SHORT COMMUNICATIONS

On The Taxonomy of the Weevil Genus *Parameira* (Coleoptera, Curculionidae, Entiminae)

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Abstract—*Parameira baidarica* sp. n., closely related to *P. taurica* Magn. et Os., is described. A key to all species, and a revision of the Ukrainian fauna of the genus *Parameira* are given.

The genus *Parameira* Seidl. comprises seven species; among these, six inhabit southern and southeastern parts of Europe, Asia Minor, and Transcaucasia; *Parameira gebleri* Fst. is represented by a parthogenetic form distributed in southern Siberia as far in the east as Transbaikalia. Species that are closely related to *P. setosa* Seidl. clearly differ from *P. rudis* Boh., they are separated in a new subgenus. Examination of the holotype of *P. taurica* and an additional material has revealed that the second distinct species also inhabits the Crimea; *P. baidarica* sp. n. is described below.

The type species of the genus is designated here, since this has been made neither in the original description (Seidlitz, 1868), nor in the subsequent publications (Reitter, 1912; Reitter, 1916; Magnano and Osella, 1971; Alonso-Zarazaga and Lyal, 1999).

Parameira clearly differs from other Palaearctic genera of the tribe Otiorhynchini in the following morphological characters adapted to inhabiting soil: epistoma distinct, glabrous, with sharp cariniform margination; cryptic pubescence very dense, formed by wide scales usually overlying one another to conceal integument and by strongly lobiform widened setae bordering margins of pronotum as a fringe. Such a type of the pubescence is also characteristic of other geophilous weevils, e.g., species of the genera Dichotrachelus Strl. (Molytinae), Trachyphloeus Germ. (Entiminae), etc.; it apparently serves for adhesion of soil particles to the body and makes the beetles nearly invisible on the soil surface. In the structure of the apical part of the rostrum, species of *Parameira* are similar to representatives of the subgenera Clypeorhynchus Yun. et. Arz. and Eunihus Rtt. of the genus Otiorhynchus Germ.

Genus PARAMEIRA Seidlitz, 1868

Type species *Stomodes rudis* Boheman, 1843, designated here.

Description. Rostrum transverse, nearly parallelsided, with pterygia not projecting or slightly projecting beyond its lateral contour; notum usually flat, uniformly narrowed from base to apex, occasionally with fine longitudinal furrow. Frons flat, situated in one plane with notum. Eyes small, strongly and nearly semi-spherically convex, entirely lying on sides of head. Antennal scape uniformly or sharply widened (more strongly in females than in males) toward apex. Flagellum thick, not widened toward apex, 2nd-7th segments distinctly wider than, or as wide as long. Pronotum elongate or transverse, with a row of narrow, upcurved or backward-pointing setae along basal margin. Elytra strongly elongate, parallel-sided. Humeral tubercles strongly beveled. Tibiae not widened apically. Third tarsal segment widely bilobed, claws free, sole surface with dense pale setae. Pubescence of dorsum dense, consisting of round or cordate, gray or brown scales and erect, lobiform widened setae; ventrites with hair-like or oval scales. Aedeagus heavily sclerotized, penis in the form of narrow, uniformly curved tube uniformly narrowing toward apex. Apex of penis strongly attenuate, tapered or rounded.

Subgenus *Lepidostomodes* subgen. n.

Type species *Parameira setosa* Seidlitz 1868.

Lepidostomodes differs from the nominotypical subgenus in the following characters: pronotum always distinctly wider than long, strongly convex at sides, with basal margination formed by dense fringe of long, lobiform setae pointing backwards; antennal scape sharply club-shaped widened toward apex; slender flagellum not widened toward apex, with rounded 2nd–7th segments about half as wide as scape at apex; body wider; humeral tubercles of elytra less strongly beveled; pubescence dense, grayish with indistinct reflection, consisting of cordate, apically tapered scales adjoining or overlying one another to conceal

integument. Head, except for epistoma, densely covered with wide scales and erect, recurved, lobiform widened setae arranged along lateral margin of notum and above eyes; antennal scape and tibiae with dense wide scales concealing integument and with erect setae; outer surface of tibial bases covered with tufts of erect, recurved, strongly lobiform widened scales. Ventrites with dense wide scales.

In addition to the type species, the subgenus includes *P. peritelina* Pes., *P. coronata* Strl., *P. taurica* Magn. et Os., *P. baidarica* sp. n., *P. gebleri* Fst., and *P. krueperi* Rtt. (?).

A Key to Subgenera and Species of the Genus Parameira

- 1(2). Pronotum slightly longer than wide, with a row of narrow, distinctly upcurved setae along basal margin. Antennal scape thick along entire length, uniformly widened (more strongly in females than in males) toward apex. Flagellum thick, not widened toward apex, with distinctly transverse 2nd-7th segments about 0.7 times as wide as scape at apex. Body narrower and more elongate. Humeral tubercles of elytra strongly beveled. Elytra uniformly covered with rounded, separate or weakly adjoining grayish scales with inconspicuous reflection. Temples nearly glabrous; vertex with fine, sparse hair-like scales; frons and dorsal side of rostrum as far as epistoma with dense, rounded or drop-shaped scales entirely concealing integument and with erect, lobiform widened, forward-curved setae arranged along lateral margin of notum and above eyes; antennal scape and tibiae with sparse long narrow scales not concealing integument and with erect setae: outer surface of tibial bases with fine, erect, lobiform widened scales weakly curved forwards and forming no tufts. Ventrites with short hair-like scales. Western Turkey, Georgia (Batumi) (new record). (Subgenus Parameira Seidlitz). (Figs. 1, 1, 3, 8; 2, 1, 2)
- 2(1). Pronotum always wider than long, with basal margin bordered with a row of more or less wide setae not upcurved but pointing backwards toward elytral base. Antennal scape sharply clubshaped widened toward apex. Flagellum slender, not widened toward apex, with rounded 2nd–7th segments about half as wide as scape at apex. Body wider. Humeral tubercles of elytra less

- 4(3). All intervals of elytra with rows of erect setae.
- 5(12). Outer apical angle of fore tibia distinctly beveled oblique.
- 7(6). Pit-shaped punctures on pronotal disc small, inconspicuous, partly covered with dense pubescence. Pronotum and elytra gray or grayish brown, setae on pronotal disc weakly raised. Dorsal side of rostrum without longitudinal furrow.
- 9(8). Body smaller, 3.1–4.25 mm long.
- 11(10). Body with narrow gray setae. Head elongate, length of temples 1.5 times longitudinal diameter

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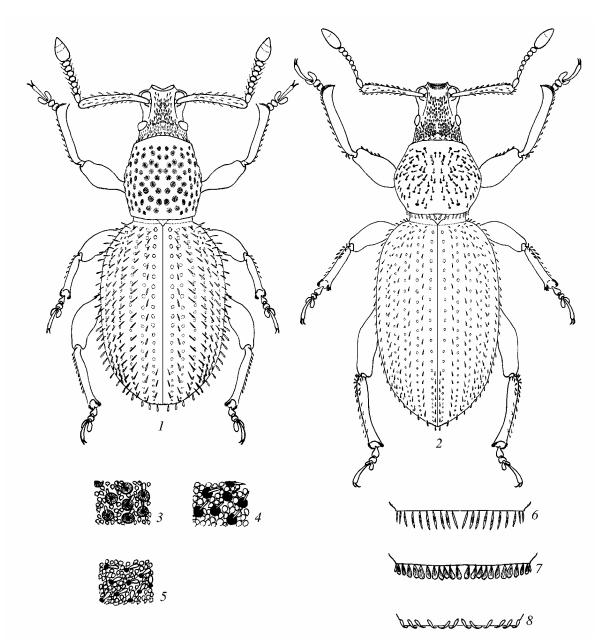


Fig. 1. (1, 2) Body of male of *Parameira*, dorsal view; (3–5) fragment of pubescence of pronotal disc; (6–8) pubescence of basal margin of pronotum; (1, 3, 8) *P.* (*Parameira*) rudis; (2, 4, 6) *P.* (*Lepidostomodes*) baidarica sp. n.; (5, 7) *P.* (*L*). taurica.

Parameira (**Lepidostomodes**) **setosa** Seidlitz, 1868 (Figs. 2, 5–7)

Magnano, Osella, 1971 : 244–247; Yunakov, 1999 : 9.—*Parameira rudis* (non Boheman, 1843) : Korotyaev, 1992 : 816.

Material. Ukraine: Odessa Prov.: 20 \circlearrowleft , 42 \circlearrowleft , 80 km N Odessa, Viktorovka Railway Station, sandy woodless slopes with dense tussock cereals, 5.IX–4.X.1999 (A. Gontarenko); 1 \circlearrowleft , 2 \circlearrowleft , near Sergeevka Vill., 17.VII.1994 (Yu.M. Marusik); 1 \circlearrowleft , Kotlovina Vill., 22.VI.2000 (A.A. Poiras); 2 \circlearrowleft , Chervonnyi Yar,

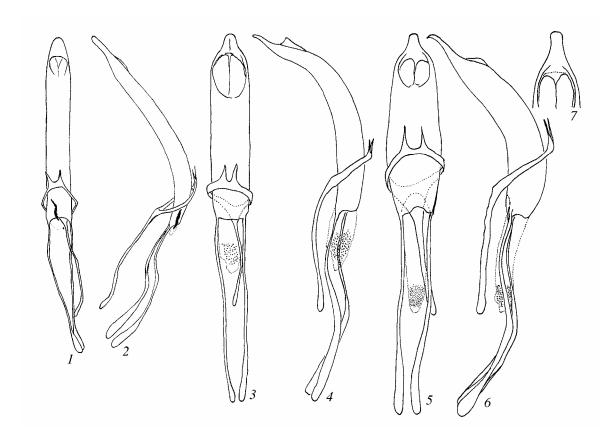


Fig. 2. Aedeagus of *Parameira*, dorsal (1, 3, 5) and lateral (2, 4, 6) view; (7) apex of aedeagus, dorsal view; (1, 2) *P.* (*Parameira*) rudis; (3, 4) *P.* (*Lepidostomodes*) baidarica sp. n.; (5-7) *P.* (*L.*) setosa.

near Lake Kitai, 19.VI.1991 (Derzhanskii); Sumy Prov.: 6 ♀, Lebedinskii Dist., Mikhailovskaya steppe, 16.VIII.1949 (S.I. Medvedev, D.S. Shapiro).

Ecology. This is a meadow-steppe, xero-mesophilous species, cryptobiont. Adults live in cereal sod. The species is phylophagous, feeding on grasses, usually on species of the family Roaseae.

Distribution. Ukraine: Odessa, Nikolaev, and Sumy Provinces; Bulgaria, Romania (Magnano and Osella, 1971); Moldova (Korotyaev, 1992). The species was described from Dobrudja. A western Pontir species.

Parameira (*Lepidostomodes*) *taurica* Magnano et Osella 1971 (Figs. 1, 4, 5, 7; 3, 1; 4, 1)

Magnano, Osella, 1971: 252-254.

Material. Crimea: Ai-Petri Yaila Mt. Range: 2 ♂, Bizyuka Mt., 800 m, 26.V.2001 (N.N. Yunakov); Yaltinskaya Yaila Mt. Range: 1 ♂, Lapata Mt., 1200 m a.s.l., 30.V.1996 (I.A. Solodovnikov); 20 ♂, 20 ♀, Kuchuk-Uzenbash-Bogaz Pass, 1 km SE Olmeskhyr Mt., 1300 m a.s.l., 29.V, 2 and 4.VI and 9.VI.2001 (N.N. Yunakov); 1 ♂, Yaprakhly Gel

locality, 1 km NE of Kuchuk-Uzenbash-Bogaz Pass, 1300 m a.s.l., 11.VI.2001 (N.N. Yunakov); 2 ♂, 2 ♀, Biyuk-Uzenbash-Bogaz Pass, 11.VI.2001 (N.N. Yunakov); 1 ♂, 1 ♀, between Stilya-Bogaz Pass and Dzhady-Burun Mt., 1400 m a.s.l., 14.VI.2001 (N.N. Yunakov); Nikitskaya Yaila Mt. Range: 6 ♂, 7 ♀, 1 km SSE Avunda Mt., 1400 m, 18 and 19.XI.2000 (N.N. Yunakov); 1 ♂, Avunda Mt., 1400 m a.s.l., 3. VI 2001 (N.N. Yunakov); 1 ♂, SSE of slope of Ai-Liya-Syrym Mt., 1200 m a.s.l., 12.VI.2001 (N.N. Yunakov).

The species has been described from a male provided with the inaccurate label "Jalta, 1910, Kulzer leg.," which indicates that this species inhabits the coastal zone of the southern part of the Crimea. Actually, *P. taurica* lives at considerable altitudes higher than forests. This is a mountain-steppe, xero-mesophilous species, cryptobiont. Adults occur since April till November, live under stones, in cereal sod, occasionally form large accumulations. This is a phylophagous species feeding on grasses, usually on *Allium* and *Potentilla*; endemic to the Mountain Crimea (The main ridge as far in the east as the Babugan-Yaila Range).

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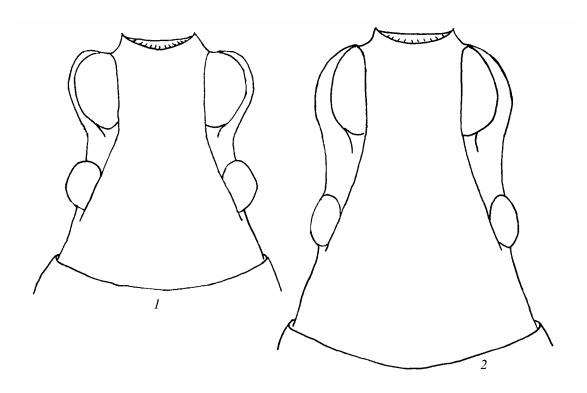


Fig. 3. Head of Parameira, dorsal view: (1) P. (Lepidostomodes) taurica, (2) P. (L). baidarica sp. n.

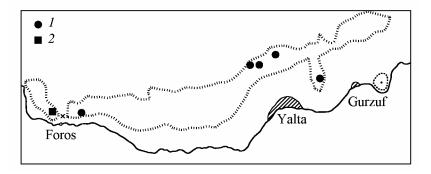


Fig. 4. Distribution of species of Parameira in the Crimea: (1) P. (Lepidostomodes) taurica; (2) P. (L). baidarica sp. n.

Parameira (Lepidostomodes) baidarica sp. n. (Figs. 1, 2, 4, 6; 2, 3, 4; 3, 2; 4, 2)

Material. Holotype, ♂: Crimea, Baidarskaya Yaila Mt. Range, Chelebi-Yaurn-Beli Mt., 650 m, mountain steppe, 25.V.2001 (N.N. Yunakov). Paratypes: 5 ♂, 8 ♀ collected together with the holotype under stones on roots and bulbs of *Allium* sp.; 1 ♂, Balaklava, 24.X.1936 (L.V. Arnoldi).

Description. Rostrum slightly wider than long, its length 0.85–0.87 times maximum width. Pterygia large, distinctly longer than longitudinal diameter of eye, clearly projecting beyond lateral contour of rostrum. Dorsal side of rostrum flat, distinctly uniformly narrowing from base to middle, then parallel-sided,

situated in one plane with frons. Preepistomal area of notum glabrous; epistoma strongly elevated and bordered with semicircular sharp carina; epistomal angles weakly, but clearly projecting beyond anterior margin of rostrum. Temples long, their length nearly 1.5 times longitudinal diameter of eye. Frons and vertex flat in longitudinal direction, weakly convex in transverse one, situated in one plane with dorsal side of rostrum. Eyes small, strongly, nearly semi-spherically convex, situated on sides of head, shifted forwards.

Antennal scape uniformly curved and thickened toward apex. Flagellum distinctly more slender than scape; 1st and 2nd segments 1.6 times as long as wide; 1st segment fusiform, more strongly narrowed at base than at apex; 2nd one weakly elongate, uniformly widened toward apex; 3rd-7th segments in female nearly spherical, 7th segment in male slightly wider than long.

Body length 3.5–4.25 mm, width 1.35–1.75 mm; 3 .5 mm and 1.35 mm, respectively, in holotype.

Differential diagnosis. The species is closely related to *P. taurica* Magn. et Os. and clearly differs from it in the following characters: erect setae on body narrower; head more elongate, with long temples 1.5 times as long as longitudinal diameter of eye; pterygia not projecting beyond lateral contour of rostrum; antennal scape more slender, weakly curved, uniformly widened toward apex; fore tibia of male strongly curved in apical third, with deeper emargination on inner surface; and claw-segment of tarsi narrower.

Ecology. This is a rare, mountain-steppe, xero-mesophilous species, cryptobiont. Adults live on stony looses, under stones and in cereal sod. The species has been found on bulbs of *Allium* sp.

Distribution. The species is allopatric in relation to *P. taurica*, inhabits the western end of the Main ridge; it has been found near Balaklava and in the Baidarskaya Yaila Mt. Range. The species is endemic to the Mountain Crimea.

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