

# Coral ID Guide

Melisa Chan, Nicté-Ha Muñoz, Mauro Lepore

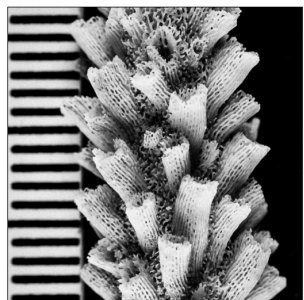
July 13, 2016

## Characteristics of Coral Species

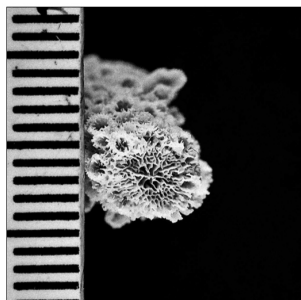
### Branching Corals

Species Name	<i>Acropora.cervicornis</i>	<i>Acropora.palmata</i>	<i>Acropora.prolifera</i>	<i>Cladocora.arbuscula</i>	<i>Eusmilia.fastigiata</i>	<i>Madracis.asperula</i>	<i>Madracis.decaetis</i>	<i>Oculina.diffusa</i>	<i>Porites.divaricata</i>	<i>Porites.furcata</i>	<i>Porites.porites</i>
Colony Shape	Branching	Branching	Branching	Branching	Branching	Branching	Branching	Branching	Branching	Branching	Branching
Corallite Size (mm)	0.8-1	0.5-0.8	0.8-1.0	<6	80-130	1	1.3-1.9	1.5-5	<1.6	1.6-1.8	1.8-2.0
Corallite wall thickness	-	-	-	-	-	-	-	-	-	-	-
Columellae size (mm)	-	-	-	1	-	-	-	-	-	-	-
Valley width (mm)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
No. of Centers per Series	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Septal Number	6	6	6	36	15-18/cm	10	10	-	12	12	12
Septal Cycle	1	1	1	-	2	2	-	-	1	1	1
Septal Teeth	-	-	-	-	None	-	-	-	-	-	-
Columella	Absent	Absent	Absent	Trabecular; discontinuous	Trabecular; continuous	Styliform (well-developed)	(well-developed)	Trabecular (well-developed)	Trabecular (weak); discontinuous	Trabecular; discontinuous	Trabecular; discontinuous
Costae	-	-	-	-	Well-developed	Absent	-	Absent/Reduced	-	-	-
Coenosteum	0.2-0.3mm	0.1-0.2mm	0.2-0.3mm	-	N/A	-	-	-	-	-	-
Branch diameter (cm)	1-3	5-25	0.5-2	-	-	-	2-3	<1.5	<1	1-2	>2
Surface	-	-	-	-	-	-	-	-	-	-	-
Colony Form	Plocoid	Plocoid	Plocoid	Phaceloid	Phaceloid	Plocoid	Plocoid	Plocoid	Subplocoid	Subplocoid	Subplocoid
Similar species	<i>Acropora formosa</i> (not in the Caribbean/E. Pacific), <i>Acropora prolifera</i>	<i>Acropora prolifera</i>	<i>Acropora cervicornis</i> , <i>Acropora palmata</i>	-	-	-	-	<i>Oculina varicosa</i>	<i>Porites furcata</i> , <i>Porites porites</i>	<i>Porites divaricata</i> , <i>Porites porites</i>	<i>Porites divaricata</i> , <i>Porites furcata</i>
Comments/Notes	Corallite: Distinctive singular central axial corallites with tubular radial corallites; <5mm long	Corallite: No distinctive axial corallite; irregular length; tubular; <5mm long Branches: Singular branches Colony: Largest among <i>Acropora</i>	Corallites: Radial corallites orient upwards in rows; <5mm long Branches: Fuse at crossings Biology: Hybrid between <i>A. cervicornis</i> and <i>A. palmata</i>	Branches: Fine ridges running along the length; each ending with a single corallite	Colony: Hemispherical mounds Septa: Widely spaced; primary septa exert	Biology: Primarily an azooxanthellae species Septa: Fuse with columella	Colonies: Nodular (flattened and club-shaped), laminar or encrusting Coenosteum: Fine spicules (sometimes form ridge between corallites) Septa: Fuse with columella	Corallites: Have neat round exert walls Septa: Slight alternation of long and short	Pali: 5-6 Branch: Often divide near tips	Branches: Thinner than <i>P. porites</i> but not as slender/branched as <i>P. divaricata</i> ; tightly compacted Pali: 5-6	Branches: Stout, irregular, and stubby with blunt and often enlarged tips Pali: 5-6

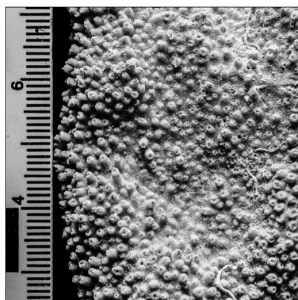
	Species Name	Colony Shape	Corallite Size (mm)	Corallite Wall Thickness	Columellae size (mm)	Septal Number	Septal Cycle	Septal Teeth	Columella	Costae	Coenosteum	Branch diameter (cm)	Colony Form	Similar Species	Comments/Notes
1	<i>Acropora cervicornis</i>	Branching	0.8-1	-	-	6	1	-	Absent	-	0.2-0.3mm	1-3	Plocoid	<i>Acropora formosa</i> (not in the Caribbean/E. Pacific), <i>Acropora prolifera</i>	Corallite: Distinctive singular central axial corallites with tubular radial corallites; <5mm long
2	<i>Acropora palmata</i>	Branching	0.5-0.8	-	-	6	1	-	Absent	-	0.1-0.2mm	5-25	Plocoid	<i>Acropora prolifera</i>	Corallite: No distinctive axial corallite; irregular length; tubular; <5mm long Branches: Singular branches Colony: Largest among <i>Acropora</i>
3	<i>Acropora prolifera</i>	Branching	0.8-1.0	-	-	6	1	-	Absent	-	0.2-0.3mm	0.5-2	Plocoid	<i>Acropora cervicornis</i> , <i>Acropora palmata</i>	Corallites: Radial corallites orient upwards in rows; <5mm long Branches: Fuse at crossings Biology: Hybrid between <i>A. cervicornis</i> and <i>A. palmata</i>
4	<i>Cladocora arbuscula</i>	Branching	<6	-	1	36	-	-	Trabecular; discontinuous	-	-	-	Phaceloid	-	Branches: Fine ridges running along the length; each ending with a single corallite
5	<i>Eusmilia fastigiata</i>	Branching	80-130	-	-	15-18/cm	2	None	Trabecular; continuous	Well-developed	N/A	-	Phaceloid	-	Colony: Hemispherical mounds Septa: Widely spaced; primary septa exert
6	<i>Madracis asperula</i>	Branching	1	-	-	10	2	-	Styliform (well-developed)	Absent	-	-	Plocoid	-	Biology: Primarily an azooxanthellae species Septa: Fuse with columella
7	<i>Madracis decaetis</i>	Branching	1.3-1.9	-	-	10	-	-	Styliform (well-developed)	Absent	-	2-3	Plocoid	-	Colonies: Nodular (flattened and club-shaped), laminar or encrusting Coenosteum: Fine spicules (sometimes form ridge between corallites) Septa: Fuse with columella
8	<i>Oculina diffusa</i>	Branching	1.5-5	-	-	-	-	-	Trabecular (well-developed)	Absent/Reduced	-	<1.5	Plocoid	<i>Oculina varicosa</i>	Corallites: Have neat round exert walls Septa: Slight alternation of long and short
9	<i>Porites divaricata</i>	Branching	<1.6	-	-	12	1	-	Trabecular (weak); discontinuous	-	-	<1	Subplocoid	<i>Porites furcata</i> , <i>Porites porites</i>	Pali: 5-6 Branch: Often divide near tips
10	<i>Porites furcata</i>	Branching	1.6-1.8	-	-	12	1	-	Trabecular; discontinuous	-	-	1-2	Subplocoid	<i>Porites divaricata</i> , <i>Porites porites</i>	Branches: Thinner than <i>P. porites</i> but not as slender/branched as <i>P. divaricata</i> ; tightly compacted Pali: 5-6
11	<i>Porites porites</i>	Branching	1.8-2.0	-	-	12	1	-	Trabecular; discontinuous	-	-	>2	Subplocoid	<i>Porites divaricata</i> , <i>Porites furcata</i>	Branches: Stout, irregular, and stubby with blunt and often enlarged tips Pali: 5-6



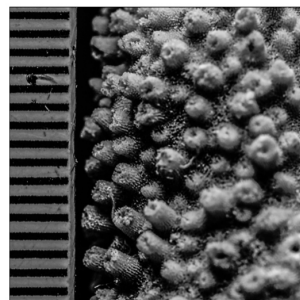
1. *Acropora cervicornis*



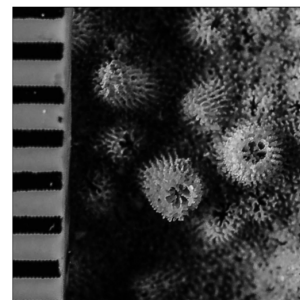
1. *Acropora cervicornis*



2. *Acropora palmata*



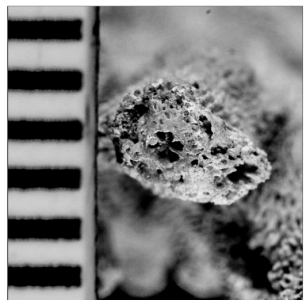
2. *Acropora palmata*



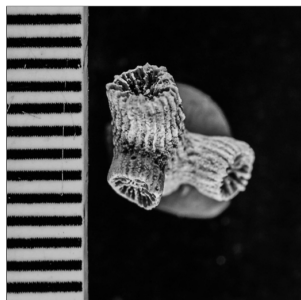
2. *Acropora palmata*



3. *Acropora prolifera*



3. *Acropora prolifera*



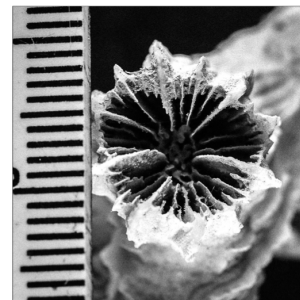
4. *Cladocora arbuscula*



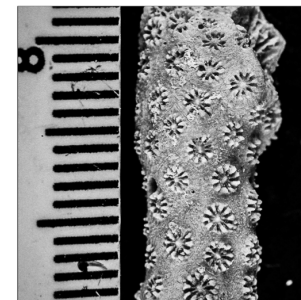
4. *Cladocora arbuscula*



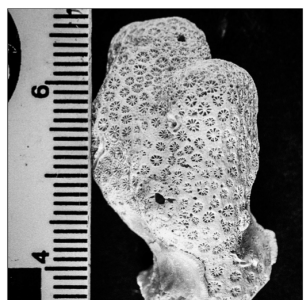
5. *Eusmilia fastigiata*



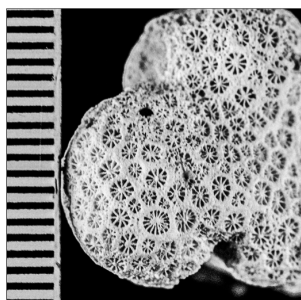
5. *Eusmilia fastigiata*



6. *Madracis asperula*



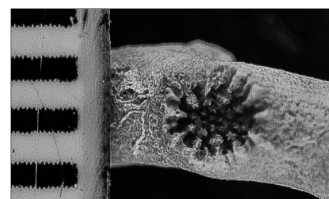
7. *Madracis decactis*



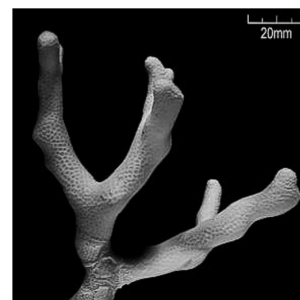
7. *Madracis decactis*



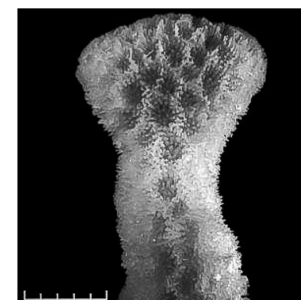
8. *Oculina diffusa*



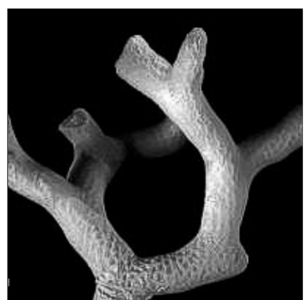
8. *Oculina diffusa*



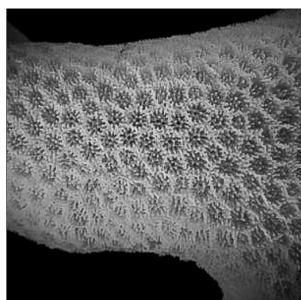
9. *Porites divaricata*



9. *Porites divaricata*



10. *Porites furcata*



10. *Porites furcata*



11. *Porites porites*



11. *Porites porites*

Figure 1: