

Simplified key to coral genera in the wildlife trade (continued)

22. Coral colony with more than one corallite: corallites arranged in rows forming a series of meandering valleys separated by ridges	Go To:	
23. a. the ridge that surrounds each valley is not shared with adjacent valleys (colony flabello-meandroid) SEE ALSO PAGES 34-37		23
b. adjacent valleys share the same wall (colony meandroid) SEE ALSO PAGE 40-41		24
24. a. corallites are large, septa are large with long teeth; a groove runs along the top of each ridge		26
b. corallites or corallite valleys are very large, septa large with long teeth, ridge lacks central groove	<i>Symphyllia</i>	
c. corallites ceriod to plocoid; may be large, septa large with tall teeth	<i>Lobophyllia</i> <i>Acanthastrea</i>	

Family Mussidae

Lobophyllia (1999: 25,000 pieces in trade, over 24,000 live)

- “Lobed Brain Coral or Bouquet Flower Coral” colonies are flat to hemispherical; corallites are 3-5 cm wide, with coarse skeletal structures; *Symphyllia* has similar septa and teeth
- corallites rise up as thick, individual branches, occasionally forking and dividing
- polyps are large and fleshy with a fleshy rim surrounding and may have a bumpy appearance

Symphyllia (1999: 1,880 pieces in trade, all live)

- “Symphony Corals” have wide valleys (> 12 mm) and a groove that runs along top of wall in some species
- adjacent corallites are fused, and each corallite is lobed and sinuous
- the margins of the septa have large teeth (> 2mm) that protrude from the corallum

Lobophyllia and *Symphyllia* have prominent fleshy polyp walls. *Symphyllia* is more sinuous in appearance and adjacent polyp walls are completely fused. In addition, a prominent groove runs along the length of the corallite wall in some species of *Symphyllia*.

Family Mussidae

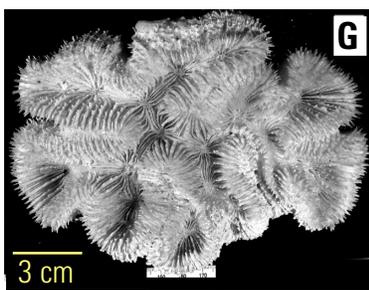
- Lobophyllia* ■ common name: Lobed Brain Coral (7 species)
 ■ colonies sub-meandroid, flabello-meandroid or phaceloid



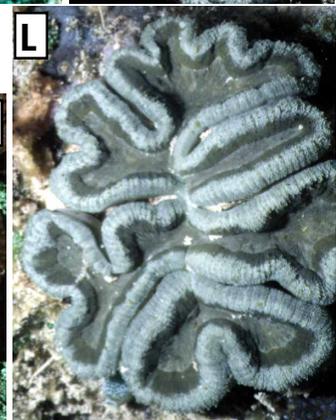
- A) septa with prominent teeth;
 septa thickened near walls
 B-E) colonies hemispherical or flattened
 B) walls thick, fleshy; calices deep
 B-D) expanded polyps have fleshy mantle
 that obscures skeleton, but
 adjacent corallite walls rarely fuse
 E) corallites have 1-4 mouths



- Symphyllia* ■ common name: Symphony Coral (7 species)
 ■ colonies meandroid or flabello-meandroid; flat or dome-shaped
 ■ pronounced lobes may radiate from the center



- F,G) septa large, with teeth
 H-L) wide valleys; ridges may be fleshy
 J-L) groove usually present along center of ridge;
 tentacles extended at night



Simplified key to coral genera in the wildlife trade (continued)

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|---|--------------------|
| 26. Coral colony with more than one corallite: | Go To: |
| a. corallites arranged in rows forming a series of meandering valleys separated by ridges; adjacent valleys share the same wall (colony meandroid) | |
| SEE ALSO PAGES 38-39 | 27 |
| b. colonies massive, encrusting or plate-like with pore-like corallites or protuberant rounded corallites | 28 |
| c. colonies plate-like, smooth or with concentric to meandering ridges and valleys | 38 |
| 27. Massive brain corals with meandering ridges and calices in rows in valleys: | |
| a. large, fleshy meandering ridges and septa with large lobed teeth | <i>Lobophyllia</i> |
| b. septa uniformly spaced and equal size, valleys uniform, 2-3 mm wide | <i>Leptoria</i> |
| c. valleys 4-5 mm wide, no paliform lobe, no columella | <i>Platygyra</i> |
| d. well-defined columella and paliform lobes | <i>Goniastrea</i> |
| e. valleys 8-20 mm wide, enclose less than 4 calices | <i>Oulophyllia</i> |
| f. valleys 2 cm or wider; enclose 4 or more calices; also flabello-meandroid..... | <i>Symphyllia</i> |
| g. wide valleys (> 1cm), interconnected with blistery coenosteum; septa large, exsert, smooth, widely-spaced; colony covered with small elliptical vesicles | <i>Physogyra</i> |

Leptoria, *Platygyra*, *Goniastrea* and *Oulophyllia* are meandroid “Brain Corals” that can be difficult to differentiate when live. Each genus has representative species with:

- sinuous valleys, < 1 cm wide, same width as walls; adjacent rows of polyps share same wall
- meandroid or sub-meandroid (1-3 polyps share same wall); walls and valleys often differ in color

Leptoria (1999: 133 pieces in trade)

- colonies often have a sculptured appearance due to regular (uniform) pattern of septa
- corallite valleys are highly meandroid and very uniform
- columella is laminar (wall-like); well-developed paliform lobe

Platygyra (1999: over 2,300 pieces in trade, most live)

- septa may be slightly to moderately exsert; colonies have a ragged appearance
- columella is spongy; corallites contained in narrow angular valleys
- *Platygyra* lacks the well-developed paliform lobes and well-defined columella centers found in *Goniastrea*

Oulophyllia (1999: 3 colonies reported)

- colonies may exceed 1 m in diameter; may be cerioid, similar to *Platygyra*
- valleys are wider than walls; walls < 4 mm wide
- may have a true meandroid form with fat, fleshy walls or may be sub-meandroid; walls often different color than polyp center, like in *Platygyra*, but walls are very steeply sloping and septa are not exsert as in *Platygyra*

Leptoria: septa are uniform in size and spacing

Oulophyllia: septa are thin and slope uniformly to columella

Platygyra: septa are exsert and ragged



Leptoria



Oulophyllia

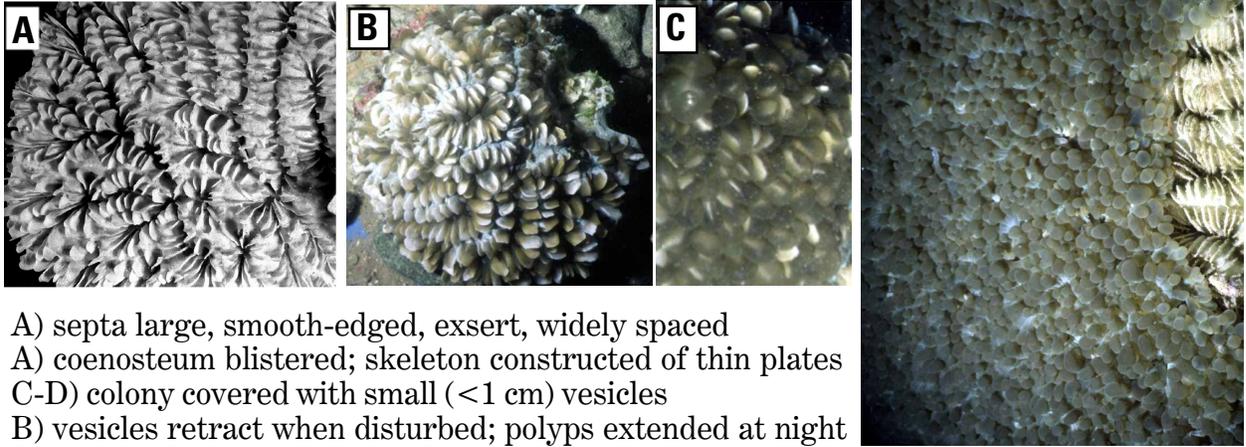


Platygyra

Meandroid Corals

Family Caryophyllidae

Physogyra ■ common name: Bubble Coral, Pearl Coral
 (2 species) ■ colonies meandroid to flabello-meandroid

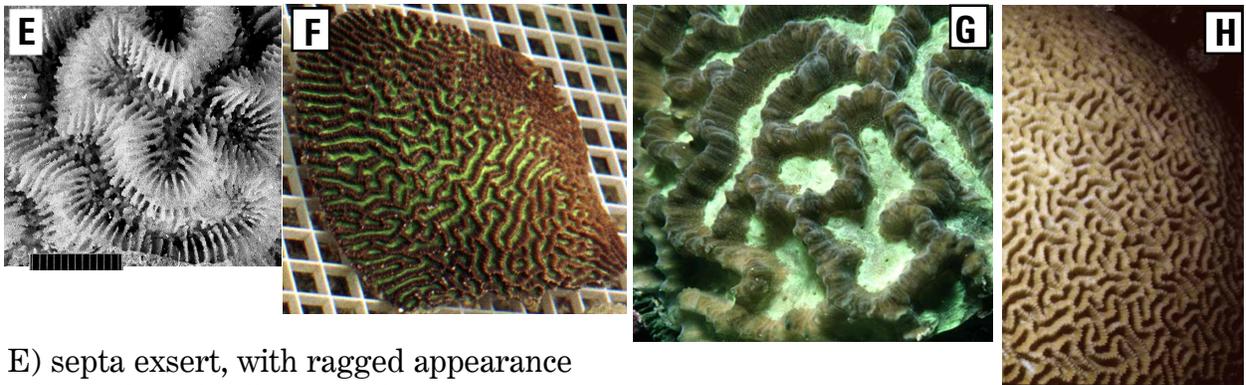


A) septa large, smooth-edged, exsert, widely spaced
 A) coenosteum blistered; skeleton constructed of thin plates
 C-D) colony covered with small (<1 cm) vesicles
 B) vesicles retract when disturbed; polyps extended at night

Family Faviidae

Platygyra

■ common name: Brain Coral (9 species)
 ■ colonies massive, flat or dome-shaped; usually meandroid, seldom cerioid



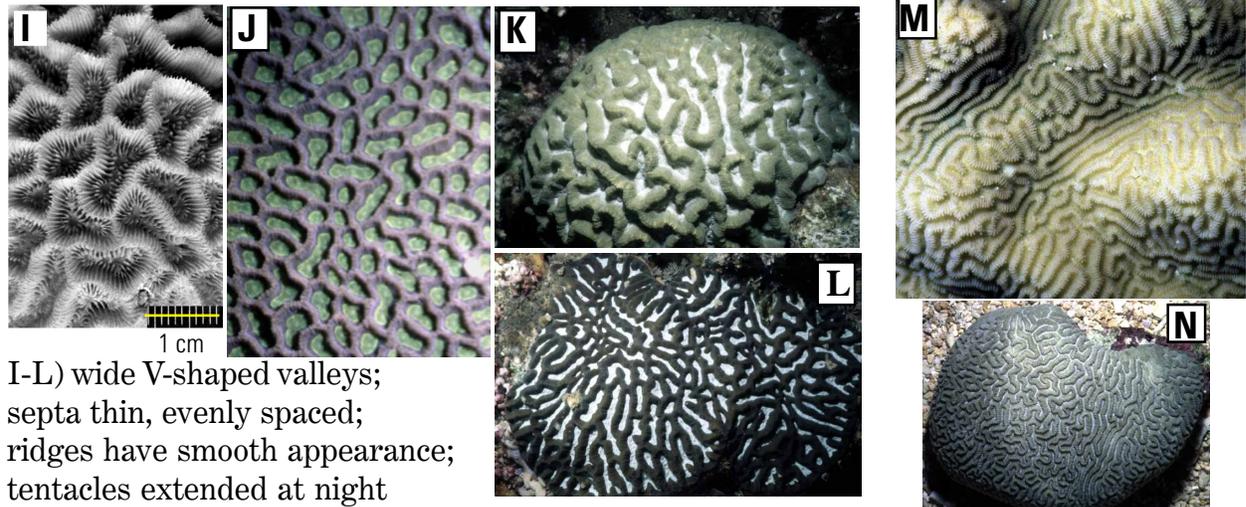
E) septa exsert, with ragged appearance
 F-G) walls and valleys may have contrasting colors
 F) colony may appear fleshy; tentacles extended at night

Oulophyllia

■ common name: Grooved Brain Coral (2 species)
 ■ colonies massive and meandroid

Leptoria

■ common name: Ragged Brain Coral
 ■ colonies meandroid and massive
 M-N) septa prominent, neat, uniform



I-L) wide V-shaped valleys;
 septa thin, evenly spaced;
 ridges have smooth appearance;
 tentacles extended at night