

**NEW DATA ON GROUND-BEETLES SUBGENUS *POGONOPHORUS*
LATREILLE, 1802 FROM MOUNTAINS OF MIDDLE ASIA (COLEOPTERA:
CARABIDAE: NEBRIINI: *LEISTUS* FRÖLICH, 1799)**

I. I. Kabak

*All-Russian Institute of Plant Protection, Podbelskogo 3, St. Petersburg – Pushkin
189620, Russia. E-mail: ilkabak@yandex.ru*

Summary. A new species, *Leistus (Pogonophorus) putchkovi* sp. n., is described from eastern part of the Zeravshan Mt. R., N Tajikistan. The new species is related to both *L. (Pogonophorus) zarudnyi* Semenov-Tian-Shanskij et Znojko, 1928 and *L. (Pogonophorus) sogdianus* Putchkov et Dolin, 1998. It easily differs from all known Middle Asian species of the subgenus in the shape of pronotum with subrectilinear in basal half lateral margins and obtusangular, blunt at apices posterior angles. Additionally, *L. (Pogonophorus) ferganensis karabaltaensis* Kabak et Putchkov, 2002 is recorded for the first time from Kazakhstan (Shungir Valley in the western part of the Kyrgyz Ala-Too Mt. R., SSW of Lugovoye Vill., Jambyl Region).

Key words: *Leistus*, taxonomy, new species, new record, Tajikistan, Kazakhstan.

И. И. Кабак. Новые данные по жужелицам подрода *Pogonophorus* Latreille, 1802 (род *Leistus* Frölich, 1799) из гор Средней Азии // Дальневосточный энтомолог. 2026. N 559. С. 21-26.

Резюме. Новый вид жужелиц, *Leistus (Pogonophorus) putchkovi* sp. n., описан из восточной части Зеравшанского хр. в Северном Таджикистане. Новый вид близок к *L. (Pogonophorus) zarudnyi* Semenov-Tian-Shanskij et Znojko, 1928 и *L. (Pogonophorus) sogdianus* Putchkov et Dolin, 1998. Описываемый вид легко отличается от всех среднеазиатских представителей подрода формой переднеспинки, бока которой почти прямолинейные в базальной половине, а задние углы – тупоугольные, притупленные на вершине. Кроме того, *L. (Pogonophorus) ferganensis karabaltaensis* Kabak et Putchkov, 2002 впервые указан с территории Казахстана (долина р. Шунгир в западной части Киргизского хребта к юго-юго-западу от с. Луговое Жамбылской области).

INTRODUCTION

The Carabidae fauna of high mountains of Middle Asia remains poorly known. One of the unsatisfactory investigated areas is the eastern part of the Zeravshan Mountain range (Tajikistan). The description of one new species of the Holarctic genus *Leistus* Frölich, 1799 from this region is presented in this paper. Additionally, the first record of *L. (Pogonophorus) ferganensis karabaltaensis* Kabak et Putshkov, 2002 from Kazakhstan is discussed.

MATERIAL AND METHODS

The study is based on the examination of two specimens of the subgenus *Pogonophorus* Latreille, 1802 (genus *Leistus*), found during collection trip of 2025 in mountains of Middle Asia (Kazakhstan and Tajikistan).

The following measurements were taken: body length (BL) from the anterior margin of the labrum to the elytral apex; head width (HW) across the eyes; frons width (FW) as minimum distance between eyes; pronotal length (PL) along median line; elytral length (EL) from the apex of the scutellum to the apex of the elytra; width of the pronotum (PW) and elytra (EW) at their broadest point; width of the pronotal base (PB) between hind angles; width of the elytral base (EB) between humeral teeth; length of the antenna (AL) from the base of the scapus to the tip of last antennomere; length of the eye (EyL) in dorsal view; length of the antennomeres 3 and 5 (3A and 5A) along their longitudinal axis from basal constriction to the apical margin.

Holotype of the new species is preserved in the Zoological Institute of Russian Academy of Science (ZIN, St.-Petersbourg, Russia, Dr. B. Kataev), the specimen of *L. ferganensis karabaltaensis* – in the working collection of I. Belousov and I. Kabak (CBK, St-Petersburg, Russia).

DESCRIPTION OF A NEW SPECIES

Family Carabidae Latreille, 1802

Subfamily Nebriinae Laporte, 1834

Tribe Nebriini Laporte, 1834

Genus *Leistus* Frölich, 1799

Subgenus *Pogonophorus* Latreille, 1802

***Leistus (Pogonophorus) putchkovi* Kabak, sp. n.**

<https://zoobank.org/NomenclaturalActs/400e155b-3101-4df6-b980-424275bfe481>

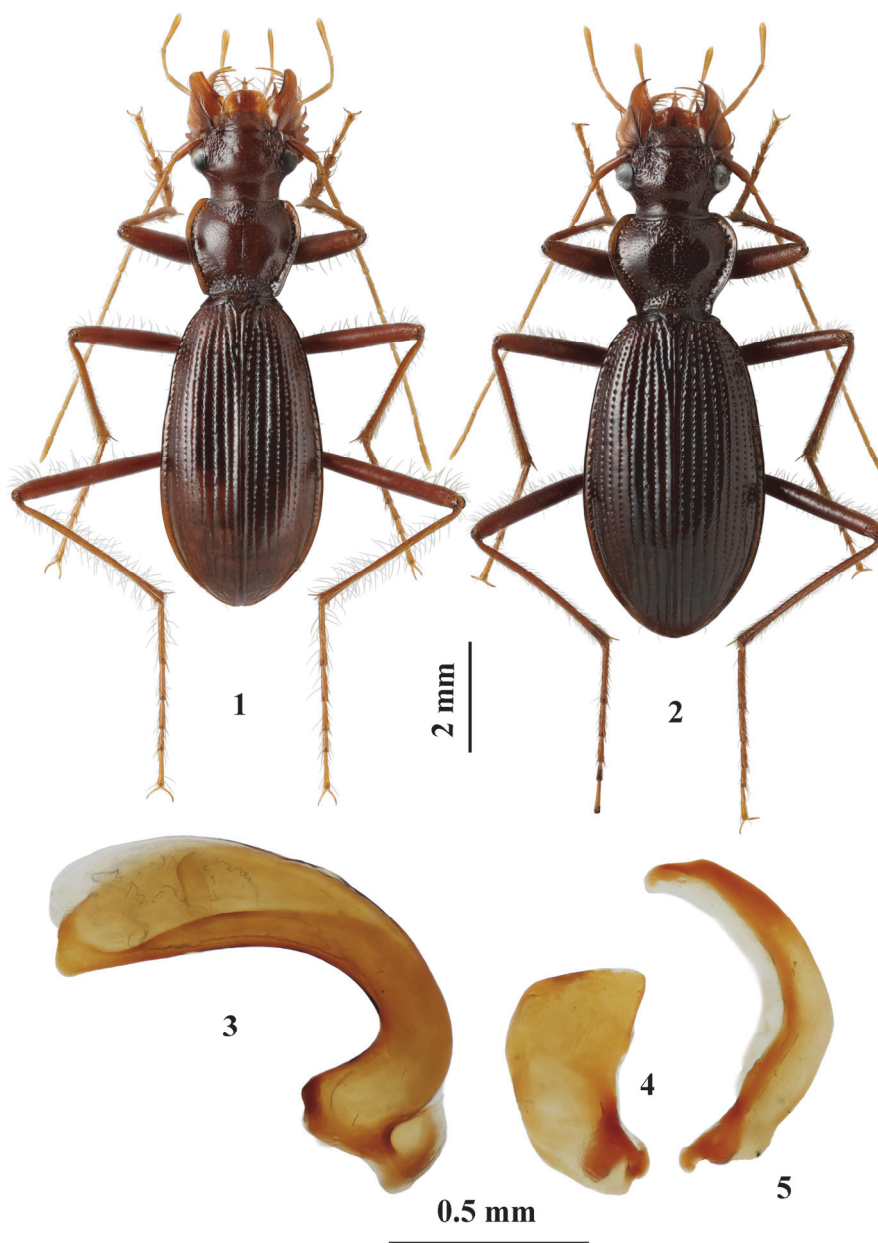
Figs 1, 3–5

MATERIAL EXAMINED. Holotype – ♂, **Tajikistan:** Zeravshan Mt. R., sources of Tagobi-Dzhuft Riv., SSW of Rarz Vill., h=3171 m, 39°16'53"N / 68°40'51"E, 14.VI 2025, I.I. Kabak leg. (ZIN).

DESCRIPTION. Small-sized species (within its species group) with subtle habitus and long appendages (Fig. 1), body length 8.5 mm, apterous. Upper-side dark testaceous, slightly shining; mouthparts, palpi, antennae, tibiae and trarsi paler, yellowish-brown.

Head comparatively large, PW/HW = 1.09, frons convex, HW/FW = 1.36, delimited posteriorly by sharp transvers impression, micropunctured and shallowly rugulose medially, irregularly striate and deeply punctate on sides. Frontal foveae wide and superficial, surpassing level of the eyes mid-length. Clypeus rugulose along anterior margin and on sides. Eyes markedly convex, 3A/EyL = 1.47. External margin of mandibles deeply sinuate. Antennae very long, AL/EL = 1.24, surpassing the level of posterior third of elytra; 5A/3A = 1.20. Mentum with three setae in the middle part of basal half. Submentum with one pair of antero-lateral setae. Gular carina arched, bearing seven stout setae.

Pronotum proportionally very narrow, PW/PL = 1.19, PW/PB = 1.54, broadest distinctly before mid-length. Lateral margins moderately rounded anteriorly, subrectilinear behind middle, without sinuation just before posterior angles. The latter obtusangular, blunt at apices.



Figs 1–5. *Leistus (Pogonophorus)* spp.: 1, 3–5, *Leistus (Pogonophorus) putchkovi* sp. n., holotype male: 1 – habitus, dorsal view; 3 – median lobe of aedeagus; 4 – left paramera; 5 – right paramera; 2 – *Leistus (Pogonophorus) ferganensis karabaltaensis* Kabak et Putshkov, 2002, female from the Shungir Valley, habitus, dorsal view.

Anterior margin convex in the middle, its border sharp laterally, widely interrupted medially; anterior angles rounded, slightly protruding. Posterior margin of pronotum concave, slightly oblique just near posterior angles, basal border reduced. Sides of pronotum moderately explanate and reflexed throughout. Basal foveae small and deep. Anterior transverse impression vague, posterior one deep and rather sharp. Disk convex, superficially rugulose and punctate medially, roughly and densely punctured anteriorly and posteriorly, punctures along margins of pronotum sparse and moderately deep. Median line thin, slightly impressed, not surpassing both anterior and posterior transverse impressions.

Elytra long and very narrow, broadest at posterior third, $EL/EW = 1.83$, $EW/EB = 1.66$, $EL/PL = 3.13$, $EW/PW = 1.43$. Intervals 2 to 4 of each elytron slightly impressed on middle part of disc. Shoulders narrow, humeral denticles acute and attenuate. Basal border oblique, weakly arched. Sides widely rounded posteriorly, subrectilinear in anterior half, convexity behind humeral denticles long and feebly salient. Marginal bead narrow, especially near humeri. Elytral striae deep, roughly punctate till apical slope; intervals convex, interval 3 bearing three setae.

Microsculpture of upper-side well-developed, composed of small isodiametric meshes.

Prosternum roughly punctured, less densely in lateral parts. Ventrites 1–3, meso- and metasternum distinctly punctate on sides. Ventrites 3–5 with one pair of setae along posterior margin, anal sternite bisetose (male).

Legs slender, very long, posterior tarsi 1.18 times shorter than posterior tibiae. Posterior face of profemora, anterior face of meso- and metafemora, metatibia and metatarsi covered with very long and erect setae, pubescence of pro- and mesotibiae and pro- and mesotarsi short and oblique.

Median lobe of aedeagus (Fig. 3) small, of usual shape for the *relictus*-species group, its apical margin slightly incised. Paramerae – see Figs 4–5.

Female unknown.

COMPARATIVE DIAGNOSIS. *Leistus putchkovi* **sp. n.** belongs to the subgenus *Pogonophorus* Latreille, 1802 (Perrault, 1980, 1982), the *L. relictus* Semenov, 1900 species group (= *Chaetoleistus* Semenov, 1904). This group is characterized by the narrow elytra, very long pubescence of the femora, metatibiae and metatarsi, and by the incised apical margin of the aedeagus.

Among the all known Middle Asian members of the subgenus *Pogonophorus*, *L. putchkovi* **sp. n.** is unique in having obtusangular, blunt at apices basal angles of the pronotum, while they are sharp and directed backward and/or outward in other species. Besides, lateral margins of the pronotum in the new species are subrectilinear in basal half (vs. distinctly sinuate in others).

The new taxon seems to be most closely related to *L. (Pogonophorus) zarudnyi* Semenov-Tian-Shanskij et Znojko, 1928 (Semenov-Tian-Shanskij & Znojko, 1928; Kabak, 1997). Both species differ from all Middle Asian consubgenera in the shape and proportions of the elytra: the elytral lateral margins markedly and almost rectilinearly convergent toward narrow base, their convexity behind humeral denticles is slightly prominent. *Leistus putchkovi* **sp. n.** differs from *L. zarudnyi*, among above mentioned characters, in smaller body size (8.5 mm vs. minimum 8.6 mm in counterpart), larger eyes ($3A/EyL = 1.24$ vs. min. 1.28 in *L. zarudnyi*), less explanate lateral margins of the pronotum, short anterior angles of the latter, less distinctly incised apical margin of aedeagus and its shorter apical lamella.

The new species is distinct from similar *L. (Pogonophorus) sogdianus* Putchkov et Dolin, 1998 in the depression on the disc of each elytron, and the slightly shorter apical lamella of the aedeagus.



Fig. 6. Biotope in the type locality of *Leistus (Pogonophorus) putchkovi* sp. n.

DISTRIBUTION. The new subspecies is only known from the type locality: sources of the Tagobi-Dzhuft River in the eastern part of the Zerafshan Mountain range, SSW of the Rarz Village (Sughd Region, Tajikistan). The area of *L. putchkovi* **sp. n.** is situated to the South of that of *L. zarudnyi* (distributed on eastern part of the Turkestan Mountain range) and to the East of type locality of *L. sogdianus* (described from the western part of the Zerafshan Mountain Range).

HABITAT. The species was collected in scree on the elevation of 3171 m (Fig. 6).

ETYMOLOGY. The new species is named in the memory of my late friend, Dr. A.V. Putchkov (Kiev, Ukraine), who made an important contribution to the knowledge of *Leistus* of Middle Asia.

NEW RECORD

Leistus (Pogonophorus) ferganensis karabaltaensis Kabak et Putchkov, 2002

Fig. 2

MATERIAL EXAMINED. **Kazakhstan:** Kyrgyz Ala-Too Mt. R., right source of Shungir Riv., SSW of Lugovoy Vill., 2073 m, 42°43'05"N / 72°36'31"E, 7.06.2025, 1 ♀, I.I. Kabak, A.M. Shapovalov leg. (CBK).

SHORT REDESCRIPTION. Morphometric characters of the specimen from the Shungir Valley: body length 8.6 mm. PW/HW = 1.16, HW/FW = 1.37, 3A/EyL = 1.18, AL/EL = 1.17, 5A/3A = 1.38, PW/PL = 1.37, PW/PB = 1.79, EL/EW = 1.73, EW/EB = 1.95, EL/PL = 3.24, EW/PW = 1.37.

Ventral side: mentum with three setae in the middle part of basal half and one pair of posterolateral setae. Submentum with two pairs of anterolateral setae. Gular carina arched, bearing eight setae. Ventrites 3–5 with 4–9 setae on each side, anal sternite quadrisetose (female).

NOTE. In all main external characters, the specimen studied is similar to the specimens of the type series, except for eyes proportionally a little smaller ($PW/HW = 1.16$ vs. min. 1.17 in types, $HW/FW = 1.37$ vs. min. 1.41 in counterparts), elytra longer ($EL/EW = 1.73$ vs. max. 1.66, $EL/PL = 3.24$ vs. max. 3.01 in type specimens). However, insufficient material from one of the localities doesn't allow to evaluate the taxonomic significance of this difference, it seems to reflect the infrasubspecific variability.

HABITATS. The single specimen was collected in humid biotope at 2073 m a.s.l.

DISTRIBUTION. Upon its description, *L. ferganensis karabaltaensis* was known only from the type locality – the Karabalta Valley in the northern slopes of the central part of the Kyrgyz Ala-Too Range (N Kyrgyzstan). New finding of *L. ferganensis karabaltaensis* (Shungir Valley, SSW of Lugovoy Village, Jambyl Region, Southern Kazakhstan) is situated in the western part of the same mountain range, around 100 km westward from the type locality. This is the first record of the species from the territory of Kazakhstan.

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