DANIELOPOLINA (OSTRACODA, THAUMATOCYPRIDIDAE) ON CHRISTMAS ISLAND, INDIAN OCEAN, A SEA MOUNT ISLAND

BY

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ABSTRACT

The genus Danielopolina is reported from an isolated seamount, Christmas Island, Indian Ocean, where it is known, for the first time, in sympatry with a Procaridid Type of anchialine community. We explain the significance of the juxtaposition in this geographical and geological context and explore the role of active and passive dispersal in the colonization of remote seamount islands.

RÉSUMÉ

Le genre Danielopolina est signalé sur un mont sous-marin isolé (seamount), l’île Christmas dans l’océan Indien, ou il est signalé pour la première fois en sympatrie avec une communauté anchialine de type Procaridide. La signification de cette juxtaposition dans un tel contexte géographique et géologique est expliquée et le rôle des dispersions actives et passives dans la colonisation des îles océaniques isolées est exploré.

INTRODUCTION

We report the occurrence of Danielopolina from the anchialine waters of an isolated seamount island, Christmas Island in the Indian Ocean. Its occurrence in this geographical and geological context is of such moment that we report it here despite the single larval individual known being insufficient for a formal species description. The genus Danielopolina is known from 11 species, 10 inhabiting epicontinental anchialine ecosystems and one being a deep-sea species (Kornicker & Iliffe, 1998) that may belong to a different genus (Danielopol et al., 2000).

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The individual, that we here refer to *Danielopolina* sp. (cf. *D. kornickeri* Danielopol, Baltanás & Humphreys, 2000), has a general shape and a carapace ornamentation resembling those of *Danielopolina kornickeri*. In lateral view the shape is more ovate than rounded, the valve surface ornamentation is represented by large polygonal ridges (fig. 1), and there is a presence of anterior short processes but an absence of postero-dorsal processes. The carapace length is 0.32 mm, without the 0.04 mm long antero-dorsal processes, and the height of the carapace is 0.20 mm. The distal part of the furca clearly indicates a juvenile stage equivalent to the second instar of *D. wilkensi* Hartmann, 1985 (cf. Kornicker & Iliffe, 1995: 23, fig. C), as it has one articulate claw and three short “Anlage” spines (fig. 1).