

Part 9

Zoanthids, Sea Anemones and Corallimorpharians

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The sea anemone *Stichodactyla helianthus* from Cahuita, Caribbean coast of Costa Rica. (Photo: Andrea Bernecker)

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Abstract Five species of zoanths, six of actinarians and two of corallimorpharians have been recognized from the Caribbean coast, and one species of sea anemone from the Pacific of Costa Rica. The Caribbean species are common throughout the Caribbean Sea. Many more species have been observed on both coasts, but have not been identified.

Introduction

Members of three orders of anthozoans (Phylum: Cnidaria), Zoanthiniaria, Actinaria, and Corallimorpharia are commonly called sea anemones, but only the Actinaria are anemones in the strict sense (www.kgs.ukans.edu/Hexacoral/Biodata/index.html). There are about 250 species of zoanths, 900 species of actinarians, and 50 species of corallimorpharians in the world (<http://phylogeny.arizona.edu/tree/eukaryotes/animals/cnidaria/cnidaria.html>).

There is little information on zoanths and corallimorpharians. Even in specialized web pages like: www.kgs.ukans.edu/Hexacoral/Biodata/index.html, there is no information on the taxonomic status of several species of zoanths. Because of the problem of preserving these soft-body organisms there are few specimens in museum collections.

In this part I present a list of species that I have observed and identified in the field, using Colin (1988) and Humann (1992). Five species of zoanths (e.g., *Zoanthus sociatus*, Fig. 9.1), six of actinarians and two of corallimorpharians have been recognized from the Caribbean coast and one species of sea anemone from the Pacific of Costa Rica (Species Lists 9.1 and 9.2 are included on the CD-Rom). Many more species have been observed on both coasts but have not been identified, stressing the need for more taxonomic work on these groups.

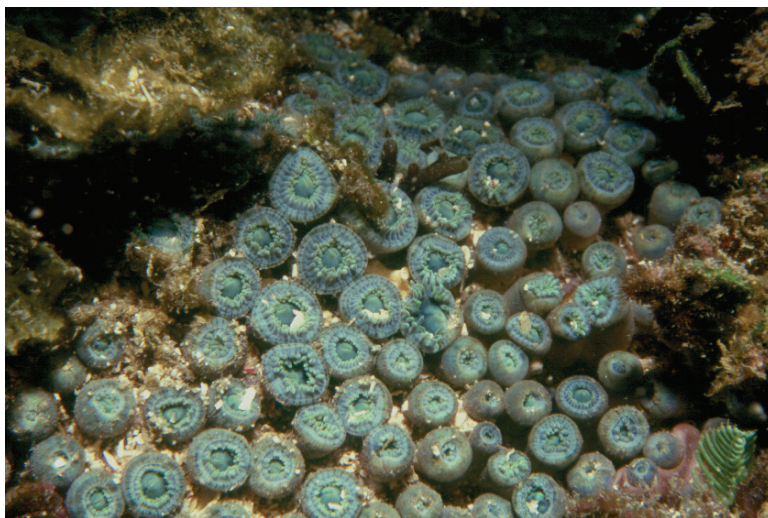


Fig. 9.1 *Zoanthus sociatus* from Cahuita, Caribbean coast of Costa Rica. (Photo: Jorge Cortés)

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Collections

There is a small collection of Costa Rican zoanths and anemones in the Museo de Zoología of the Universidad de Costa Rica.

Recommendations

Much more work is needed on these groups, not only in Costa Rica, but worldwide. Dr. Daphne Fautin recommends that good underwater photographs, from several angles, should be taken of an organism before collecting it, because once preserved, even after they have been relaxed, they lose their original shape and color.

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References

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Species List 9.1 Zoanths, actinarians, and corallimorpharians found on the Caribbean coast of Costa Rica

		World distribution ^a Central America ^b Oceanic distribution ^c Habitat/ Community ^d References ^e			
Class ANTHOZOA					
Order ZOANTHINARIA					
Family ZOANTHIDAE					
<i>Palythoa caribaeorum</i>	Duchassaing & Michelotti, 1860	Car	G,H,N	it,st,eb	rb,cr [1, 2, 3]
<i>Palythoa grandis</i>	Verrill, 1900	Car		st,eb	cr [1]
<i>Zoanthus pulchellus</i>	Duchassaing & Michelotti, 1860	Car		st,eb	cr [1]
<i>Zoanthus sociatus</i>	Ellis & Solander, 1786	Car	H,N,P	st,eb	rb,cr [1,2]
Family PARAZOANTHIDAE					
<i>Parazoanthus parasiticus</i>	(Duchassaing & Michelotti)	Car		st	c,cr [2]
Order ACTINARIA					
Family ACTINIIDAE					
<i>Anthopleura</i> sp.		Car		st,eb	rb,cr [1]
<i>Condylactis gigantea</i>	(Weinland, 1860)	Car	G	st,eb	rb,cr [1,3]
Family AIPTASIIDAE					
<i>Bartholomea annulata</i>	(Lesueur, 1817)	Car	G	st,eb	rb,cr [1,3]
Family ALICIIDAE					
<i>Alicia mirabilis</i>	Johnson, 1861	Car		st,eb	rb,cr [1]
<i>Lebrunia coralligens</i>	(Wilson, 1890)	Car		st,eb	rb,cr [1]
Family STICHODACTYLIDAE					
<i>Stichodactyla helianthus</i>	(Ellis, 1768)	Car		st,eb	rb,cr [1]

(continued)

Species List 9.1 (continued)

	World distribution ^a	Central America ^b	Oceanic distribution ^c	Habitat/ Community ^d	References ^e
Order CORALLIMORPHARIA					
Family ACTINODISCIDAE					
<i>Discosoma sanctithomae</i> (Duchassaing & Michelotti, 1860)	Car		st,eb	rb,cr	[2]
Family CORALLIMORPHIDAE					
<i>Ricordea florida</i> (Duchassaing & Michelotti, 1860)	Car		st,eb	rb,cr	[2]

^a Car = Caribbean

^b G = Guatemala, H = Honduras, N = Nicaragua; P = Panama

^c eb = epibenthic; it = intertidal; st = subtidal

^d c = commensal; cr = coral reefs; rb = rocky bottom

^e References are indicated by numbers according to the reference list.

Species List 9.2 Zoanths, actinarians, and corallimorpharians found on the Pacific coast of Costa Rica

	World distribution ^a	Costa Rica ^b	Oceanic distribution ^c	Habitat/ Community ^d	References ^e
Class ANTHOZOA					
Order ACTINARIA					
Family Hormathiidae					
<i>Telmatactis cricoides</i> (Duchassaing, 1850)	EP	IC	st,eb	rb,cr	[1]

^aEP = eastern Pacific

^bIC = Isla del Coco

^ceb = epibenthic; st = subtidal

^dcr = coral reefs; rb = rocky bottom

^eReferences are indicated by numbers according to the reference list