

A new genus and new species of soft coral (Octocorallia: Alcyonacea: Alcyoniidae) from the south western region of Australia

P. ALDERSLADE

Museum and Art Gallery of the Northern Territory, GPO Box 4646, Darwin, Northern Territory, 0801, Australia. (phil.alderslade@nt.gov.au)

Abstract

Notodysiferus dhondtae new genus & new species (Octocorallia: Alcyoniidae) is described from King George Sound, Albany, Western Australia. The shallow water, dimorphic, zooxanthellate genus has a massive, encrusting growth form similar to some species of warm water alcyoniid genera such as *Sinularia* and *Lobophytum*. The new taxon has both autozooids and siphonozooids in most of the area of the lobes of the polypary, but siphonozooids alone are distributed over the basal regions of the lobes. The sclerites of the new taxon are 8-radiate capstans and their derivatives. Remarks are presented on the alcyonacean fauna of the region, and the new genus is compared to similar taxa.

Key words: Coelenterata, Cnidaria, Octocorallia, Alcyonacea, Alcyoniidae, *Notodysiferus*, new genus, new species, Western Australia

Introduction

King George Sound, Albany, (Fig. 1) is historically important to both terrestrial and marine biologists because it was visited by such important vessels as the *Investigator*, *L'Astrolabe*, *Le Géographe* and *Le Casuarina*. But although it is the type locality for many marine species, the octocoral fauna of this southwestern corner of Western Australia is virtually unknown.

This part of the Australian coastline lies in the Flindersian province (Bennett & Pope 1953). This province has extremely high levels of biodiversity and endemism, with, for example, 110 species of echinoderms of which 90% are considered endemic (Poore 1995). The province has warm to cool waters in contrast to the cold temperate waters that exist off shore in the southeastern part of the mainland and around Tasmania. In the western and central-western regions of the southern coast, this warmer environment is mostly attributed to the effects of the Leeuwin Current that transports waters from the tropical north-