

Pachycerianthus
(Anthozoa: Ceriantharia: Cerianthidae),
Two Newly Described Species from
Port Jackson, Australia

SCOTT CARTER *

Taronga Zoo Aquarium, PO Box 20, Mosman NSW 2088, Australia

* Present address: Marine and Estuarine Studies Section, Environment Protection Authority of NSW,
Locked Bag 1502, Bankstown NSW 2200, Australia

ABSTRACT. Two previously undescribed species of *Pachycerianthus* from Port Jackson are described. The species can be easily distinguished in the field on appearance. *Pachycerianthus delwynae* has distinctly banded marginal tentacles. *Pachycerianthus longistriatus* has distinctive longitudinal stripes on its marginals. Both species are found in sublittoral sandy mud in Port Jackson, often in close association with each other.

CARTER, S., 1995. *Pachycerianthus* (Anthozoa: Ceriantharia: Cerianthidae), two newly described species from Port Jackson, Australia. Records of the Australian Museum 47(1): 1-6.

Cerianthids are attenuated, solitary anemone-like anthozoans (Fig. 1a) with two series of tentacles in the crown and no pedal disc, which inhabit a soft tube made of layers of discarded nematocysts, sometimes encrusted with mud or sand (den Hartog, 1977).

Although cerianthids are considered common members of the benthic fauna of south-eastern Australia (Coleman, 1987; Shepherd & Thomas, 1982), knowledge of the taxonomy and morphology of Australian species is very poor. They have usually been designated as *Cerianthus* sp or *Cerianthus membranaceus* (Spallanzani), a Mediterranean species. There are four genera in the family Cerianthidae, *Cerianthus* Delle Chiaje, *Pachycerianthus* Roule, *Ceriantheopsis* Carlgren and *Ceriantheomorpha* Carlgren. The two species now described from Port Jackson, NSW, are

assigned to the genus *Pachycerianthus*. This distinction is based on the presence of short, sterile mesenteries at m1 and b1 whereas *Cerianthus*, *Ceriantheopsis* and *Ceriantheomorpha* have fertile m1 and b1 mesenteries (Carlgren, 1912, 1931).

Materials and Methods

All animals were collected from Port Jackson by SCUBA diving. They were dug from the silt by hand and transported live to the Taronga Zoo Aquarium where they were placed in a 200 litre glass aquarium with fresh seawater flowing through at about five litres/minute.