

Sibinia sarmatica sp.n. from eastern Ukraine (Coleoptera: Curculionidae)

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Abstract

A new species of *Sibinia* GERMAR (Coleoptera: Curculionidae), *S. sarmatica*, belonging to the subgenus *Dichotychius* BEDEL and related to *S. sodalis* GERMAR is described from eastern Ukraine.

Key words: Coleoptera, Curculionidae, Curculioninae, *Sibinia*, taxonomy, new species, Ukraine.

Introduction

The Palaearctic species of the weevil genus *Sibinia* GERMAR, 1817 are presently included in two subgenera: *Sibinia* s.str. and *Dichotychius* BEDEL, 1885. According to KOROTYAEV (1996), the latter is principally characterized by smaller size (length < 2.4 mm), dorsal vestiture dense and composed of broad scales including on elytral striae, host plants halophilous or psammophilous Plumbaginaceae. This subgenus is arranged in two groups, which can be distinguished by the disposition of the scales covering the elytral interstices: the *S. sodalis* GERMAR, 1824 group, with scales arranged in 2–4 irregular rows, and the *S. exigua* FAUST, 1885 group with scales arranged in a single regular row (CALDARA 1979).

Having intensively studied the weevil fauna of various Plumbaginaceae, the first author has found a peculiar species similar to the species of the *S. sodalis* group with toothed claws (CALDARA 1979, CALDARA & KARASYOV 1995) on *Limonium* sp. in salt marshes eastwards from Dnepropetrovsk (Ukraine). This species is related to *S. (D.) sodalis* and was identified as a new species for the science.

Abbreviations

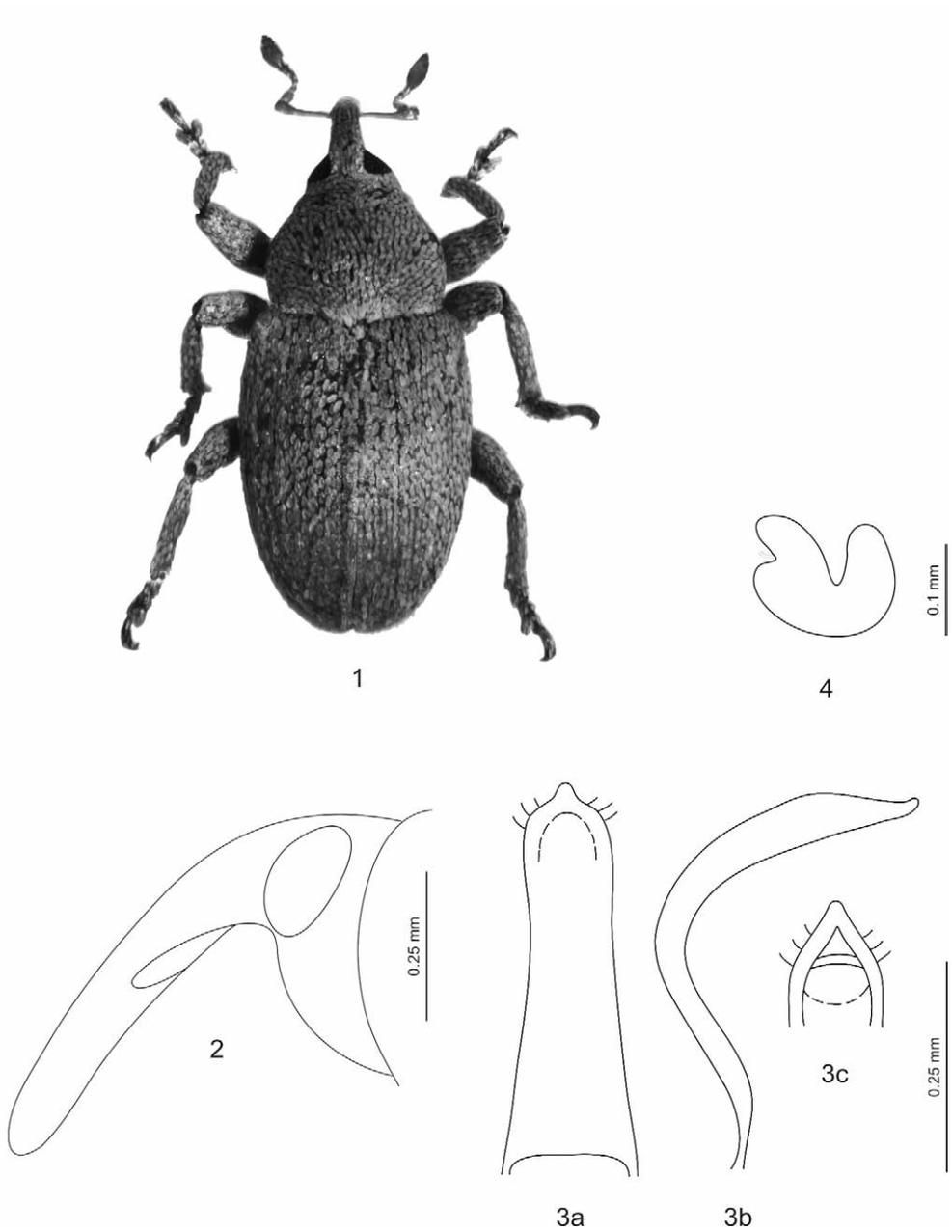
CCa Collection Roberto Caldara, Milano, Italy
CKo Collection Michael Košťál, Brno, Czech Republic
NMW Naturhistorisches Museum Wien, Austria

HT holotype
l length
P pronotum
R rostrum
w width

Sibinia sarmatica sp.n.

TYPE LOCALITY: Vesele near Pavlograd, Dnepropetrovsk env., Ukraine.

TYPE MATERIAL: **Holotype** ♂ (CKo): “Ukraina or. Samara valley Michael Košťál leg. \ Vesele pr. Pavlograd 50 m N 48°36.7' E 35°47.4' 16.ix.2009”. **Paratypes**: 14 ♂♂, 10 ♀♀ (CKo), 2 ♂♂, 2 ♀♀ (CCa), 1 ♂, 1 ♀ (NMW): same data.



Figs. 1–4: *Sibiria sarmatica*: 1) habitus (holotype); 2) rostrum and head of holotype (lateral view); 3) aedeagus of holotype: a) ventral view, b) lateral view, c) apex in dorsal view; 4) spermatheca.

DIAGNOSIS: 2.0–2.3 mm long, with scales arranged in 3–4 irregular rows on each elytral interstice, with toothed tarsal claws and long elytra ($l/w > 1.19$).

DESCRIPTION: Holotype (Fig. 1): completely perfect male specimen, 2.03 mm long excluding rostrum, pronotum 1.27 times as wide as long, elytra 1.39 times as long as wide, rostrum 1.14 times as long as pronotum, antennae inserted in 0.6 of the rostrum length, funicular segment 1 twice as long as segment 2.

Integument: Dark brown, legs, antennae and distal part of rostrum reddish brown. Prothorax, elytra, femora and basal part of rostrum completely covered by unicolorous cinnamon brown oval ($l/w = 1.75$ – 2.50) scales. Scales at medial posterior prothorax margin before scutellum brownish yellow. Head, basal part of rostrum, anterior prothorax margin and femora with very sparsely intermixed grayish oval scales. Tibiae and tarsal segment 1–3 with sparse oval to sublanceolate ($l/w = 2.00$ – 4.00) light brown scales. Medial part of ventral body side densely covered by paler oval scales.

Head: Eyes large and flat. Frons slightly narrower than rostrum at base, moderately convergent backwards. Rostrum (Fig. 2) moderately robust, slightly longer than pronotum ($l/w = 1.14$), in dorsal view parallel-sided, in lateral view more strongly curved in its basal third and only very moderately narrowed to its apex. Antennae inserted in apical half of rostrum ($6/10$ of length). Antennal funicle with six segments, segment 1 remarkably thicker than and twice as long as segment 2. Antennal club spindle-shaped, more than twice as long as wide.

Prothorax: 1.27 times as wide as long, sides curved, widest at basal third, in lateral view moderately curved with a shallow depression before anterior margin.

Elytra: Moderately elongate ($l/w = 1.39$), convex, 1.29 times as wide as prothorax, widest at the end of their basal third.

Legs: Tarsal segment 3 bilobed, twice as wide as segment 2. Claw segment of the same length as segments 1–3 together. Claws with inner basal teeth reaching up to the middle of claw length.

Aedeagus (Fig. 3): Median lobe at apex sharply pointed with setae on apical margins.

Female. Rostrum on average slightly longer, antennal insertion approximately in the middle of rostrum length. Elytra slightly wider. Spermatheca (Fig. 4) similar to that of *S. sodalis*, but with more distinct sulcus between corpus and ramus where spermathecal duct originates. Spiculum ventrale without peculiar characters.

Variability: Body length: $\sigma\sigma$ 2.02–2.15, ♀♀ 1.99–2.33, Rl/Pl: $\sigma\sigma$ 1.08–1.28, ♀♀ 1.11–1.29, pronotum (w/l): $\sigma\sigma$ 1.20–1.35, ♀♀ 1.20–1.39, elytra (l/w): $\sigma\sigma$ 1.30–1.45, ♀♀ 1.29–1.43. The type series of 31 specimens shows no significant variability in the shape of rostrum, prothorax and elytra or in the colour and disposition of the vestiture.

Comparative notes: Due to the toothed claws together with the disposition of the elytral vestiture *S. sarmatica* is more similar to *S. sodalis* than to other species in the subgenus. From this species it is clearly distinguishable by the apex of the aedeagus, which bears setae, is pointed and is bent at nearly a right angle, furthermore by the irregularly curved, and slightly but distinctly narrowed rostrum in lateral view as well as by the different host plant (*Limonium* for *S. sarmatica* vs. *Armeria* for *S. sodalis*).

Distribution: Eastern Ukraine.

Biology: All specimens were found in halophilous plant communities on *Limonium* sp.

Etymology: The Latin species name refers to the ancient name of Ukraine “Sarmatia”.

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References

- CALDARA, R. 1979: Revisione delle specie paleartiche di *Sibinia* vicine a *sodalis* Germar ed *exigua* Faust (Coleoptera: Curculionidae). – Memorie della Società entomologica italiana 57: 65–100.
- CALDARA, R. & KARASYOV, V.P. 1995: Description of four new Palearctic species of the genus *Sibinia* (Insecta: Coleoptera: Curculionidae: Curculioninae). – Reichenbachia 31 (13): 65–69.
- KOROTYAEV, B.A. 1996: 147. *Sibinia* Germ., pp. 488–490. – In Egorov, A.B., Zherichin, V.V. & Korotyayev, B.A. (eds.): 112b. Sem. Curculionidae – dolgonosiki, ili sloniki, pp. 249–516. – In Ler, P.A. (ed.): Opredelitel' nasekomikh Dalnego Vostoka Rossii i shsti tomakh. Tom III. Zhestkokryliye, ili zhuki. Chast 3, dopolnenie. Rossijskaya Akademiya Nauk, Dalnegovostochnoe Otdelenie, Biologo-Pochvennyj Institut, Vladivostok, 556 pp.

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