

## First record of *Orsodacne cerasi* (Linnaeus, 1758) (Coleoptera: Orsodacnidae) from Russian Far East

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### Abstract

The first record of *Orsodacne cerasi* (Linnaeus, 1758) (Orsodacnidae: Orsodacninae) from Primorskii Krai (the Russian Far East) is given. It is the most eastern find of this species and the first record for Primorskii Krai. The distribution map from Asia, illustrations and redescription of *Orsodacne cerasi* are presented.

**Key words:** Biodiversity, Chrysomeloidea, Orsodacninae, Primorskii Krai.

### Introduction

The leaf beetle fauna of Primorskii Krai was studied quite well (Vasiliev 1964; Medvedev 1992, 2010; Mikhailov and Chashchina 2009; Sergeev 2015, 2016a, 2016b, 2017a, 2017b, 2019, 2020, 2022), but some groups are still insufficiently discovered. The finding of a large beetle, *Temnaspis nankinea* (Pic, 1914), in the south of Primorskii Krai is an example of this (Ivanov et al. 2022). Five species belong to the genus *Orsodacne* Latreille, 1802 in the Palearctic (Legalov 2021, 2022a, 2022b), but only two species were found in East Asia, *O. arakii* Chujd, 1942 from Japan (Honshu and Shikoku) and *O. yunnanicus* Legalov, 2021 from China (Yunnan). The genus is absent in Korea and North Japan (Hokkaido). *Orsodacne cerasi* (Linnaeus, 1758) is a forest species distributed in Europe, Asia Minor (south to Southern Iran (Lopatin 1985)), Kazakhstan and Central Asia, as well as in Siberia (Heyden 1880–1881; Kiseleva 1928; Guselnikov and Medvedev 1984; Lopatin 1985, 2010; Medvedev and Dubeshko 1989, 1992; Silfverberg 2010; Moseyko et al. 2018; Legalov 2021, etc.). The easternmost record was Central Siberia, without a locality (Medvedev and Dubeshko 1992).

It is the easternmost record *Orsodacne cerasi* from Eurasia and the first find for the Russian Far East (Primorskii Krai).

## Material and methods

Studied specimen is kept in the ZIN – Zoological Institute RAS (Russia: Sankt-Petersburg).

The location of species is shown on map (fig. 2) which given on original data from collections of the Zoological Institute RAS and Institute of Systematics and Ecology of Animals, SB RAS, and also sensu references (Heyden 1880–1881; Kiseleva 1928; Guselnikov and Medvedev 1984; Lopatin 2010; etc.).

The terminology of beetle body is according to Lawrence et al. (2010). The systematics of studied taxa are based on Reid (2014).

## Systematics

Insecta: Coleoptera: Chrysomeloidea: Orsodacnidae: Orsodacninae

Genus: *Orsodacne* Latreille, 1802

Species: *Orsodacne cerasi* (Linnaeus, 1758) (Fig. 1)

**Material:** female (ZIN), RUSSIA, Primorskii Krai, Kedrovaya Pad' Res., VII.-VIII.1956, L.N. Medvedev.



**Figure 1.** *Orsodacne cerasi*, female, Primorskii Krai.

**Description.** Body yellowish-brown, covered with sparse semierect setae. Head capsule hypognathous, short, constricted behind eyes. Labrum free. Mandibles medium, curved. Eyes rounded, convex. Forehead wide, impressed, finely punctate, without grooves. Temples very short. Antennae inserted before eyes, filiform and long, reaching humeri. Antennomere 1 suboval, about 1.9 times as long as wide. Antennomeres 2-10 long-conical. Antennomeres 2-4 equal in width. Antennomere 2 2.0 times as long as wide, about 0.8 times as long as and 0.7 times as narrow as antennomere 1. Antennomere 3 subequal to antennomere 2. Antennomere 4 about 2.3 times as long as wide, about 1.1 times as long as antennomere 3. Antennomeres 5-6 equal in width. Antennomere 5 about 2.1 times as long as wide, 1.1 times as long as and 1.2 times as wide as antennomere 4. Antennomeres 6-8 equal in length. Antennomere 6 about 2.5 times as long as wide, 0.9 times as narrow as antennomere 5. Antennomere 7 about 1.7 times as long as wide, 1.1 times as wide as antennomere 6. Antennomere 8 about 2.3 times as long as wide, about 0.8 times as narrow as antennomere 7. Antennomere 9 2.3 times as long as wide, 1.1 times as long as and about 1.1 times as wide as antennomere 8. Antennomere 10 about 2.1 times as long as wide, 0.9 times as long as and equal in width to antennomere 9. Antennomere 11 2.7 times as long as wide, about 1.2 times as long as and 0.9 times as narrow as antennomere 10, weakly pointed at apex. Pronotum with weakly arcuate sides in apical and middle thirds, concave before middle, about 1.2 times as long as wide at apex, about 0.8 times as long as wide in middle, subequal to wide at base, quite densely punctate. Distances between punctures larger than their diameters. Disc of pronotum moderately convex. Base 0.6 times as narrow as elytral base. Scutellum distinct, semi-oval, 0.7 times as long as wide. Elytra subparallel-sided, with weak humeri and distinct epipleuron, without striate, 2.2 times as long as wide at base, 1.9 times as long as wide in middle, about 2.5 times as long as wide at apical fourth, 3.4 times as long as pronotum. Distances between punctures larger than their diameters. Scutellar striole present. Procoxal cavities narrowly separated. Metanepisterna narrow. Wings developed. Abdomen with free ventrites. Ventrites 1 and 2 subequal in length. Ventrites 3 and 4 equal in length. Ventrite 3 shorter than ventrite 2. Ventrite 5 slightly shorter than ventrite 4. Legs long. Femora thickened. Tibiae quite almost straight, with two spurs, without mucros. Tarsomere 1 wide-conical. Tarsomere 2 conical. Tarsomere 3 bilobed. Tarsomeres 1-3 with pulvilli on lower surface. Tarsomere 5 long. Trasal claws free and bifid.

**Remarks.** Yellow coloration is most common in beetles in Asiatic Russia. Specimens with a black scutellum, elytra (sometimes partially yellow), partially a head, prothorax, meso- and metaventrite, and abdomen or with a black body are recorded in the southeast of Western Siberia.



**Figure 2.** Distribution of *Orsodacne cerasi* from North Asia.

**Distribution.** Northern Europe: Great Britain, Denmark, Lithuania, Latvia, Estonia, Norway, Sweden, Finland; Southern Europe: Spain, France, Italy; Western Europe: the Netherlands, Switzerland, Germany, Liechtenstein, Austria; Balkans: Croatia, Serbia, Bulgaria, Macedonia; Eastern Europe: Czech Republic,

Poland, Hungary, Belarus, Ukraine, Moldavia, Romania; European part of Russia; Caucasus: Azerbaijan; Asia minor: Western Turkey, Southern Iran; North-western and Eastern Kazakhstan; Western and Middle Siberia, Russian Far East.

## Discussion

The new record of this species allows us to discuss the disjunction of its range. *Orsodacne cerasi* is widely distributed in the Western Palaearctic. It is found as far south as Southern Iran where it occurs in oases. It lives in the humid forests of Western Altai and in the floodplains of the large rivers of North-western Kazakhstan. Its finds from Western and Central Siberia are also in humid regions. The easternmost record is from Cisbaikalia (south of Irkutsk Region) without a specific location (Medvedev, Dubeshko 1992). The finds in Eastern Siberia are not known. Our record is the first from the Russian Far East. It can be assumed that this species still lives in the humid regions of Transbaikalia and in the south of the Far East, although it is very rare. There are examples of such distribution. *Cimberis attelaboides* (Fabricius, 1787) from the family Nemonychidae is common in Europe, but in Western Siberia it is caught singly, avoiding arid areas. Its easternmost locality in Siberia is Irkutsk, but it is found in North Korea (Legalov 2017). *Temnocerus caeruleus* (Fabricius, 1798) from the family Rhynchitidae is common in Europe and Western Siberia, but found by single specimens in Tuva, Irkutsk and in the south of Primorskii Krai (Legalov 2006). We can probably expect new finds of *Orsodacne cerasi* from the south of Eastern Siberia and the Far East.

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