

A new species of *Stenus* (s. str.) (Coleoptera, Staphylinidae, Steninae) from the western Caucasus

Новый вид рода *Stenus* (s. str.) (Coleoptera, Staphylinidae, Steninae) с Северо-Западного Кавказа

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Ключевые слова: Staphylinidae, Steninae, *Stenus*, новый вид, Кавказ, распространение, экология.

Abstract. This paper provides a description of *Stenus sagittiformis* sp.n., a new species from the western Caucasus.

Резюме. В статье описан *Stenus sagittiformis* sp.n., новый вид с Северо-Западного Кавказа.

Introduction

In the course of my investigation of the fauna of Staphylinidae of the western Caucasus a new species of the genus *Stenus* Latreille, 1796 was discovered. It is described and compared to other *Stenus* species below.

An overall review of *Stenus* of the Caucasian region (78 species), including identification keys, is given in the revision by Ryvkin [1990]. The latest published list of the *Stenus* fauna of the western Caucasus (57 species) can be found in Solodovnikov [1998]. In that list, *Stenus sagittiformis* sp.n. described here is listed as *Stenus* (s. str.) sp.n. (No. 269).

Measurements of the beetles for this description, given in millimeters, were taken and abbreviated as follows: HL — head length (from apex of clypeus to neck constriction); HW — head width (maximal, including eyes); DBE — distance between eyes (on dorsal side of head, maximal); PL — pronotal length (along medial line); PW — pronotal width (maximal); ELmin — elytral length, minimal (from apex of scutellum to sutural angle); ELmax — elytral length, maximal (from base of humerus to the level of the most distal (apico-lateral) corner of the elytral apical margin); EW — elytral width: combined width of both elytra (maximal, when elytra closed along suture); EWS — elytral width at shoulders: combined width of both elytra measured at shoulders; total length of the body was measured from tip of mandibles to tip of abdomen.

Type material of *Stenus sagittiformis* sp.n. was labeled with respective type labels (red for the holotype, yellow for the paratype, both not cited here) and deposited to the collection of the Zoological Institute of the Russian Academy of Sciences in St. Petersburg (ZIN).

Stenus sagittiformis Solodovnikov, sp.n.

Figs 1–2.

Material. Holotype, ♂ [slightly damaged], «Russia, Krasnodarskii Krai, Lagonaki plateau, eastern slopes of Mt. Fisht, sources of Belaya river, gravel stream edge, 1800 m, above timber line, 26.VI.1994, leg. A. Solodovnikov» (ZIN); paratype: 1♀ [lacking

left anterior leg], «Russia, Krasnodarskii Krai, western part of Aibga Range, 1000–1450 m, 23.VIII.1995, leg. M. Savitsky» (ZIN).

Материал. Голотип, ♂ [слегка повреждён], «Россия, Краснодарский край, плато Лагонаки, восточный склон горы Фишт, верховья реки Белой, галечник по берегу, 1800 м, над границей леса, 26.VI.1994, колл. А. Солодовников» (ЗИН, Санкт-Петербург); паратип: 1♀ [без левой передней ноги], «Россия, Краснодарский край, западная часть перевала Айбга, 1000–1450 м, 23.VIII.1995, колл. М. Савицкий» (ЗИН, Санкт-Петербург).

Description. Measurements: holotype (paratype): HL: 0.55 (0.58); HW: 0.80 (0.90); DBE: 0.51 (0.55); PL: 0.71 (0.80); PW: 0.64 (0.80); ELmin: 0.80 (0.95); ELmax: 0.96 (1.10); EW: 0.96 (1.02); EWS: 0.80 (0.90).

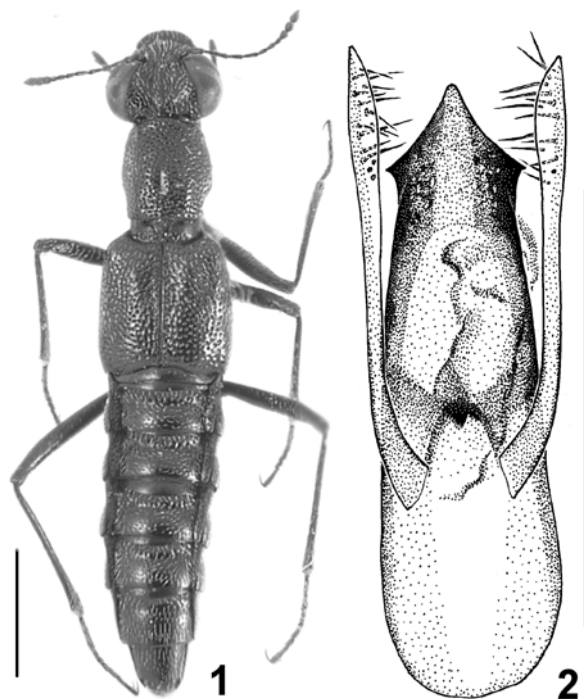
Black, with slight metallic blue iridescence. Antennae very dark brownish-black. Legs black with paler (brownish) tarsi. Maxillary palps with black apical segment and more or less yellowish basal segments. Labrum black, with gray pubescence. Body glossy, with coarse, moderately dense punctation, fine microsculpture and fine gray pubescence. Length of the body about 5.5 mm. Habitus as in Fig. 1.

Head considerably wider than pronotum, only slightly narrower than maximal width of elytra. Frons in the middle with two longitudinal shallow grooves extending along inner margins of eyes, leaving smooth but distinct longitudinal ridge in between. Punctation very coarse, moderately dense: interspaces from about 0.5 times as large as, to equal to diameter of punctures, very glossy, with fine but very distinct microsculpture.

Pronotum slightly longer than wide, widest at middle, gradually narrowing anteriorly and more abruptly converging posteriorly; with coarse, moderately dense punctation and fine microsculpture as on head. Pronotum with shallow transverse impression near anterior margin and with short medial longitudinal impunctate shallow impression immediately behind middle.

Elytra about as long as wide, with distinct shoulders, gradually expanding apically, distinctly longer than pronotum (measured both along suture and laterally). Apical margin of each elytron slightly sinuate, straight at sutural angle. Basal part of each elytron with two very slight impressions: one medially from shoulder, another near suture, these impressions leaving a slight elevated «tubercule» between them. Punctation and microsculpture as on head and pronotum.

Legs long and slender. Tarsomere IV of all tarsi not bilobed, only very slightly emarginate to accommodate the base of apical tarsomere. Tarsomere I of posterior tarsi



Figs 1–2. *Stenus sagittiformis*: 1 — habitus of paratype, scale bar 1 mm; 2 — aedeagus, from dorsal (parameral) side, scale bar 0.5 mm.

Рис. 1–2. *Stenus sagittiformis*: 1 — общий вид паратипа, масштабная линейка 1 мм; 2 — эдеагус с дорсальной стороны (сторона прикрепления парамер), масштабная линейка 0,5 мм.

about 1.5 times as long as apical tarsomere. Tarsi with dense gray pubescence all over.

Abdomen (in dorsal view) converging posteriad along its whole length (at base slighter, apically stronger). Tergites III–VII with wide, very distinct paratergites; all tergites without basal longitudinal keels. Punctuation distinctly finer and sparser than on the forebody, interspaces having distinct microsculpture: punctures slightly smaller than those on forebody, slightly coarser on tergites III–IV than on tergites V–VII, interspaces on all visible tergites being from equal to about 2 times as large as diameter of punctures. Pubescence as on rest of the body. Posterior margin of tergite VII with apical palisade fringe.

Male. Sternite VIII with apical emargination as deep as about 1/5 of its length. Sternite IX apically very slightly emarginate, with slightly denticulate apical margin between latero-apical angles. Aedeagus as in Fig. 2, with rather broad arrow-like, obtusely pointed apex; parameres slightly protruding beyond apex of median lobe, with slightly enlarged apices having long setae all directed inwards; no setae at the apical margins of parameres.

Female. Sternite VIII rounded and very slightly pointed in the middle of its apical margin.

Etymology. The species epithet is a Latin adjective of masculine gender, which means «arrow-shaped». It refers to the strongly arrow-shaped apical part of the aedeagus of the new species.

Distribution. *Stenus sagittiformis* sp.n. is known so far only from two localities in the western Caucasus (Russia, Krasnodarskii Krai): Lagonaki plateau and Aibga.

Bionomics. Bionomic data is recorded only for one specimen (from Lagonaki plateau). It was collected above timberline (1800 m) at the gravel stream edge of a fast creek, one of the sources of the Belaya River. As regards

the second specimen (from Aibga range), it is only known that it was found at an elevation between 1000 and 1450 m.

Comparison. The new species belongs to the subgenus *Stenus* s.str. based on the following combination of characters: abdominal tergites III–VII with paratergites; tarsomere IV of all tarsi simple, not bilobed; posterior tarsi relatively long, with first tarsomere considerably longer than apical tarsomere.

Within this subgenus, based on such character states as absence of a longitudinal medial keel on the basal tergites of the abdomen, long tarsomere I of the posterior tarsi (about 1.5 times as long as apical tarsomere), and structure of the aedeagus, *Stenus sagittiformis* sp.n. can be placed into the «*biguttatus*» species group which at the Caucasus is represented by *S. biguttatus* (Linnaeus, 1758), *S. bohaci* Hromádka, 1977 and *S. comma* Le Conte, 1863 [Ryvkin 1990]. From all listed species it can be readily distinguished by the lack of pale spots on the elytra (body entirely black) and by structure of the aedeagus (namely by rather strong teeth, which project from the lateral sides of the median lobe before its apical constriction). Additionally, from *S. biguttatus* and *S. bohaci*, the new species differs in having darker basal segments of the maxillary palps and a slightly larger body. *Stenus sagittiformis* sp.n. can be readily distinguished from any other species of «*biguttatus*» group as well as from somewhat similar black (immaculate) species from other groups. Among those, it is most similar with *S. aereus* Solsky, 1871, which is entirely black (immaculate) member of «*biguttatus*» group widely distributed in Central Asia, Afghanistan and Iran [Herman, 2001]. From that species *S. sagittiformis* sp.n. differs in sparser punctuation of the forebody, presence of a smooth but distinct longitudinal middle ridge on the frons (frons flat in *S. aereus*), metallic blue (contrary to somewhat bronze in *S. aereus*) appearance of the body, very strong lateral teeth of the median lobe (in *S. aereus* median lobe laterally pointed, but these slight projections do not form distinct teeth), and absence of setae on the apical margin of the parameres.

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