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Thalamocyclops pachypes gen. nov., sp. nov. (Copepoda: Cyclopoida: Cyclopidae), a crevicular cyclopine from Socotra Island (Yemen): tale of a remarkable survival drive

Frank Fiers^{a,b} and Kay Van Damme^c

^aDirectorate Taxonomy and Phylogeny, Royal Belgian Institute of Natural Sciences, Brussels, Belgium;

^b“Emil Racoviță” Institute of Speleology, Romanian Academy, Cluj-Napoca, Romania; ^cSenckenberg Research Institute and Natural History Museum, Frankfurt a.M., Germany

ABSTRACT

A new cyclopine copepod, *Thalamocyclops pachypes* sp. nov. was found to roam the crevicular residence of the semi-terrestrial brachyuran crab *Socotra pseudocardisoma* living on the Diksam limestone plateau of Socotra Island (Yemen). The remarkable morphology of the antennules, maxilliped and the inflated legs 4 and 5 justified the erection of a separate copepod genus, *Thalamocyclops* gen. nov. Re-examination of the previously described *Bryocyclops soqatraensis* revealed striking resemblances, which prompted the reallocation of it to the new genus: *Thalamocyclops soqatraensis* comb. nov. The description of the latter is emended. Besides the adult morphology, the copepod development of *T. pachypes* sp. nov. is described and some information on the naupliar stages is provided. The particular body shape, the highly specialized mouthparts and the uniquely engulfed metasomal somites and legs of *T. pachypes* sp. nov. appear to be related to its feeding and reproductive strategies in a most particular habitat in which drastic temporal and long-term changes occur.

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Introduction

Socotra Archipelago, a cluster of sun-beaten small islands scattered in a northwestern corner of the Indian Ocean, became legendary because of its unique biota. The steep number of endemics encountered on these weathered isles triggered many to prize them as the ‘Galápagos of the Indian Ocean’ (Di Micco De Santo and Zandri 2004; Cheung and DeVantier 2006). The remote location of the archipelago, its position on the crossroads of three major biogeographic regions, the long and complicated geological antecedents, and the compactness of each island facing particular climatic circumstances have been sculpting sceneries where the biota has to cope with a hostile environment in order to survive (Van Damme and Banfield 2011). The high number of endemics among the present-day resident flora and fauna is commonly explained in the light of these basic premises (Cheung and DeVantier 2006; Banfield et al. 2011). Flora