

Copyright © 2013 Magnolia Press





http://dx.doi.org/10.11646/zootaxa.3619.5.6 http://zoobank.org/urn:lsid:zoobank.org:pub:0AB793D1-D40D-47FF-9835-C83BBD94CE27

# Larval morphology of *Lebertia longiseta* Bader, 1955, *L. dubia* Thor, 1899 and *Oxus nodigerus* Koenike, 1898 (Acari, Hydrachnidia: Lebertiidae, Oxidae)

# PETR V. TUZOVSKIJ

Institute for Biology of Inland Waters of the Russian Academy of Sciences, Borok, Yaroslavl Province, 152742 Russia. E-mail: tuz@ibiw.yaroslavl.ru

# Abstract

Illustrated descriptions of the larvae of the water mite species of *Lebertia longiseta* Bader, 1955, *Oxus nodigerus* Koenike, 1898 and redescription of the larva *L. dubia* (Thor, 1899) are presented.

Key words: water mites, Lebertiidae, Oxidae, Lebertia, L. longiseta, L. dubia, Oxus, O. nodigerus, morphology, larva

# Introduction

The larvae of *Lebertia longiseta* Bader, 1955 and *Oxus nodigerus* Koenike, 1898 were previously unknown. Piersig (1901) and Koenike (1909) gave a brief description of the morphology of the larva of *L. dubia* (Thor, 1899). In the present paper the larvae of the above named species are described in detail. Larvae of the families Lebertiidae and Oxidae are known to parasitize the thorax region or, rarely, abdomen of imagos of chironomid Diptera (Tanypodinae, Chironominae, Orthocladiinae) (Smith & Oliver 1986, Martin 2000, Martin & Stur 2006).

# Materials and methods

Specimens were collected by the author in lakes, ponds, bogs and streams of the European and Asian parts of Russia. To obtain larvae, water mites were maintained in laboratory conditions (room temperature, natural daynight conditions). Eggs and larvae obtained from females kept individually in glass or transparent plastic vessels of 10–15 mm diameter, and a height of 15 mm. The adult *Lebertia* species were identified with the key of Gerecke (2009).

Idiosomal setae are named according to Tuzovskij (1987), for comparing with other common terminology see Gerecke & Tuzovskij (2001): Fch—frontales chelicerarum, Fp—frontales pedipalporum, Vi—verticales internae, Ve—verticales externae, Oi—occipitales internae, Oe—occipitales externae, Hi—humerales internae, He—humerales externae, Hv—humerales ventralia, Sci—scapulares internae, Sce—scapulares externae, Li—lumbales internae, Le—lumbales externae, Si—sacrales internae, Se—sacrales externae, Ci—caudales internae, Pe—praeanales internae, Ai—anales internae, Ae—anales externae.

Furthermore, the following abbreviations are used: P-1-5, pedipalp segments (trochanter, femur, genu, tibia and tarsus); I-Leg-1-5, first leg, segments 1-5 (trochanter, femur, genu, tibia and tarsus) i.e. III- Leg-3 = genu of third leg; C1—coxal setae located posteromedially on coxa I, C2—coxal seta located posterolaterally on coxa I, C3—coxal seta located posterolaterally on coxa II, C4—coxal seta located anteriorly on coxa III, C5—coxal seta located posterolaterally on coxa seta located posterolaterally on coxa II, s—solenidion, ac—acanthoid seta; L—length; W—width, n = number of specimens measured; all measurements are given in  $\mu$ m.