

## New data on distribution of Palearctic Histeridae with description of a new species of *Saprinus* (Coleoptera)

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*Saprinus lopatini* sp. n. closely related to *S. lautus* Er. is described from the lowlands of Middle Asia. New data on distribution of 8 poorly known species are given.

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This paper contains new data on distribution of 8 rare and poorly known species and description of 1 new species. The holotype of the new species is kept in the Zoological Institute, St. Petersburg (ZIN), paratypes and other material in ZIN and in the zoological museums of the Moscow (ZMMU) and Byelorussian (BU) Universities.

### *Chaetabraeus convexus* (Reitter, 1884)

*Material.* Ukraine, Crimea: 3 specimens, Bakhchisaray Distr., Pochtovoe, on dead fish, 29.VII.1989 (S. Saluk) (ZIN, BU).

The species was known from the eastern part of Mediterranean subregion: Greece, Bulgaria, Turkey, Syria, Lebanon, Jordan, Israel (Mazur, 1984; Kapler, 1991). It has been recently recorded from the Ukraine without indication of exact locality (Shapran, 1991).

### *Chaetabraeus subconvexus* (Kryzhanovskij, 1976)

*Material.* Tajikistan: 2 specimens, Hissar Ridge, Varzob, in rotten root of *Ferula* sp., 3.V.1988 (S. Saluk) (BU); 2 specimens, Sanglok Ridge, Sebiston, in rotten root of *Ferula* sp., 28.IV.1992 (A. Lukashuk) (BU).

New records expand the range of this poorly known species and suggest that it is widely distributed in the mountains of Middle Asia. Its rarity in collections may be due to its special habitat, which is rarely inspected by collectors. This may be also true for some species of the

genera *Margarinotus* (Marseul) Wenzel, *Hister* L., *Atholus* Thomson and *Platysoma* Leach inhabiting rotten roots of some Apiaceae and Fabaceae in Transcaucasia and Middle Asia (see Kryzhanovskij & Reichardt, 1976; Olexa, 1982, 1987).

### *Acritus komai* Lewis, 1879

*Material.* Ukraine, Crimea: 1 specimen, env. of Simferopol, in old hay, 25.VII.1987 (S. Saluk) (ZIN).

This almost cosmopolitan species (Mazur, 1984; Gomy, 1987) is recorded from the former USSR for the first time.

### *Acritus minutus* (Herbst, 1792)

*Material.* Kazakhstan: 14 specimens, N Dzhungarian Alatau Mts., Kaikan Ridge, 30 km ESE of Uch-Aral, under loose bark of *Populus* sp., 6.VIII.1989 (A. Tishechkin) (ZIN, BU).

This species known previously from Europe, North Africa, Turkey, East Siberia and Australia (Mazur, 1984) is recorded from Kazakhstan for the first time.

### *Saprinus lopatini* sp. n.

(Figs 1-4)

*Holotype.* ♂, Tajikistan, Tigrovaya Balka Nature Reserve, in fungi, 1.IV.1966 (I.K. Lopatin).

*Paratypes.* Tajikistan: 1 ♂, 3 ♀, as holotype; ♀, same locality, on dead cow, 21-23.IV.1988 (S. Saluk) (ZIN, BU); Turkmenistan: 3 ♂, 2 ♀, Amu Darya River, 100 km

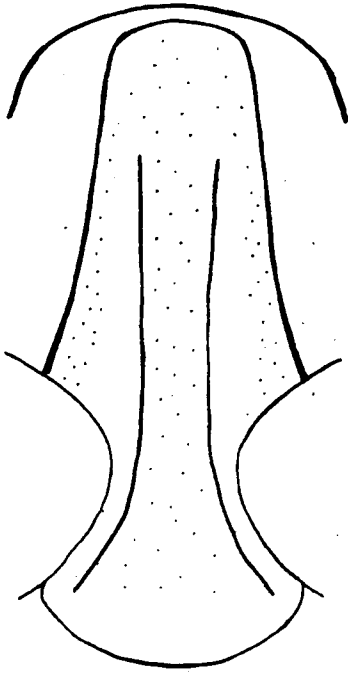


Fig. 1. *Saprinus lopatini* sp. n., prosternum.

downstream of Chardzhou, on carrion, IV.1983 (S. Alekseev) (ZIN, ZMMU, BU); 1 ♂, 2 ♀, Kaplankyr Nature Reserve, 27.V.1985 (ZIN, BU); Uzbekistan: 1 ♂, railway station Golodnaya Step' [now Gulistan], 16.IV.1903 (G. Jacobson) (ZIN); 1 ♀, Tashkent, 8.IV.1920 (I. Ivanov), "*Saprinus lautus* Er., A. Reichardt det." (ZIN); 1 ♀, Ferghana Prov., Gorchakovo [now Margilan], 3.IV.1919 (I. Ivanov), "*Saprinus lautus* Er., A. Reichardt det." (ZIN); Kazakhstan: 2 ♀, Perovsk [now Kzyl-Orda], 6.V.1905 (J. Baeckmann), one of the beetles bears label "sp. prope *lautus*" handwritten by A.N. Reichardt (ZIN).

**Description.** Body shortly oval, moderately convex, black, shiny, with distinct bronze-green tinge; legs dark brown; antennal club rusty brown.

Frons slightly convex, covered with small, moderately dense (1-3)\* punctures. Frontal stria interrupted in the middle.

Pronotum moderately convex; lateral sides evenly, smoothly convergent; anterior angles feebly projecting. Postocular foveae absent. Sides densely punctate (0.5-1) or even rugulose. Pronotal disc shiny, with small sparse (2-5) punctures. Epipleura smooth, without hairs.

Dorsal striae thin, non-punctate, sometimes with traces of punctation slightly entering into

apical half. 4th dorsal stria arch-shaped merged with complete sutural stria, in some specimens narrowly interrupted at base. Sutural stria merged with complete marginal elytral stria. Outer subhumeral stria well developed, in some specimens almost merged with humeral stria. Elytral punctation small and sparse (3-5), covering apical half, slightly entering into intervals. Intervals with very fine and small punctation invisible under 16-fold magnification.

Propygidium and pygidium densely punctate with small punctures. Punctation of pygidium larger and sparser (0.5-1.5) than in propygidium (0.5-0.8).

Prosternal carina concave in profile. Lateral prosternal striae sharp, parallel, merged near anterior margin. Carinal striae not merged, sharply convergent between procoxae, further nearly parallel, reaching apical fourth of prosternum (Fig. 1).

Mesosternum with small, sparse punctures (3-4); marginal stria strongly curved. Metasternum feebly convex, without any impressions and tubercles, only with several rows of small punctures along lateral margins and larger and denser punctures along apical margin. Meta-sternal longitudinal suture well developed.

Fore tibia moderately wide, with 7-9 teeth on outer margin. Middle and hind tibia spinulate. Tarsi thin, about half as long as the corresponding tibia. Claws short, their length less than half of the 5th segment.

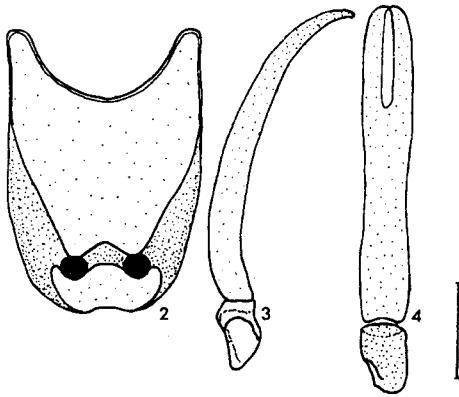
Eighth sternite of male similar to that of *S. lautus* Er., with 2 small sclerotized areas on ventral side (Fig. 2). Aedeagus long, somewhat curved in profile, its sides nearly parallel (Figs 3, 4).

Full length 2.6-3.9 mm, length from anterior margin of pronotum to apical margin of elytra 2.0-2.9 mm, width 1.7-2.5 mm.

**Etymology.** The species is named after Prof. I.K. Lopatin, well-known specialist on Chrysomelidae.

**Comparison.** *S. lopatini* sp. n. is very similar to *S. lautus* Er. Besides the differences of prosternal stria pattern and structure of male genitalia (cf. Kryzhanovskij & Reichardt, 1976), it may also be distinguished from *S. lautus* by rusty brown antennal club (it is somewhat darker only in some old specimens), interrupted frontal stria, and much less developed punctation of upper side. As follows from the comparison of type material of the new species with *S.*

\* Density of punctation is indicated as ratio of distance between punctures and their diameters.



Figs 2-4. *Saprinus lopatini* sp. n. 2, male eighth sternite, dorsal view; 3, aedeagus, dorsal view; 4, aedeagus, lateral view. Scale: 0.3 mm.

*lautus* from Middle Asia and the neighbouring areas (Kazakhstan, Altai Mts., about 80 specimens in total), these two species may be distinguished without examination of male genitalia.

**Distribution.** *S. lopatini* sp. n. is widely distributed in lowlands of Middle Asia especially in the valleys of large rivers (Amu Darya, Syr Darya, Vakhsh). The nearest species, *S. lautus*, is distributed further northwards, it is typical for steppe zone and recorded regularly from Kazakhstan and Altai, but rarely from Middle Asia. It seems that in Middle Asia these species are separated ecologically: all known captures of *S. lautus* in Middle Asia (Ugam, Talas and Zeravshan Ridges) were reported from the mountains 1200-2200 m above sea level.

**Bacanius lableri** (Reichardt, 1941)

**Material.** Russia: Primorsk Terr.: 4 specimens, Ussuriysk Distr., Kamenushka, in rotten wood, 3.VI.1990 (S. Kurbatov) (ZIN, BU); 2 specimens, Merkushevka S of Spassk-Dal'niy, under bark of *Tilia* sp., 13.VI.1990 (S. Kurbatov) (BU).

The species was formerly known only from Vladivostok (Kryzhanovskij & Reichardt, 1976).

**Hister megalonyx** Reichardt, 1922

**Material.** Kazakhstan: Aktyubinsk Prov.: 1 specimen, Chelkar Distr., 5.V.1979 (I. Belousov) (ZIN); Guriev Prov.: 2 specimens, Prikaspian Karakum Desert, Korukduk, 18.IV.1981 (F. Bidashko) (ZIN, BU).

The species is widely distributed in Middle Asia and South Kazakhstan, it is recorded from West Kazakhstan for the first time.

**Hister moerens** Erichson, 1834

**Material.** Russia: 1 specimen, SW part of Ulyanovsk Prov., Zykovo, in the burrow of *Marmota bobac*, 15.V.1989 (A. Isaev) (ZIN).

This record expands the species range north and eastwards. There was no previous information of *H. moerens* inhabiting rodent burrows.

**Margarinotus agnatus** (Lewis, 1884)

**Material.** Russia, Sakhalin Prov.: 1 ♂, Sakhalin I., Yuzhno-Sakhalinsk, on dead dog, 8.VIII.1985 (S. Saluk) (BU); 1 ♂, Kunashir I., Mendeleevo, 31.VII.1985 (S. Saluk) (BU).

The species was known from Himalayas and Japan including Hokkaido (Mazur, 1984; Ôhara, 1989). Illustrations of male genitalia of *M. agnatus* and *M. weymarni* Wenzel in the book by Kryzhanovskij & Reichardt (1976) were confused due to editor's error (p. 333, Figs 644, 647). The genitalia of *M. agnatus* are illustrated in Fig. 644.

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