

**THE DESCRIPTION OF A NATURAL INTERSPECIFIC HYBRID
BETWEEN *CARABUS (ARCHIPLECTES) JUENTHNERI*
AVADCHARENSIS KURNAKOV, 1972 AND *CARABUS*
(SPHODRISTOCARABUS) JANTHINUS RUGATUS BREUNING,
1934 (COLEOPTERA, CARABIDAE).**

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ABSTRACT: A natural hybrid between *Carabus (Archiplectes) juenthneri avadcharensis* Kurnakov, 1972 and *Carabus (Sphodristocarabus) janthinus rugatus* Breuning, 1934 is described and figured.

KEY WORDS: Coleoptera, Carabidae, *Carabus*, *Archiplectes*, *Sphodristocarabus*, natural hybrid, Caucasus, Abkhazia.

Natural hybrids between species of the subgenera *Archiplectes* and *Sphodristocarabus* were not known till now. The description of a natural hybrid between *Carabus (Archiplectes) juenthneri avadcharensis* Kurnakov, 1972 and *Carabus (Sphodristocarabus) janthinus rugatus* Breuning, 1934 (Fig.2) is given below.

MATERIAL

Male: Caucasus, Abkhazia, 7,4 km from Ritza Lake to the north-east, 1,5 km from Kutjukh Village to the north, 1635 m, 19-25.VII.2008, A. Vlasenko leg. Specimen is preserved in the collection of Mr. A.S Vlasenko (Moscow, Russia).

DESCRIPTION

***Carabus (Archiplectes) juenthneri avadcharensis* Kurnakov, 1972 (Fig.1)**

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***Carabus (Sphodristocarabus) janthinus rugatus* Breuning, 1934 (Fig.3)**

Body length is 25.4 mm (including mandibles), body width is 9.0 mm.

Body more convex than in *C. juenthneri avadcharensis* but less convex than in *C. janthinus rugatus*.

Head thickened; ratio width of pronotum/width of head 1.32; eyes prominent. Mandibles broader than in *C. janthinus rugatus* but narrower than in *C. juenthneri avadcharensis*; terebral tooth of the right and left mandibles bidentate, strongly prominent; retinaculum of the right mandible bigger, strongly prominent, retinaculum of the left mandible smaller, slightly prominent; surface

of mandibles smooth. Frontal furrows broad and deep as in *C. juenthneri avadcharensis*, inside with few coarse wrinkles; frons and vertex nearly smooth as in *C. juenthneri avadcharensis*; neck with coarse punctures and wrinkles as in *C. janthinus rugatus*. Labrum wider than clypeus, slightly notched, with two lateral setae. Antenna long, protruding beyond the base of pronotum by five apical segments as in *C. juenthneri avadcharensis*, longer than in *C. janthinus rugatus*; palpi as in *C. juenthneri avadcharensis*, more dilated than in *C. janthinus rugatus*; penultimate segment of the maxillary palpi slightly longer than the last segment; penultimate segment of the labial palpi with two setae. Mentum tooth triangular broad as in *C. juenthneri avadcharensis*, slightly shorter than lateral lobes; submentum with two setiferous pores.

Prothorax broader than in *C. juenthneri avadcharensis* and *C. janthinus rugatus*; ratio width/length 1.96. Pronotum with more rough sculpture than in *C. juenthneri avadcharensis* but less rough than in *C. janthinus rugatus*; median longitudinal line distinct; basal foveae not deep as in *C. janthinus rugatus*, inside with dense coarse wrinkles as in *C. juenthneri avadcharensis*. Lobes of hind angles triangular, long, bent upwards as in *C. juenthneri avadcharensis*. Sides of pronotum narrowly margined and bent upward posteriorly, lateral margin with three setae.

Elytrae oval as in *C. janthinus rugatus* (in *C. juenthneri avadcharensis* elytrae oblong-oval), more convex than in *C. juenthneri avadcharensis* but less convex than in *C. janthinus rugatus*; widest at about middle; shoulders prominent as in *C. janthinus rugatus*, not so rounded as in *C. juenthneri avadcharensis*; sides of elytrae narrowly margined. Ratio length/width 1.50; ratio width of elytrae/width of pronotum 1.53. Elytral sculpture exactly intermediate between elytral sculpture of *C. juenthneri avadcharensis* and *C. janthinus rugatus*; primary elytral foveoles indistinct.

Abdominal sternites slightly wrinkled as in *C. juenthneri avadcharensis*, metepisternum with sparse fine wrinkles, not longer than its width; sternal sulci absent as in *C. juenthneri avadcharensis*. Legs longer than in *C. janthinus rugatus*; anterior tarsi with four dilated segments bearing hairy pads.

Shape of aedeagus and endophallic structure are conspecific with the genital structure of *C. juenthneri avadcharensis*.

Coloration black.

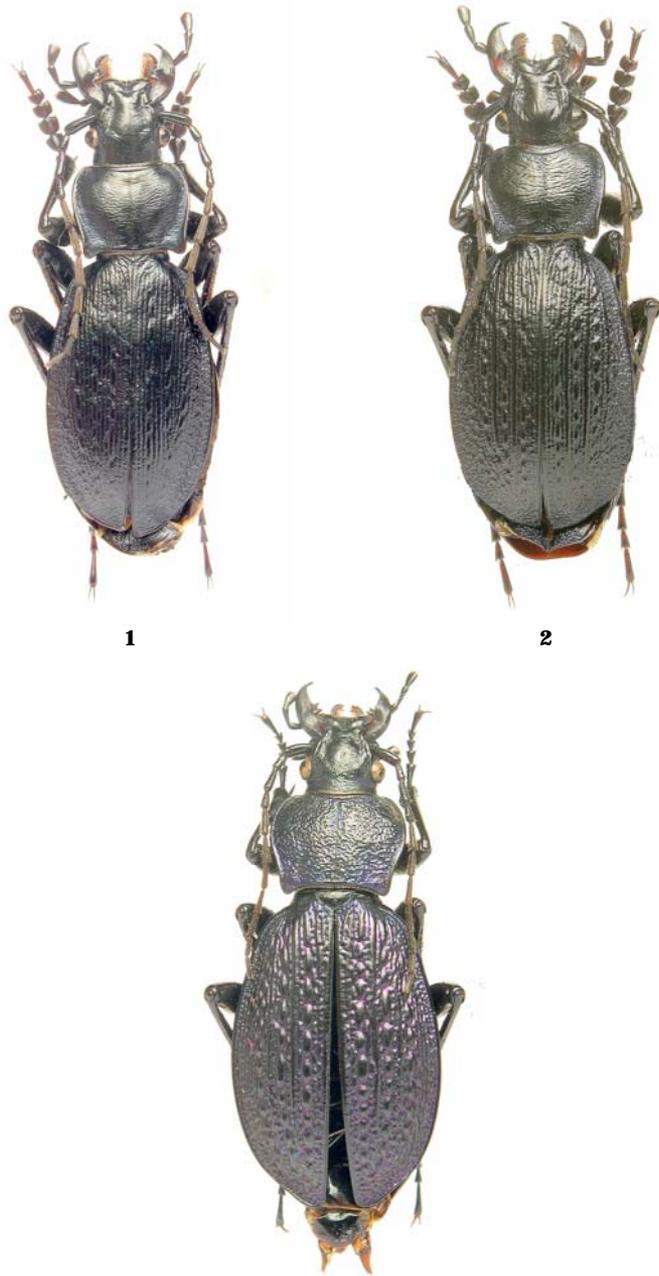
Distribution. Caucasus, Abkhazia, Ritza Lake environs.

Habitat. The specimen was collected in the brushwood near beech-fir forest.

LITERATURE CITED

Breuning, S. 1934. Über Carabini. Folia Zoologica et Hydrobiologica, 6: 29-40.

Kurnakov, V.N. 1972. Contribution à la Faune des Carabiques du Caucase. VI. Nouveaux Carabes du Caucase. Nouvelle Revue d'entomologie, II (2): 111-115.



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Figs 1-3. *Carabus* (general view): 1. *Carabus* (*Archiplectes*) *juenthneri avadcharensis*; 2. *Carabus* (*Archiplectes*) *juenthneri avadcharensis* X *Carabus* (*Sphodristocarabus*) *janthinus rugatus* interspecific hybrid; 3. *Carabus* (*Sphodristocarabus*) *janthinus rugatus*. All specimens from Caucasus, Abkhazia, Ritza Lake environs.