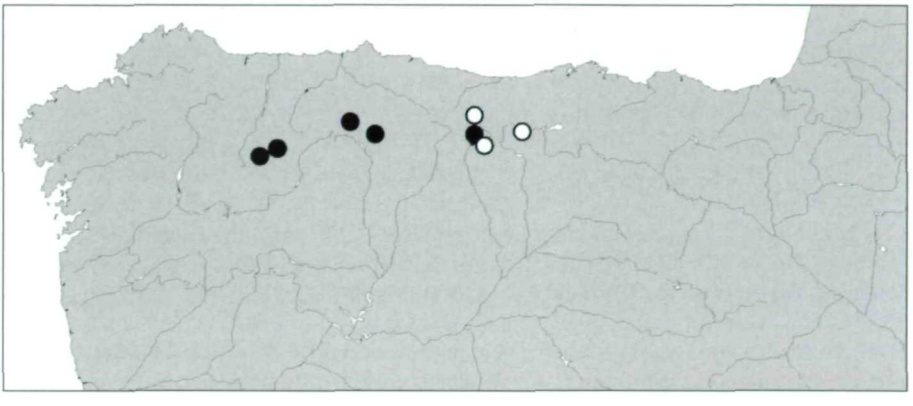
Leptusa (*Neopisalia*) *cantabrica* PAŠNIK 1998: 191 ff.

Leptusa tronqueti PACE 1999: 20; **syn.n.**

Types examined: *L. cantabrica*: Holotype ♂: Hispania, 1.XI.76, Cantabr. Mts., 1300-1400. J.P. 1386 / Holotype *Leptusa cantabrica* sp.n. det. G. Pašnik 1998 (ISEA). Paratypes: 1♂, 1♀: same data as holotype (ISEA).

Additional material examined: Spain: 2♂♂, Castilla y León, 40 km WNW Aguilar de Campoo, pass W Cervera, 42°54N, 04°39W, 1550 m, 13.VII.2003, leg. Assing (cAss).

Comments: When PACE (1999) described *L. tronqueti* (type locality: Santander Espinama: Picos de Europa; Canal de Pedabejo), he was probably not aware of the description of *L. cantabrica* (type locality: Abiada), which had been published only three months earlier. Based on an examination of the types of *L. cantabrica*, on the illustrations of the distinctive aedeagus in the original description of *L. tronqueti*, and the fact that the distribution of the species is evidently not confined to a single mountain, there is no doubt that *L. cantabrica* and *L. tronqueti* are conspecific; hence the synonymy proposed above. *Leptusa cantabrica* is at present known only from the Picos de Europa range (Map 1), where it apparently occurs in montane habitats; it has been found at altitudes of 1250-1600 m. The specimens listed above were sifted from debris and grass roots in a beech forest.



Map 1: Known distributions of *Leptusa franziana* PACE (filled circles) and *L. cantabrica* PAŠNIK (open circles) in northwestern Spain.

Leptusa (*Pachygastropisalia*) *lativentris lativentris* SHARP (Map 2)

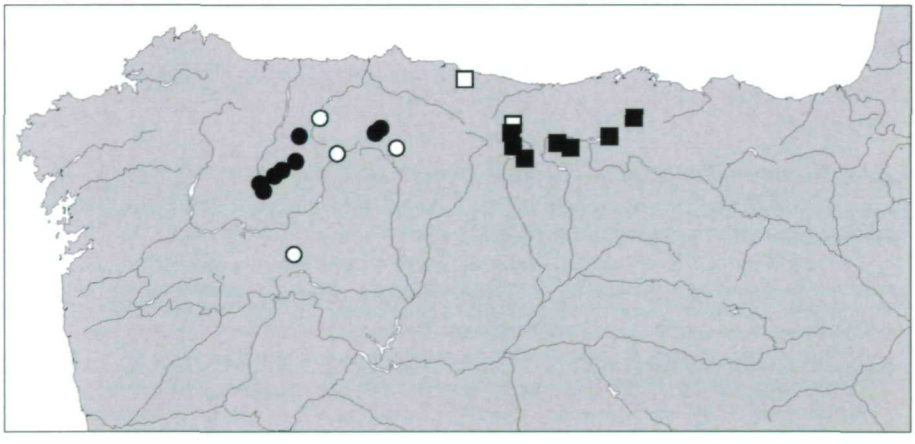
Leptusa lativentris fitoensis FAGEL 1967: 208ff.; **syn.n.**

Material examined: Spain: Cantábria, 9♂♂, 7♀♀, 10 km SW Reinosa, 42°58, 04°14W, 1220 m, mixed oak and beech forest, 12.VII.2003, leg. Assing (cAss); 14♂♂, 11♀♀, 50 km SSE Santander, E Vega de Pas, 43°10N, 03°39W, 1250 m, 15.VII.2003, leg. Assing (cAss); 1 ex., Santander, Puerto del Escudo, leg. Franz (NHMW); 3♂♂, 3♀♀, Picos de Europa, Puerto de San Glorio, 43°04N, 04°46W, 1600 m, 17.VII.2003, leg. Assing (cAss). **Castilla y León:** 20♂♂, 29♀♀, 50 km WNW Aguilar de Campoo, S Peña Prieta, 42°59N, 04°45W, 1500 m, 13.VII.2003, leg. Assing (cAss); 18♂♂, 34♀♀, 40 km WNW Aguilar de Campoo, pass W Cervera, 42°54N, 04°39W, 1550 m, 13.VII.2003, leg. Assing (cAss).

Comments :In the original descriptions of *L. lativentris pajarensis* and *L. l. fitoensis*, which are based on only 6 and 13 type specimens, respectively, FAGEL (1967) states that

the sexual characters are identical with those of the nominal subspecies. He indicates several characters distinguishing the subspecies (such as the puncturation, proportions, coloration, etc.), but was apparently unware of the extreme extent of intraspecific variation of the species. I have been unable to appreciate these distinguishing characters, based on an examination of almost 871 specimens of *L. lativentris*. However, a study of the character indicated by PACE (1989), i. e. the ventral aspect of the apex of the median lobe of the aedeagus, indeed revealed the presence of two morphs. There is considerable variation in the populations examined, but specimens from the western parts of the Cordillera Cantábrica tend to have a more or less strongly dilated apex of the median lobe of the aedeagus, whereas in the specimens from localities east of the Puerto de Pajares the aedeagus is not or only weakly dilated apically. Since the morpological difference coincides with a plausible distribution pattern, the subspecific status of *L. lativentris lativentris* and *L. l. pajarensis* is here maintained. The distributions of the two subspecies are illustrated in Map 2. The apical dilatation of the aedeagus of the holotype of *L. l. fitoensis*, which is figured by PACE (1989), is within the range of the nominal subspecies, hence the synonymy indicated above.

Leptusa lativentris is very common in montane and subalpine biotopes, especially in various types of montane woodland (oak, birch, beech) of the Cordillera Cantábrica. It has been found in great numbers at altitudes of 1000-2150 m. For additional records, most of which refer to *L. l. pajarensis*, see ASSING (2003c).



Map 2: Known distributions of *Leptusa lativentris lativentris* SHARP (squares) and *L. l. pajarensis* FAGEL (circles) in northwestern Spain, based on examined (filled squares and circles) and selected literature records (open squares and circles).

Leptusa (Gnopheropisalia) nigerrima PACE

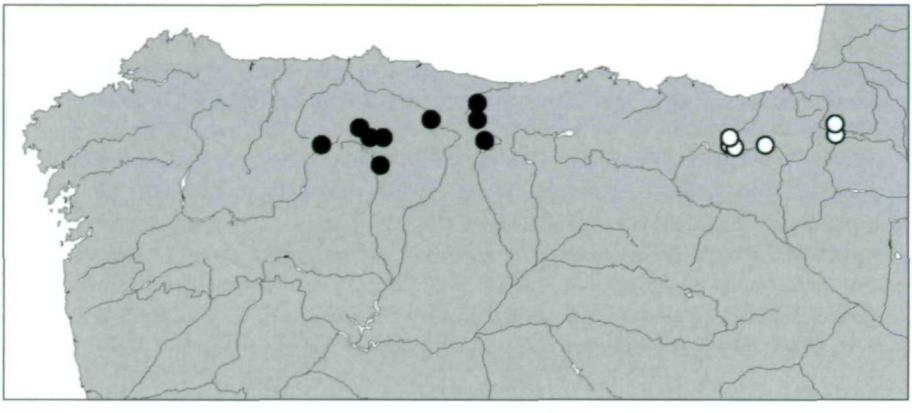
Material examined: Spain: 2♂♂, 1♀, Sierra de Ancares, leg. Franz (NHMW); 1♂, Pontevedra, Belus, leg. Franz (cAss); 1♂, Pontevedra, Isla Cies del Norte, leg. Franz (NHMW).

C o m m e n t s : The known distribution of *L. nigerrima*, which is confined to the northwest of the Iberian Peninsula, is mapped by ASSING (2003c).

Leptusa (*Gnopheropisalia*) *granulipennis* EPPELSHEIM (Map 3)

Material examined: Spain: 1♂, Castilla y León, 50 km WNW Aguilar de Campoo, S Peña Prieta, 42°59N, 04°45W, 1500 m, 13.VII.2003, leg. Assing (cAss).

Comments: The known distribution of *L. granulipennis* ranges from the Peña Ubiña to the Picos de Europa (Map 3). The above specimen was sifted from moist debris in a birch forest. For more records see ASSING (2003c) and PACE (1989).



Map 3: Known distributions of *Leptusa granulipennis* EPPELSHEIM (filled circles) and *L. roscidavallensis* PACE (open circles) in northwestern Spain. The open circle furthest to the northwest is the type locality of *L. guipuzcoensis* PACE.

Leptusa (*Entomophallopisalia*) *roscidavallensis* PACE (Map 3)

Leptusa roscidavallensis PACE 1981: 90.

Leptusa guipuzcoensis PACE 1983a: 90 f.; **syn.n.**

Type examined: *L. guipuzcoensis*: Holotype ♀: ♀ / Brincola Spanien / Nordöstliches Spanien / Prov. Gulpozcoa, an der Eisenbahnlinie Irun - Madrid / asturiensis Bh. / ex coll. Scheerpeltz / Holotypus Leptusa (Micropisalia) guipuzcoensis m. det. R. Pace 1980 / Leptusa roscidavallensis Pace det. V. Assing 2003 (NHMW).

Additional material examined: Spain: 1♂, País Vasco, 60 km SE Bilbao, Sierra de Urquilla, 42°57N, 02°19W, 1480 m, 10.VII.2003, leg. Assing (cAss); 5♂♂, 3♀♀, same data, but 42°57N, 02°20W (cAss); 6♂♂, 9♀♀ [partly teneral; 1 dissected ♀ with mature egg in ovaries], Navarra, 50 km S San Sebastian, Sierra de Aralar, 42°57N, 01°58W, 1320 m, 11.VII.2003, leg. Assing (cAss).

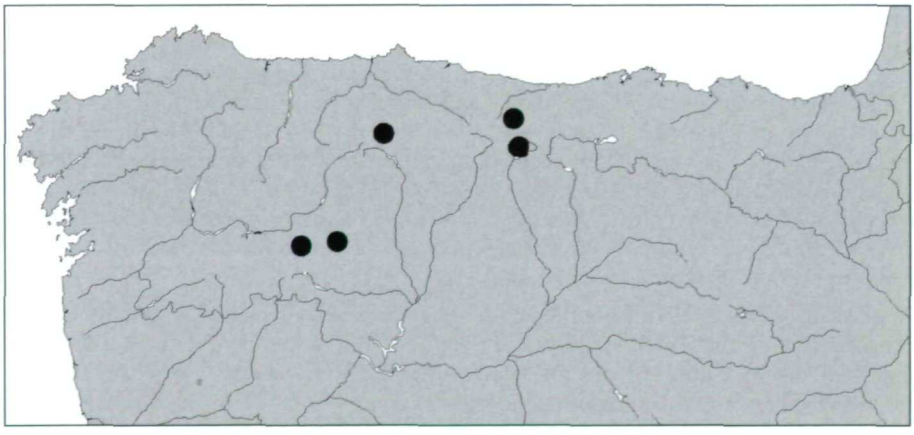
Comments: The species is apparently widespread from the western Pyrénées to País Vasco (Map 3); for more records see ASSING (2003c). The original description of *L. guipuzcoensis* is based on a single female. The type locality (Brincola = Brinkola) is very close to the two localities where the material listed above was collected (see Map 3). According to PACE (1989), the only character distinguishing *L. guipuczocensis* from *L. roscidavallensis* is the slender capsule of the spermatheca. A comparison of the holotype with material of *L. roscidavallensis*, however, yielded no convincing evidence that it should represent a distinct species. It is a rather small specimen whose external characters are all within the range of intraspecific variation of *L. roscidavallensis*. The spermatheca is relatively slender, but the shape of the spermatheca is also somewhat variable in

material of *L. roscidavallensis*. Consequently, considering also the vicinity of the type locality of *L. guipuzcoensis* and localities where *L. roscidavallensis* was found, there is hardly any doubt that the holotype of *L. guipuzcoensis* is conspecific with *L. roscidavallensis*; hence the synonymy indicated above. The new material examined was sifted from moss, grass, and leaf litter in beech forests. Part of the specimens collected in July are teneral. One dissected female collected in the same period had a mature egg in the ovaries.

Leptusa (*Entomophallopisalia*) *franzi* PACE (Map 4)

Material examined: Spain: 25♂♂, 18♀♀, Castilla y León, 50 km WNW Aguilar de Campoo, S Peña Prieta, 42°59N, 04°45W, 1500 m, 13.VII.2003, leg. Assing (cAss); 47♂♂, 24♀♀, Cantábria, Picos de Europa, Fuente Dé, Peña Vieja, 43°10N, 04°48W, 1940 m, 17.VII.2003, leg. Assing (cAss).

Comments: The species was previously known only from the Sierra de Teleno and the Peña Ubiña in Asturias, where it was collected in alpine habitats at altitudes of 1870-2100 m. The new records show that – despite its small size, reduced eyes and wings, and its habitat – *L. franzi* is much more widespread (Map 4) and that it also inhabits montane woodland. At Peña Prieta, it was sifted from moist debris in a birch forest at an altitude of 1500 m; at Peña Vieja, it was sifted from moss and from the roots of grass and cushion plants in the shade of rocks at an altitude of 1940 m.



Map 4: Known distribution of *Leptusa franzi* PACE in northwestern Spain, based on examined material.

Leptusa (*Entomophallopisalia*) *difficilis* PACE

Material examined: Spain: 1♂, 10♀♀, Cantábria, 25 km WNW Reinosa, Tres Mares, 43°03N, 04°23W, 2130 m, 14.VII.2003, leg. Assing (cAss).

Comments: The above specimens were collected near the type locality (see PACE 1996).

Leptusa (*Dysleptusa*) *cribripennis* KRAATZ 1856, sp. propr.

Leptusa cribripennis KRAATZ 1856: 65.

As synonym of *L. fuliginosa* (AUBÉ): SMETANA (1973: 9; unintentional lectotype designation); PACE (1989).

Leptusa fuliginosa vavrai ROUBAL 1931: 131; **syn.n.**

Types examined: *L. cribripennis*: Lectotype ♂ [dissected prior to present study]: Syntypus / cribripennis mihi Austria / Coll. Kraatz / DEI Eberswalde / Leptusa fuliginosa Aubé Smetana det. 1972 / L. fuliginosa Au. det. R. Pace 1984 / Lectotypus Leptusa cribripennis Kraatz rev. V. Assing 2003 / Leptusa cribripennis Kraatz det. V. Assing 2003 (DEI).

Additional material examined: 1♂, 2♀♀: Greece, Fthiotis, Oros Kallidromo (SSE Lamia), 38°45N, 22°28E, 2.IV.2001, leg. Wunderle, Assing (cAss, cWun).

Comments: The original description of *L. cribripennis* is based on an unspecified number of specimens. In stating that he examined the holotype, SMETANA (1973) unintentionally designated a lectotype. According to the same author, *L. fuliginosa* (AUBÉ) and *L. vavrai* ROUBAL are distinguished primarily by the presence (*L. fuliginosa*) or absence (*L. vavrai*) of a median carina on the male tergite VIII. Since this median carina is fully developed in the lectotype of *L. cribripennis*, he considered the type to be conspecific with *L. fuliginosa*, a species originally described from the Caucasus region. The resulting synonymy of *L. cribripennis* with *L. fuliginosa* was confirmed by PACE (1989), who additionally synonymized *L. vavrai* with *L. fuliginosa*.

In a recent study (ASSING 2002) it was shown that *L. fuliginosa* is variable in various external characters, including wing length, a character given particular significance in the key provided by PACE (1989), and the median carina of the male tergite VIII, which is occasionally very indistinct or even missing. In addition, it was found that several specimens seen from Greece were not conspecific with *L. fuliginosa*, although this species was believed to be the sole representative of the subgenus in southeastern Europe (PACE 1989). The material from Greece and the specimens from northern Anatolia clearly differ regarding the morphology the aedeagus: the width of the flagellum, the shape of the apical parts of the internal sac, the shape of the ventral process of the median lobe (lateral view), and the shape of the crista apicalis (ASSING 2002: Figs. 15-16). These observations gave rise to the hypothesis that the distribution of *L. fuliginosa* is in fact confined to the Caucasus region and northern Anatolia and that the correct name of the species seen from Greece is *L. cribripennis*.

A subsequent examination of the lectotype of *L. cribripennis* indeed revealed that it is conspecific with the Greek specimens. In addition, the aedeagus of *L. vavrai* as illustrated in SMETANA (1973) is in full agreement with that of *L. cribripennis*, so that the following synonymy is here proposed: *L. cribripennis* KRAATZ 1856 = *L. vavrai* ROUBAL 1931.

Based on an examination of material collected in the Crimean Iaila range (type locality), *L. rossica* BERNHAUER is confirmed as a distinct species. Its aedeagus is somewhat similar to that of *cribripennis*, but it differs by the relatively shorter and less slender ventral process, the straight outline at the base of the ventral process (lateral view), the more slender flagellum, as well as by several external characters (shorter antennae, smaller eyes, shorter elytra, coarser granulose elytral puncturation).

Distribution: Material of *L. cribripennis* was seen from Austria, Slovakia, and Greece. In addition, part of the records of *L. fuliginosa* in HORION (1967) and PACE (1989) probably refer to this species, so that the distribution of the species probably includes all of the Balkans, Romania, the Czech Republic, and Austria.

Leptusa (Dendroleptusa) samia **sp.n.** (Figs. 10-18)

Holotype ♂: GR - Samos, unterhalb Manolate, ca. 300m; "Nachtigallental", N37°47'15'' E26°49'34'', 29.IV.2003, leg. Meybohm/Brachat / Holotypus ♂ *Leptusa samia* sp.n. det. V. Assing 2003 (cAss).
Paratypes: 3♀♀: same data as holotype (cAss).

Description: 2.6-3.6 mm; habitus as in Fig. 10. Head dark brown to blackish; pronotum and elytra lighter than head, brown to dark brown; abdomen brown to dark brown, with segment VI and the anterior parts of segment VII blackish; legs and antennae testaceous, with the apical 6-8 antennomeres slightly darker.

Head in dorsal view transverse, 1.10-1.15 times as wide as long (Fig. 10); eyes relatively large, distinctly projecting from lateral outline of head and slightly longer than postocular region in dorsal view; puncturation shallow and rather sparse; microreticulation distinct.

Pronotum about 1.2 times as wide as head and 1.35 times as wide as long (Fig. 10); punctures also shallow, but denser and coarser than those of head; microsculpture similar to that of head.

Elytra 1.15-1.20 times as wide and at suture approximately 0.9 times as long as pronotum; puncturation well-defined and granulose; microsculpture indistinct. Hind wings reduced.

Abdomen widest at segment V, as wide as or slightly wider than elytra; 1.25-1.30 times as wide as elytra; microsculpture shallow; puncturation fine and sparse, somewhat sparser on posterior than on anterior tergites; posterior margin of tergite VII with narrow palisade fringe.

♂: tergite VII (in holotype) with somewhat granulose puncturation especially in posterior half; posterior margin of tergite VIII concave in the middle, this concavity delimited by a toothlike projection on either side (Fig. 14); sternite VIII posteriorly pointed and with long marginal setae (Fig. 15); median lobe of aedeagus and apical lobe of paramere as in Figs. 11-13.

♀: tergite VII unmodified; posterior margin of tergite VIII weakly serrate and without distinct concavity in the middle (Fig. 16); sternite VIII posteriorly broadly convex (Fig. 17); spermatheca as in Fig. 18.

Etymology: The name (Lat.) is the adjective derived from Samos, where the species was found.

Comparative notes and systematics: *Leptusa samia* is readily distinguished from all its congeners especially by the morphology of the aedeagus. Based on the sexual and external characters, the species belongs to the subgenus *Dendroleptusa*. Other species of this subgenus are distinguished from *L. samia* as follows:

The widespread *L. fumida* (ERICHSON) has a much more densely punctate pronotum, larger eyes, much larger and longer elytra, fully developed hind wings, distinct tubercles on the male tergites VII and VIII, a greater number of tooth-like processes at the posterior margin of the male tergite VIII, and an aedeagus with a differently shaped median lobe (especially in lateral view), a longer and larger apical lobe of the paramere, differently shaped sclerotized internal structures, and a shorter flagellum, as well as a spermatheca with a relatively larger capsule.

In *L. secreta* BERNHAUER from the southwestern Balkans, the male tergite VII has a median tubercle, the median lobe of the aedeagus is of different shape especially in lateral view, and the internal structures are more slender.

In *L. asperata* EPPELSHEIM, a rather common corticolous species from Greece, the pronotum and elytra are more coarsely punctate, the elytra are slightly longer (in relation to the pronotum), the coloration is usually darker (pronotum and elytra blackish, antennomeres IV-XI distinctly infuscate), the male tergite VII has a small median tubercle, the posterior margin of the male tergite VIII is serrate (with numerous small denticles), the median lobe of the aedeagus is of different shape in lateral view and not distinctly dilated apically in ventral view, the sclerotized internal structures are of different shape, and the apical lobe of the paramere is larger and longer.

Leptusa winkleriana SCHEERPELTZ, an Albanian species of which only a single male without aedeagus is known, has smaller eyes and a coarser puncturation of the elytra.

For illustration of the primary sexual characters and the facies of these species see the figures in PACE (1989).

D i s t r i b u t i o n : *Leptusa samia* is known only from the Greek island Samos, near the coast of southwestern Anatolia.

Leptusa (Stictopisalia) sarensis PACE (Figs. 19-26)

Leptusa (Stictopisalia) sarensis PACE 1983: 283ff.

T y p e e x a m i n e d : Holotype ♂: Sar planina, Serbia mer., Dr. Komárek / Holotypus Leptusa (Stictopisalia) sarensis det. R. Pace 1978 (NMP).

Additional material examined: 30 exs., Serbia, Šar planina, Popova shapka, 5.-11.VI.1955, leg. F. Schubert (NHMW).

R e m a r k s : An examination of the holotype and additional material revealed that an identification of the species based on the illustrations and descriptions provided by Pace (1983, 1989) may prove difficult. Therefore, the genitalia, habitus (Fig. 19), and the previously undescribed secondary sexual characters are here described and illustrated:

♂: tergites VII and VIII without granula, tubercles, or carinae; tergite VIII posteriorly weakly concave (Fig. 24); posterior margin of sternite VIII weakly pointed (Fig. 25); median lobe of aedeagus in lateral view with broader and basally partly semi-transparent ventral process, in ventral view apically without projecting angles (Figs. 20-22).

♀: posterior margin of tergite VIII of similar shape as in ♂; sternite VIII posteriorly more distinctly pointed than in ♂ (Fig. 26); spermatheca with more oblong capsule than in *L. sarensis* (Fig. 23).

D i s t r i b u t i o n : The species is apparently endemic to the Šar planina, which is partly on Serbian and partly on Macedonian territory, not far from the Albanian border. It was collected together with *L. reitteri* EPPELSHEIM and *L. komareki* PACE.

Leptusa (Neoleptusa) gurgentepensis PACE 1989

Leptusa (Neoleptusa) gurgentepensis PACE 1989: 41.
Leptusa (Neoleptusa) spoliata ASSING 2002: 974; **syn.n.**

C o m m e n t s : Unlike the holotype of *L. gurgentepensis*, the male holotype and the three male paratypes of *L. spoliata* lack any trace of median tubercles on the abdominal tergites VII and VIII. No difference, however, could be found in the morphology of the aedeagus. Moreover, the type locality of *L. spoliata* is rather close to that of *L. gurgentepensis*, so that there is little doubt that the types of both names are conspecific. Consequently, *L. spoliata* is here synonymized with *L. gurgentepensis*.

***Leptusa (Aphaireleptusa) dissimulans* sp.n.**

Leptusa dissimulans: ASSING 2002: 883; unavailable name.

Holotype ♂: JAPAN - Honshu, Nagano Pref., above Marunuma, 1350m, deciduous woodland, 30.VII.1999, V. Puthz / Holotypus ♂ *Leptusa dissimulans* sp.n. det. V. Assing 2002 (cAss).

Description: 3.0 mm. In external characters extremely similar to *L. puthzi* ASSING, distinguished from that species as follows:

Puncturation of pronotum more clearly defined, slighly less dense; elytra at suture slightly shorter than pronotum.

♂: tergites VII and VIII with slightly more distinct oblong tubercles; posterior margin of sternite VIII very weakly concave in the middle (see Fig. 37 in ASSING (2002)); sternite VIII similar to that of *L. puthzi*; median lobe of aedeagus larger, with much longer ventral process, with distinct subapical fold at base of ventral process, with much longer flagellum, and smaller sclerotized structures of completely different shape in internal sac (Figs. 35-36 in ASSING 2002).

♀: unknown.

Derivatio nominis: The name (Lat., present participle of dissimilare: to hide, to camouflage) refers to the fact that only after dissection of the aedeagus I discovered that the holotype represents a species distinct from *L. puthzi*.

Comparative notes: In general appearance, *L. dissimulans* is similar to the Taiwanese species of *Aphaireleptusa* and especially *L. michai* ASSING from mainland China. From all the congeners that have been recorded from Japan, except for the highly similar *L. puthzi*, it is readily distinguished by the bright coloration, the coarsely punctate and mat forebody, and by the sexual characters. For distinction from *L. puthzi* see ASSING (2002).

Distribution and bionomics: Like *L. puthzi*, *L. dissimulans* is known only from Honshū, where it was collected in a deciduous forest in the vicinity of Lake Marunuma at an altitude of 1350 m.

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Zusammenfassung

Vier Arten werden beschrieben: *Leptusa* (*Lasiopisalia*) *bellinorum* sp.n. (Spanien: Cantábria), *L.* (*Dendroleptusa*) *samia* sp.n. (Griechenland: Samos), *L.* (*Stictopisalia*) *sarensis* PACE und *L.* (*Aphaireleptusa*) *dissimulans* sp.n. (Japan). *Leptusa* (*Dysleptusa*) *cribripennis* KRAATZ, bisher als jüngeres Synonym von *L. fuliginosa* (AUBÉ) betrachtet, wird revalidiert. Sechs Namen werden synonymisiert: *L. lativentris lativentris* SHARP 1875 = *L. lativentris fitoensis* FAGEL 1967; *L. franziana* PACE 1981 = *L. scheerpeltzi* PACE 1983, syn.n.; *L. roscidavallensis* PACE 1981 = *L. guipuzcoensis* PACE 1983, syn.n.; *L. cantabrica* PAŚNIK 1998 = *L. tronqueti* PACE 1999, syn.n.; *L. cribripennis* KRAATZ 1856 = *L. vavrai* ROUBAL 1931, syn.n.; *L. gurgentepensis* PACE 1989 = *L.*

spoliata ASSING 2002, syn.n. Insbesondere aus Spanien werden weitere Nachweise gemeldet. Für fünf Arten aus Nordspanien werden Verbreitungskarten erstellt.

References

ICZN (1999): International Code of Zoological Nomenclature. Fourth Edition. — London: XXIX + 306 pp.

ASSING V. (2002): New species and records of *Leptusa* KRAATZ from the Palaearctic region (Coleoptera: Staphylinidae, Aleocharinae). — Linzer biol. Beitr. **34/2**: 971-1019.

ASSING V. (2003a): The Turkish species of *Leptusa* KRAATZ in the F. Schubert collection (Naturhistorisches Museum, Wien) (Coleoptera: Staphylinidae, Aleocharinae). — Koleopt. Rdsch. **73**: 75-82.

ASSING V. (2003b): The third species of *Cantaberella* TRONQUET from northern Spain (Coleoptera: Staphylinidae, Aleocharinae). — Linzer biol. Beitr. **35/2**: 701-704.

ASSING V. (2003c): New species and records of *Leptusa* KRAATZ from the Iberian peninsula (Insecta: Coleoptera: Staphylinidae, Aleocharinae). — Beitr. Entomol. **53/2**: 239-250.

FAGEL G. (1967): Contribution à la connaissance des Staphylinidae. XCVI. Sur quelques espèces des Asturies. — Bull. Ann. Soc. R. Ent. Belg. **104**: 201-215.

HORION A. (1967): Faunistik der mitteleuropäischen Käfer. Bd. XI: Staphylinidae, 3. Teil: Habrocerinae bis Aleocharinae (ohne Subtribus Athetae). — Überlingen-Bodensee: 1-419.

PACE R. (1981): *Leptusa* KR. di Spagna, Portogallo e Grecia raccolte dal Prof. H. Franz (Coleoptera, Staphylinidae). — Boll. Soc. ent. ital., Genova **113**: 84-93.

PACE R. (1983a): Risultati dello studio delle specie del genere *Leptusa* KRAATZ della collezione Scheerpeltz al Naturhistorisches Museum di Vienna (Coleoptera, Staphylinidae). — Ann. Naturhist. Mus. Wien **85/B**: 53-102.

PACE R. (1983b): *Leptusa* KRAATZ nuove o poco note del Museo Nazionale di Praga (Coleoptera, Staphylinidae). — Acta Entomol. Mus. Nat. Pragae **41**: 277-296.

PACE R. (1989): Monografia del genere *Leptusa* KRAATZ (Coleoptera Staphylinidae). — Mem. Mus. Civ. Stor. Nat. Verona., Sez. Sci. Vita (A: Biol.) **8**: 1-307.

PACE R (1996): Nuove *Leptusa* KRAATZ di Spagna, Francia, Italia, Austria, Cipro, Turchia e Taiwan. Monografia del genere *Leptusa* KRAATZ: Supplemento IV (Coleoptera, Staphylinidae). — Nouv. Revue Entomol. (N. S.) **13**: 21-33.

PACE R (1999): *Leptusa tronqueti* n.sp. della Spagna. Monografia del genere *Leptusa* KRAATZ: Supplemento IX (Coleoptera, Staphylinidae). — Nouv. Revue Entomol. (N. S.) **16**: 19-21.

PAŚNIK G. (1998): A new species of the genus *Leptusa* from Spain (Coleoptera: Staphylinidae: Aleocharinae). — Acta zool. cracov. **41**: 191-193.

ROUBAL J. (1931): Beschreibungen von vier neuen Coleopteren. — Čas. Čsl. Spol. Entomol. **7-8**: 131-132.

SMETANA A. (1973): Die *Leptusa*-Arten der Tschechoslovakischen Republik einschließlich Karpatorußlands (Col., Staphylinidae). — Stuttgarter Beitr. Naturk., Ser. A (Biol.) 255: 1-46.

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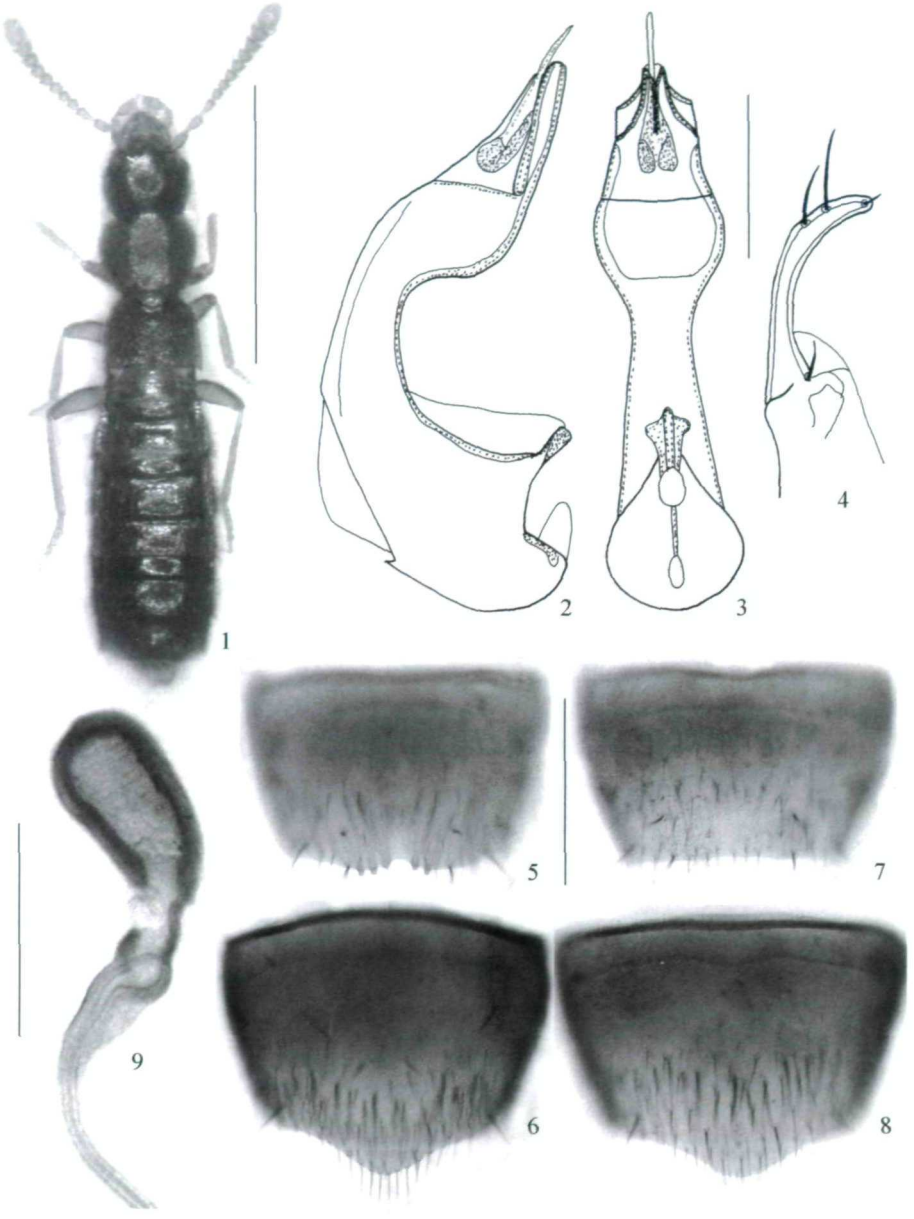
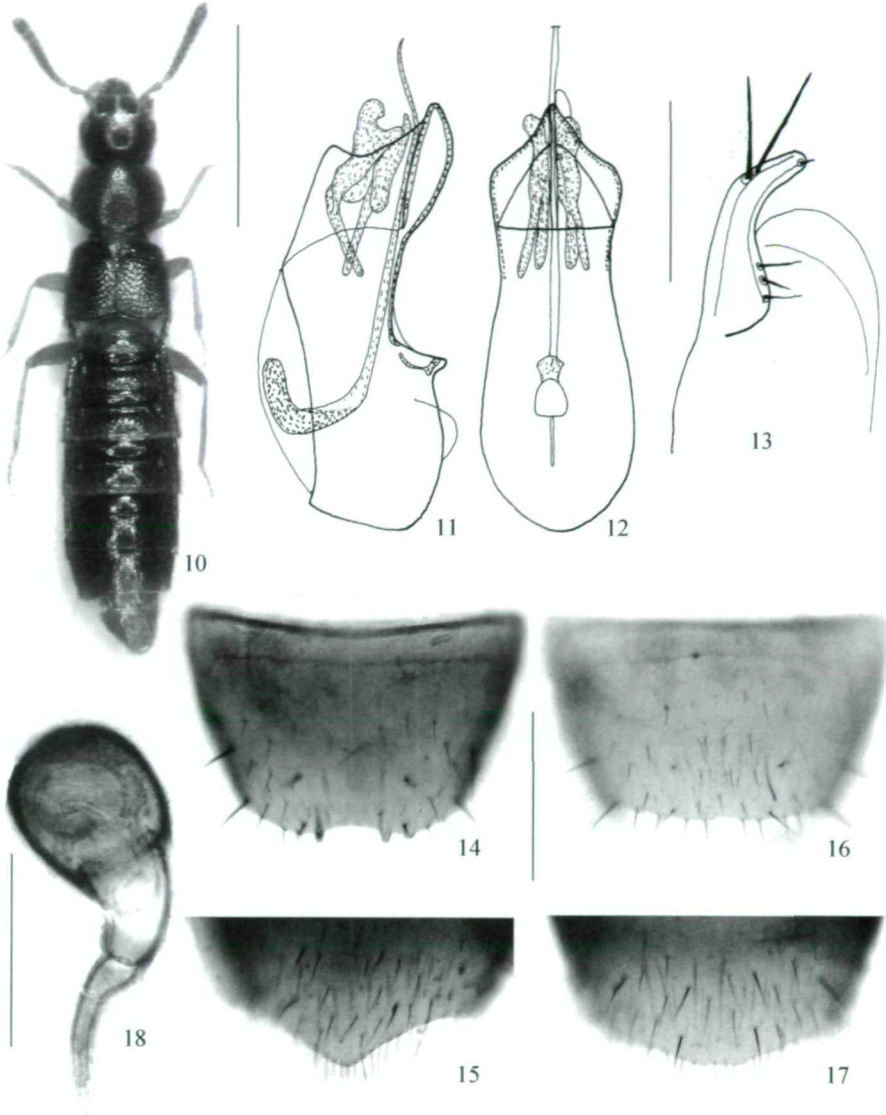
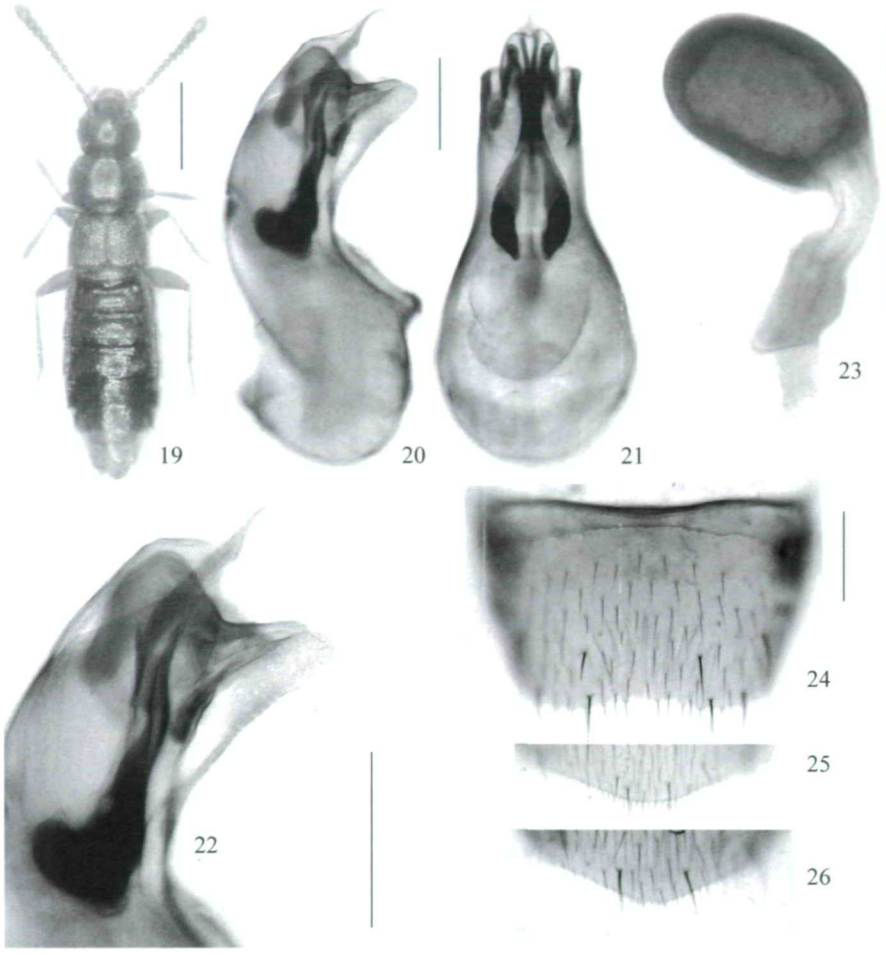


Figs. 1-9: *Leptusa bellinorum* sp.n.: **1** – habitus; **2, 3** – median lobe of aedeagus in lateral and in ventral view; **4** – apical lobe of paramere; **5** – ♂ tergite VIII; **6** – ♂ sternite VIII; **7** – ♀ tergite VIII; **8** – ♀ sternite VIII; **9** – spermatheca. Scale bars: 1: 1.0 mm; 5-8: 0.2 mm; 2-4: 0.1 mm; 9: 0.05 mm.



Figs. 10-18: *Leptusa samia* sp.n.: **10** – habitus; **11, 12** – median lobe of aedeagus in lateral and in ventral view; **13** – apical lobe of paramere; **14** – ♂ tergite VIII; **15** – posterior part of ♂ sternite VIII; **16** – ♀ tergite VIII; **17** – posterior part of ♀ sternite VIII; **18** – spermatheca. Scale bars: 10: 1.0 mm; 11-12, 14-17: 0.2 mm; 13, 18: 0.1 mm.



Figs. 19-26: *Leptusa sarensis* PACE: **19** – facies; **20, 21** – median lobe of aedeagus in lateral and in ventral view; **22** – apical part of median lobe in lateral view; **23** – spermatheca; **24** – ♂ tergite VIII, **25** – posterior margin of ♂ sternite VIII, **26** – posterior margin of ♀ sternite VIII. Scales: 19: 0.5 mm; 20-26: 0.1 mm.