

## New and little-known rove-beetles of the subfamilies Paederinae and Staphylininae (Coleoptera: Staphylinidae) of European Russia

### Новые и малоизвестные стафилиниды подсемейств Paederinae и Staphylininae (Coleoptera: Staphylinidae) Европейской России

К. А. Grebennikov  
К. А. Гребенников

Department of Entomology, St.-Petersburg State University, Universitetskaya nab. 7/9, St.-Petersburg 199034 Russia.  
Кафедра энтомологии, Санкт-Петербургский государственный университет, Санкт-Петербург 199034 Россия.

KEY WORDS: Staphylinidae, lower Volga, new species, type, designation.

КЛЮЧЕВЫЕ СЛОВА: Staphylinidae, Нижнее Поволжье, новый вид, тип, обозначение.

ABSTRACT: Type material is revised for *Philonthus velatipennis* Solsky, 1869 and *Heterothops tenuiventris* Kirschenblatt, 1937. Lectotypes of these taxa are designated, *H. tenuiventris* is redescribed. A new species, *Lathrobium* (s.str.) *sareptae* sp.n. is described.

РЕЗЮМЕ: Изучен типовой материал для *Philonthus velatipennis* Solsky, 1869 и *Heterothops tenuiventris* Kirschenblatt, 1937. Обозначаются лектотипы данных таксонов, приводится переописания *H. tenuiventris*. Описывается новый вид *Lathrobium* (s.str.) *sareptae* sp.n.

#### Introduction

This paper is a result of the investigation of fauna and taxonomy of staphylinids of the lower Volga region — south-eastern part of European Russia, including Volgograd and Astrakhan' areas and Kalmykiya. At present, the local fauna of the subfamilies Paederinae and Staphylininae numbers 132 species [Grebennikov, 2001ab]. A great number of them are Central-Palaearctic steppe and desert species. This very interesting element of the entire fauna remains to be poorly known as on the territory of the lower Volga region so and in the entire Palaearctic region as a whole. Examination of some material from the lower Volga region (collected by me during 1994–1999 and also type and non-type specimens kept in the Zoological Institute of Russian Academy of Sciences, St.-Petersburg, Russia — ZISP) gives me the opportunity to improve our knowledge about little-known *Philonthus velatipennis* Solsky, 1869 and *Heterothops tenuiventris* Kirschenblatt, 1937, and to describe a new species, *Lathrobium* (s.str.) *sareptae* sp.n.

All material examined in the course of preparation of this paper (including types of new species) is kept in ZISP (curator Prof. G. S. Medvedev).

All measurements are made in a millimetres: total body length (TL) is measured from apex of clypeus to apex of abdomen; forebody length (FB) — from front margin of

clypeus to elytral hind margin, head length (HL) — from front margin of clypeus to neck, pronotum length (PL) — along median line, elytra length (EL) — from their basal margin at shoulder to their hind margin; head (including eyes) (HW), pronotum (PW) and elytra (EW) width is maximal.

#### *Lathrobium* (s.str.) *sareptae* K. Grebennikov, sp.n.

Type material examined: holotype: 1 ♂, Russia, Volgograd Area, SW of city Volgograd, NE of town Vodny, 8.VI.1997, leg. K. A. Grebennikov/ Holotypus ♂ *Lathrobium* (s. str.) *sareptae* sp. n., K. A. Grebennikov det., 2000; paratype: 1 ♂, same data, but marked as paratype respectively.

Comparative material examined: *Lathrobium* (s. str.) *crassipes* Mulsant et Rey, 1877: 1 ♂, Apfelb. bl. Utovo/ *Lathrobium crassipes*, Dalm. [Dalmatia — Balkan Peninsula].

DESCRIPTION. Measurements: TL=7–7.5; FB=3.9–4.1; HL=1.06–1.12; HW=0.99–1.08; PL=1.204–1.274; PW=1.01–1.11; EL=1.50–1.57; EW=1.25–1.30. Ratios: HL : HW = 1.04–1.07; PL : PW = 1.15–1.19; EL : EW = 1.20.

Body black; mouthparts and antennae brown; legs yellowish-brown. Forebody — Fig. 1.

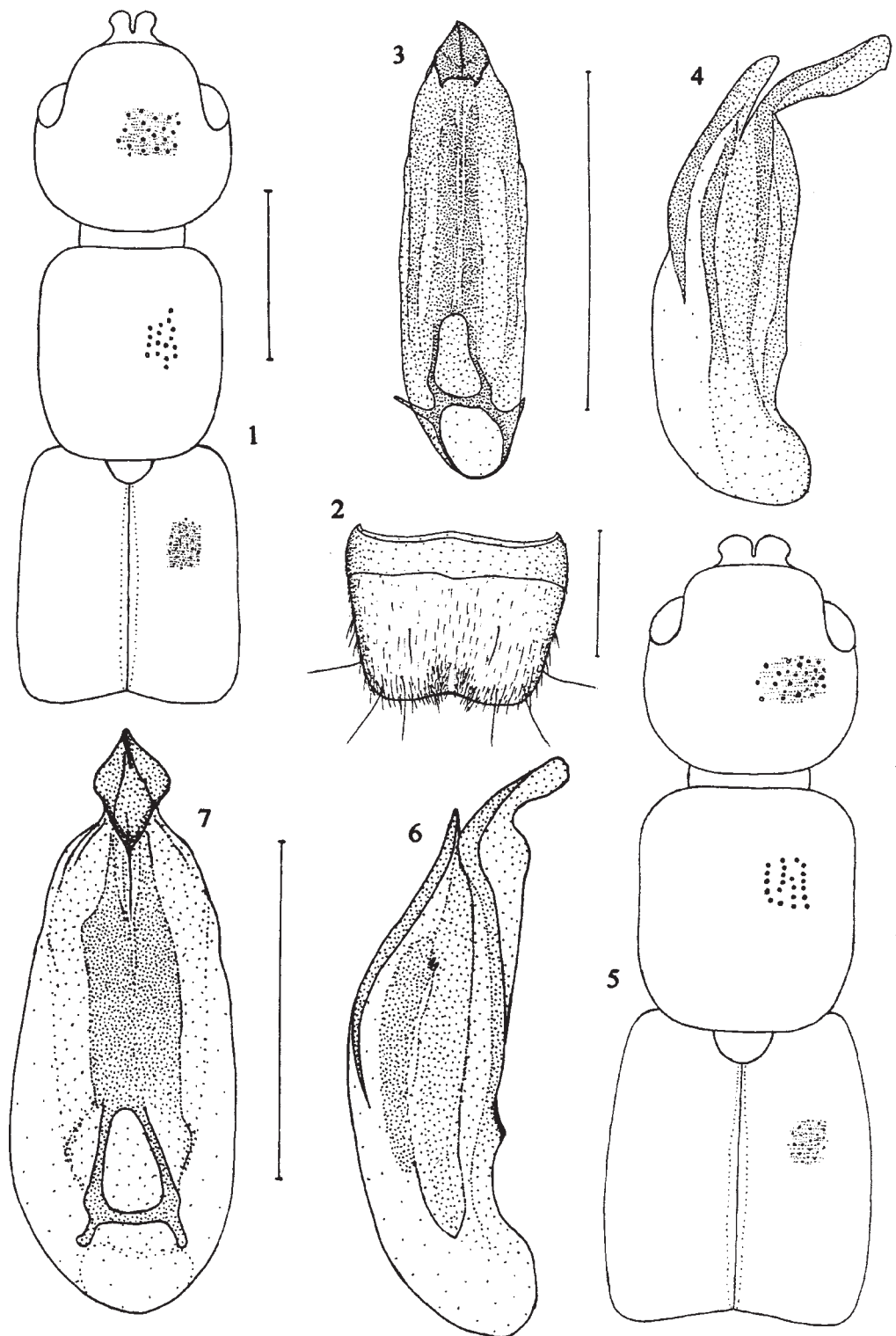
Head longer than wide; temples, behind small eyes, widened, 2.3–2.4 times longer than eyes, rounded, without distinct angles. Upper surface with well distinct (x25) transversal microsculpture and coarse and sparse heterogeneous (smaller to larger) punctation. Antennomeres 3<sup>rd</sup>–10<sup>th</sup> not becoming wider towards the apex of antenna; antennomere 3<sup>rd</sup> almost as long as 2<sup>nd</sup>; antennomeres 6<sup>th</sup>–10<sup>th</sup> 1.5 times longer than wide.

Pronotum longer than wide, parallel-sided, almost as wide as head. Upper surface without distinct microsculpture, with large and coarse slightly heterogeneous (smaller to larger) punctation (interspaces about 1.5–3 times larger than maximal diameter of punctures). Median longitudinal impunctate band well distinct, its width about 2.5–4 times larger than maximal diameter of punctures.

Elytra longer than wide, slightly diverging backwards, slightly wider than pronotum and head. Surface with distinct (x50) microsculpture and fine dense punctation (interspaces about 1–2 times larger than diameter of punctures).

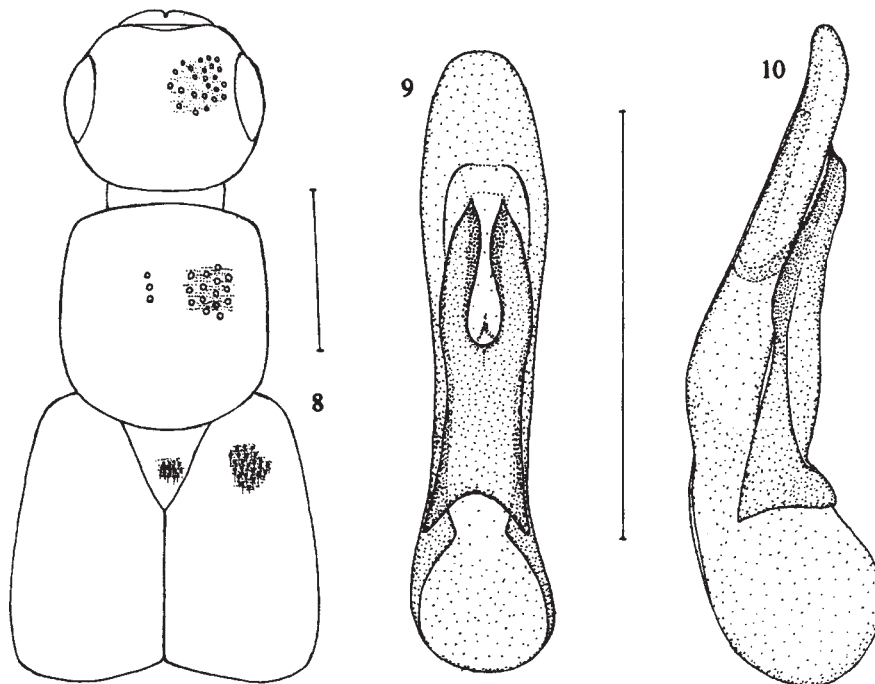
Abdomen almost as wide as elytra, slightly diverging backwards. Surface of tergites with well distinct (x25) dense microsculpture and very fine and dense punctation.

8<sup>th</sup> sternite of ♂ as in Fig. 2. Aedeagus as in Figs. 3, 4.



Figs. 1-7: 1-4: *Labtrobium sareptae*, sp.n. (holotype): 1 — forebody, 2 — 8th sternite of ♂, 3 — aedeagus in ventral view, 4 — the same in lateral view. 5-7: *L. crassipes*: 5 — forebody, 6 — aedeagus in lateral view, 7 — the same in ventral view. Scale bar: 1mm.

Рис. 1-7: 1-4: *Labtrobium sareptae*, sp.n. (голотип): 1 — передняя часть тела, 2 — 8-й стернит ♂, 3 — эдеагус (вентрально), 4 — то же, латерально. 5-7: *L. crassipes*: 5 — передняя часть тела, 6 — эдеагус (латерально), 7 — то же, вентрально. Масштаб 1 мм.



Figs. 8–10: *Philonthus velatipennis* (lectotype): 8 — forebody, 9 — aedeagus in ventral view, 10 — the same in lateral view. Scale bar: 1mm.

Рис. 8–10: *Philonthus velatipennis* (лектотип): 8 — передняя часть тела, 9 — эдеагус (вентрально), 10 — то же, латерально. Масштаб 1 мм.

**COMPARISON.** Apparently, the new species is closely related to *Lathrobium* (s.str.) *crassipes* Muls. et Rey, 1877. It differs from the latter in the slightly smaller body, monochrome black elytra, in the shape of punctation of the forebody (Figs. 1, 5), and in the shape of aedeagus (Figs. 3, 4, 6, 7).

**ETYMOLOGY.** The species name “*sareptae*” refers to the geographical name “Sarepta” (former name of the Krasnoarmeysk — southern part of the city Volgograd).

*Philonthus velatipennis* Solsky, 1869

*Philonthus velatipennis*: Solsky, 1869: 461; Coiffait, 1974: 210. Type material examined: Lectotype (designated here): 1 ♂, Astrachan [Astrakhan', Russia]/ *Philonthus velatipennis mihi* [both labels pink]/ Lectotypus ♂ *Philonthus velatipennis* Sols., K. Grebennikov des., 2000; paralectotype: 1 ♂, same data as in lectotype, but marked as paralectotype respectively.

**LECTOTYPE DESIGNATION.** Both examined specimens are practically identical in the external characters (Fig. 8) and aedeagus shape (Figs. 9, 10). A revision of type material revealed that the most recent description by Coiffait [1974] is correct. To fix the identity of the species a lectotype is here designated.

*Heterothops tenuiventris* Kirschenblatt, 1937

Fig. 23–26.

*Heterothops tenuiventris*: Kirschenblatt, 1937: 181. Type material examined. Lectotype (designated here): 1 ♂, [North-western Kazakhstan, North-West of the Gur'ev Area] Nizhny [lower] Ushtagan, 16. IV. 1933, [leg.] Dobrinskaya/ *Heterothops tenuiventris* sp. n. [handwriting] Kirschenblatt dt./

Lectotypus *Heterothops tenuiventris* Kirsch., K. Grebennikov det., 2000; paralectotypes: 1 ♂, 1 ♀, Nizhny Ushtagan, 16. IV. 1933, [leg.] Dobrinskaya/ Paralectotypus *Heterothops tenuiventris* Kirsch., K. Grebennikov det., 2000; 2 ♀, Nizhny Ushtagan, 11. III. 1933, [leg.] Dobrinskaya/ Paralectotypus *Heterothops tenuiventris* Kirsch., K. Grebennikov det., 2000.

Additional material examined. **Russia, Volgograd Area:** 1 ♂, upper town Buzinovka, 21.V.1938, leg. Mamontov; 1 ♂, city Kotel'nikovo, 20.XI.1935, leg. leg. Kolpakova; **Altay Province:** 2 ♂, Kulunda [about 250 km W of city Barnaul].

Being published in 1937 in the obscure local journal focusing on parasitology, a description of *H. tenuiventris* was practically unavailable for specialists. Besides, the description itself is very short, focusing on the few external characters. Therefore, *H. tenuiventris* needs to be redescribed.

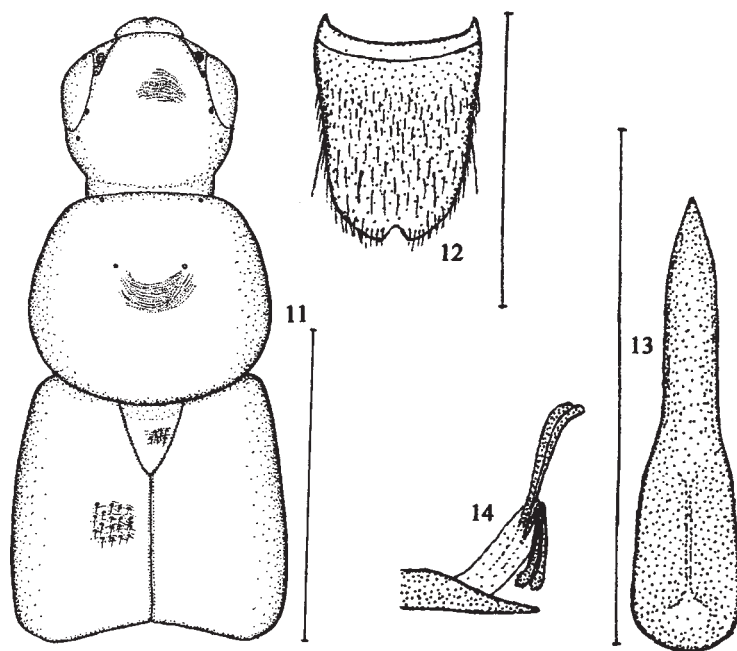
Examination of the type and additional material gives me an opportunity to present the first illustration of some external characters (Figs. 11, 12) and aedeagus (Figs. 13, 14) of *H. tenuiventris* and to add more details to the short original description by Kirschenblatt [1937].

**REDESCRIPTION.** Measurements: TL=4.2–4.7; FB=1.8–2.1; HW=0.53–0.59; HL=0.49–0.52; PW=0.73–0.77; PL=0.63–0.66; EW=0.84–0.87; EL=0.85–0.92. Ratios: HW : HL = 1.06–1.14; PW : PL = 1.15–1.20; EW : EL = 1.00–1.05.

Brown, head black; elytra, legs, antennae, mouth parts and the apex of abdomen yellow-brown. Forebody — Fig. 11.

Head wider than long; temples convex, eyes 1.2 times longer than temples. Upper surface with the well distinct (x25) transversal microsculpture, without punctation. Antennomere 3<sup>rd</sup> slightly shorter and narrower than 2<sup>nd</sup>, 2 times longer than wide; 7<sup>th</sup>–10<sup>th</sup> slightly wider than long.

Pronotum wider than long, wider than head, converging anteriad, widest behind its middle, narrowest at the anterior



Figs. 11–14: *Heterothops tenuiventris* (lectotype): 11 — forebody, 12 — 8th sternite of ♂, 13 — aedeagus in ventral view, 14 — internal sac of the aedeagus, lateral view. Scale bar: 1mm.

Рис. 11–14: *Heterothops tenuiventris* (лектотип): 11 — передняя часть тела, 12 — 8-й стернит ♂, 13 — эдеагус (вентрально), 14 — внутренний мешок эдеагуса, латерально. Масштаб 1 мм.

margin. Dorsal rows with 2 punctures. Upper surface with the well distinct (x25) transversal microsculpture, without punctation.

Scutellum densely punctate, with transversal microsculpture.

Elytra almost as long as wide, slightly diverging backwards, wider than pronotum and head. Punctuation fine, sparser than on scutellum, interspaces with fine, but distinct (x25) microsculpture.

Abdomen converging backwards from segment 4<sup>th</sup> (3<sup>rd</sup> visible). Punctuation of tergites (especially of the basal ones) dense, interspaces with distinct (x50) transversal microsculpture, which is finer than on pronotum but coarser than on elytra. Pubescence as on elytra, dense, brown.

8<sup>th</sup> sternite of ♂ as in Fig. 12. Aedeagus as in Figs. 13, 14.

COMPARISON. Apparently, *Heterothops tenuiventris* is closely related to *H. conviva* Smetana, 1967 and *H. jureceki* Stourač, 2000. According to the original description of *H. conviva* by Smetana, [1967], *H. tenuiventris* differs from the latter in the darker coloration (especially of elytra) and in the relatively narrower abdomen. From *H. jureceki* (according to the original description by Stourač [2000] *H. tenuiventris* differs in the shape of the internal sac of the aedeagus, in the relatively larger eyes, and in the deeper apical emargination of the 8<sup>th</sup> sternite of male.

LECTOTYPE DESIGNATION. In the original description by Kirschenblatt [1937], only the type locality (lower Ushtagan) was mentioned, but the number of type specimens and their sex were not indicated.

In the collection of Kirschenblatt in ZISP, a clearly separated series of specimens of *H. tenuiventris* from the lower Ushtagan was found. But only one male of these specimens, considered here to be syntypes, has the original identificational type label (in Kirschenblatt's handwriting: "Heterothops tenuiventris sp. n. Kirschenblatt dt."). Thus, this specimen is designated here as lectotype.

ACKNOWLEDGEMENTS. I am grateful to Prof. G. S. Medvedev, curator of Coleoptera in ZISP for the loan of specimens this paper is based on. I am thankful to A. Yu. Solodovnikov (Coleoptera Department, ZISP) for numerous critical comments on this manuscript. I am also grateful to my scientific supervisor A. A. Stekol'nikov (Department of Entomology, St.-Petersburg State University), for his advisory help. This project is finished under the financial support of the Russian Foundation for Basic Research (programs "Biodiversity", project No. 13/2000 and "Leading scientific schools", project No. 00-15-97934) and the Ministry of Education of the Russian Federation (program "Universities of Russia — basic researches", project No 015.07.01.75).

## References

- Coiffait, H. 1974a. Coléoptères Staphylinidés de la Région Paléartique occidentale. II. Sous famille Staphylininae. Tribus Philonthini et Staphylinini. Toulouse. 593 p.
- Coiffait, H. 1974b. Coléoptères Staphylinidés de la Région Paléartique occidentale. IV. Sous famille Paederinae. Tribu Paederini I (Paederi, Lathrobii). Toulouse. 440 p.
- Coiffait, H. 1984. Coléoptères Staphylinidés de la Région Paléartique occidentale. V. Sous famille Paederinae. Tribu Paederini II. Sous famille Euaesthetinae. Toulouse. 424 p.
- Grebennikov, K. A. 2001a. [Fauna and ecological features of staphylinids (Coleoptera, Staphylinidae) of the lower Volga region. Subfamily Staphylininae] // Entomol. Obozrenie (in press) [in Russian, with English summary]
- Grebennikov, K. A. 2001b. [Fauna and ecological features of staphylinids (Coleoptera, Staphylinidae) of the lower Volga region. Subfamilies Oxyporinae, Euaesthetinae, Steninae, Paederinae, Xantholininae] // Vestnik Sankt-Peterburgskogo Universiteta. Ser. Biol. (in press). [in Russian, with English summary]
- Kirschenblatt, Ya. D. 1937. [Staphylinid-beetles in the nests of *Cytellus pygmaeus* Pall.] // Vestnik Mikrobiologii, Epidemiologii i Parazitologii (Saratov). Vol.16. No.1–2. P.171–185 [in Russian, with German summary].
- Smetana A., 1967. Ergebnisse der Zoologischen Forschungen der Dr. Z. Kaszab in der Mongolei. 86. Staphylinidae II. Unterfamilien Paederinae, Xantholininae and Staphylininae (Coleoptera) // Acta entomol. bohemoslov. Vol.64. S.195–218.
- Solsky S. M., 1869. Matériaux pour servir à l'étude des insectes de la Russie // Bull. Soc. Nat. Mosc. T.42. P.459–467.
- Stourač P., 2000. Drei neue paläarktische Arten der Gattung *Heterothops* (Coleoptera: Staphylinidae) // Folia heyrovskiana. Vol.8. No.1. S.67–72.