



## Redescription of the monotypic genus *Cinusa* Schioedte and Meinert, 1884 (Isopoda, Cymothoidae), a buccal-cavity isopod from South Africa

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### Abstract

The parasitic isopod *Cinusa tetradontis* Schioedte and Meinert, 1884, is the only species in *Cinusa* and has one known host, the evil-eye puffer fish, *Amblyrhynchotes honckenii*. The original Latin description contained many generic or family traits and thus the genus and species are redescribed. A complete revision of the genus was carried out, detailed illustrations of *C. tetradontis* are provided and a lectotype designated and deposited in the Zoological Museum, University of Copenhagen.

**Key words:** *Cinusa tetradontis*, *Amblyrhynchotes honckenii*, marine, fish parasite, taxonomy, South Africa

### Introduction

Fish parasitic isopods have rarely been studied in South Africa and little information is available on the biodiversity and ecology of these parasites for this region. The first record of Cymothoidae from South African fish was in 1818, with the description of *Anilocra capensis* Leach, 1818, from ‘*les mers du cap de Bonne-Espérance*’. Further cymothoids were recorded by Stebbing (1910; 1923; 1924), then Barnard (1925; 1940) and Kensley (1978a; 1978b; 2001).

Trilles (1994) provided a catalogue of the parasitic isopods of the family Cymothoidae, which highlighted the lack of information of fish parasitic isopods in certain parts of the world, specifically South Africa, South America and Asia. Trilles (1994) suggested that this was not due to low diversity of isopods, but rather the absence of researchers working in this field. Gibbons *et al.* (1999) reported five years later that there is still a lack of full-time professional crustacean taxonomists in South Africa. Gibbons *et al.* (1999) also showed that only 6.67% of the world’s isopods are known from South Africa, with a total of only 300 isopods out of the approximately 4500 known species in the world. According to Kensley’s (2001) Indian Ocean check-list for marine Isopoda, only 16 (5.3%) of these isopods are cymothoids collected from South Africa, as compared to Australia with approximately 70 species in 17 genera (Bruce *et al.* 2002). This difference may also be attributed to the substantial difference in the coastal size between the two countries, with Australia having 25760 km of coastline compared to South Africa’s 2798 km. Australia also has a extensive tropical coastline, and it may be due to higher latitudes having significantly lower numbers of cymothoids as seen with New Zealand having only eight cymothoids identified out of 353 isopods.

*Cinusa tetradontis* Schioedte and Meinert, 1884, was originally described from Simons Bay, South Africa, with subsequent records by Stebbing (1910), Barnard (1940) and Kensley (1978). The genus is monotypic and has been found in the mouth of the only known host, *Amblyrhynchotes honckenii* (Bloch, 1785), the evil-eye pufferfish. *Cinusa tetradontis* specimens have been recorded from Simons Bay (Schioedte & Meinert 1884), ‘*India orientali*’ (Schioedte & Meinert 1884), Cape of Good Hope (Stebbing 1910), and False Bay (Kensley 1978).