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**TWO NEW SUBSPECIES OF
CARABUS (MORPHOCARABUS) HUMMELI FISCHER VON WALDHEIM,
 1823 FROM USSURI LAND
 (Coleoptera, Carabidae)**

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Résumé. Deux nouvelles sous-espèces du *Carabus (Morphocarabus) hummeli*: *Carabus (Morphocarabus) hummeli biamensis* ssp. n. et *Carabus (Morphocarabus) hummeli vladobydovi* ssp. n. sont décrites de l'Extrême-Orient russe. Leurs caractères distinctifs sont définis.

Abstract. Two new subspecies of *Carabus (Morphocarabus) hummeli*: *Carabus (Morphocarabus) hummeli biamensis* ssp. n. and *Carabus (Morphocarabus) hummeli vladobydovi* ssp. n. are described from Ussuri Land (Russia). Diagnostic data are given.

Key words: Coleoptera, Carabidae, *Carabus (Morphocarabus) hummeli*, new subspecies, Ussuri Land, Far East Russia.

***Carabus (Morphocarabus) hummeli biamensis* ssp. n.** (Ph. 1,2).

Description: Body length in male is 24.3 mm (including mandibles), width 8.3 mm; body length in females is 22.0 - 25.8 mm, width 7.8 - 9.0 mm.

Head not thickened, rarely thickened (in females); ratio width of pronotum/width of head 1.83; eyes slightly convex; mandibles relatively short and broad, slightly incurved; terebral tooth of the right and left mandibles bi-dentate, slightly prominent; retinaculum of the right and left mandibles small, slightly prominent; surface of mandibles smooth. Frontal furrows deep and long, inside coarsely-wrinkled. Frons, vertex and neck coarsely-wrinkled, rarely with sparse and coarse punctures and wrinkles. Labrum slightly 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 longer than the last segment; penultimate segment of the labial palpi with 2 setae. Mentum tooth triangular, broad, slightly shorter than lateral lobes; submentum with 2 setiferous pores.

Prothorax cordiform, broadest at about middle; ratio width/length 1.28. Pronotum with coarse punctures; pronotal sculpture more rough and dense laterally. Median longitudinal line indistinct; basal foveae small, shallow, inside coarsely-punctured. Sides of pronotum broadly margined, its margins broader posteriorly; lobes of hind angles short, evenly rounded, slightly bent outwards and downwards. Lateral margin with 2 setiferous pores: one pore at about middle and one pore near hind angle.

Elytrae oval or oblong-oval, relatively convex; widest at about middle; shoulders prominent; sides of elytrae narrowly margined. Ratio length/width 1.81; ratio width of elytrae/width of pronotum 1.45. Elytral sculpture triploid, homodynamous; all elytral interspaces moderately convex, about equally developed, interrupted into rather long links. Primary foveoles indistinct; striae coarsely punctured.

Ventral body surface smooth, metepisternum finely-punctured, slightly longer than its width; sides of abdomen slightly wrinkled; sternal sulci absent.

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

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

Pronotum blue, elytrae brown with pink lustre, rarely elytrae blue; margins of pronotum and elytrae red, reddish-gold, gold, green, greenish-gold or greenish-red. Mandibles, palpi, antennae, legs and ventral body surface dark brown, femurs, sometimes reddish brown.

Material examined: Holotype: male with label: "Northern Ussuri Land, B. Svetlovodnaiya (Biame) River Valley, 40 km from the mouth, 30.VII.1976, A. Klitin leg"; Paratypes: 6 females, same data and same locality.

Discussion

The new subspecies differs from *Carabus (Morphocarabus) hummeli smaragdulus* Kraatz, 1878, which is widely distributed in the Ussuri Land Region by following features: eyes less convex; sculpture of frons rougher; mandibles shorter; prothorax cordiform, narrower; lobes of hind angles longer, more bent outwards; body less stout and robust; elytrae narrower; coloration of elytrae usually brown with pink lustre; body shorter.

Distribution: Northern part of Ussuri Land Region, near Khabarovsk Region. Up to now only one population from the Valley of B. Svetlovodnaiya (Biame) River is known.

Habitat: The beetles were collected in the mixed forest.

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

Description: Body length in males is 22.0 – 23.5 mm (including mandibles), width 8.0 - 8.4 mm; body length in females is 23.0 - 25.6 mm, width 8.0 - 9.0 mm.

Head not thickened, ratio width of pronotum/width of head 2.12; eyes strongly convex; mandibles relatively long, slightly incurved; terebral tooth of the right and left mandibles bi-dentate, slightly prominent; retinaculum of the right and left mandibles moderately prominent; surface of mandibles smooth. Frontal furrows deep and shallow, inside coarsely-wrinkled. Frons, vertex and neck coarsely-wrinkled. Labrum slightly wider than clypeus, slightly notched, with 2 lateral setae. Antennae protruding beyond the base of pronotum by 4 apical segments; palpi slightly dilated; penultimate segment of the maxillary palpi shorter than the last segment; penultimate segment of the labial palpi with 2 setae. Mentum tooth broad, shorter than lateral lobes; submentum with 2 setiferous pores.

Prothorax transverse, slightly cordiform, broadest at about middle; ratio width/length 1.25. Pronotum with coarse wrinkles and punctures; pronotal sculpture more rough laterally. Median longitudinal line distinct; basal foveae oval, small, inside coarsely-punctured. Sides of pronotum broadly margined, its margins broader posteriorly; lobes of hind angles short, evenly rounded, bent downwards. Lateral margin with 2 setiferous pores: one pore at about middle and one pore near hind angle.

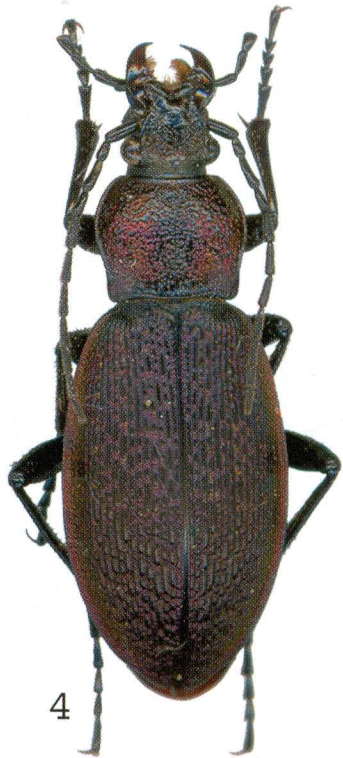
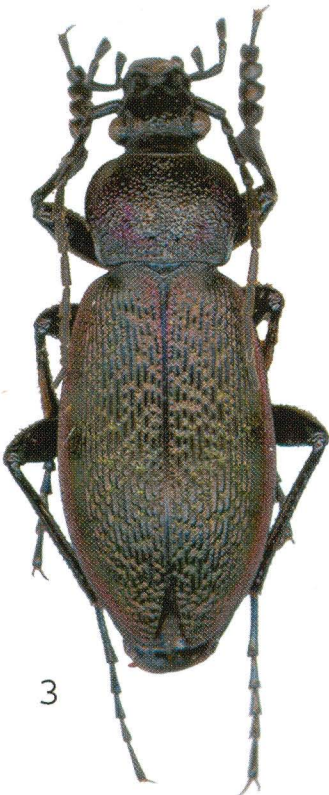
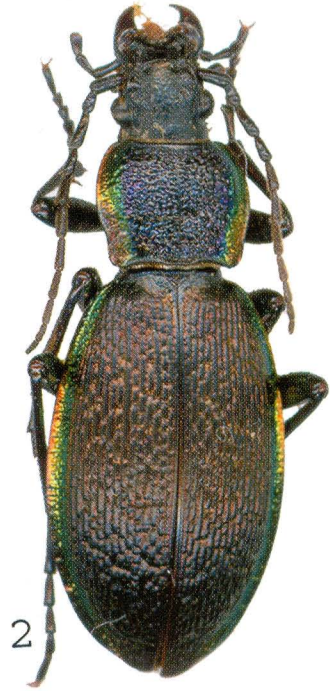
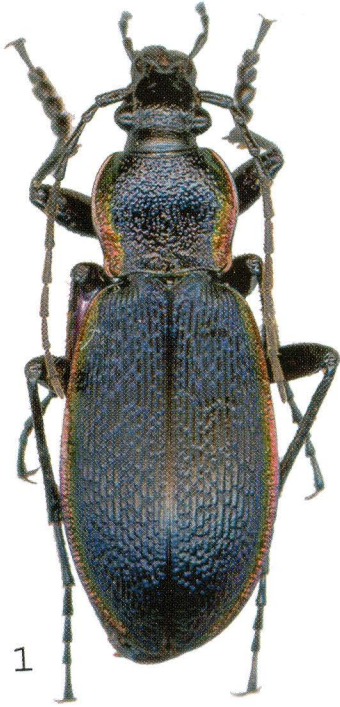
Elytrae oblong-oval, narrow, widest at about middle; shoulders prominent; sides of elytrae narrowly margined. Ratio length/width 1.62; ratio width of elytrae/width of pronotum 1.45. Elytral sculpture triploid, homodynamous; all elytral interspaces slightly convex, about equally developed, interrupted into short and relatively long lines. Primary foveoles indistinct; striae coarsely punctured.

Metepisternum with fine punctures, slightly longer than its width. Abdominal sternites with fine punctures laterally; sternal sulci absent.

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

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

Pronotum violet-pink, violet-red, purple-pink, red or dark pink; elytrae dark pink, purple-pink with greenish-gold lustre; brownish-pink or pink with greenish-gold lustre; margins of pronotum and elytrae purple. Mandibles, palpi, antennae, legs and ventral body surface black.



Material examined: Holotype: male with label: "Southern Ussuri Land, Popov Island, 12-14.VII.1990, A. Aliykrinsky leg."; Paratypes: 2 males, 3 females, same data and same locality.

Discussion

The new subspecies differs from other subspecies of *Carabus (Morphocarabus) hummeli* by very specific coloration: pronotum violet-pink, violet-red, purple-pink, red or dark pink; elytrae dark pink, purple-pink with greenish-gold lustre; brownish-pink or pink with greenish-gold lustre; margins of pronotum and elytrae purple. Such original coloration was not known at *Carabus (Morphocarabus) hummeli* earlier.

Distribution: Southern part of Ussuri Land Region. Up to now only one population from Popov Island is known.

Habitat: The beetles were collected in the meadow.

Dedication: I dedicate this subspecies in memory of my father Dr. Vladimir P. OBYDOV, the chief designed of State Specialized Design Institute of Radio and Television.

References

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Figures

- Ph.1. *Carabus (Morphocarabus) hummeli biamensis* ssp. n. (Holotype).
Ph.2. *Carabus (Morphocarabus) hummeli biamensis* ssp. n. (Paratype).
Ph.3. *Carabus (Morphocarabus) hummeli vladobydovi* ssp. n. (Holotype).
Ph.4. *Carabus (Morphocarabus) hummeli vladobydovi* ssp. n. (Paratype).