Proposal of a New Subgenus for the Unique Alpine Species, Carabus latreilleanus (Coleoptera, Carabidae)

Yûki Imura

Department of Gynecology, Tôkyû General Hospital, Kita-senzoku, 1–45–6, Ôta-ku, Tokyo, 145–0062 Japan

Through the courtesy of Professor Pierfranco CAVAZZUTI (Pagno, Italy), I recently received a series of alcohol-treated specimens belonging to the so-called *Orinocarabus* (=group of *Carabus amplipennis* [*partim*] in the subgenus *Oreocarabus*, sensu IMURA & MIZUSAWA, 1996, the *Carabus* of the World) from the western part of the Alps, and they were submitted to the JT Biohistory Research Hall (Takatsuki, Osaka) for molecular biological studies. Most of the analysed taxa formed a single cluster on the genealogical tree constructed from the mitochondrial ND5 gene sequences, while *Carabus latreilleanus*, which has been regarded as nothing but a member of *Orinocarabus*, constituted another branch remote from the *Orinocarabus* cluster (detailed analytical data will be given in another paper now under preparation). Careful morphological examination of its fully everted endophallus also reveals that this species has very strange genitalic characters which seem to be deviated from the criteria established for all the other members of *Orinocarabus*. It is probable that *C. latreilleanus* occupies an independent phylogenetic position in the genus *Carabus* (s. lat.), and here I propose a new subgenus for it.

Subgenus Cavazzutiocarabus IMURA, nov.

Type species: Carabus latreilleanus CSIKI, 1927.

Small-sized carabid beetle with the external features almost identical with those of *Orinocarabus*, but very peculiar in conformation of the male genitalia. Membraneous preostium very narrow, its basal part widely covered with semi-sclerotized flap smoothly connecting with the dorsal wall of aedeagus, and ostium lobe seems vestigial (in all the other *Orinocarabus* species, membraneous preostium much wider with a well developed ostium lobe as a distinct projection); ligulum not specialized, indicated by longitudinally arranged pigmented granules; basal lateral lobes and median lobe absent; prepraeputial lobes thickly haired, with the right one larger than the left; parapraeputial lobes rather weakly inflated and symmetrical; praeputial pad large and hemispherical, with a smaller accessory hump on its left side; both apical and podian lobes weakly but obviously inflated; apical portion of aedeagus narrowly elongate though short, and aggonoporius not remarkably sclerotized.