



## Redescription of *Asterocheres suberitis* Giesbrecht, 1897 and *A. tenerus* (Hansen, 1923) (Copepoda: Siphonostomatoida), including notes on *A. abyssi* (Hansen, 1923) and *A. intermedius* (Hansen, 1923)

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### Abstract

The present paper reviews the type material of four poorly described species of *Asterocheres* Boeck, 1859 deposited in the Zoologisk Museum of the University of Copenhagen. For *A. abyssi* (Hansen, 1923) and *A. intermedius* (Hansen, 1923), each taxon was represented by only the poorly preserved, dissected holotype. Consequently, neither species could be redescribed in detail. As the original description of *A. abyssi* is not sufficient to differentiate it from its congeners, we propose to regard this species as undetermined. Although only the antennule and antenna of *A. intermedius* were amended, this species is still considered valid based on a combination of characters that include a 21-segmented antennule, oral siphon extending beyond leg 1 insertion, and genital double-somite being longer than wide. The other two species, *A. suberitis* Giesbrecht, 1897 and *A. tenerus* (Hansen, 1923), were redescribed which revealed inaccuracies in the original descriptions. *Asterocheres suberitis* is characterized by having a 21-segmented antennule, oral siphon extending to the maxilliped insertion, 2-segmented mandibular palp, and genital double-somite being wider than long. *Asterocheres tenerus* is distinguished by a combination of characters that include a 21-segmented antennule, oral siphon extending to the intercoxal plate of leg 2, 2-segmented mandibular palp, relatively slimmer and longer claws on the antenna, maxilla and maxilliped, and genital double-somite being about as long as wide.

**Key words:** Siphonostomatoida, *Asterocheres*, Danish Ingolf expedition, Davis Strait, Naples

### Introduction

*Asterocheres* Boeck, 1859 is the most speciose genus of the siphonostomatoid copepod family Asterocheridae Giesbrecht, 1899, containing approximately 70 species, most of which were poorly or incompletely described (Stock 1966; Ho 1984; Humes 1996; Ivanenko & Smurov 1997; Kim 2004, 2005). As such, these descriptions are unreliable for comparative purposes. Nevertheless, the number of new *Asterocheres* species continues to increase at a fairly rapid rate, with 15 new members being described since 2000 (Humes 2000; Johnsson 2001, 2002; Kim 2004, 2005; Bandera *et al.* 2005, 2007; Bispo *et al.* 2006; Conradi *et al.* 2006). In sharp contrast, only one poorly known species has been recently redescribed within the same time period (Ivanenko & Ferarri 2003). This paper provides morphological information on the type material of four *Asterocheres* species as part of the ongoing taxonomical revision of poorly known species within this symbiotic group (Bandera & Huys 2008; Bandera & Conradi in press).