Two new species of the Bruchidius halodendri group from Turkmenia (Coleoptera: Bruchidae: Bruchinae)

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ABSTRACT. Bruchidius turkmenicus n. sp. and B. vestitialis .n. sp. are described from Turkmenia. Both species belong to the B. halodendri group.

Key words: Entomology, taxonomy, Coleoptera, Bruchidae, Bruchidius, new species, Turkmenia.

The Bruchidius halodendri group was first characterized by BOROWIEC (1988), as group glycyrrhizae. This group includes externally very similar species: Bruchidius crassicornis LUKJANOVICH & TER-MINASSIAN, 1957, B. fulvus (ALLARD, 1883), B. glycyrhizae (GYLLENHAL, 1839), B. halodendri (GEBLER, 1825), B. pallidulus (REITTER, 1895), B. tuberculicauda LUKJANOVICH & TER-MINASSIAN, 1954. As to the group name, I prefer the eldest valid species name: B. halodendri. Most species of the group are distributed in Central Asia (LUKJANOVICH & TER-MINASSIAN 1957). One, B. glycyrhizae, reaches up to Eastern Europe and Middle East (DECELLE, LODOS 1989). Only B. fulvus occurs exclusively in the Eastern Mediterraneum. The main host plants are probably Glycyrrhiza species.

Bruchidius turkmenicus n. sp.

ETYMOLOGY Named after the type locality, Turkmenia in Central Asia.

DIAGNOSIS

It is a member of the *Bruchidius halodendri* group. Externally *B. turkmenicus* resembles *B. glycyrhizae*. However, *B.glycyrhizae* differs in its larger size, darker coloration of pronotum and elytra, vestiture with indistinct elongated paler spots, and male genitalia with a large tooth-like sclerite in the internal sac (cf. BOROWIEC 1988: fig. 316).

DESCRIPTION

Length (pronotum-elytra): 1.4-1.9 mm, width: 0.9-1.2 mm. Body moderately short, oval (fig. 1).

Reddish; basal antennal segments, fore and mid legs yellowish except darkened to blackish apical tarsal segments; frons, apical and basal margins and disc of pronotum, elytral base and suture, ventral side of body darkened to blackish; often pygidium, humeral callus and lateral margins of elytra also darkened. Vestiture moderately dense, not covering body surface completely, greyish to yellowish-grey uniform, rarely with very indistinct elongated paler spot in middle of elytral interval three.

Head of moderate length. Eyes moderately bulging, emarginate to two thirds of their length. Tempora very short. Distance between eyes three quarters of greatest width of eye. Frons convex, with oblong, obtuse tubercle. Antennae of moderate length, extending to apical third of elytral length; basal antennal segments 1-3 (-4) cylindrical, about 1.5 times longer than wide, remaining segments becoming steadily broader, segments 8-10 about 1.2 times wider than long, segment 11 about 1.4 times longer than wide, with pointed tip.

Pronotum conical, about 1.3 times wider than long, sides linear to slightly bisinuate (fig. 1). Disc convex, double punctured, distance between coarse punctures often less than their diameters. Hind edges with distinct oblique depression. Scutellum as long as wide, bifid.

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

Hind femora with small preapical denticle on inner ventral margin. Hind tibiae moderately broadened; mucro as long as coronal denticle at extention of lateral carina.

Pygidium double punctured.

Male. Antennal segments 1-3 cylindrical, segment 4 subserrate, as long as wide, segments 5-10 serrate (fig. 2). Pygidium as long as wide, convex, vertical. Sternite V as long as IV, emarginate to base. Median lobe of moderate length, ventral valve subtriangular. Internal sac apically with paired small group of oblong spines, followed below by an agglomeration of shorter spines becoming gradually smaller

and weaker sclerotized, mid part of internal sac without sclerites, basal part with numerous minute spines and subbasal row of 5-6 oblong spines of the same size as those of the paired apical group (fig. 3). Lateral lobes oblong, flat, with about 10 long setae at apex, divided to three quarters of their length (fig. 4). Basal strut oblong, with large apical keel.



1-3. Bruchidius turkmenicus n. sp.: 1 - male body outline, 2 - male antenna, 3 - median lobe, 4 - lateral lobes. Scale = 0.1 mm

Female. Antennal segments 1-4 cylindrical, segment 4 about 1.4 times longer than wide, segment 5 subserrate, as long as wide, segments 6-10 serrate. Pygidium about 1.2 times longer than wide, slightly convex, vertical, with bilateral smooth, longitudinal impression. Sternite V twice as long as IV, not emarginate.

Host plant unknown.

TYPES

Holotype male and 3 paratypes males: "Turkmenistan, Repetek, 27.IV.1991, leg. HALADA"; holotype genitalia slide no. 090196I; allotype female and 3 paratypes males: "W. Turkmenia, Nebit-Dag, 28 km W Dzebel, 28.IV.1993, leg. HALADA"; 5 paratypes, 2 males, 3 females: "W. Turkmenia, Jebel, 28.IV.1993, leg. HALADA"; all types deposited in the author's collection.

Bruchidius vestitialis n. sp.

Etymology

Named after the striking elytral vestiture.

DIAGNOSIS

It is a member of the *Bruchidius halodendri* group. Externally *B. vestitialis* is similar to *B. turkmenicus*. *B. turkmenicus* shows slight differences, like less bisinuate to linear sides or mostly uniform elytral vestiture. However, *B. turkmenicus* distinctly differs in its male genitalia (see description above).

DESCRIPTION

Length (pronotum-elytra): 1.9 mm, width: 1.2 mm. Body moderately short, oval (fig. 5).

Reddish; basal antennal segments, fore and mid legs yellowish except darkened to blackish apical tarsal segments; frons, apical and basal margins and disc of pronotum, elytral base and suture, humeral calli, ventral side of body including pygidium darkened to blackish. Vestiture moderately dense, not covering body surface completely, greyish to yellowish-grey, with very distinct longitudinal paler spots in elytral intervals 3, 5, and 9.

Head of moderate length. Eyes moderately bulging, emarginate to two thirds of their length. Tempora very short. Distance between eyes three quarters of greatest width of eye. Frons convex, with oblong, obtuse tubercle. Antennae of moderate length, extending to apical third of elytral length; basal antennal segments 1-3 (-4) cylindrical, about 1.5 times longer than wide, remaining segments becoming steadily broader, segments 8-10 about 1.2 times wider than long, segment 11 about 1.4 times longer than wide, with pointed tip.

Pronotum conical, about 1.3 times wider than long, sides distinctly bisinuate (fig. 5). Disc convex, double punctured, distance between coarse punctures often less

than their diameter. Hind edges with distinct oblique depression. Scutellum as long as wide, bifid.

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



4-6. Bruchidius vestitialis n. sp.: 5 - male body outline, 6 - male antenna, 7 - median lobe, 8 - lateral lobes. Scale = 0.1 mm

Hind femora with small preapical denticle on inner ventral margin. Hind tibia moderately broadened; mucro as long as coronal denticle at extention of lateral carina.

Pygidium double punctured.

Male. Antennal segments 1-3 cylindrical, segment 4 subserrate, as long as wide, segments 5-10 serrate (fig. 7). Pygidium as long as wide, convex, vertical. Sternite V as long as IV, emarginate to base. Median lobe short, ventral valve opposite funnel-shaped. Internal sac apically with paired small group of oblong spines, followed below by transverse sclerotizations in apical half, a sickle-shaped sclerite above basal part with numerous minute spines (fig. 8). Lateral lobes short, broad, flat, with about 12 long setae at apex, devided to half their length (fig. 6). Basal strut oblong, with moderate apical keel.

Female unknown. Host plant unknown.

TYPE

Holotype male: "W. Turkmenia, Nebit-Dag, 28 km W Dzebel, 28.IV.1993, leg. HALADA"; genitalia slide No. 080196IV; deposited in the author's collection.

REFERENCES

BOROWIEC, L., 1988. Bruchidae - Strakowce (Insecta, Coleoptera). In: Fauna of Poland, 11, PWN, Warszawa, 226 pp.

DECELLE, J., LODOS, N., 1989. Contribution to the study of Legume Weevils of Turkey (Coleoptera: Bruchidae).Bull. Annls Soc. r. belge Ent., 125: 163-212.

LUKJANOVICH, F. K., TER-MINASSIAN, M.E., 1957. Zhuki-zernovki (*Bruchidae*). Fauna SSSR, Zhestkokrylye, **24**(1), Zool. Inst. Akad. Nauk SSSR N.S. 67, Moscow, 209 pp.