

Heterochrony in *Haplomesus* (Crustacea: Isopoda: Ischnomesidae): revision of two species and description of two new species

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Abstract

Two new species of Ischnomesidae, *Haplomesus celticensis* sp. nov. and *Haplomesus hanseni* sp. nov. are described from the southwest of Ireland and the Argentine Basin respectively. Both species lack the expression of pereopod VII, a characteristic that we argue is produced by progenesis, not neoteny as suggested by Brökeland & Brandt (2004). *Haplomesus angustus* Hansen, 1916 and *Haplomesus tropicalis* Menzies, 1962, also lack pereopod VII and are revised from the type material. The original description of *Haplomesus angustus* Hansen, 1916 describes the adult type specimen as a juvenile; the original description of *Haplomesus tropicalis* Menzies, 1962 fails to mention the lack of pereopod VII. Progenesis is discussed for the above species and within the family Ischnomesidae as a whole.

Key words: Isopoda, Asellota, Ischnomesidae, *Haplomesus*, heterochrony, progenesis

Introduction

The Ischnomesidae is a family of marine benthic asellote isopods found mostly at bathyal and abyssal depths, with records from about 250–7000 m (Wolff 1962; Kussakin 1988). To date, 99 species have been described in five genera. The known diversity of this family, however, is increasing owing to recent reports of several new species (e.g. Merrin & Poore 2003). In this paper, we report two new species of *Haplomesus* from the Atlantic Ocean, *Haplomesus celticensis* sp. nov. from the Celtic Sea off southwestern Ireland, and *Haplomesus hanseni* sp. nov. from the Argentine Basin. These species are unusual because they lack pereopod VII. Two other ischnomesid species with the same condition have been described recently by Brökeland & Brandt (2004): *Haplomesus corniculatus* and