

## The genus *Euryparasitus* in North America (Mesostigmata: Euryparasitidae)

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### Abstract

The genus *Euryparasitus* in North America is revised on the basis of the deutonymphal instar. Four species are recognized, two previously described and two new. The four species fall into two easily recognizable groups. The first group, consisting of *E. longicheta* Bondartchuk & Buyakova and *E. occidentalis* n. sp., lacks barbed setae on the idiosoma and serrations on the anterior free margin of the gnathotectum, and shows a well differentiated acrotarsus on legs I. The second, consisting of *E. calcarator* (Banks) and *E. maseri* n. sp., has barbed setae on the idiosoma and serrations on the anterior margin of the gnathotectum, but lacks a well differentiated acrotarsus I. A key to the deutonymphs for the species of *Euryparasitus* and genera of Euryparasitidae in North America is provided. The host association pattern of *Euryparasitus* species appears to fit better with ecological than with host specificity.

**Key words:** *Euryparasitus*, Nearctic, mammals, Rhodacaroidea, Euryparasitidae

### Introduction

The superfamily Rhodacaroidea includes a wide range of largely free-living, soil inhabiting mites. Among the few exceptions is a lineage including the closely related genera *Euryparasitus* and *Cyrtolaelaps*, genera which feature a deutonymph that is associated with small mammals. Non-deutonymphal instars are usually associated with the nests of these mammals. There have been no reports of feeding on the host by the