



Postembryonal development in Caprellidae: SEM description and comparison of ready-to-hatch juveniles and adults of two Mediterranean skeleton shrimps (Crustacea: Amphipoda)

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Table of contents

Abstract	1
Introduction	1
Material and methods	2
Results	3
Caprellidae White, 1847	3
Caprella Lamarck, 1801	3
<i>Caprella cavediniae</i> Krapp-Schickel & Vader, 1998	3
<i>Caprella equilibra</i> Say, 1818	13
Discussion	23
Resume	30
References	31

Abstract

Descriptions of the sets of externally visible characters of “ready-to-hatch” juveniles and redescriptions of females and males of *Caprella cavediniae* Krapp-Schickel & Vader, 1998 and *Caprella equilibra* Say, 1818 (Crustacea: Amphipoda: Caprellidae) are made using the scanning EM and the light microscope. The juveniles of the different species are compared as well as the juveniles with the respective adults. It is shown that juvenile *Caprellas* are far from being “miniature editions” of the adults and that numerous morphogenetic changes and reconstructions occur during postembryonal development.

Key words: Morphogenesis, direct development, first juvenile stage, adults, Scanning EM, amphipods, *Caprella*

Introduction

In Caprellidae, like in other Amphipoda and Peracarida in general, embryonic development from egg to first juvenile takes place in the female’s marsupium. In most Zoology textbooks, the juveniles hatching from the marsupium a few hours after leaving the egg are seen as “miniature editions” of the adults, and the development thus being of the direct type. While studying *Caprella scaura* Templeton, 1836, a caprellid newly found in the Mediterranean Sea (Krapp et al. 2006) we took ready-to-hatch juveniles out of the marsupium, analyzed them with the light and scanning electron microscope, and found numerous differences between the first juve-