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Description of *Rhinusa exigua* sp.n. from Turkey (Coleoptera: Curculionidae: Curculioninae)

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Abstract

Rhinusa exigua sp.n. (Coleoptera: Curculionidae: Curculioninae) from Turkey is described and figured. The differences from the very closely related *R. antirrhini* (PAYKULL, 1800) are reported.

Key words: Coleoptera, Curculionidae, Curculioninae, Mecinini, *Rhinusa exigua* sp.n., Turkey.

Introduction

A very small species of *Rhinusa* STEPHENS, 1829 related to *R. antirrhini* (PAYKULL, 1800) has been collected in Turkey, where it was found only on a single species of *Linaria* with very small pale blue flowers. After examination of the species belonging to the *R. antirrhini* group sensu REITTER (1908), FREMUTH (1972) and BEHNE (1988), we describe it as new to science.

Acronyms

CAL Coll. Caldara, Milano, Italy
FAU Faculty of Agriculture, Atatürk University, Erzurum, Turkey
TOS Coll. Toševski, Novi Beograd, Serbia
ZIN Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia

Rhinusa exigua sp.n.

TYPE LOCALITY: Tortum env. (Erzurum, NE Turkey).

Type series: Holotype ♂ (ZIN): "Turkey, Erzurum Prov., 10 km N of Tortum, 1350 m, detritus slope along road, 10.VI.2002, B. Korotyaev". Paratypes: same data as holotype (7 exs., 2, CAL; 2, FAU; 3, ZIN); "Turkey, Erzurum Prov., 10 km N of Tortum, 16.06.2009, GPS 239: N40 22.084 E41 30.334, 1360 m, on L. corifolia, I. Toševski leg." (6 exs., 3 CAL; 3 TOS); "Turkey, Erzurum Prov., 7 km NW of Egerti Vill., Ispir road, ca. 1800 m, detritus slope along road, 13.VI.2003, B. Korotyaev" (5 exs., ZIN); "Turkey, Erzurum Prov., downstream Egerti Vill., 21.VI.2002, leg. Korotyaev" (2 exs., ZIN); "Turkey, Sivas Prov., Kaynarca, Ziyarettepesi Pass, River Tokma, Gürün, 13.06.2009. GPS 227: N38 46.231 E36 58.352, 1651 m, on Linaria corifolia, I. Toševski leg." (1 ex., TOS); "Turkey, Niğde Prov., 5 km S Niğde, 12.06.2009, GPS 222: N37 55.303 E34 40.522, 1269 m, on Linaria corifolia, I. Toševski leg." (5 exs., 2 CAL; 3 TOS); "Turkey, Karaman Prov., Aydinkişla, 11.06.2009, GPS N37 13.784 E32 22.011, 1379 m, on Linaria corifolia, I. Toševski leg." (10 exs., 5 CAL; 5 TOS); "Turkey, Antalya Prov, 17 Km SW of Kurkuteli, 8.06.2009, GPS 209: N36 56.777 E30 04.203, 1364 m, on Linaria corifolia, I. Toševski leg." (5 exs., 2 CAL; 3 TOS).

DESCRIPTION: Male (holotype) (Fig. 1). Length 1.4 mm (rostrum excluded).

Body short, oval, moderately robust, with black integument, except dark brown antennae and tarsi, covered with seta-like, moderately long (length/width 4–8), whitish scales.

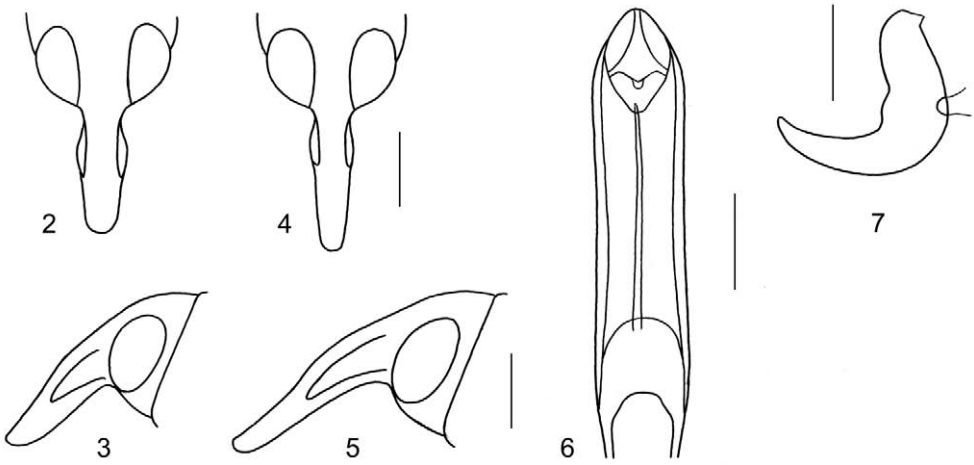
Rostrum short (rostrum length/pronotum length 0.72); in lateral view (Fig. 3) nearly straight, robust at base, finer and abruptly narrowed along dorsal margin from antennal insertion to apex; in dorsal view (Fig. 2) distinctly widened at antennal insertion and moderately narrowed from

middle to apex, with scrobe clearly visible, moderately striate-punctate in basal 0.5, smoother and shining in apical 0.5, in medial 0.3 with wide median sulcus, from base to middle covered with subrecumbent to suberect, moderately dense scales. Frons slightly wider than base of rostrum, without fovea. Eyes weakly convex. Antennae dark brown, inserted at middle of rostrum; scape three times as long as wide; funicle distinctly longer than scape, with first segment 1.5 times as long as wide, distinctly more robust than and 1.5 times as long as second segment, which is two times as long as wide, third-fifth segments becoming gradually more transverse; club short, oval, uniformly pubescent.

Fig. 1: *Rhinusa exigua*, holotype, habitus.

Pronotum with punctures dense and nearly regular, intervals between punctures narrow, smooth and shiny, hardly visible between recumbent to subrecumbent, moderately dense scales; transverse (width/length 1.46), with moderately pronounced narrow neck at apex, with moderately curved sides, widest before middle, moderately convex.

Elytra short (length/width 1.15), subrectangular, moderately wider than pronotum (elytral width/pronotal width 1.38), at base weakly convex between scutellum and fifth interstria then moderately produced anteriorly, with sides weakly curved, widest just in front of middle, moderately convex on disc; interstriae clearly visible between mainly recumbent to subrecumbent, sparse scales arranged in nearly regular single row and denser on apical 1/3 of first interstria; striae clearly visible, 0.5 times as wide as interstriae, with a row of scales shorter and finer than those of interstria.



Figs. 2–7: *Rhinusa exigua*, 2–3) rostrum of male in dorsal (2) and lateral (3) view; 4–5) rostrum of female in dorsal (4) and lateral (5) view; 6) median lobe of aedeagus in dorsal view; 7) spermatheca. Scales: 0.5 mm (rostra), 0.25 mm (median lobe), 0.1 mm (spermatheca).

Legs moderately robust, with scales sparse and distinctly shorter than width of tibia; all femora with minute tooth; tibiae with moderately robust unci; tarsi with first segment two times as long as wide, second segment 1.5 times as long as wide, third segment bilobed and distinctly wider than second; claws connate in basal 0.5.

Abdomen with dense and moderately regular punctures, with recumbent to subrecumbent, moderately dense scales; length ratio of ventrites 1+2/3+4: 2.12.

Median lobe of aedeagus long, in dorsal view with parallel sides as in Fig. 6.

Female: As male except rostrum slightly longer (rostrum length/pronotum length 0.82), in lateral and dorsal view (Figs. 4–5) narrower and finer in apical 0.5. Uncus of metatibia very small. Spermatheca as in Fig. 7.

VARIABILITY: Length 1.3–1.6 mm (rostrum excluded). In some specimens pronotum and elytra are widest at middle, whereas the scales on the elytral interstriae may be partly arranged in two irregular rows.

ETYMOLOGY: The name is a Latin adjective, which refers to the very small size of the species in comparison with the other related species.

REMARKS: Among the species of the *R. antirrhini* group, *R. exigua* is mainly characterized by the small size occurring only in the closely related *R. antirrhini*. These two taxa can be separated as follows:

Rhinusa exigua: size very small (length 1.3–1.6 mm); rostrum of female more elongate from antennal insertion to apex (length/width 4.05–4.20), in lateral view with dorsal margin more abruptly narrowed at antennal insertion, which is placed just before middle; scales of dorsal vestiture white and recumbent to subrecumbent; median lobe of aedeagus with sides subparallel to near apex.

Rhinusa antirrhini: size small (length 1.7–2.4 mm, average 2.1 mm); rostrum of female less elongate from antennal insertion to apex (length/width 3.20–3.50), in lateral view with dorsal margin less abruptly narrowed at antennal insertion, which is placed at middle; scales of dorsal

vestiture whitish brown with sericeous reflections and suberect to erect; median lobe of aedeagus with sides narrowed at middle.

The rostrum and the aedeagus of *R. antirrhini* were well illustrated by FREMUTH (1972) and BEHNE (1988). It is noteworthy that the aedeagus of *R. exigua* is similar to that of *R. florum* (RÜBSAAMEN, 1895) (= *R. smreczynskii* (FREMUTH, 1972)), which however differs clearly from the new species in the shape of the rostrum, which in lateral view is regularly and not abruptly narrowed at the antennal insertion. There are no differences in the shape of the female genitalia between these three species.

Finally *R. exigua* revealed extensive genetic differentiation from *R. antirrhini* and *R. florum* in a sequence of 696 base pairs of the mitochondrial cytochrome oxidase II (COII) gene (Toševski, unpublished data).

BIOLOGICAL NOTES: The new species usually occurs on dry eroded detritus or clay slopes in the mid-altitude mountains. The host plant is *Linaria corifolia* DESFONTAINES R.L., 1808 (det. V.I. Dorofeyev & I. Toševski), which is endemic to the Irano-Turanian phytogeographical region. An intense collection on a dense population of *L. corifolia* in mid-June at elevations of 1100–1800 m usually was productive, whereas search at an elevation above 1900 m provided no material (Korotyaev & Toševski, pers. obs.).

DISTRIBUTION: Turkey (presently known from the provinces of Erzurum, Sıvas, Niğde, Karaman and Antalya).

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