

**A NEW SUBSPECIES OF *CARABUS*
(*HOMEOECARABUS*) *MAEANDER* FISCHER VON
WALDHEIM, 1822 (COLEOPTERA, CARABIDAE) FROM
NORTH TUNGUSKA RIVER VALLEY (NORTH SIBERIA)**

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ABSTRACT: A new subspecies of *Carabus* (*Homoeocarabus*) *maeander*: *Carabus* (*Homoeocarabus*) *maeander evenkiensis* ssp. n. is described from North Tunguska River valley in Evenk Autonomous Region (North Siberia). Diagnostic data are given.

KEY WORDS: Coleoptera, Carabidae, *Carabus* (*Homoeocarabus*) *maeander*, new subspecies, North Siberia, Evenk Autonomous Region, North Tunguska River.

Carabus (*Homoeocarabus*) *maeander* Fischer von Waldheim, 1822 has been described from Nerchinsk (southern Transbaikalie). This species is found in the following countries: South Korea, Russia, Japan, Canada and America. In America this species is found in north-central to north-eastern United States and ranges across most of Canada. In Japan *Carabus maeander* occurs on Hokkaido Island. In Russia the species is distributed in East Siberia from Irkutsk Region to Kamtchatka, southern Russian Far East, Sakhalin, southern Kuriles (Kunashir Island). Hokkaido and Kunashir Islands inhabits subspecies *Carabus* (*Homoeocarabus*) *maeander paludis* Géhin, 1885.

The wide area of *Carabus maeander* is inhabited by many unequally differing populations. Some of the groups of populations, undoubtedly, must be considered as subspecies. At the same time, the majority of populations constitute a continuous sequence of forms slightly different in size, coloration and proportions, but it is hardly possible to consider these forms as subspecies.

Recently I have received two specimens (male and female) of *Carabus maeander* collected in the North Tunguska River valley in Evenk Autonomous Region (North Siberia). The specimens are rather peculiar morphologically and distributed on periphery of a specific area of *Carabus maeander* and in my opinion are represented by separate subspecies.

The descriptions of *Carabus maeander evenkiensis* ssp. n. is given below.

DESCRIPTION

***Carabus* (*Homoeocarabus*) *maeander evenkiensis* ssp. n.**

(Figs 1, 2).

Holotype: male with label: "North Siberia, Evenk Autonomous Region, N Tunguska River, 60 km up to Tura Village, Tabachnyi Stream, 19.VI.1972" (the collector is not known).

Papatype: female, same locality, 15.VI.1972.

The holotype is preserved in the collection of the State Museum of Biology (Moscow, Russia). The paratype is preserved in the collection of the State Museum of Biology (Moscow, Russia).

Body length in male is 15.4 mm (including mandibles), width 6.3 mm; body length in female is 18.5 mm, width 7.6 mm.

Head (Fig. 4) not thickened, ratio width of pronotum/width of head 2.25; eyes big, strongly convex; mandibles relatively long, narrow, slightly incurved; terebral tooth of the right and left mandibles bi-dentate, strongly prominent; retinaculum of the left mandible smaller, retinaculum of the right mandible bigger, strongly prominent; surface of mandibles smooth. Frontal furrows shallow, inside coarsely-wrinkled with coarse punctures. Frons, vertex and neck coarsely-wrinkled with dense coarse punctures. Labrum wider than clypeus, moderately notched, with two lateral setae. Antenna protruding beyond the base of pronotum by three apical segments; palpi slightly dilated; penultimate segment of the maxillary palpi equal to the last segment; penultimate segment of the labial palpi with two setae. Mentum tooth triangular, shorter than lateral lobes; submentum with two setiferous pores.

Prothorax (Fig. 4) transverse, convex, broadest at about middle; ratio width/length 1.50. Pronotum with dense coarse wrinkles and punctures; pronotal sculpture more rough laterally. Median longitudinal line distinct; basal foveae deep, inside coarsely-wrinkled. Sides of pronotum narrowly margined; lobes of hind angles broad, evenly rounded, slightly bent downwards; anterior pronotal angles prominent. Lateral margin with two setiferous pores: one pore at about middle and one pore near hind angle.

Elytrae short-oval, convex, widest behind middle; shoulders prominent; sides of elytrae narrowly margined. Ratio length/width 1.48; ratio width of elytrae/width of pronotum 1.37. Elytral sculpture: elytral interspaces strongly convex, primary elytral interspaces interrupted into relatively short links; secondary elytral interspaces integral, tertiaries reduced. Primary foveoles indistinct; striae coarsely punctured.

Metepisternum coarsely-punctured, not longer than its width. Abdominal sternites smooth; sternal sulci not deep.

Legs of normal length; fore male tarsi with four dilated segments bearing hairy pads.

Aedeagus (Fig. 6) evenly curved apical lamella relatively short, slightly dilated; endophallic structure (Fig. 8) in general is characteristic for the species.

Head and prothorax (Fig. 4) reddish-bronze; elytrae (Figs 1, 2) greenish-bronze, elytral interspaces black; mandibles, palpi, antennae, legs, claws and ventral body surface black.

Differential diagnosis. The new subspecies differs from *Carabus (Homoeocarabus) maeander maeander* Fischer von Waldheim, 1822 (Fig. 3) by following features: frons, vertex and neck completely coarsely-wrinkled with dense coarse punctures (Fig. 4) (in nominotypical subspecies frons nearly smooth, vertex and neck with sparse coarse punctures, Fig. 5); pronotum completely with dense coarse wrinkles and punctures, anterior angles of pronotum prominent (Fig. 4) (while in *Carabus maeander maeander* pronotum on disk with sparse coarse punctures and wrinkles, laterally with more rough sculpture, anterior pronotal angles evenly rounded, Fig. 5); elytrae broader and shorter, ratio length/width 1.48 (while in nominotypical subspecies this coefficient is 1.60); apical lamella of aedeagus (Fig. 6) shorter than in

nominotypical subspecies (Fig. 7); coloration of prothorax and elytrae brighter (Figs 1, 2, 3).

Distribution. Russia, North Siberia, Evenk Autonomous Region, North Tunguska River valley. Up to now only one population is known.

Habitat. Probably the beetles were collected in the forested area.

LITERATURE CITED

Fischer von Waldheim, G. 1820-1822. Entomographia imperii Rossici, Vol. I, Typogr. Acad. Caes. medico-chir. excusa, Mosquae: 104 pp.

Géhin, J. B. 1885. Catalogue synonymique et systématique des Coléoptères de la tribu des Carabides, avec des planches dessinées par Ch. Haury. Remiremont, Prague: 104 pp.

Figs 1-3. *Carabus*, general view:



Fig.1. *Carabus maeander evenkiensis* ssp. n., male (holotype).

Fig.2. *Carabus maeander evenkiensis* ssp. n., female (paratype).

Fig.3. *Carabus maeander maeander*, male (from southern Transbaikalie, Chita env.).

Figs 4-5. Head and prothorax:

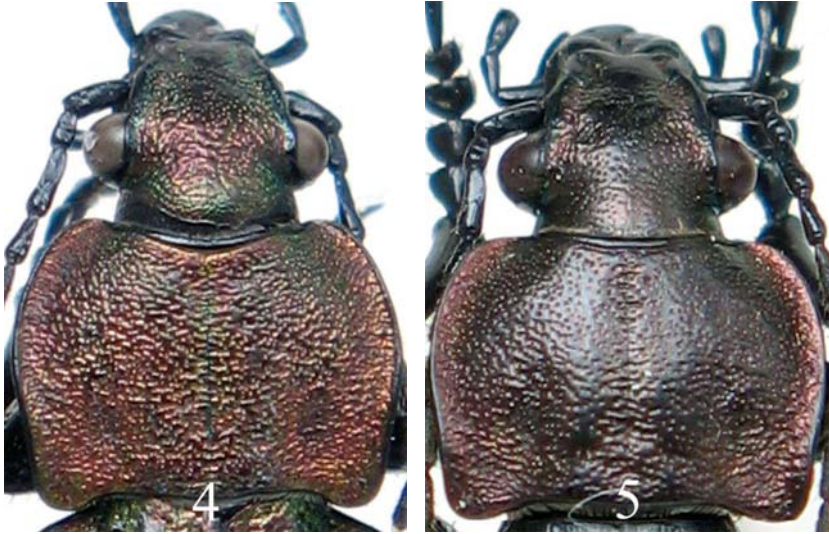


Fig 4. *Carabus maeander evenkiensis* ssp. n., male (holotype).

Fig 5. *Carabus maeander maeander*, male (from Chita env.).

Figs 6-8. Male genital structure:

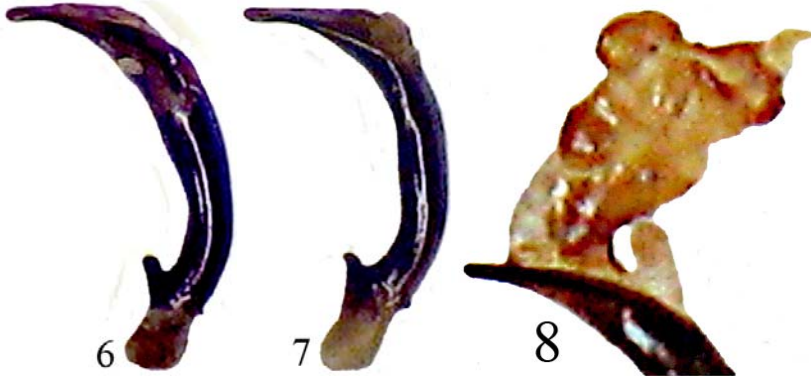


Fig 6. Aedeagus of *Carabus maeander evenkiensis* ssp. n. (holotype).

Fig 7. Aedeagus of *Carabus maeander maeander* (from Chita env.).

Fig 8. Endophallus of *Carabus maeander evenkiensis* ssp. n. (holotype).