

A new species of the genus *Carcilia* Roelofs, 1875 (Coleoptera: Curculionidae) from China

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ABSTRACT

A new species, *Carcilia siniaevi* sp. n. from China (Guangxi) is described and illustrated. The new species is similar to *C. tenuistriata* Heller, 1941, but can be distinguished by the outer setose fringe of the metatibial tarsal groove being strongly sinuate, the position of the antennae inserted closer to the rostrum base, the presence of an elongated, forked tooth near the middle of the profemur, the more convex mesosternal process and the straight rostrum. This is the first record of the genus *Carcilia* in Guangxi Zhuang Autonomous Region.

KEYWORDS: Biodiversity, beetles, Curculionoidea, Molytinae, Carciliini, new species, weevils, Guangxi Zhuang Autonomous Region.

INTRODUCTION

The tribe Carciliini Pierce, 1916 includes a single genus *Carcilia* Roelofs, 1875. The tribe is characterised by a prosternum with a rostral channel bounded by carinae laterally, but not at base, as well as by appendiculate claws, an absence of the sclerolepidia and the tibiae quite short and wide (Legalov 2018). Together with the newly described species, *Carcilia* comprises 12 known species in eastern Asia (southern part of the Russian Far East, North and South Korea, Japan and China) and in the Oriental Region (India, Myanmar, Vietnam and the Philippines) (Heller 1931, 1941; Voss 1937, 1953; Zumpt 1937; Marshall 1948; Morimoto 1982; Hong *et al.* 2000; Legalov 2015, 2019, 2020, 2025a, 2025b; Alonso-Zarazaga *et al.* 2023).

This paper describes a new species of the genus *Carcilia* that has been found in China. This is the first record of the genus in the Guangxi Zhuang Autonomous Region, and the third species of *Carcilia* recorded in China.

MATERIAL AND METHODS

The type specimen is deposited in the collection of the Institute of Systematics and Ecology of Animals, Novosibirsk, Russia (ISEA).

The images and measurements were taken with a Zeiss AxioCam MRc5 camera mounted on a Carl Zeiss Stemi 2000 binocular microscope.

The terminology of weevil morphology is based on Lawrence *et al.* (2010). The systematics of the studied taxa is based on Legalov (2018) and Alonso-Zarazaga *et al.* (2023).

TAXONOMY

Family Curculionidae Latreille, 1802
Subfamily Molytinae Schoenherr, 1823
Tribe Carciliini Pierce, 1916
Genus *Carcilia* Roelofs, 1875

Carcilia Roelofs, 1875: 152. Type species: *Carcilia strigicollis* Roelofs, 1875, by monotypy.

Laemosaccodes Voss, 1937: 274. Type species: *Laemosaccodes nitidirostris* Voss, 1937, by original designation.

Paramagdalis Ter-Minassian, 1956: 394. Type species: *Paramagdalis fortipes* Ter-Minassian, 1956, by monotypy.

Carcilia siniaevi sp. n.

Figs 1–8

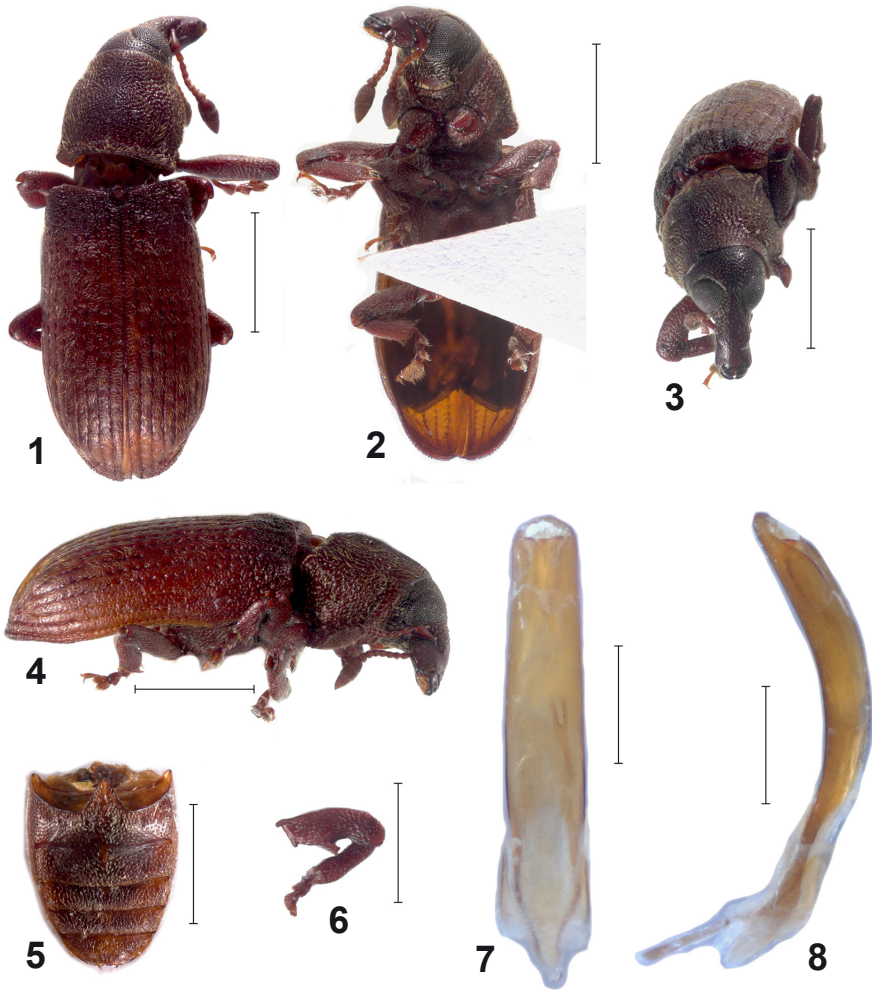
LSID: [urn:lsid:zoobank.org:act:6AF94C15-785A-4965-8746-34B19313075A](https://zoobank.org/act:6AF94C15-785A-4965-8746-34B19313075A).

Etymology: The species is named in honour of lepidopterologist Viktor Siniaev (Moscow), who collected the holotype.

Diagnosis: The new species is similar to *Carcilia tenuistriata* Heller, 1941 (= *Paramagdalis fortipes*) (Figs 9–11) from South Korea, Japan and the Russian Far East, but can be distinguished by a strongly sinuate outer setose fringe of the tarsal groove of the metatibia, the antennae being inserted closer to the rostrum base, the presence of an elongated, forked tooth at the median part of the profemora, the more convex mesosternal process and the straight rostrum, abruptly narrowing to the apex.

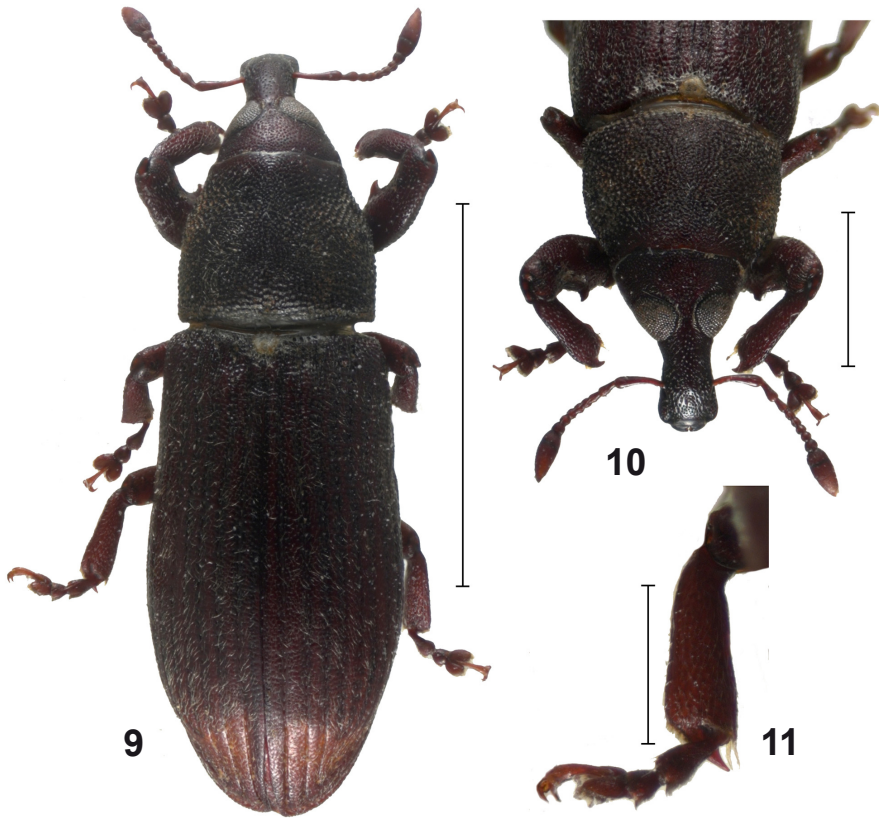
Description: Male. Body red-brown, covered with short appressed pale piliform scales. Total body length (without rostrum) 7.6 mm. Length of rostrum 1.1 mm.

Head conical. Mandibles large, slightly shorter than antennomere 2, with two teeth on inner edge. Rostrum abruptly narrowing towards apex, short, straight, 0.6× as long as pronotum, about 1.8× as long as wide at apex, 2.0× as long as wide in middle and about 1.9× as long as wide at base, finely punctate. Eyes large, transversely oval, not protruding from contour of head, finely faceted. Forehead flattened, densely punctate, about 0.6× as narrow as rostrum base width. Temple 0.5× as long as eye, finely punctate. Antennae long, inserted before middle of rostrum. Antennomere 1 long, weakly curved, reaching eyes, about 3.1× as long as wide at apex. Antennomere 2 oblong-conical, about 1.7× as long as wide at apex, 0.4× as long as and about 0.8× as narrow as antennomere 1. Antennomeres 3–7 conical. Antennomere 3 slightly longer than wide at apex, 0.7× as long as and of same width as antennomere 2. Antennomere 4 slightly longer than wide at apex, slightly shorter and narrower than antennomere 3. Antennomere 5 as long as wide



Figs 1–8. *Carcilia siniaevi* sp. n., holotype, male: (1) general habitus, dorsal view; (2) general habitus, ventral view; (3) general habitus, frontal view; (4) general habitus, lateral view; (5) abdomen; (6) fore leg; (7) penis, dorsal view; (8) penis, lateral view. Scale bar = 2.0 mm for Figs 1–7, 0.5 mm for Figs 7, 8.

at apex, slightly shorter and narrower than antennomere 4. Antennomere 6 slightly wider than long, slightly shorter and wider than antennomere 5. Antennomere 7 slightly shorter than wide at apex, slightly longer and of same width as antennomere 6. Antennomere 8 about $0.8\times$ as long as wide at apex, slightly shorter and about $1.3\times$ as wide as antennomere 7. Antennal club compact, with fused segments, tomentose, about $0.9\times$ as long as antennomeres 2–8 combined. Antennomere 9 about $0.8\times$ as long as wide at apex, $1.5\times$ as long as and $1.5\times$ as wide as antennomere 8.



Figs 9–11. *Carcilia tenuistriata*, male, Primorskii Krai: (9) general habitus, dorsal view; (10) general habitus, frontal view; (11) metatibia. Scale bar = 5.0 mm for Fig. 9, 2.0 mm for Fig. 10, 1.0 mm for Fig. 11.

Antennomere 10 about $0.7\times$ as long as wide at apex, of same length and about $1.1\times$ as wide as antennomere 9. Antennomere 11 slightly longer than wide at base, about $1.3\times$ as long as and about $0.8\times$ as wide as antennomere 10.

Pronotum almost bell-shaped, about $1.2\times$ as long as wide at apex, about $0.9\times$ as long as wide at middle and at base. Pronotal disk weakly convex, densely granulate. Scutellum semi-oval, slightly wider than length.

Elytra about $2.2\times$ as long as wide at base, about $1.9\times$ as long as wide at middle, $2.4\times$ as long as wide at apical $\frac{1}{4}$, about $2.9\times$ as long as pronotum. Elytral base not projecting over pronotum base. Humeri slightly flattened. Elytral striae distinct. Ninth stria not shortened. Interstriae flat, wide, $4.0\text{--}6.0\times$ as wide as striae, densely granulate. Elytra widest behind midlength.

Sternum: Prosternum punctate, with distinct prosternal canal, dentate before procoxae. Pre- and postcoxal portions of prosternum short. Precoxal portion about 0.5× as long as procoxal cavity. Postcoxal portion 0.6× as long as precoxal portion. Procoxal cavities narrowly separated. Mesocoxal cavities separated. Mesosternal process convex in middle. Metanepisternum very narrow. Metaventrite weakly convex, punctate, about 2.3× as long as metacoxal cavity. Metacoxal cavities widely separated.

Abdomen ventrally convex, densely punctate. Ventrites 1 and 2 fused. Ventrite 1 about 1.2× as long as metacoxal cavity. Ventrite 2 slightly longer than ventrite 1. Ventrites 3 and 4 of same length. Ventrite 3 0.7× as long as ventrite 2. Ventrite 5 about 1.2× as long as ventrite 4, and as long as metacoxal cavity.

Legs: Procoxa large, conical. Metacoxa transverse. Femora thickened and flattened, medially with tooth; profemur with elongated, forked tooth near middle. Tibiae almost straight, flattened, with large uncus and two groups of setae. Metatibiae with outer setose fringe of tarsal groove strongly sinuate. Tarsi long. First tarsomere oblong-conical. Second tarsomere conical. Third tarsomere bilobed. Fifth tarsomere elongated. Tarsal claws divergent and appendiculate.

Aedeagus as on Figs 7, 8.

Female. Unknown.

Holotype: ♂ **China:** Guangxi Zhuang Autonomous Region, Dayao Shan, Junxiu, 24°07'N 110°14'E, 1400 m, xi.2006, V. Siniaev (ISEA).

Distribution: China (Guangxi Zhuang Autonomous Region).

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