



## A new species of *Liropus* (Crustacea, Amphipoda, Caprellidae) from California, USA, with an illustrated key of the genus

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### Abstract

A new species of the genus *Liropus* (Crustacea, Amphipoda, Caprellidae) is described based on specimens collected from a small cave of Santa Catalina Island, California. The new species, *Liropus minusculus*, can be distinguished from all its congeners mainly by the presence of anterolateral projections on pereonites 2, 3, and 4 (males), pereopod 5 one-articulate (although with a second article incompletely tabicated), basis of gnathopod 2 very elongate (males), and abdomen with two pairs of one-articulate appendages (males), one of them rudimentary. Up-to-date morphological comparisons among the world *Liropus* species are provided, together with an illustrated key to species. This is the first record of *Liropus* from the north-east Pacific.

**Key words:** Crustacea, Amphipoda, Caprellidae, *Liropus*, new species, North Pacific, California

### Introduction

Since Mayer's monographic works (1882, 1890, 1903) on the caprellid amphipods revealed the diverse nature of the North American Pacific fauna, few studies have been published on the systematics, distribution, or ecology of these animals in this region (Laubitz 1970; McCain & Steinberg 1970). Dougherty & Steinberg (1953) studied the caprellids of California between latitudes 36°N and 38°N and listed 20 species. Jensen (1969) reported habitat and general ecological information on many Pacific coast species. Laubitz (1970) conducted a comprehensive work and provided details and/or figures of 26 species found in the North American Pacific between latitudes 40°N and 60°N, including ecological notes and a zoogeographical discussion. Laubitz (1970) examined the fauna from the Gulf of Alaska to southern Oregon, and Martin (1977) covered the caprellids from the Oregon-California border to Fort Bragg, California. Marelli (1981) pointed out that the composition of the caprellid fauna from the whole central California region had not been recently studied, but provided new records of *Caprella alaskana*, *C. mutica* and *C. scaura*. Watling & Carlton (2007) provided a detailed revision, including an illustrated guide and a list of 31 species of caprellids from California. This list does not include the species *Aciconula acanthosoma*, described by Chess (1989) based on material collected from Isthmus Reef, Santa Catalina Island, California.

During a short visit to the Canadian Museum of Nature (October 2010), abundant caprellid material collected from the Pacific coast of the USA housed at the Museum was identified by the first author. A vial containing two tiny and interesting specimens (male and female) collected by J.R. Chess from a small cave of Isthmus Reef, Santa Catalina Island, was found. A detailed examination of the material revealed that the specimens belong to an undescribed species of the genus *Liropus*, representing the first record of the genus for the north-east Pacific coast.

### Material and methods

For morphological comparison with other species of the genus *Liropus*, material from the Muséum National