



***Cymothoa hermani* sp. nov. (Isopoda, Cymothoidae, Crustacea), a parasitic isopod, collected off the Zanzibar coast, Tanzania from the mouth of a parrotfish (Scaridae)**

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Abstract

Cymothoa hermani sp. nov., a buccal fish-parasitic isopod is described from off Unguja Island, Zanzibar, from the buccal cavity of the marbled parrotfish, *Leptoscarus vaigiensis*. *Cymothoa hermani* sp. nov. is characterised by the unique bulbous ornamentation on pereonite 1, anterolateral angles on pereonite 1 rounded and produced past frontal margin of cephalon, and pereopods with long and slender dactyli. There are no other species of *Cymothoa* known from parrotfishes. This description increases the number of known *Cymothoa* from the southwestern Indian Ocean to four.

Key words: *Leptoscarus vaigiensis*, fish parasites, Africa, Indian Ocean, Cymothoidae, *Cymothoa*, buccal cavity

Introduction

Cymothoid isopods are permanent ectoparasites of marine and freshwater fishes, surviving primarily on a hematophagous diet (Trilles 1991). They attach to the external surfaces, gills or in the buccal cavity of their fish host. Those cymothoid isopods that attach in the buccal cavity of hosts belong to a number of different genera and are commonly referred to as tongue-replacement or tongue-biter isopods due to the large female almost always found attached to the host's tongue. Two of the most common genera of tongue-biters in the south-western Indian Ocean are *Ceratothoa* Dana, 1852 and *Cymothoa* Fabricius, 1793. These isopods are potentially economically important parasites as they have been shown to cause detrimental effects on fish in captivity including growth inhibition, anaemia and death in smaller fish (Adlard & Lester 1994, Horton & Okamura 2001, Mladineo 2002, Ravi & Rajkumar 2007).

There is little known about the Cymothoidae in the southwestern Indian Ocean (Bruce 1986, Kensley 2001, Richmond 2002) with the most recent contribution being a review of the monotypic genus *Cinusa* Schioedte and Meinert, 1884 from this area (Hadfield *et al.* 2010). *Cymothoa* itself is correspondingly also very poorly documented in this region, though records from Australia (Poore 2002), Caribbean (Kensley & Schotte 1989) and East Pacific (Brusca 1981) indicate the wide range of this genus and the potential for new species to be found in the southern Africa region. This contribution records one new species in this region. To facilitate further collections of these isopods we provide a detailed description for this species and a few notes on the genus.

Material and methods

Appendages were dissected with the aid of dissecting needles and forceps, stained with lignin pink and observed with the aid of a Lecia MZ125 stereomicroscope, Olympus BX41 light microscope and a WILD Heerbrugg TYP