

6.4 OCTOCORALLIA

L.P. van Ofwegen & M. Slierings

National Museum of Natural History, Leiden

During the 'Oceanic Reefs' Expedition to the Seychelles (15 December 1992 - 8 January 1993) octocorals were sampled by snorkeling, SCUBA-diving, rectangular dredges, and Agassiz trawls. Approximately 550 samples were collected. Prior to sampling a small part of the colonies was photographed underwater. All material is preserved in 70% alcohol and deposited in the National Museum of Natural History, Leiden, The Netherlands.

In general most alcyonaceans were found in depths of 0-10 m, while most gorgonians live in water deeper than 20 m. Only two pennatulaceans were collected. Most of the specimens are now sorted to the family/genus level (see table 6.4). From this table it is obvious that most of the material belongs to the family Alcyoniidae Lamouroux, 1812 (around 55% of the total), and in this family mostly to the genus *Sinularia* May, 1898 (35% of the total). These findings correspond well with the SCUBA observations that many *Sinularia* species form large monospecific carpets, sometimes dominating the reef hard-substratum. A start has been made with the identification of the species of the genus *Sinularia*. Up till now about 25% of the specimens have been examined and 17 species identified:

- S. brassica* May, 1898
- S. capitalis* (Pratt, 1903)
- S. crassa* Tixier-Durivault, 1945
- S. cristata* Tixier-Durivault, 1969
- S. densa* (Whitelegge, 1897)
- S. erecta* Tixier-Durivault, 1945
- S. gibberosa* Tixier-Durivault, 1970
- S. firma* Tixier-Durivault, 1970
- S. fishelsoni* Verseveldt, 1970
- S. heterospiculata* Verseveldt, 1970
- S. humesi* Verseveldt, 1968
- S. macrodactyla* Kolonko, 1926
- S. manaarensis* Verseveldt, 1980
- S. maxima* Verseveldt, 1971
- S. muralis* May, 1899
- S. robusta* Macfadyen, 1936
- S. whiteleggei* Lüttschwager, 1914

Apart from the above mentioned species at least two new species were found. Compared with previous collections from the Seychelles (Verseveldt, 1976, with 9 species; Malyutin, 1992, with 17 species) the present collection contains more species of *Sinularia*.

S. brassica, *S. capitalis*, *S. cristata*, *S. crassa*, *S. firma*, *S. erecta*, *S. manaarensis* and *S. whiteleggei* are new for the Seychelles, which means that in total 29 spe-

cies of *Sinularia* are now known from the area. Interesting is the finding of *S. manaarensis*, up till now only known from the Gulf of Manaar (SE India). A more extensive report on the collection with descriptions of new species will be published in *Zoologische Verhandelingen* in the future.

references

- Bayer, F.M., 1981. Key to the genera of Octocorallia exclusive of Pennatulacea (Coelenterata: Anthozoa), with diagnoses of new taxa. Proc. Biol. Soc. Wash. 94 (3): 902-947.
- Malyutin, A.N., 1992. Octocorallia from the Seychelles islands with some ecological observations. Atoll Res. Bull. 367 (3): 1-4.
- Verseveldt, J., 1976. Alcyonacea from the Seychelles (Coelenterata: Octocorallia). Rev. Zool. Afr. 90 (3): 497-513.

Table 6.4. Octocorallia of the Seychelles (2× means two samples). In this table the classification of Bayer (1981) is followed, with exception of unidentified material, which is split into Alcyonacea indet. and Gorgonacea indet.

	Helioporacea
	Helioporidae
<i>Heliopora coerulea</i> (Pallas, 1766)	
Sta.nrs. 736, 754(dry)	
	Alcyonacea
	Tubiporidae
<i>Tubipora musica</i> Linnaeus, 1758	
Sta.nrs. 602, 606, 711, 735.	
	Clavulariidae
<i>Telesto</i>	
Sta.nrs. 712, 753, 755, 764(2×).	
Clavulariidae indet.	
Sta.nr. 786(2×).	
	Alcyoniidae
<i>Alcyonium</i>	
Sta.nrs. 735, 767(2×), 782, 783, 786, 796.	
<i>Cladiella</i>	
Sta.nrs. 604, 709(2×), 711, 768.	
<i>Lobophytum</i>	
Sta.nrs. 707(3×), 709, 711(2×), 717(5×), 723(3×), 735(3×), 740, 741, 747(2×), 748, 753(3×), 759(3×), 767(6×), 774(5×), 780(2×), 783(4×), 786(4×), 792(6×), 796(4×).	
<i>Sarcophyton</i>	
Sta.nrs. 707(2×), 711(5×), 721, 723(3×), 735(3×), 741(2×), 747(3×), 748(6×), 753(3×), 759(2×), 765, 766(2×), 767(7×), 780, 792(2×), 796.	
<i>Sinularia</i>	
Sta.nrs. 609, 707(5×), 711(5×), 716 (1×), 717(6×), 723(14×), 735(9×), 740(2×), 741(4×), 748(4×), 753(23×), 759(16×), 765, 766, 767(27×), 768(5×), 774(21×), 780(5×), 783(10×), 786(7×), 792(12×), 796(19×), 797.	
	Nephtheidae
<i>Dretronephthya</i>	
Sta.nrs. 705, 707(2×), 710(2×), 712, 713(2×), 714(4×), 715, 720, 730, 734, 742, 751, 752(2×), 753(4×), 755, 766(4×), 767(5×), 774(6×), 782.	
<i>Nephthea/Stereonephthya</i>	
Sta.nrs. 707(2×), 708, 713, 716, 723, 734, 738, 741, 744, 745, 748, 753, 756, 759(3×), 767(3×), 774(3×), 786, 796(2×).	
<i>Capnella</i>	
Sta.nrs. 717, 759(2×), 767, 768(2×), 772, 774(2×), 780, 796.	
<i>Lemnalia</i>	
Sta.nrs. 716, 717(2×), 719, 735, 755, 759, 767(2×), 796.	

Umbellulifera

Sta.nrs. 715, 716, 730, 751, 755, 766.

Xeniidae

Sta.nrs. 609(2×), 618, 709, 711(3×), 717(2×), 723, 735, 748(2×), 753(2×), 767, 780.

Nidaliidae

Siphonogorgia

Sta.nrs. 715, 751, 753, 755(2×), 764(3×), 766, 774.

Alcyonacea indet

Sta.nrs. 717, 721, 748, 750(2×), 751(2×), 752(4×), 759, 765, 766, 786, 792, 795.

Anthothelidae

Solenocaulon

Sta.nrs. 705, 751, 752, 764, 766, 778.

Melithaeidae

Sta.nrs. 601, 604, 605, 705(3×), 711, 748, 749, 753(3×), 767(4×), 783, 786(3×), 792(2×).

Subergorgiidae

Subergorgia

Sta.nrs. 723, 751(3×), 752, 753(2×), 755(4×), 764, 782, 786.

Acanthogorgiidae

Sta.nrs. 752, 753(4×), 755(2×), 767, 786, 792(2×).

Gorgoniidae

Rumphella

Sta.nrs. 753, 756, 783, 796.

Ellisellidae

Sta.nrs. 705, 716, 721, 730, 751(3×), 752, 755, 764, 766(2×), 774, 786.

Primnoidae

Sta.nr. 794.

Gorgonacea indet.

Sta.nrs. 711, 714, 721(2×), 730(2×), 750, 751(5×), 752(2×), 753(2×), 764(6×), 766(3×), 774, 786.

Pennatulacea

Pteroeiridae

Sta.nr. 782.

Pennatulacea indet.

Sta.nr. 714.
