



A description of a larva of *Ancyrona diversa* Pic, 1921 and its phylogenetic implications (Coleoptera: Trogossitidae)

JIŘÍ KOLIBÁČ¹ & ARTEM A. ZAITSEV²

¹Moravian Museum, Department of Entomology, Hviezdoslavova 29a, 627 00 Brno, Czech Republic. E-mail: jkolibac@mzm.cz

²Moscow Pedagogical State University (MPSU), Faculty of Biology and Chemistry, Department of Zoology and Ecology, Kibaltchicha str. 6-5, 129164 Moscow, Russia. E-mail: ztema@mail.ru

Abstract

A larva of *Ancyrona diversa* Pic, 1921 (Coleoptera: Trogossitidae) associated with adults is described in detail. Its morphological features are compared with known larvae of the tribe Lophocaterini and the subfamilies Trogossitinae and Peltinae. Phylogenetic and systematic implications are discussed. A resurrection of the subfamily name Lophocaterinae is suggested for the trogossitid tribes Decamerini, Lophocaterini and Ancyronini.

Key words: Russian Far East, Coleoptera, Trogossitidae, Lophocaterini, Ancyronini, larval morphology, phylogeny

Introduction

The subfamily Lophocaterinae was established by Crowson (1964) and classified within the former Trogossitidae, not Peltidae (*sensu* Crowson 1964), because of larval similarities. Three genera were included by that author only: *Lophocateres* Olliff, 1883, *Promanus* Sharp, 1877 and *Grynomia* Sharp, 1877. Later, Crowson (1970) established a family rank for Lophocaterinae and included further genera: *Grynocharis* Thomson, 1859, *Lycoptis* Casey, 1890, *Indopeltis* Crowson, 1966, and *Peltonyxa* Reitter, 1876 (= *Floricatores* Crowson, 1970). Such concept of Lophocateridae was followed by numerous authors (e.g. Mamaev 1976) but others consider the mentioned genera a part of Peltinae (Barron 1971) or a rank of subfamily was only granted (e.g. Slipinski 1992, Lawrence 1999ab). Kolibáč (2006) classified the former Lophocaterinae/-idae as a tribe together with Decamerini (former Decamerinae) and Ancyronini as its sister groups. The same author had originally placed the cluster Decamerini-Lophocaterini-Ancyronini in the subfamily Peltinae (Kolibáč 2006, 2007) but later, he discussed about its independent position among Trogossitidae subfamilies (Kolibáč 2008) and mentioned possibility to use a subfamily rank (Lophocaterinae) for it. Also possible paraphyly of Lophocaterini with regard to Ancyronini have already been mentioned (Kolibáč 2008, 2010). A comprehensive review of the trogossitid taxonomy is included in Kolibáč & Leschen (2010).

Larvae of Ancyronini have been poorly known so far. Crowson (1964) mentioned *Grynomia varians* Broun, 1880 larva but without a detailed description. A larva of *Ancyrona haroldi* Reitter, 1877 was described by Hayashi (1986) but association with adults of the specimen is unclear and it is so similar to *Lophocateres pusillus* Klug, 1832 that the first author of this communication considered it to be identical with the latter species. The recent record of clearly associated larvae of *Ancyrona diversa* Pic, 1921, and its detailed description, could contribute in resolving of the questions outlined above.

Methods

Five larval specimens were conserved in 75% ethyl alcohol. The separated body parts (head, anterior leg, part of abdomen) of one of them were briefly boiled in 10% KOH solution. The mouth part were dissected from