



New species of *Alona* from South-East Russia and Mongolia related to *Alona salina* Alonso, 1996 (Cladocera: Anomopoda: Chydoridae)

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Abstract

Two new species of genus *Alona* Baird, 1843 were found in regions along the south-east border of Asian Russia. *Alona irinae* **sp. nov.** was found in a lake in the plain of the Zeya River, a north tributary of the Amur River, and in a lake in the steppe region along the West coast of Baikal. *Alona floessneri* **sp. nov.** inhabits saline lake Uvs-Nuur on the border of Russia and West Mongolia, and several other saline lakes of Mongolia. Both species share numerous affinities with each other and with the Iberian species *Alona salina* Alonso, 1996, but differ in the shape and armament of postabdomen, sculpture of carapace, and size. Detailed morphology of *Alona salina*, including that of juveniles, was studied for the first time. Studied species belong to the *elegans*-group of species, likely of generic rank, which include also *A. elegans* Kurz, 1875 and *A. orellanai* Alonso, 1996.

Key words: Cladocera, *Alona elegans* group, morphology, systematics, north-central Asia

Introduction

The cladoceran fauna of south-east Siberia, Mongolia, far-east Russia, and the northern part of East Asia generally, is not yet sufficiently studied (Korovchinsky 1992). A number of endemics were already recorded from eastern and central Asia for some of the better-investigated groups of Cladocera. For example, there are seven endemic species of *Diaphanosoma* in the area (Korovchinsky 2004). The region along the south border of Russia, the border between the Palearctic and Oriental zoogeographic provinces, mostly escaped the attention of cladocerotologists. A new species of *Daphnia* was recently described from the area (Kotov *et al.* 2006).

Investigation of samples from a lake in the steppe region along the west coast of Lake Baikal, from the plain of the Zeya River, a northern tributary of the Amur River, from Uvs Nuur, a large endorheic saline lake in northwest Mongolia, and from several other saline lakes in Mongolia revealed populations of genus *Alona*, similar to the Iberian species, *Alona salina* Alonso, 1996. This species was not fully studied, and detailed information about trunk limb morphology and juvenile animals was not provided in the initial description (Alonso 1996). The aim of present research was (1) to investigate detailed morphology of *Alona salina*, (2) to clarify the taxonomic status of Asian populations, and (3) to analyse the position of *A. salina* and related species within the genus *Alona*.