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NEW TAXA OF THE GENUS *CARABUS* FROM NORTH CHINA (Coleoptera, Carabidae)

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Résumé. Deux nouvelles sous-espèces du genre *Carabus*: *Carabus (Megodontus) vietinghoffi fulgidiformis* ssp. n. et *Carabus (Morphocarabus) hummeli gaolinensis* ssp. n. sont décrites du Chine de Nord. Leurs caractères distinctifs sont définis.

Abstract. Two new subspecies of the genus *Carabus*: *Carabus (Megodontus) vietinghoffi fulgidiformis* ssp. n. and *Carabus (Morphocarabus) hummeli gaolinensis* ssp. n. are described from North China. Diagnostic data are given.

Key words: Coleoptera, Carabidae, *Carabus*, new subspecies, North China.

Descriptions

Carabus (Megodontus) vietinghoffi fulgidiformis ssp. n. (Ph. 1,2).

Material examined: Holotype: male with label: "North China, Gaolinzy env., 2-24.07.1996, A. Doroshenko leg."; **Papatypes:** 2 males, 2 females, same data and same locality.

Description: Body length in males 24.0-28.0 mm (including mandibles), width 8.0-9.7 mm; body length in females 24.2-24.5 mm, width 8.7-9.0 mm.

Head not thickened, ratio width of pronotum/width of head 2.30; eyes convex; mandibles long, strongly incurved; terebral tooth of the right and left mandibles bidentate, moderately prominent; retinaculum of the right and left mandibles slightly prominent; surface of mandibles with few shallow punctures. Frontal furrows deep and long, inside with sparse coarse punctures. Frons, vertex and neck with sparse coarse punctures. Labrum wider than clypeus, slightly notched, without lateral setae. Antennae protruding beyond the base of pronotum by 4 apical segments; palpi moderately dilated; penultimate segment of the maxillary palpi equal to the last segment; penultimate segment of the labial palpi with 4-5 setae. Mentum tooth narrow, triangular, longer than lateral lobes; submentum without setiferous pores.

Prothorax transverse, slightly cordiform, broadest at about middle; ratio width/length 1.40. Pronotum nearly smooth anteriorly, its punctuation more rough and dense laterally and posteriorly. Median longitudinal line indistinct; basal foveae oval, inside with sparse punctures. Sides of pronotum narrowly margined, its margin broader and slightly bent upwards posteriorly; lobes of hind angles triangular, slightly bent downwards. Lateral margin with 2-3 setiferous pores.

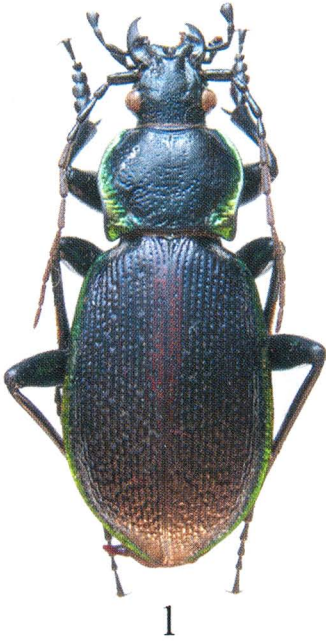
Elytra oval, moderately convex, widest at about middle; shoulders strongly prominent; sides of elytra broadly margined. Ratio length/width 1.62; ratio width of elytra/width of pronotum 1.50. Elytral sculpture triploid, homodynamous, all elytral interspaces slightly prominent. Primary foveoles distinct; striae coarsely punctured.

Metepisternum smooth, slightly longer than its width. Abdominal sternites smooth; sternal sulci indistinct to absent.

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

Shape of aedeagus and endophallic structure in general is characteristic for species.

Coloration dark blue, sometimes with green lustre; pronotal and elytral margins green, greenish bronze or red; mandibles, palpi, antennae, legs and ventral body surface black.



Ph.1. *C. vietinghoffi fulgidiformis* ssp. n., male (Holotype).
Ph.2. *C. vietinghoffi fulgidiformis* ssp. n., female (Paratype).
Ph.3. *C. hummeli gaolinensis* ssp. n., male (Paratype).
Ph.4. *C. hummeli gaolinensis* ssp. n., female (Paratype).

Differential diagnosis

The new subspecies is closely related to *Carabus (Megodontus) vietinghoffi fulgidus* Fischer von Waldheim, 1828 but strongly differs from the latter by elytral sculpture, which is relatively smooth; all elytral interspaces slightly prominent, primary elytral foveoles distinct (in *Carabus vietinghoffi fulgidus* elytral sculpture rough, primary elytral foveoles indistinct). Besides the new subspecies differs from *Carabus vietinghoffi fulgidus* by less convex pronotum with less distinct median longitudinal line.

Distribution: Up to now only one population from North China (Gaolinzy Village environs) is known.

Carabus (Morphocarabus) hummeli gaolinensis ssp. n. (Ph. 3,4).

Material examined: Holotype: male with label: "North China, Gaolinzy env., 2-24.07.1996, A. Doroshenko leg."; Papatypes: 2 males, 4 females, same data and same locality.

Description: Body length in males 20.4-24.9 mm (including mandibles), width 7.0-8.6 mm; body length in females 23.2-24.3 mm, width 8.5-8.7 mm.

Head not thickened, ratio width of pronotum/width of head 1.83; eyes strongly convex; mandibles long, strongly incurved and sharply pointed at the apex; terebral tooth of the right and left mandibles bi-dentate, strongly prominent; retinaculum of the right and left mandibles slightly prominent; surface of mandibles smooth. Frontal furrows deep and long, inside with coarse wrinkles. Frons nearly smooth, vertex and neck with coarse wrinkles. Labrum wider than clypeus, strongly notched, with 2 lateral setae. Antennae long, protruding beyond the base of pronotum by 5 apical segments; palpi slightly dilated; penultimate segment of the maxillary palpi longer than the last segment; penultimate segment of the labial palpi with 2 setae. Mentum tooth triangular, shorter than lateral lobes; submentum with 2 setiferous pores.

Prothorax transverse, cordiform, broadest at about middle; ratio width/length 1.15. Pronotum with coarse punctures and wrinkles, its punctuation more rough and dense laterally. Median longitudinal line distinct; basal foveae oval, small, not deep, inside with coarse wrinkles. Sides of pronotum narrowly margined; lobes of hind angles evenly rounded, slightly bent outwards. Lateral margin with 2 setiferous pores: one pore at about middle and one pore near hind angle.

Elytra oblong-oval, slightly convex, widest at about middle; shoulders slightly prominent; sides of elytra narrowly margined. Ratio length/width 1.77; ratio width of elytra/width of pronotum 1.50. Elytral sculpture triploid, homodynamous; all elytral interspaces slightly convex, about equally developed. Primary foveoles indistinct; striae finely punctured.

Metepisternum smooth, slightly longer than its width. Abdominal sternites smooth; sternal sulci absent.

Legs long; anterior male tarsi with four dilated segments bearing hairy pads.

Shape of aedeagus and endophallic structure in general is characteristic for species.

Pronotum red, bronze, cooper, dark blue; elytra bronze, cooper, greenish-bronze, green, dark brown; mandibles, palpi, antennae, legs and ventral body surface black; femurs brown.

Differential diagnosis

The new subspecies differs from *Carabus (Morphocarabus) hummeli smaragdulus* Kraatz, 1878, which is widely distributed in the south of Amur and Khabarovsk Region (near to the Chinese border) by following features: head with less rough sculpture; antennae longer, protruding beyond the base of pronotum by 5 apical segments; pronotum cordiform, narrower with less rough sculpture; elytra oblong-oval, much narrower and less convex; legs longer; femurs brown.

Distribution: Up to now only one population from North China (Gaolinzy Village environs) is known.

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