

Three new species of *Branchinecta* (Crustacea: Branchiopoda: Anostraca) from the Nearctic

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Abstract

Branchinecta lateralis, *B. constricta* and *B. serrata*, three new species of fairy shrimp, are described from central North American temporary pools. *Branchinecta campestris* Lynch, 1960 has been thought to occur on both sides of the Rocky Mountains in Canada and the United States. However, material from east of the North American Continental Divide were found to represent an undescribed species, morphologically distinct from *B. campestris*, and is described here as *Branchinecta lateralis* n. sp. *Branchinecta constricta* n. sp. has affinities with *B. coloradensis*, and *B. packardi*, yet is distinguished in that the male second antenna has a proximal constriction. *Branchinecta serrata* n. sp. is closely related to *Branchinecta paludosa* and *B. kaibabensis*, but differs in the shape of the distal segment of the male second antenna and in the female pattern of dorsolateral projections.

Key words: *Branchinecta*, new species, *Branchinecta lateralis*, *Branchinecta campestris*, *Branchinecta constricta*, *Branchinecta serrata*, Montana, Wyoming, Texas, Alberta, fairy shrimp

Introduction

The Branchinectidae is monogeneric with approximately 50 described species. The genus *Branchinecta* has been reported from all continents except Africa and Australia. Six taxa occur in Eurasia, one species is circumpolar and another ranges into Antarctica, however the genus reaches its greatest diversity is in the Americas with more than 20 species for each of the continents (Belk & Brtek 1995).

Brtek and Mura (2000) provided a very confused diagnosis of the Branchinectidae and divided the genus *Branchinecta* into five species groups, the geographic distribution of each was depicted on a map. These species groups were justified by the sentence: “One genus only: *Branchinecta* Verrill, 1869 which can be divided (according to the morphology of the male antenna, among other features) into five distinct species groups at