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**Two new species of the
Bruchidius halodendri group from Central Asia
(Coleoptera: Bruchidae: Bruchinae)**

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Abstract: Two new species of the *Bruchidius halodendri* group are described new to science: *B. danilevskyi* from Kazakhstan and *B. savitskyi* from Uzbekistan.

Key words: Coleoptera, Bruchidae, *Bruchidius*, new species, Central Asia.

Introduction

Eight species of the *Bruchidius halodendri* group were hitherto known (ANTON 1996). The present paper adds two new species recently collected by Russian entomologists in Central Asia.

New species

***Bruchidius danilevskyi* nov. spec., ♂, ♀**

Holotype: Kazakhstan: Kzyl-Orda, 20.V.1996, ♂, leg. M. Danilevsky; allotype ♀, 22♂♂ and 22♀♀ paratypes: same data; types in author's coll., Emmendingen (Germany), paratypes in coll. Biologiezentrum Linz.

Paratypes: Kazakhstan: W Chundza, Charyn Valley, 800 m, 10.-13.VI.1993, 3♂♂ and 4♀♀, leg. W. Schawaller, coll. Staatliches Museum für Naturkunde, Stuttgart (Germany) and in author's coll., Emmendingen (Germany).

Etymology: This species is dedicated to Dr. M. L. Danilevsky, Moscow (Russia), an expert on Cerambycidae (Coleoptera), who collected the most part of the type series.

Diagnosis: It is a member of the *Bruchidius halodendri* group. At first glance it is very similar to *B. tuberculicauda* TER-MINASSIAN 1954, concerning color, habitus, antenna and male genitalia. However, *B. tuberculicauda* differs in the pygidium broader (male about 1.1-1.2 times longer than wide), female pygidium with pairy, longitudinal, lateral impression and striking, apical protuberance, male genitalia with ventral valve of median lobe distinctly broader, apical part of internal sac with pairy, small, oval

agglomeration of about 15 shingle-like plates, without small denticles below pairy agglomeration (fig. 7), and the lateral lobes divided to about two third of length, with about 10 long, apical setae (fig. 8).

Description: Length (pronotum-elytra): 1.6-2.3 mm, width: 1.0-1.4 mm. Body moderately short, oval (fig. 1).

Reddish, with darkened to blackish parts; at least interocular protuberance, pronotal disc, scutellum, elytral suture, and metathorax blackish, often elytra basolaterally besides humeral calli blackish, at most visible part of head, pronotum completely, elytra with circumscutellar area, intervals 1-2 and lateroapically to middle of sides, and complete abdomen including pygidium blackish; basal antennal segments, fore and mid legs yellowish except darkened to blackish apical tarsal segments. Vestiture moderately dense, not covering body surface completely, greyish to very pale yellowish-grey, often with less distinct, longitudinal, paler spots in elytral interval 3.

Head of moderate length. Eyes moderately bulging, emarginate to two third of their length. Tempora very short. Distance between eyes four fifth of greatest width of eye. Frons and vertex convex, with oblong, obtuse, interocular protuberance. Antennae of moderate length, extending to apical third of elytral length; antennal segments 1-3(4) about 1.5 times longer than wide, 11 with pointed tip.

Pronotum conical, about 1.2 times wider than long, sides bisinuate (fig. 1). Disc convex, double punctured, distance between coarse punctures less than their diameter. Hind edges with oblique depression. Scutellum as long as wide, bifid.

Elytra about 1.1 times longer than their combined width, with maximum width at end of basal fourth. Double-hooked tubercle at base of striae 4-5. Sides nearly parallel in second and third fourth of elytral length. Disc moderately convex. Striae narrow, flat, with punctures deeply impressed; punctures distinctly broader than striae. Intervals plain, with dense micropunctuation and with irregular row of large punctures. Humeral calli distinct.

Hind femora with small preapical denticle on mesoventral margin. Hind tibia moderately broadened; mucro about 1.5 times longer than coronal denticle at extension of lateral carina.

Pygidium double punctured.

Male. Antennal segments 1-3 cylindrical, 4 subserrate, 5-10 serrate, 4-10 becoming steadily broader, 5 and 8-10 about as long as wide, 11 about 1.6-1.7 times longer than wide (fig. 2). Pygidium about 1.3 times longer than wide, convex, vertical. Sternite V as long as IV, apically emarginate. Median lobe moderately short, ventral valve subtriangular, with tip somewhat blunt. Apical part of internal sac with pairy, basally fused, longitudinal aggregation of numerous, shingle-like plates, followed below by small denticles, and basal part with single, very large and broad, spine-like sclerite among numerous, small denticles and above numerous, minute needles (fig. 3). Lateral lobes oblonge, flat, with about 20 long setae at apex, divided to about four fifth of length (fig. 4). Basal strut oblonge, with moderate apical keel.

Female. Antennal segments 1-4 cylindrical, 5 subserrate, about 1.2 times longer than wide, 6-10 serrate, 5-10 becoming steadily broader, 8-10 about 1.2 times wider than long, 11 about 1.2 times longer than wide. Pygidium about 1.2 times longer than wide, slightly convex, subvertical, with smooth, pairy, laterobasal impression. Sternite V about twice as long as IV, not emarginate.

Host plant: Unknown.

***Bruchidius savitskyi* nov. spec., ♂, ♀**

H o l o t y p e : Uzbekistan: 18 km N Termez, Uchkizil, 25.VI.1991, emerged 25.VII.1991, ♂, leg. M. Savitsky; allotype ♀: same data as holotype, but 27.VI.1991, emerged 1.IV.1992.

P a r a t y p e s : same data, but diverse data of collection, from 25. to 27.VI.1991, emergence from 3. VI.1991 to 9.IV.1992, 12♂♂ and 22♀♀. Holotype and paratypes in coll. Zoological Museum, Academy of Sciences, St. Petersburg (Russia), paratypes in coll. Zoological Museum, Lomonosov University, Moscow (Russia), allotype and paratypes in author's coll., Emmendingen (Germany), paratype in coll. Biologiezentrum Linz.

E t y m o l o g y : This species is dedicated to Michail Savitsky, Moscow (Russia), an expert on Bruchidae (Coleoptera), who collected the complete type series.

D i a g n o s i s : It is a member of the *Bruchidius halodendri* group. *B. savitskyi* resembles *B. tuberculicauda* and *B. danilevskyi* with regard to the body shape, antenna and the male genitalia, and it shows the same female pygidium like *B. tuberculicauda*. But the last has the vestiture nearly uniform greyish, with rarely feebly visible, oblonge, paler spots in intervals 3 and 9, male genitalia with ventral valve of median lobe distinctly broader, apical part of internal sac with pairy, well separated agglomeration of about 15 shingle-like plates, without minute spines below pairy agglomeration, and basal part with small, subcircular area of small spines beside the single, very large and broad, spine-like sclerite (fig. 7). *B. danilevskyi* is well distinct from *B. savitskyi* in the vestiture with less distinct spots, spots only in intervals 3 and 9, pygidium slimmer (male: about 1.3 times longer than wide), internal sac in apical part with pairy, basally fused, oblonge agglomeration of shingle-like plates, in basal part with single, very large, spine-like sclerite among numerous, small denticles (fig. 3), and lateral lobes with about 20 long setae at apex (fig. 4).

D e s c r i p t i o n : Length (pronotum-elytra): 1.5-2.2 mm, width: 0.9-1.3 mm. Body moderately short, oval.

Reddish, with darkened to blackish parts; at least extreme apical margin of pronotum, scutellum, and partially metathorax blackish, often elytra basolaterally besides humeral calli blackish, at most interocular protuberance of head, pronotum completely, elytra with circumscutellar area, suture, basal tubercle, humeral calli and lateroapically to middle of sides, and complete abdomen including pygidium except disc blackish; basal antennal segments, fore and mid legs yellowish except darkened to blackish apical tarsal segments. Vestiture moderately dense, not covering body surface completely, yellowish-grey, with very distinct, longitudinal, paler spots in elytral intervals 3, 5, 7, 9.

Head of moderate length. Eyes moderately bulging, emarginate to two third of their length. Tempora very short. Distance between eyes nine tenth of greatest width of eye. Frons and vertex convex, with oblong, obtuse, interocular protuberance. Antennae of moderate length, extending to apical third of elytral length; antennal segments 1-3(4) about 1.5 times longer than wide, 11 with pointed tip.

Pronotum conical, about 1.2 times wider than long, sides bisinuate. Disc convex, double punctured, distance between coarse punctures often less than their diameter. Hind edges with oblique depression. Scutellum as long as wide, bifid.

Elytra about 1.2 times longer than their combined width, with maximum width at end of basal fourth. Double-hooked tubercle at base of striae 4-5. Sides nearly parallel in second and third fourth of elytral length. Disc moderately convex. Striae narrow, flat, with

punctures deeply impressed; punctures often distinctly broader than striae. Intervals plain, with dense micropunctuation and with irregular row of large punctures. Humeral calli distinct.

Hind femora with small preapical denticle on mesoventral margin. Hind tibia moderately broadened; mucro about twice longer than coronal denticle at extension of lateral carina.

Pygidium double punctured.

Male. Antennal segments 1-3 cylindrical, 4 subserrate, 5-10 serrate, 5 about 1.2 times longer than wide, 4-10 becoming steadily broader, 8-10 about as long as wide, 11 1.7-1.8 times longer than wide. Pygidium about 1.1 times longer than wide, convex, vertical. Sternit V as long as IV, apically emarginate. Median lobe moderately short, ventral valve subtriangular, with tip acute. Apical part of internal sac with suboval aggregation of numerous, shingle-like plates, followed below by minute spines, and basal part with longitudinal agglomeration of numerous, small spines beside single, very large and broad, spine-like sclerite and above numerous minute needles (fig. 5). Lateral lobes oblonge, flat, with about 12 long setae at apex, devided to about two third of length (fig. 6). Basal strut oblonge, with moderate apical keel.

Female. Antennal segments 1-4 cylindrical, 5 subserrate, about as long as wide, 5-10 becoming steadily broader, 6-10 serrate, 8-10 about 1.2 times wider than long, 11 about 1.3 times longer than wide. Pygidium about 1.3 times longer than wide, nearly flat, oblique, pygidium with pairy, longitudinal, lateral impression and striking, apical protuberance. Sternite V about twice as long as IV, not emarginate.

Host plant: *Glycyrrhiza glabra* (Leguminosae, Fabaceae).

Summary

Bruchidius danilevskyi nov. spec., ♂, ♀ and *B. savitskyi* nov. spec., ♂, ♀, members of the *B. halodendri* group, are described including detailed figures and compared with the closely related *B. tuberculicauda* TER-MINASSIAN 1954.

Literatur

- ANTON K.-W. (1996): Two new species of the *Bruchidius halodendri* group from Turkmenia (Coleoptera: Bruchidae: Bruchinae). — Genus 7: 475-480.
- TER-MINASSIAN M.E. (1954): New species of seed beetles (Coleoptera, Bruchidae) of the USSR fauna (in Russian). — Tr. Zool. Inst. Akad. Nauk SSSR Leningrad 15: 67-73.

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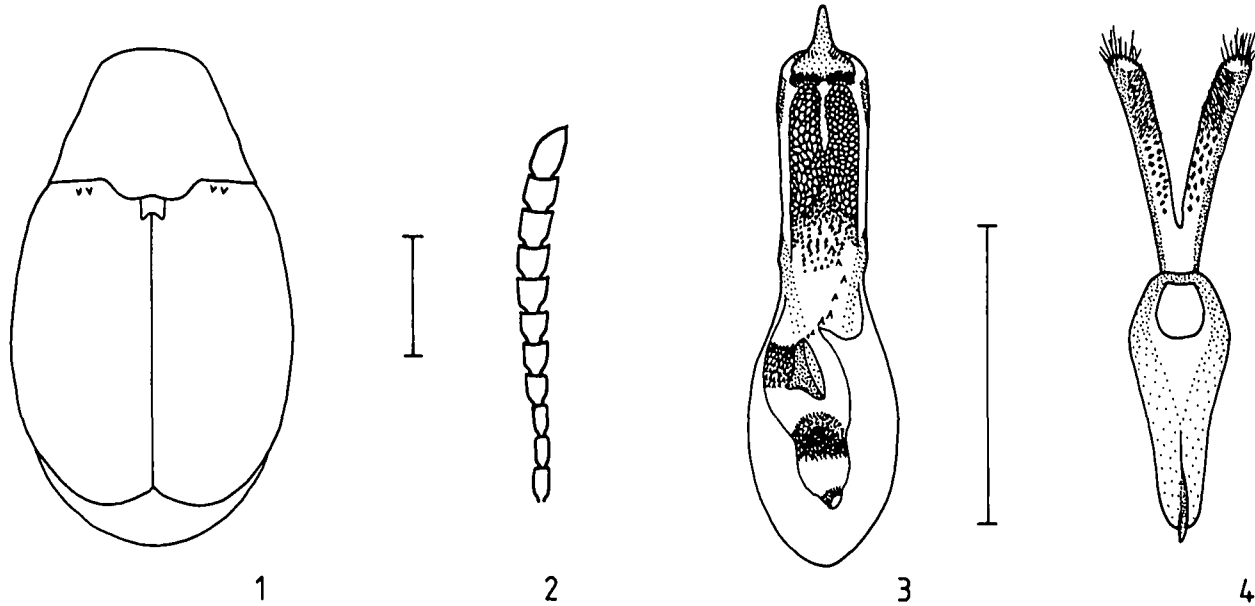


Fig. 1-4: 1 – *Bruchidius danilevskyi* nov.spec. ♂, ♀; habitus in dorsal view (scale bar = 0.5 mm). 2 – *Bruchidius danilevskyi* nov.spec. ♂, antenna (scale bar = 0.5 mm). 3 – *Bruchidius danilevskyi* nov. spec. ♂, median lobe (scale bar = 0.5 mm). 4 – *Bruchidius danilevskyi* nov. spec. ♂, lateral lobes (scale bar = 0.5 mm).

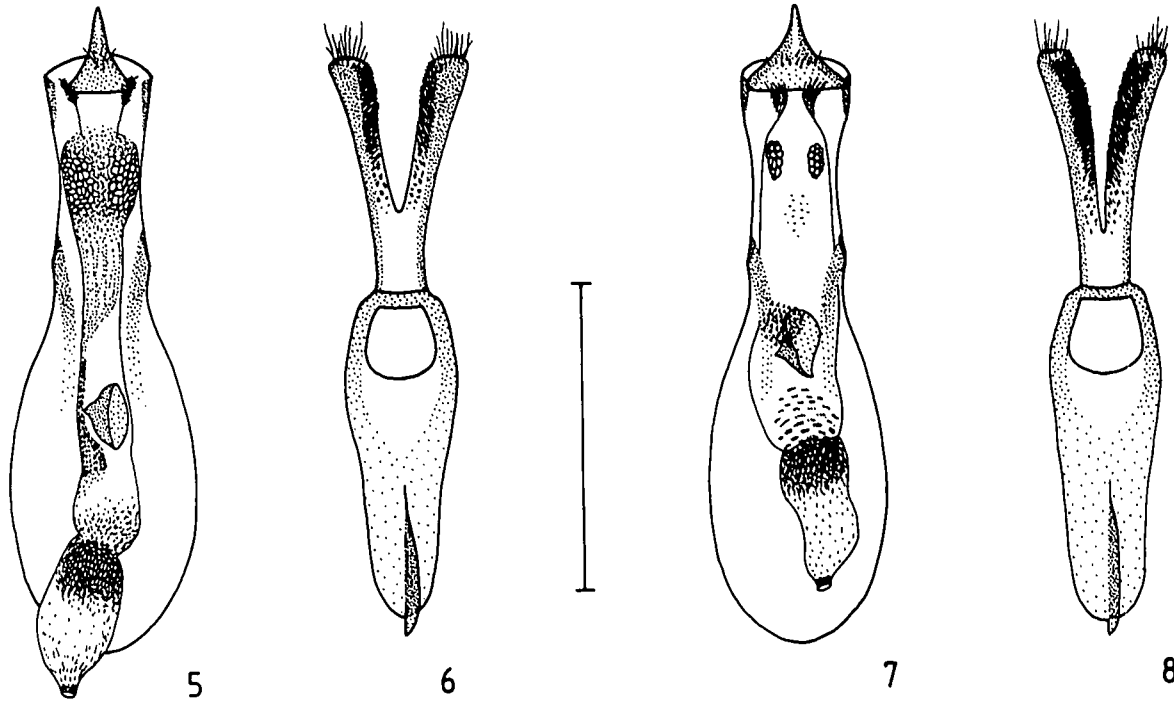


Fig. 5-8: 5 – *Bruchidius savitskyi* nov. spec. ♂, median lobe (scale bar = 0.5 mm). 6 – *Bruchidius savitskyi* nov. spec. ♂, lateral lobes (scale bar = 0.5 mm). 7 – *Bruchidius tuberculicauda* TER-MIN. ♂, median lobe (scale bar = 0.5 mm). 8 – *Bruchidius tuberculicauda* TER-MIN. ♂, lateral lobes (scale bar = 0.5 mm).