

Tube anemones (Ceriantharia Anthozoa) of New Caledonia

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Cerianthids or tube anemones are solitary anemone-like anthozoans. Most of cerianthids have very uniform appearance with long column, flattened oral disk and rounded aboral end. At the oral disk there are two crowns of simple numerous tentacles: shorter ones surround the mouth and longer ones are arrayed at the margin. Internally cerianthids have an actinopharynx with a single siphonoglyph and several tens of complete mesenteries. Members of the order Ceriantharia are principally bilateral animals: their tentacles and mesenteries are not arranged in pairs, but exclusively in couples and arise one by one in the single multiplication chamber.

When disturbed a cerianthids rapidly retract into tubes vertically arranged in the substrate, that composed of an interlacement of discharged cnidae (ptychocysts) and often incrustated with mucus, sand, broken shells and other debris. Tube of cerianthids can serve as a natural substrate to a variety of invertebrates such as phoronids, polychaetes, sipunculoids, bivalves, crustaceans etc. Many of cerianthids possess long-lived planktonic larvae that spend in plankton up to several months and that are often described under their own binomens (Molodtsova, 2004).

Three specimens of Ceriantharia from New Caledonia deposited in NMHN (Paris) were determined as *Pachycerianthus nobilis* (Haddon et Shackelton 1894) and *P. delwynae* Carter, 1995. *P. nobilis* (senior synonym of well-known *P. fimbriatus* McMurrich, 1910) is widely distributed in the Pacific and also known from the pacific coast of US and Canada. *P. delwynae* was recently described from the eastern cost of Australia. Both species have symbiotic phoronids.

Labout & Richer de Forges (2004) reported two other species of the family Cerianthidae (*Cerianthus maua* and *C. sp. 1*) and four species of Arachnactidae (*Arachnanthus* spp. 1 and 2 and two undetermined arachnactids). *Pachycerianthus maua* (Carlgren, 1900) was described from Zanzibar in the very beginning of XX century. This species was more than once reported from the West Pacific but none of determinations was proved by anatomy. It is quite possible that *C. maua* and *C. sp.1* are in fact *P. nobilis* and *P. delwynae* but to be sure more material has to be studied.

REFERENCES

- LABOUTE P. & RICHER DE FORGES B., 2004. Lagons et récifs de Nouvelle-Calédonie, ed. C. Ledru, Nouméa, 520 pp.
MOLODTSOVA T.N. 2004. On the taxonomy and presumable evolutionary pathways of planktonic larvae of Ceriantharia (Anthozoa, Cnidaria) - *Proceed. 7th ICCB, 6-11 July 2003 Lawrence, Kansas, USA. Hydrobiologia*, vol. 530, no. 1, pp. 261-266.

List of the taxa

Suborder Spirularia den Hartog, 1977

Fam. Cerianthidae

Pachycerianthus delwynae Carter, 1995

(?) *Pachycerianthus maua* (Carlgren, 1900)

Pachycerianthus nobilis (Haddon et Shackelton 1894)

Suborder Penicillaria den Hartog, 1977

Fam. Arachnactidae

Arachnanthus sp. 1

Arachnanthus sp. 2

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of marine species from
New Caledonia



Edited by
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