

**Family Acroporidae**

- 1a. no axial corallite
  - 2a. corallites <2 mm diameter, columella absent
    - 3a. branches without basal structures ..... Genus *Anacropora* (1:168, see below)
    - 3b. branches with basal structures ..... Genus *Montipora* (1:62, see below)
  - 2b. corallites obvious, columella present ..... Genus *Astreopora* (1:434, see below)
- 1b. axial corallites on branch ends ..... Genus *Acropora* (1:176, see below)

**Family Acroporidae****Genus *Acropora***

- 1a. colony without axial corallites - Group 1 (1:184)
  - 2a. colony sub-massive
    - 3a. colony predominantly vertical
      - 4a. corallites conspicuously exsert ..... *A.elizabethensis* (1:188)
      - 4b. corallites not conspicuously exsert ..... *A.palifera* (1:186)
    - 3b. colony predominantly horizontal ..... *A.cuneata* (1:184)
  - 2b. colony encrusting ..... *A.crateriformis* (1:190)
- 1b. colony with axial corallites
  - 2a. colony with branches dominant
    - 3a. radial corallites immersed - Group 2 (1:192)
      - 4a. coenosteum with tuberculae ..... *A.togianensis* (1:192)
      - 4b. coenosteum without tuberculae ..... *A.cylindrica* (1:193)
    - 3b. radial corallites exsert branches large
      - 4a. branches irregular - Group 3 (1:194)
        - 5a. branches elongate, straight
          - 6a. radial corallites very variable ..... *A.variolosa* (1:197)
          - 6b. radial corallites not very variable ..... *A.hemprichii* (1: 194)
        - 5b. branches short, twisted
          - 6a. axial corallites conspicuous ..... *A.brueggemanni* (1:198)
          - 6b. axial corallites not conspicuous
            - 7a. branches highly fused ..... *A.scherzeriana* (1:200)
            - 7b. branches not highly fused ..... *A.schmitti* (1:196)
      - 4b. branches buffalohorn-like - Group 4, ..... *A.rudis* (1:201)
      - 4c. branches elkhorn-like - Group 5, ..... *A.palmata* (1:202)
      - 4d. branches staghorn-like
        - 5a. branches mostly upright - Group 6 (1:204)
          - 6a. axial corallites distinctive
            - 7a. axial corallites very exsert ..... *A.grandis* (1:208)
            - 7b. axial corallites moderately exsert
              - 8a. radial corallites with rounded lips ..... *A.formosa* (1:204)
              - 8b. radial corallites with sharp lips ..... *A.cervicornis* (1:206)
            - 7c. axial corallites not distinctive ..... *A.teres* (1:209)
    - 5b. branches becoming prostrate
      - 6a. radial corallites rasp-like - Group 7 (1:210)
        - 7a. colony mostly encrusting
          - 8a. corallites minute ..... *A.minuta* (1:210)
          - 8b. corallites not minute ..... *A.palmerae* (1:211)
        - 7b. colony mostly branching

- 8a. centre of colony submassive
  - 9a. peripheral branches short ..... *A.pinguis* (1:212)
  - 9b. peripheral branches well developed
    - 10a. branches distally flattened ..... *A.irregularis* (1:214)
    - 10b. branches tapered ..... *A.robusta* (1:216)
- 8b. centre of colony branching
  - 9a. branches contorted ..... *A.roseni* (1:218)
  - 9b. branches tapered
    - 10a. branches highly fused ..... *A.abrotanoides* (1:220)
    - 10b. branches not highly fused ..... *A.nobilis* (1:222)
- 6b. radial corallites not obviously rasp-like - Group 8 (1:224)
  - 7a. branch ends conspicuously upturned
    - 8a. branches compact ..... *A.indonesia* (1:224)
    - 8b. branches not compact
      - 9a. branches uneven ..... *A.hoeksemai* (1:225)
      - 9b. branches even
        - 10a. branches large proximally ..... *A.valenciennesi* (1:226)
        - 11b. branches not large proximally ..... *A.acuminata* (1:230)
  - 7b. branch ends not conspicuously upturned
    - 8a. branches irregular ..... *A.kouirini* (1:231)
    - 8b. branches straight ..... *A.donei* (1:228)
- 6c. branches horizontal, interlocking
  - 7a. radial corallites sharp-edged - Group 9 (1:232)
    - 8a. radial corallites immersed to nariform
      - 9a. colony primarily prostrate ..... *A.stoddarti* (1:232)
      - 9b. colony not primarily prostrate ..... *A.sotitaryensis* (1:234)
    - 8b. radial corallites tubular, appressed
      - 9a. colony primarily prostrate ..... *A.nalalensis* (1:236)
      - 9b. colony not primarily prostrate ..... *A.divaricata* (1:238)
  - 7b. radial corallites rounded - Group 10 (1:240)
    - 8a. basal branches mostly not distinguishable ..... *A.branchi* (1:242)
    - 8b. basal branches mostly distinguishable
      - 9a. radial corallites in rows ..... *A.glauca* (1:240)
      - 9b. radial corallites not in rows ..... *A.orbicularis* (1:244)
- 4e. branches middle-sized
  - 5a. branches with conspicuous secondary branches - Group 11 (1:245)
    - 6a. branches and sub-branches distinct
      - 7a. sub-branch ends abundant
        - 8a. branches straight ..... *A.florida* (1:248)
        - 8b. branches curved ..... *A.austera* (1:250)
      - 7b. sub-branch ends not abundant
        - 8a. corallites tubular on upper branches ..... *A.wallaceae* (1:245)
        - 8b. corallites appressed on upper branches ..... *A.lovelli* (1:246)
    - 6b. branches and sub-branches intergrade
      - 7a. branches not highly fused
        - 8a. branches twisted ..... *A.forskali* (1:252)
        - 8b. branches straight ..... *A.lutkeni* (1:252)
      - 7b. branches highly fused ..... *A.seriate* (1:254)
  - 5b. branches staghorn-like - Group 12 (1:256)
    - 6a. axial corallite large ..... *A.abrollosensis* (1:256)

	6b. axial corallite not large	
	7a. radial corallites of uniform size .....	<i>A.microphthalmma</i> (1:258)
	7b. radial corallites of different sizes .....	<i>A.copiosa</i> (1:260)
	5c. branches interlocking vertically	
	6a. radial corallites sharp-edged - Group 13 (1:261)	
	7a. branches irregular .....	<i>A.prolifera</i> (1:261)
	7b. branches straight	
	8a. radial corallites with sharp lower lips	
	9a. radial corallites of one size .....	<i>A.haimeii</i> (1:263)
	9b. radial corallites of variable size .....	<i>A.yongei</i> (1:262)
	8b. radial corallites cylindrical .....	<i>A.pectinatus</i> (1:264)
	6b. radial corallites irregular - Group 14 (1:265)	
	7a. coenosteum coarse	
	8a. branches elongate .....	<i>A.tortuosa</i> (1:265)
	8b. branches compact .....	<i>A.horrída</i> (1:266)
	7b. coenosteum smooth	
	8a. radial corallites conical .....	<i>A.rufus</i> (1:269)
	8b. radial corallites not conical .....	<i>A.vaughani</i> (1:268)
	5d. branches interlock horizontally - Group 15 (1:270)	
	6a. branches irregularly twisted .....	<i>A.pruinosa</i> (1:270)
	6b. branches straight	
	7a. axial corallites distinctive	
	8a. radial corallites aligned along branches	
	9a. corallites uniform along branches .....	<i>A.tumida</i> (1:271)
	9b. peripheral corallites exert .....	<i>A.parahemprichii</i> (1:274)
	8b. radial corallites irregular .....	<i>A.striata</i> (1:272)
	7b. axial corallites not distinctive .....	<i>A.sekiseiensis</i> (1:276)
	6c. branches curved .....	<i>A.akajimensis</i> (1:273)
	4f. branches fine	
	5a. branches tubular - Group 16 (1:277)	
	6a. branches irregularly twisted .....	<i>A.meridiana</i> (1:280)
	6b. branches straight	
	7a. radial corallites tubular	
	8a. branching pattern open .....	<i>A.proximalis</i> (1:278)
	8b. branching pattern compact .....	<i>A.inermis</i> (1:281)
	7b. radial corallites nariform .....	<i>A.tizardi</i> (1:277)
	5b. branches flat - Group 17 (1:282)	
	6a. branches widely spaced .....	<i>A.walindii</i> (1:287)
	6b. branches closely spaced	
	7a. radial and axial corallites intergrade .....	<i>A.elegans</i> (1:282)
	7b. radial corallites distinct	
	8a. radial corallites small .....	<i>A.simplex</i> (1:284)
	8b. radial corallites conspicuous	
	9a. radial corallites primarily lateral .....	<i>A.tenella</i> (1:285)
	9b. radial corallites scattered .....	<i>A.pichoni</i> (1:286)
2b.	colony plate-like	
	3a. branches robust - Group 18 (1:288)	
	4a. branches and sub-branches distinct	
	5a. branches widely spaced .....	<i>A.plumosa</i> (1:288)
	5b. branches closely spaced.....	<i>A.pharaonis</i> (1:296)

4b.	branches and sub-branches not distinct branches fused proximally	
5a.	branches laterally flattened .....	<i>A.tutuilensis</i> (1:290)
5b.	branches not laterally flattened	
6a.	branch ends upturned .....	<i>A.downingi</i> (1:294)
6b.	branch ends not upturned .....	<i>A.clathrata</i> (1:292)
5c.	branches fully fused .....	<i>A.efflorescens</i> (1:298)
3b.	branches fine - Group 19 (1:299)	
4a.	corallites and branchlets intergrade .....	<i>A.rambleri</i> (1:299)
4b.	corallites and branchlets distinct	
5a.	axial corallites distinct	
6a.	branchlets upright	
7a.	axial corallites dome-shaped	
8a.	branches mostly fully fused .....	<i>A.spicifera</i> (1:308)
8b.	branches mostly distinct .....	<i>A.hyacinthus</i> (1:306)
7b.	axial corallites tubular .....	<i>A.cytherea</i> (1:300)
6b.	branchlets strongly inclined .....	<i>A.bifurcata</i> (1:304)
6c.	branchlets irregular .....	<i>A.plana</i> (1:302)
5b.	axial corallites indistinct .....	<i>A.tanegashimensis</i> (1:310)
2c.	colony digitate	
3a.	colony forms clumps	
4a.	branches cylindrical - Group 20 (1:311)	
5a.	axial corallite small .....	<i>A.ocellata</i> (1:312)
5b.	axial corallite dome-shaped	
6a.	radial corallites not appressed .....	<i>A.bushyensis</i> (1:311)
6b.	radial corallites appressed	
7a.	branches radiate from a basal point .....	<i>A.arabensis</i> (1:315)
7b.	branches do not radiate .....	<i>A.chesterfieldensis</i> (1:314)
4b.	branches finger-like - Group 21 (1:316)	
5a.	branches elongate, with sub-branches	
6a.	radial corallites of uniform size .....	<i>A.torresiana</i> (1:316)
6b.	radial corallites of two sizes .....	<i>A.samoensis</i> (1:323)
5b.	branches short	
6a.	axial corallites conspicuous .....	<i>A.humilis</i> (1:318)
7a.	axial corallites not conspicuous	
8a.	radial corallites increase in size .....	<i>A.gemmifera</i> (1:324)
8b.	radial corallites of uniform size	
9a.	radial corallites in rows .....	<i>A.monticulosa</i> (1:320)
9b.	radial corallites not in rows .....	<i>A.retusa</i> (1:322)
8c.	radial corallites irregular size .....	<i>A.globiceps</i> (1:317)
3b.	colony forms plates - Group 22 (1:326)	
4a.	axial conspicuous	
5a.	radial corallites small .....	<i>A.sarmentosa</i> (1:326)
5b.	radial corallites not small	
6a.	branches taper slightly .....	<i>A.digitifera</i> (1:328)
6b.	branches taper strongly .....	<i>A.japonica</i> (1:330)
4b.	axial corallites inconspicuous .....	<i>A.dendrum</i> (1:327)
4c.	axial corallites large - Group 23 (1:331)	
5a.	radial and axial corallites distinct .....	<i>A.fastigata</i> (1:331)
5b.	radial and axial corallites intergrade	
6a.	radial corallites bud obtusely .....	<i>A.multiacuta</i> (1:332)

	6b. radial corallites bud acutely .....	<i>A.suharsonoi</i> (1:333)
	5c. radial corallites spiny - Group 24 (1:334)	
	6a. axial corallites exsert	
	7a. radial corallites in rows .....	<i>A.polystoma</i> (1:335)
	7b. radial corallites not in rows .....	<i>A.massawensis</i> (1:336)
	6b. axial corallites not exsert .....	<i>A.listeri</i> (1:334)
2d.	colony corymbose to branching, radial corallites scale-like	
	3a. colony corymbose - Group 25 (1:337)	
	4a. branchlets irregularly spaced	
	5a. radial corallites compact .....	<i>A.prostrata</i> (1:338)
	5b. radial corallites not compact .....	<i>A.convexa</i> (1:337)
	4b. branchlets uniformly spaced .....	<i>A.millepora</i> (1:340)
	3b. colony branching - Group 26 (1:342)	
	4a. radial corallites of one size	
	5a. branches sturdy .....	<i>A.papillare</i> (1:345)
	5b. branches fine .....	<i>A.loisetteae</i> (1:346)
	4b. radial corallites of mixed sizes	
	5a. radial corallites large, conspicuous .....	<i>A.aspera</i> (1:342)
	5b. radial corallites small .....	<i>A.pulchra</i> (1:344)
2e.	colony forms clumps, branchlets well developed	
	3a. radial corallites appressed - Group 27 (1:347)	
	4a. colony cushion-like plates	
	5a. branches and sub-branches intergrade .....	<i>A.mirabilis</i> (1:347)
	5b. branches and sub-branches distinct	
	6a. radial corallites in a rosette .....	<i>A.latistella</i> (1:348)
	6b. radial corallites not in a rosette .....	<i>A.subulata</i> (1:350)
	4b. colony not cushion-like plates	
	5a. branchlets come from branches .....	<i>A.kimbeensis</i> (1:352)
	5b. branchlets come from base	
	6a. radial corallites nariform .....	<i>A.azurea</i> (1:355)
	6b. radial corallites not nariform .....	<i>A.nana</i> (1:354)
	3b. radial corallites small - Group 28 (1:356)	
	4a. radial corallites strongly appressed .....	<i>A.aculeus</i> (1:356)
	4b. radial corallites not strongly appressed .....	<i>A.elegantula</i> (1:358)
	3d. radial corallites with flaring lips - Group 29 (1:359)	
	4a. radial corallites in a rosette	
	5a. axial corallites long .....	<i>A.tenuis</i> (1:360)
	5b. axial corallites short .....	<i>A.vermiculata</i> (1:359)
	4b. radial corallites not in a rosette	
	5a. radial corallites widely spaced .....	<i>A.insignis</i> (1:364)
	5b. radial corallites not widely spaced .....	<i>A.selago</i> (1:362)
2f.	colony forms plates - Group 30 (1:366)	
	3a. branchlets with multiple axial corallites	
	4a. axial corallites larger than radial corallites .....	<i>A.anthoceric</i> (1:368)
	4b. axial and radial corallites similar	
	5a. peripheral branchlets outwardly inclined	
	6a. radial corallites with rounded lips .....	<i>A.desalwii</i> (1:370)
	6b. radial corallites with sharp lips .....	<i>A.parapharaonis</i> (1:367)
	5b. peripheral branchlets upright .....	<i>A.willisiae</i> (1:366)
	3b. branchlets with single axial corallites	

	4a. axial and incipient axial corallites intergrade .....	<i>A.batnuai</i> (1:372)
	4b. axial corallites distinct	
	5a. radial corallites appressed	
	6a. corallite openings nariform .....	<i>A.microclados</i> (1:374)
	6b. corallites openings not nariform .....	<i>A.macrostoma</i> (1:375)
	5b. radial corallites with flaring lips .....	<i>A.lamarcki</i> (1:376)
2g.	colony forms plate-like bushes	
	3a. axial corallites dominate colony shape - Group 31 (1:378)	
	4a. axial corallites very large .....	<i>A.lokani</i> (1:379)
	4b. axial corallites middle-sized	
	5a. corallites tubular .....	<i>A.granulosa</i> (1:382)
	5b. corallites tapered .....	<i>A.caroliniana</i> (1:380)
	4c. axial corallites fine	
	5a. corallites tubular .....	<i>A.paniculata</i> (1:378)
	5b. corallites tapered .....	<i>A.jacquelineae</i> (1:384)
	3b. axial corallites not dominating - Group 32 (1:386)	
	4a. radial corallites conspicuous	
	5a. axial corallites dome-shaped	
	6a. axial and radial corallites distinct .....	<i>A.verweyi</i> (1:386)
	6b. axial and radial corallites similar	
	7a. radial corallites widely spaced .....	<i>A.squarrosa</i> (1:390)
	7b. radial corallites crowded .....	<i>A.plantaginea</i> (1:391)
	5b. axial corallites tubular	
	6a. branches distinct from axial corallites .....	<i>A.rosaria</i> (1:394)
	6b. branches not distinct from axial corallites .....	<i>A.loripes</i> (1:388)
	4b. radial corallites not conspicuous .....	<i>A.maryae</i> (1:392)
	3c. corallites not dominating the colony structure	
	4a. radial corallites smooth-edged - Group 33 (1:396)	
	5a. axial corallites conspicuous	
	6a. radial corallites not nariform .....	<i>A.cophodactyla</i> (1:396)
	6b. radial corallites nariform .....	<i>A.appressa</i> (1:397)
	5b. axial corallites not conspicuous .....	<i>A.secale</i> (1:398)
	4b. radial corallites sharp-edged, nariform - Group 34 (1:400)	
	5a. colony caespitose .....	<i>A.cerealis</i> (1:402)
	5b. colony corymbose .....	<i>A.nasuta</i> (1:400)
	4c. radial corallites appressed Group 35 (1:404)	
	5a. colony corymbose .....	<i>A.valida</i> (1:404)
	5b. colony irregularly branched	
	6a. corallites with sharp edges .....	<i>A.variabilis</i> (1:406)
	6b. corallites with rounded edges .....	<i>A.lianae</i> (1:407)
2h.	colony thicket-like Group 36 (1:408)	
	3a. radial corallites of uniform size .....	<i>A.paralis</i> (1:410)
	3b. radial corallites of mixed sizes	
	4a. radial corallites with flaring lips .....	<i>A.exquisita</i> (1:412)
	4b. radial corallites appressed .....	<i>A.kirstyae</i> (1:409)
	3c. radial corallites vary down branches .....	<i>A.gomezii</i> (1:408)
2i.	colony forms tangles Group 37 (1:414)	
	3a. axial corallites distinctive	
	4a. branches very elongate	
	5a. sub-branches frequent .....	<i>A.derawanensis</i> (1:414)

	5b. sub-bunches infrequent .....	<i>A.filiformis</i> (1:418)
	4b. branches short and twisted	
	5a. branches prostrate .....	<i>A.cardenae</i> (1:419)
	5b. branches upright .....	<i>A.torihalimeda</i> (1:421)
	3b. axial and incipient, axial corallites intergrade	
	4a. radial corallites grouped .....	<i>A.fenneri</i> (1:416)
	4b. radial corallites widely spaced .....	<i>A.ruselli</i> (1:420)
2j.	colony bottlebrush-like Group 38 (1:422)	
	3a. colony with distinct branches	
	4a. axial and incipient axial corallites intergrade	
	5a. axial corallites very elongate	
	6a. axial corallites have thick walls .....	<i>A.turaki</i> (1:429)
	6b. axial corallites have thin walls .....	<i>A.echinata</i> (1:426)
	5b. axial corallites not very elongate .....	<i>A.awi</i> (1:422)
	4b. axial corallites mostly distinct	
	5a. corallites with truncated openings .....	<i>A.navini</i> (1:431)
	5b. corallites with rounded openings .....	<i>A.longicyathus</i> (1:430)
	3b. colony bushy	
	4a. axial corallites and branches intergrade .....	<i>A.speciosa</i> (1:424)
	4b. branches distinct	
	5a. sub-branches irregular	
	6a. radial corallites short, crowded .....	<i>A.carduus</i> (1:432)
	6b. radial corallites elongate, not crowded .....	<i>A.subglabra</i> (1:428)
	5b. sub-branches increase in size proximally .....	<i>A.elseyi</i> (1:433)

<b>Family Acroporidae</b>	<b>Genus <i>Anacropora</i></b>
1a. branches robust (>10 mm thick)	
2a. tips blunt	
3a. coenosteum coarse, not patterned .....	<i>A.spumosa</i> (1:171)
3b. coenosteum coarse, reticulate .....	<i>A.reticulata</i> (1:172)
2b. tips pointed .....	<i>A.puertogalerae</i> (1:170)
1b. branches fine (<10 mm thick)	
2a. lower lip to corallites conspicuous .....	<i>A.spinosa</i> (1:173)
2b. lower lip to corallites inconspicuous .....	<i>A.forbesi</i> (1:108)
1c. branches very fine (<5 mm thick)	
2a. branches twisted and tapered .....	<i>A.pillai</i> (1:175)
2b. branches not twisted or tapered .....	<i>A.matthai</i> (1:174)
<b>Family Acroporidae</b>	<b>Genus <i>Astreopora</i></b>
1a. colony plate-like - Group 1, .....	<i>A.expansa</i> (1:434)
1b. colony encrusting - Group 2 (1:436)	
2a. coenosteum coarse .....	<i>A.incrustans</i> (1:437)
2b. coenosteum smooth .....	<i>A.moretonensis</i> (1:436)
1c. colony massive	
2a. corallites small (<1.5 mm diameter) - Group 3 (1:438)	
3a. corallites immersed	
4a. corallites with feathery openings .....	<i>A.listeri</i> (1:439)
4b. corallites without feathery openings .....	<i>A.randalli</i> (1:438)
3b. corallites on mounds .....	<i>A.suggesta</i> (1:440)
2b. corallites large (>1.5 mm diameter) - Group 4 (1:441)	
3a. corallites conical, without dominating openings	
4a. corallites evenly distributed	
5a. coenosteum papillae form ridges .....	<i>A.gracilis</i> (1:444)
5b. coenosteum papillae perpendicular .....	<i>A.myriophthalma</i> (1:442)
5c. coenosteum papillae inclined .....	<i>A.scabra</i> (1:441)
4b. corallites irregularly distributed .....	<i>A.cucullata</i> (1:445)
3b. corallites not conical, with dominating openings	
4a. corallites widely spaced .....	<i>A.macrostoma</i> (1:447)
4b. corallites not widely spaced .....	<i>A.ocellata</i> (1:446)



Family **Acroporidae**Genus **Montipora**

- 1a. colony dominated by laminar growth-form
  - 2a. radiating coenosteum ridges conspicuous - Group 1 (1:66)
    - 3a. corallites clearly visible corallites in rows between ridges ..... *M.foliosa* (1:66)
    - 3b. corallites irregular ..... *M.cebuensis* (1:68)
  - 2b. corallites barely visible
    - 3a. laminae irregularly contorted ..... *M.hodgsoni* (1:72)
    - 3b. laminae flat ..... *M.delicatula* (1:70)
- 2c. radiating coenosteum ridges not conspicuous - Group 2 (1:73)
  - 3a. tuberculae or papillae present
    - 4a. tuberculae and papillae inconspicuous ..... *M.florida* (1:74)
    - 4b. tuberculae and papillae conspicuous
      - 5a. corallites <1 mm ..... *M.aequitaberculata* (1:76)
      - 5b. corallites >1 mm ..... *M.crassituberculata* (1:78)
    - 4b. tuberculae and papillae absent
      - 5a. laminae thin, delicate ..... *M.friabilis* (1:73)
      - 5b. laminae thick, not delicate ..... *M.capricornis* (1:80)
- 1b. colony dominated by encrusting or massive growth-form
  - 2a. corallites not very small (>1 mm diameter)
    - 3a. coenosteum tuberculae prominent - Group 3 (1:82)
      - 4a. branches clearly developed
        - 5a. coenosteum ridges clearly developed
          - 6a. ridges flame-shaped ..... *M.confusa* (1:82)
          - 6b. ridges irregular ..... *M.vietnamensis* (1:84)
        - 5b. coenosteum ridges poorly developed
          - 6a. tuberculae aligned on ridges
            - 7a. peripheral tuberculae distinctive ..... *M.undata* (1:86)
            - 7b. peripheral tuberculae not distinctive ..... *M.circumvallata* (1:93)
          - 6b. tuberculae not aligned on ridges ..... *M.saudii* (1:92)
      - 4b. branches not clearly developed
        - 5a. coenosteum has tuberculae ..... *M.monasteriata* (1:88)
        - 5b. coenosteum has papillae ..... *M.tuberculosa* (1:90)
    - 3b. coenosteum tuberculae not prominent
      - 4a. thecal papillae clearly visible - Group 4 (1:94)
        - 5a. upgrowths present
          - 6a. papillae well developed
            - 7a. papillae intergrade with tuberculae
              - 8a. corallites distinct
                - 9a. coenosteum ridges present ..... *M.lobulata* (1:95)
                - 9b. coenosteum ridges absent ..... *M.efflorescens* (1:104)
              - 8b. corallites indistinct ..... *M.flabellata* (1:99)
            - 7b. papillae distinct from tuberculae
              - 8a. papillae irregular in size ..... *M.stilosa* (1:102)
              - 8b. papillae uniform in size ..... *M.peltiformis* (1:100)
          - 6b. papillae not well developed
            - 7a. papillae compact ..... *M.turtiensis* (1:96)
            - 7b. papillae widely spaced ..... *M.dilatata* (1:98)
    - 5b. upgrowths absent

	6a. corallites exsert	
	7a. corallites large and conspicuous .....	<i>M.nodosa</i> (1:1 10)
	7b. corallites not large	
	8a. colonies massive .....	<i>M.grisea</i> (1:94)
	8b. colonies explanate	
	9a. colonies encrusting .....	<i>M.verilli</i> (1:107)
	9b. colonies not encrusting	
	10a. thecal papillae short .....	<i>M.patula</i> (1:106)
	10b. thecal papillae not short .....	<i>M.effusa</i> (1:108)
	6b. corallites immersed	
	7a. papillae of uniform size .....	<i>M.informis</i> (1:1 12)
	7b. papillae of mixed size .....	<i>M.corbettensis</i> (1:109)
4b.	thecal papillae not clearly visible - Group 5 (1:1 14)	
	5a. colonies distinctly columnar	
	6a. coenosteum fine	
	7a. corallites immersed .....	<i>M.spongodes</i> (1:122)
	7b. corallites irregularly exsert .....	<i>M.incrassata</i> (1:119)
	6b. coenosteum coarse .....	<i>M.spumosa</i> (1:120)
	5b. colonies not distinctly columnar	
	6a. coenosteum coarse	
	7a. surface irregular	
	8a. corallites very conspicuous .....	<i>M.cocosensis</i> (1:1 14)
	8b. corallites not very conspicuous .....	<i>M.calcarea</i> (1:116)
	7b. surface smooth .....	<i>M.mollis</i> (1:1 17)
	6b. coenosteum fine	
	7a. corallites conspicuous .....	<i>M.turgescens</i> (1:118)
	7b. corallites inconspicuous .....	<i>M.orientalis</i> (1:1 14)
2b.	corallites very small (<1 mm diameter) - Group 6 (1:123)	
	3a. corallites occur in tuberculae	
	4a. tuberculae become verrucae-like .....	<i>M.cryptus</i> (1:126)
	4b. tuberculae not verrucae-like	
	5a. corallites microscopic .....	<i>M.floweri</i> (1:124)
	5b. corallites not microscopic .....	<i>M.hoffmeisteri</i> (1:123)
	3b. corallites do not occur in tuberculae .....	<i>M.millepora</i> (1:125)
1b.	colony dominated by distinctive corallite or coenosteum characters	
	2a. corallites funnel-shaped (foveolate) - Group 7 (1:127)	
	3a. colonies form branches .....	<i>M.angulala</i> (1:127)
	3b. colonies do not form branches	
	4a. corallites foveolate and non-foveolate .....	<i>M.caliculata</i> (1:128)
	4b. corallites all foveolate	
	5a. funnels very conspicuous .....	<i>M.foveolata</i> (1:131)
	5b. funnels not very conspicuous .....	<i>M.venosa</i> (1:130)
	2b. corallites not funnel-shaped	
	3a. coenosteum forms verrucae - Group 8 (1:132)	
	4a. colonies form branches	
	5a. branches well defined .....	<i>M.capitata</i> (1:144)
	5b. branches not well defined .....	<i>M.setosa</i> (1:137)
	4b. colonies form flat plates	
	5a. verrucae irregularly fused .....	<i>M.palawanensis</i> (1:132)
	5b. verrucae fused into ridges	

	6a. whole plate has ridges .....	<i>M.mactanensis</i> (1:134)
	6b. plate margins only have ridges .....	<i>M.veruculosus</i> (1:136)
4c.	colonies sub-massive	
	5a. verrucae forms interlocking ridges .....	<i>M.taiwanensis</i> (1:132)
	5b. verrucae fused into nodules	
	6a. corallites very conspicuous .....	<i>M.verrucosa</i> (1:138)
	6b. corallites not very conspicuous	
	7a. verrucae irregular .....	<i>M.meandrina</i> (1:142)
	7b. verrucae not irregular .....	<i>M.danae</i> (1:140)
1c.	colony dominated by branching growth-form	
2a.	branches thick - Group 9 (1:146)	
	3a. branches becoming sub-massive .....	<i>M.australiensis</i> (1:152)
	3b. braches not sub-massive	
	4a. branches tall	
	5a. colonies with explanate bases	
	6a. corallites with tall thecal papillae .....	<i>M.hispida</i> (1:148)
	6b. corallites without tall thecal papillae .....	<i>M.cactus</i> (1:150)
	5b. colonies without explanate bases .....	<i>M.gaimardi</i> (1:146)
	4b. branches short and fused .....	<i>M.hemispherica</i> (1:147)
2b.	branches twig-like	
3a.	branches predominantly straight	
	4a. coenosteum smooth - Group 10 (1:153)	
	5a. branches tubular	
	6a. corallites with projecting lower lip .....	<i>M.altasepta</i> (1:153)
	6b. corallites without lips	
	7a. corallites in pits .....	<i>M.samarensis</i> (1:156)
	7b. corallites not in pits .....	<i>M.digitata</i> (1:154)
	5b. branches irregular .....	<i>M.niugini</i> (1:158)
4b.	coenosteum forms ridges - Group 11 (1:159)	
	5a. branches with pointed ends	
	6a. branches compact and fine .....	<i>M.hirsuta</i> (1:159)
	6b. branches open .....	<i>M.slellata</i> (1:160)
	5b. branches with rounded ends	
	6a. corallites deeply pitted .....	<i>M.porties</i> (1:162)
	6b. corallites not deeply pitted .....	<i>M.malampaya</i> (1:163)
3b.	branches predominantly contorted - Group 12 (1:164)	
	4a. papillae well developed	
	5a. papillae uniform .....	<i>M.aspergillus</i> (1:167)
	5b. papillae irregular	
	6a. colony surface spiny .....	<i>M.echinata</i> (1:166)
	6b. colony surface not spiny .....	<i>M.pachytuberculata</i> (1:166)
4b.	papillae not developed	
	5a. corallites with projecting lower lips .....	<i>M.spongiosa</i> (1:165)
	5b. corallites without projecting lower lips .....	<i>M.kellyi</i> (1:164)

**Family Agariciidae**

- 1a. colony not massive
- 2a. corallite centres discernible
- 3a. polyps aligned between collines
- 4a. corallites without individual walls ..... Genus *Agaricia* (2:170)
- 5a. colony with horizontal plates and upright fronds - Group 1 (2:171)
- 6a. horizontal plates not well formed ..... *A.tnnuifolia* (2:171)
- 6b. horizontal plates well formed ..... *A.agaricites* (2:172)
- 5b. colony consists of horizontal plates Group 2 (2:174)
- 6a. valleys short, irregular
- 7a. collines closely (<5 mm) spaced ..... *A.undata* (2:175)
- 7b. collines widely (>5 mm) spaced
- 8a. corallite centres >5/cm ..... *A.fragilis* (2:174)
- 8b. corallite centres <5/cm ..... *A.grahamae* (2:175)
- 6b. valleys well formed ..... *A.lamarcki* (2:176)
- 5c. colony sub-massive - Group 3, ..... *A.humilis* (2:177)
- 4b. corallites with individual walls ..... Genus *Leptoseris* (2:202, see below)
- 3b. polyps not aligned between collines ..... Genus *Pavona* (2:178, see below)
- 2b. corallite centres not discernible ..... Genus *Pachyseris* (2:224)
- 3a. colony primarily plate-like
- 4a. plates primarily upright
- 5a. columellae inconspicuous ..... *P.gaemmae* (2:224)
- 5b. columellae well developed ..... *P.rugosa* (2:226)
- 4b. plates primarily horizontal ..... *P.speciosa* (2:228)
- 3b. colony bifurcated fronds
- 4a. valleys shallow and even ..... *P.foliosa* (2:230)
- 4b. valleys irregular ..... *P.involuta* (2:231)
- 1b. colony massive
- 2a. corallites in concavities ..... Genus *Gardineroseris*, *G.plaulata* (2:222)
- 2b. corallites not in concavities ..... Genus *Coeloseris*, *C.mayeri* (2:221)

**Family Agariciidae****Genus *Leptoseris***

- 1a. colonies delicate fronds
- 2a. fronds highly divided
- 3a. fronds irregularly twisted ..... *L.cailletti* (2:205)
- 3b. fronds not irregularly twisted
- 4a. fronds one corallite wide ..... *L.papyracea* (2:204)
- 4b. fronds more than one corallite wide ..... *L.gardineri* (2:202)
- 2b. fronds not highly divided
- 3a. fronds flat sheets ..... *L.amitorienis* (2:207)
- 3b. fronds not flat sheets ..... *L.tubulfera* (2:206)
- 1b. colonies not delicate fronds
- 2a. corallites aligned or in valleys
- 3a. corallites exsert
- 4a. septo-costae alternate
- 5a. corallites with rounded edges ..... *L.explanata* (2:208)
- 5b. corallites with sharp edges ..... *L.cucullata* (2:214)

4b. septo-costae sub-equal .....	<i>L.solida</i> (2:211)
3b. corallites immersed	
4a. central corallite distinguishable	
5a. peripheral corallites strongly inclined .....	<i>L.scabra</i> (2:210)
5b. peripheral corallites not strongly inclined .....	<i>L.striata</i> (2:212)
4b. central corallite not distinguishable	
5a. corallite openings rounded .....	<i>L.foliola</i> (2:219)
5b. corallite openings not rounded	
6a. laminae have radiating ridges .....	<i>L.myectoseroides</i> (2:213)
6b. laminae do not have radiating ridges .....	<i>L.incrustans</i> (2:218)
2b. corallites not aligned or in valleys	
3a. corallite openings rounded .....	<i>L.hawaiiensis</i> (2:216)
3b. corallite openings not rounded .....	<i>L.yabei</i> (2:220)
<b>Family Agariciidae</b>	
Genus <i>Pavona</i>	
1a. colonies leafy or plate-like - Group 1 (2:179)	
2a. colonies upright plates	
3a. plates short, thick	
4a. corallites aligned vertically .....	<i>P.danai</i> (2:179)
4b. corallites aligned horizontally .....	<i>P.frondifera</i> (2:182)
3b. plates not short, thick .....	<i>P.cactus</i> (2:180)
2b. colonies prostrate or encrusting	
3a. corallites large and conspicuous .....	<i>P.explanulata</i> (2:184)
3b. corallites not large and conspicuous .....	<i>P.varians</i> (2:186)
1b. colonies not leafy - Group 2 (2:188)	
2a. colonies not sub-massive or columnar	
3a. corallites plocoid .....	<i>P.maldivensis</i> (2:192)
3b. corallites immersed .....	<i>P.decussata</i> (2:194)
2b. colonies sub-massive to columnar	
3a. colonies primarily sub-massive	
4a. corallites in short deep valleys .....	<i>P.venosa</i> (2:190)
4b. corallites not in valleys	
5a. colonies become massive .....	<i>P.gigantea</i> (2:189)
5b. colonies become nodular .....	<i>P.diffluens</i> (2:188)
3b. colonies become columnar	
4a. columns mostly cylindrical .....	<i>P.clavus</i> (2:198)
4b. columns laterally compressed .....	<i>P.duerdeni</i> (2:200)
3c. colonies explanate	
4a. corallites with large columellae .....	<i>P.minuta</i> (2:196)
4b. corallites with small columellae .....	<i>P.bipartita</i> (2:197)

**Family Astrocoeniidae**

- 1a. colonies encrusting, corallites inconspicuous
- 2a. coenosteum style present ..... Genus *Stylocoeniella* (2:4)
- 3a. coenosteum styles prominent ..... *S.armata* (2:4)
- 3b. coenosteum styles not prominent
- 4a. corallites immersed ..... *S.guentheri* (2:6)
- 4b. corallites conical ..... *S.cocosensis* (2:8)
- 2b. no coenosteum style ..... Genus *Stephanocoenia*, *S.michelinii* (2:9)
- 1b. colonies becoming branching, corallites conspicuous
- 2a. septa with free margins ..... Genus *Palauastrea*, *P.ramosa* (2:10)
- 2b. septa fused with columella ..... Genus *Madracis* (2:12, see below)

**Family Astrocoeniidae**Genus *Madracis*

- 1a. colonies not branching
- 2a. corallite have 6 primary septa ..... *M.senaria* (2:14)
- 2b. corallites have 8 primary septa ..... *M.formosa* (2:14)
- 2c. corallites have 10 primary septa
- 3a. second septal cycle well developed ..... *M.pharensis* (2:12)
- 4a. second septal cycle not well developed
- 5a. colonies columnar ..... *M.kirbyi* (2:16)
- 5b. colonies nodular ..... *M.decactis* (2:18)
- 1b. colonies branching
- 2a. branches irregularly contorted
- 3a. septa plunge steeply ..... *M.asanoi* (2:17)
- 3b. septa do not plunge steeply ..... *M.asperula* (2:18)
- 2b. branches straight ..... *M.mirabilis* (2:20)

**Family Caryophylliidae**

Genus *Heterocyathus* ..... *H.aequicostatus* (2:412)

Family **Dendrophylliidae**

- 1a. colony attached to substrate
  - 2a. colony with fronds or encrusting ..... Genus *Turbinaria* (2:388, see below)
  - 2b. colony composed of branches
    - 3a. branches subdivide ..... Genus *Duncanopsammia*, *D.axifuga* (2:405)
    - 3b. branches do not subdivide ..... Genus *Balanophyllia*, *B.europaea* (2:406)
- 1b. colony not attached to substrate ..... Genus *Heteropsammia*, *H.cochlea* (2:407)

Family **Dendrophylliidae**Genus *Turbinaria*

- 1a. colony not encrusting
  - 2a. fronds not composed of 1 used corallites
    - 3a. corallites >4 mm diameter
      - 4a. corallites short, average 6 mm in diameter ..... *T.peltata* (2:390)
      - 4b. corallites tubular, average 5 mm in diameter ..... *T.patula* (2:389)
    - 3b. corallites <4 mm diameter
      - 4a. fronds unifacial
        - 5a. fronds not contorted
          - 6a. colony surface smooth ..... *T.reniformis* (2:396)
          - 6b. colony surface not smooth ..... *T.frondens* (2:392)
        - 5b. fronds contorted ..... *T.mesenterina* (2:394)
      - 4b. fronds bifacial
        - 5a. corallites conical ..... *T.bifrons* (2:402)
        - 5b. corallites not conical ..... *T.conspicua* (2:403)
  - 2b. fronds composed of fused corallites ..... *T.heronensis* (2:404)
- 1b. colony encrusting to sub-massive
  - 2a. colony surface smooth ..... *T.radicalis* (2:397)
  - 2b. colony surface not smooth
    - 3a. corallites conspicuously exsert ..... *T.irregularis* (2:398)
    - 3b. corallites not conspicuously exsert ..... *T.stellulata* (2:400)

**Family Euphyllidae**

*Note: characters of soft parts are used in this key.*

- 1a. colonies do not have vesicles extended during daytime
  - 2a. colonies have V-shaped valleys ..... Genus *Catalaphyllia*, *C.jardiniei* (2:82)
  - 2b. colonies do not have V-shaped valleys
    - 3a. colonies have tentacles ..... Genus *Euphyllia* (2:68, see below)
    - 3b. colonies have mantles ..... Genus *Nemanzophyllia*, *N.turbida* (2:84)
- 1b. colonies have vesicles or mantles extended during daytime
  - 2a. colonies not massive ..... Genus *Plerogyra* (2:86)
    - 3a. mantles extended during daytime ..... *P.discus* (2:86)
    - 3b. vesicles extended during the day
      - 4a. colonies flabello-meandroid ..... *P.sinuosa* (2:88)
      - 4b. colonies phaceloid ..... *P.simplex* (2:90)
  - 2b. colonies massive ..... Genus *Physogyra*, *P.lichtensteini* (2:92)

**Family Euphylliidae****Genus *Euphyllia***

- 1a. colonies phaceloid - Group 1 (2:69)
  - 2a. tentacles in simple tubes
    - 3a. primary septa strongly exsert
      - 4a. tentacles elongate ..... *E.glabrescens* (2:70)
      - 4b. tentacles short ..... *E.paraglabrescens* (2:72)
    - 3b. primary septa not strongly exsert ..... *E.cristata* (2:69)
  - 2b. tentacles not simple tubes
    - 3a. tentacles branch ..... *E.paradivisa* (2:73)
    - 3b. tentacles have anchor-shaped ends ..... *E.paraancora* (2:74)
- 1b. colonies flabello-meandroid - Group 2 (2:76)
  - 2a. tentacles arc fleshy lobes ..... *E.yaeyamaensis* (2:76)
  - 2b. tentacles branch ..... *E.divisa* (2:78)
  - 2c. tentacles have anchor-shaped ends ..... *E.ancora* (2:80)



**Family Faviidae**

- 1a. colonies phaceloid
  - 2a. corallites small (<5 mm diameter) ..... Genus *Cladocora* (3:88)
    - 3a. branches irregular ..... *C.arbuscula* (3:90)
    - 3b. branches form clumps *C.eacspilosa* (3:88)
  - 2b. corallites not small (>5 mm diameter) ..... Genus *Caulastrea* (3:91, see below)
- 1b. colonies flabello-meandroid ..... Genus *Erythrastrea*, *E.flabellata* (3:98)
- 1c colonies massive or derived from massive
  - 2a. budding intra-tentacular or meandroid
    - 3a. colonies plocoid
      - 4a. corallites not exsert ..... Genus *Favia* (3:100, see below)
      - 4b. corallites exsert ..... Genus *Barabattoia* (3:132)
        - 5a. costae alternate ..... *B.laddi* (3:132)
        - 5b. costae do not alternate ..... *B.amicorum* (3:133)
    - 3b. colonies cerioid to secondarily meandroid
      - 4a. paliform lobes present
        - 5a. paliform lobes not prominent ..... Genus *Favites* (3:134, see below)
        - 5b paliform lobes prominent
          - 6a.valleys < 10 mm across ..... Genus *Goniastrea* (3:156,see below)
          - 6b. valleys >10 mm
            - 7a. across ambulacral groove present
              - 8a. colonies large ..... Genus *Colpophyllia*, *C.natans* (3:210)
              - 8b. colonies small ..... Genus *Manicina*, *M.areolata* (3:99)
            - 7b. ambulacral groove absent ..... Genus *Oulophyllia* (3:195)
              - 8a. valleys with less than 3 centres ..... *O.bennettiae* (3:200)
              - 8b. valleys with more than 3 centres
                - 9a. valleys deep, sub-sinuuous ..... *O.crispa* (3:196)
                - 9b. valleys shallow, sinuous ..... *O.levis* (3:198)
        - 4b. paliform lobes absent or weakly developed
          - 5a. paliform lobes spongy
            - 6a. ambulacral groove absent ..... Genus *Platygyra* (3:176,see below)
            - 6b. ambulacral groove present ..... Genus *Diploria* (3:206)
              - 7a. ambulacral groove very distinct ..... *D.labyrinthiformis* (3:206)
              - 7b. ambulacral groove not distinct
                - 8a. valleys irregular ..... *D.clivosa* (3:209)
                - 8b. valleys not irregular ..... *D.strigosa* (3:208)
          - 5b. paliform lobes wall-like ..... Genus *Leptoria* (3:202)
            - 6a. paliform walls solid ..... *L.phrygia* (3:204)
            - 6b. paliform walls not solid ..... *L.irregularis* (3:202)
    - 3c. colonies branching ..... Genus *Australogyra*, *A.zelli* (3:194)
  - 2ba. budding extra-tentacular
    - 3a. corallites small (<4 mm diameter)
      - 4a. corallites crowded ..... Genus *Cyphastrea* (3:240, see below)
      - 4b. corallites not crowded ..... Genus *Plesiastrea* (3:226)
        - 5a. paliform lobes conspicuous ..... *P.versipora* (3:226)
        - 5b. paliform lobes not conspicuous ..... *P.devantieri* (3:228)
    - 3b. corallites middle-sized
      - 4a. corallites plocoid
        - 5a. colonies sub-massive

6a. septa strongly alternate .....	Genus <i>Oulastrea</i> , <i>O.crispata</i> (3:229)
6b. septa do not alternate .....	Genus <i>Montastrea</i> (3:212, see below)
5b. colonies massive to columnar .....	Genus <i>Solenastrea</i> (3:250)
6a. colonies massive .....	<i>S.bournoni</i> (3:250)
6b. colonies columnar .....	<i>S.hyades</i> (3:251)
4b. corallites cerioid .....	Genus <i>Leptastrea</i> (3:232, see below)
4c. corallites sub-plocoid .....	Genus <i>Parasimplastrea</i> , <i>P.sheppardi</i> (3:239)
3c. corallites large, conspicuous	
4a. corallites cerioid .....	Genus <i>Moseleya</i> , <i>M.latistellata</i> (3:269)
4b. corallites plocoid .....	Genus <i>Diploastrea</i> , <i>D.heliopora</i> (3:230)
1d. colonies explanate to branching .....	Genus <i>Echinopora</i> (3:252, see below)
<b>Family Faviidae</b>	
Genus <i>Caulastrea</i>	
1a. corallites >10 mm diameter	
2a. corallites short .....	<i>C.tumida</i> (3:94)
2b. corallites long .....	<i>C.connata</i> (3:91)
1b. corallites <10 mm diameter corallites straight	
2a. septa of even thickness .....	<i>C.echinulata</i> (3:97)
2b. septa of variable thickness .....	<i>C.furcata</i> (3:92)
1c. corallites curved at colony margins .....	<i>C.curvata</i> (3:96)
<b>Family Faviidae</b>	
Genus <i>Cyphastrea</i>	
1a. colony massive	
2a. 12 primary septa	
3a. costae equal or sub-equal	
4a. septa irregularly exsert	
5a. corallites widely spaced .....	<i>C.agassizi</i> (3:248)
5b. corallites crowded	
6a. coenosteum spinules common .....	<i>C.ocellina</i> (3:244)
6b. coenosteum mostly smooth .....	<i>C.japonica</i> (3:240)
4b. septa not irregularly exsert .....	<i>C.serailia</i> (3:242)
3b. costae alternate .....	<i>C.chalcidicum</i> (3:241)
2b. 10 primary septa .....	<i>C.microphthalma</i> (3:246)
2c. 6 primary septa .....	<i>C.hexasepta</i> (3:245)
1b. colony branching .....	<i>C.decadia</i> (3:249)
<b>Family Faviidae</b>	
Genus <i>Echinopora</i>	
1a. colonies sub-massive	
2a. septo-costae even .....	<i>E.forskaliana</i> (3:264)
2b. septo-costae very uneven .....	<i>E.robusta</i> (3:263)
1b. colonies not sub-massive	
2a. colonies do not form solid branches	
3a. corallites >4 mm in diameter	
4a. corallites even .....	<i>E.pacificus</i> (3:252)

4b. corallites uneven	
5a. corallites up to 4.5 mm in diameter .....	<i>E.gemmacea</i> (3:258)
5b. corallites up to 7 mm in diameter	
6a. corallites develop into branches .....	<i>E.irregularis</i> (3:262)
6b. corallites and branches discrete .....	<i>E.hirsutissima</i> (3:260)
3b. corallites <4 mm in diameter	
4a. colony primarily explanate .....	<i>E.lamellosa</i> (3:254)
4b. colony primarily tubular .....	<i>E.ashmorensis</i> (3:256)
2b.colonies form solid branches	
3a. branches are composed of single corallites	
4a. coenosteum smooth .....	<i>E.tiranensis</i> (3:265)
4b. coenosteum rough .....	<i>E.fruticulosa</i> (3:257)
3b. branches not composed of single corallites	
4a. coenosteum smooth .....	<i>E.mammiformis</i> (3:266)
4b. coenosteum rough .....	<i>E.horrída</i> (3:268)
<b>Family Faviidae</b>	
<b>Genus <i>Favia</i></b>	
1a. corallites small (<8 mm diameter) - Group 1 (3:102)	
2a. colonies columnar .....	<i>F.stelligera</i> (3:102)
colonies not columnar	
3a. corallites irregular, immersed .....	<i>F.fragum</i> (3:104)
3b. corallites regular, conical .....	<i>F.laxa</i> (3:105)
1b. corallites middle-sized (8-12 mm diameter) - Group 2 (3:106)	
2a. septa irregular in height	
3a. paliform lobes well developed	
4a. corallites inclined on the colony .....	<i>F.truncatus</i> (3:113)
4b. corallites not inclined on the colony .....	<i>F.albidus</i> (3:112)
3b. paliform lobes not well developed	
4a. septa irregularly exsert .....	<i>F.matthai</i> (3:106)
4b. septa not irregularly exsert .....	<i>F.speciosa</i> (3:108)
2b. septa not irregular	
3a. corallites conical .....	<i>F.helianthoides</i> (3:110)
3b. corallites not conical	
4a. corallites crowded, irregularly shaped.....	<i>F.lacuna</i> (3:111)
4b. corallites not crowded or irregular .....	<i>F.pallida</i> (3:114)
1b. corallites large (>12 mm diameter) - Group 3 (3:116)	
2a. corallites irregularly shaped	
3a. septa exsert .....	<i>F.rotumana</i> (3:121)
3a. septa not exsert	
4a. corallites exsert .....	<i>F.vietnamensis</i> (3:127)
4b. corallites not exsert .....	<i>F.rosaria</i> (3:119)
2b. corallites not irregularly shaped	
3a. corallites exsert	
4a. corallites conical	
5a. costae strongly beaded .....	<i>F.danae</i> (3:123)
5b. costae not strongly beaded .....	<i>F.fauns</i> (3:116)
4b. corallites not conical	
5a. corallites compact .....	<i>F.rotundata</i> (3:124)

5b. corallites not compact	
6a. paliform lobes conspicuous .....	<i>F.maxima</i> (3:126)
6b. paliform lobes not conspicuous .....	<i>F.maritima</i> (3:130)
3b. corallites not exsert .....	<i>F.veroni</i> (3:128)
4a. corallites compact or irregularly spaced .....	<i>F.lizardensis</i> (3:120)
4b. corallites not compact, uniformly spaced	
5a. primary septa exsert .....	<i>F.leptophylla</i> (3:118)
5b. primary septa not exsert .....	<i>F.marshae</i> (3:122)
<hr/>	
<b>Family Faviidae</b>	Genus <i>Favites</i>
1a. corallites very small (<6 mm in diameter) - Group 1 (3:136)	
2a. corallites irregular in shape .....	<i>F.stylifera</i> (3:136)
2b. corallites uniform in shape .....	<i>F.micropentagona</i> (3:137)
1b. corallites small (6-10 mm in diameter) - Group 2 (3:138)	
2a. corallite angular	
3a. paliform lobes well developed .....	<i>F.pentagona</i> (3:138)
3b. paliform lobes weakly developed or absent	
4a. septa very exsert .....	<i>F.spinosa</i> (3:142)
4b. septa not exsert .....	<i>F.acuticollis</i> (3:141)
2b. corallites rounded	
3a. paliform lobes well developed .....	<i>F.bestae</i> (3:140)
3b. paliform lobes absent .....	<i>F.chinensis</i> (3:143)
1c. corallites middle-sized (10-14 mm in diameter) - Group 3 (3:144)	
2a. colony surface hillocky .....	<i>F.halicora</i> (3:144)
2b. colony not hillocky	
3a. septa irregularly exsert .....	<i>F.russelli</i> (3:148)
3b. septa not irregular	
4a. corallites angular .....	<i>F.abdita</i> (3:146)
4b. corallites rounded .....	<i>F.complanata</i> (3:150)
1d. corallites large (>14 mm in diameter) - Group 4 (3:152)	
2a. corallites rounded .....	<i>F.vasta</i> (3:152)
2b. corallites angular	
3a. septal teeth conspicuous .....	<i>F.flexuosa</i> (3:154)
3b. septal teeth not conspicuous .....	<i>F.parajlexuosa</i> (3:155)
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<b>Family Faviidae</b>	Genus <i>Goniastrea</i>
1a. colony predominantly mono-centric	
2a. corallites <5 mm in diameter - Group 1 (3:158)	
3a. colonies massive	
4a. corallites minute (<2 mm in diameter) .....	<i>G.minuta</i> (3:158)
4b. corallites not minute	
5a. corallite walls rounded .....	<i>G.edwardsi</i> (3:161)
5b. corallite walls acute .....	<i>G.retiformis</i> (3:162)
3b. colonies branching .....	<i>G.ramosa</i> (3:160)
2b. corallites >5 mm in diameter - Group 2 (3:164)	
3a. corallites irregular .....	<i>G.deformis</i> (3:167)



Family <b>Faviidae</b>	Genus <i>Platygyra</i>
1a. colonies monocentric or have short valleys - Group 1 (3:178)	
2a. walls thick, rounded	
3a. valleys irregularly contorted .....	<i>P.yaeyamaensis</i> (3:184)
3b. valleys not contorted	
4a. columellae well developed .....	<i>P.crosslandi</i> (3:180)
4b. columellae weakly developed .....	<i>P.pini</i> (3:178)
2b. walls not thick, rounded	
3a. valleys mostly have several centres .....	<i>P.ryukyuensis</i> (3:182)
3b. valleys mostly mono-centric	
4a. columellae well developed .....	<i>P.carnosus</i> (3:184)
4b. columellae weakly developed .....	<i>P.verweyi</i> (3:181)
1b. colonies meandroid - Group 2 (3:186)	
2a. walls thick, rounded .....	<i>P.lamellina</i> (3:192)
2b. walls not thick, rounded	
3a. valleys contorted .....	<i>P.contorta</i> (3:188)
3b. valleys not contorted	
4a. septa irregularly exsert .....	<i>P.daedalea</i> (3:191)
4b. septa not irregularly exsert	
5a. top of wall acute .....	<i>P.acuta</i> (3:190)
5b. top of wall not acute .....	<i>P.sinensis</i> (3:186)

**Family Fungiidae**

- 1a. not colonial
- 2a. free living
- 3a. central mouth dominant
- 4a. disc small, costae inconspicuous
- 5a. disc entire ..... Genus *Cycloseris* (2:236, see below)
- 5b. disc partitioned into segments ..... Genus *Diaseris* (2:248)
- 6a. septa thin and uniform ..... *D.fagilis* (2:250)
- 6b. septa thick and wavy ..... *D.distorta* (2:248)
- 4b. disc not small, costae conspicuous
- 5a. septal teeth not large lobes ..... Genus *Fungia* (2:256, see below)
- 5b. septal teeth large lobes ..... Genus *Heliofungia*, *H.adiniformis* (2:254)
- 3b. axial furrow dominant ..... Genus *Ctenactis* (2:286)
- 4a. axial mouth with single mouth
- 5a. tentacles with white tips ..... *C.albitetaculata* (2:288)
- 5b. tentacles without white tips ..... *C.echinata* (2:286)
- 4b. axial furrow with multiple mouths ..... *C.crassa* (2:290)
- 2b. attached to substrate ..... Genus *Cantharellus* (2:251)
- 3a. septa thin ..... *C.noumeae* (2:252)
- 3b. septa thick
- 4a. disc button-like ..... *C.doederleini* (2:251)
- 4b. disc irregular, encrusting ..... *C.jebbi* (2:253)
- 1b. colonial
- 2a. colony free living
- 3a. axial furrow distinct ..... Genus *Herpolitha* (2:291)
- 4a. centres mostly restricted to axial furrow ..... *H.weberi* (2:291)
- 4b. centres numerous outside axial furrow ..... *H.limax* (2:292)
- 3b. axial furrow indistinct or absent
- 4a. septo-costae petaloid ..... Genus *Polyphyllia* (2:294)
- 5a. septa grouped into parallel blocks ..... *P.novaehiberniae* (2:294)
- 5b. septa radiate ..... *P.talpina* (2:295)
- 4b. septa not petaloid
- 5a. corallites robust, crowded ..... Genus *Sandalolitha* (2:296)
- 6a. colony strongly arched ..... *S.robusta* (2:296)
- 6b. colony irregularly flat
- 7a. corallites evenly distributed ..... *S.africana* (2:299)
- 7b. corallites restricted to central area ..... *S.dentata* (2:298)
- 5b. corallites not robust or crowded
- 6a. colonies delicate domes ..... Genus *Zoopilus*, *Z.echinalm* (2:304)
- 6b. colonies not delicate domes ..... Genus *Halomitra* (2:300)
- 7a. septal teeth smooth ..... *H.pileus* (2:302)
- 7b. septal teeth ornamented ..... *H.meierae* (2:300)
- 7c. septal teeth club-shaped ..... *H.clavator* (2:301)
- 2b. colony attached to substrate
- 3a. colony mostly encrusting ..... Genus *Lithophyllon* (2:306)
- 4a. central corallite distinguishable
- 5a. septo-costae thick, colony small ..... *L.mokai* (2:306)
- 5b. septo-costae not thick, colony not small ..... *L.lobata* (2:307)
- 4b. central corallite not distinguishable ..... *L.undulatum* (2:308)

3b. colony mostly explanate .....	Genus <i>Podabacia</i> (2:310)
4a. colony irregularly contorted .....	<i>P.lankaensis</i> (2:315)
4b. colony not contorted	
5a. colony with lobed margin .....	<i>P.sinai</i> (2:314)
5b. colony with entire margins	
6a. peripheral corallites strongly inclined .....	<i>P.crustacea</i> (2:310)
6b. peripheral corallites not inclined .....	<i>P.motuporensis</i> (2:312)
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<b>Family Fungiidae</b>	<b>Genus <i>Cycloseris</i></b>
1a. disc approximately circular	
2a. disc strongly arched	
3a. central arch not distinctive	
4a. septa straight, symmetrical .....	<i>C.cycloliles</i> (2:236)
4b. septa curved, not symmetrical .....	<i>C.curvata</i> (2:240)
3b. central arch distinctive	
4a. septa even within orders .....	<i>C.costulata</i> (2:245)
4b. septa uneven .....	<i>C.erosa</i> (2:241)
2b. disc generally flat	
3a. septa not exsert around the mouth	
4a. primary septa form radiating spokes .....	<i>C.hexagonalis</i> (2:239)
4b. septa do not form radiating spokes .....	<i>C.sinensis</i> (2:238)
3b. septa exsert around the mouth costae thin and even	
4a. septo-costae alternate at the disc margin .....	<i>C.vaughani</i> (2:244)
4b. septo-costae do not alternate .....	<i>C.patelliformis</i> (2:246)
3c. costae thick and irregular .....	<i>C.tennis</i> (2:244)
2c. disc very thin and flat .....	<i>C.colini</i> (2:247)
1c. disc elliptical .....	<i>C.somervillei</i> (2:242)
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<b>Family Fungiidae</b>	<b>Genus <i>Fungia</i></b>
1a. disc approximately circular	
2a. septal teeth large and pointed	
3a. disc mostly flat .....	<i>F.scruposa</i> (2:259)
3b. disc not flat	
4a. whole of upper surface arched	
5a. septal teeth irregular .....	<i>F.corona</i> (2:260)
5b. septal teeth uniform .....	<i>F.klunzingeri</i> (2:266)
4b. central arch distinctive	
5a. disc thick, heavy .....	<i>F.horrída</i> (2:264)
5b. disc not thick .....	<i>F.danai</i> (2:262)
2b. septal teeth saw-like, with a central rib .....	<i>F.fungites</i> (2:268)
2c. septal teeth fine, rounded	
3a. septa thick and wavy .....	<i>F.granulosa</i> (2:276)
3b. septa not thick and wavy	
4a. septal cycles even	
5a. surface with axial mouth only	
6a. septa teeth distinct .....	<i>F.repanda</i> (2:272)



	6b. septal teeth fine serrations .....	<i>F.scabra</i> (2:274)
	5b. surface with peripheral mouths .....	<i>F.puishani</i> (2:277)
	4b. septa cycles uneven	
	5a. septa in two distinct orders .....	<i>F.fralinae</i> (2:271)
	5b. septa not in two distinct orders	
	6a. central arch present .....	<i>F.spinifer</i> (2:275)
	6b. central arch absent .....	<i>F.concinna</i> (2:270)
1b.	disc not distinctively circular	
2a.	disc irregularly shaped	
3a.	surface with peripheral mouths .....	<i>F.taiwanensis</i> (2:278)
3b.	surface without peripheral mouths .....	<i>F.moluccensis</i> (2:284)
2b.	disc with a regular shape	
3a.	tentacular lobes conspicuous .....	<i>F.scutaria</i> (2:280)
3b.	tentacular lobes inconspicuous or absent	
4a.	septa thick .....	<i>F.paumotensis</i> (2:282)
4b.	septa fine .....	<i>F.seychellensis</i> (2:279)

**Family Meandrinidae**

- 1a. colony not phaceloid
  - 2a. colony meandroid
    - 3a. valleys convoluted
      - 4a. colony hemispherical ..... Genus *Ctenella*, *C.chagius* (2:123)
      - 4b. colony columnar ..... Genus *Dendrogyra*, *D.cylindrus* (2:126)
    - 3b. valleys not convoluted
      - 4a. columellae present ..... Genus *Meandrina* (2:120)
        - 5a. colony sub-massive ..... *M.meandrites* (2:120)
        - 5b. colony not sub-massive ..... *M.braziliensis* (2:122)
      - 4b. columellae absent ..... Genus *Gyrosmlia*, *G.interrupta* (2:128)
  - 2b. colony not meandroid
    - 3a. colony plocoid ..... Genus *Dichocoenia*, *D.stakesi* (2:124)
    - 3b. colony not plocoid ..... Genus *Montigyra*, *M.kenti* (2:129)
- 1b. colony phaceloid ..... Genus *Eusmlia*, *E.fastigiata* (2:130)

**Family Merulinidae**

- 1a. monticules developed ..... Genus *Hydnophora* (2:364, see below)
- 1b. monticules not developed
  - 2a. colony consists of branches and/or laminae
    - 3a. no basal laminae ..... Genus *Paraclavarina*, *P.triangularis* (2:374)
    - 3b. with basal laminae ..... Genus *Merulina* (2:376)
      - 4a. colony consists of plates without branches ..... *M.scheeri* (2:380)
      - 4b. colony consists of plates with branches
        - 5a. skeletal structures thick, blunt ..... *M.ampliata* (2:378)
        - 5b. skeletal structures thin, sharp ..... *M.scabricula* (2:376)
  - 2b. colony massive ..... Genus *Boninastrea*, *B.boninensis* (2:382)
  - 2c. colony columnar ..... Genus *Scapophyllia*, *S.cylindrica* (2:383)

**Family Meandrinidae****Genus *Hydnophora***

- 1a. colony entirely branching
  - 2a. branches mostly <10 mm thick ..... *H.rigida* (2:366)
  - 2b. branches mostly >10 mm thick ..... *H.grandis* (2:368)
- 1b. colony not entirely branching
  - 2a. colony with irregular up-growths
    - 3a. up-growths column-like ..... *H.pilosa* (2:364)
    - 3b. up-growths branch-like
      - 4a. skeletal structures fine ..... *H.bonsai* (2:369)
      - 4b. skeletal structures coarse ..... *H.exesa* (2:370)
  - 2b. colony massive ..... *H.microconos* (2:372)

## Family **Mussidae**

*Note: Measurements assume colonies are fully developed.*

- 1a. colonial
  - 2a. corallites <12 mm in diameter
    - 3a. colony phaceloid ..... Genus *Blastomussa* (3:4)
      - 4a. corallites <7 mm in diameter ..... *B.merleti* (3:4)
      - 4b. corallites >7 mm in diameter ..... *B.wellsi* (3:6)
    - 3b. colony cerioid ..... Genus *Micromussa* (3:8)
      - 4a. corallites <5 mm in diameter ..... *M.diminuta* (3:9)
      - 4b. corallites >5 mm diameter
        - 5a. septa have 1-3 large teeth ..... *M.amakusensis* (3:10)
        - 5b. septa have a uniform series of teeth ..... *M.minuta* (3:8)
  - 2b. corallites >12 mm diameter
    - 3a. colony cerioid to sub-plocoid (except *Mussismilia harttii*)
      - 4a. septal teeth pointed ..... Genus *Acanthastrea* (3:12, see below)
      - 4b. septal teeth beaded ..... Genus *Mussismilia* (3:32)
        - 5a. corallites <10 mm diameter ..... *M.braziliensis* (3:34)
        - 5b. corallites >10 mm diameter
          - 6a. colony phaceloid ..... *M.harttii* (3:35)
          - 6b. colony not phaceloid ..... *M.hispida* (3:32)
      - 3b. colony subplocoid to submeandroid ..... Genus *Isophyllia* (3:36)
        - 4a. colony sub-plocoid ..... *I.rigida* (3:37)
        - 4b. colony sub-meandroid ..... *I.sinuosa* (3:36)
      - 3c. colony phaceloid to flabello-meandroid
        - 4a. corallites numerous ..... Genus *Lobophyllia* (3:38, see below)
        - 4b. corallites not numerous ..... Genus *Mussa*, *M.angulosa* (3:64)
      - 3d. colony meandroid
        - 4a. septal teeth very prominent ..... Genus *Symphyllia* (3:52, see below)
        - 4b. septal teeth not very prominent
          - 5a. valleys mostly radiate ..... Genus *Mycetophyllia* (3:72)
            - 6a. colonies thin laminae
              - 7a. valleys distinct ..... *M.ferox* (3:74)
              - 7b. valleys not distinct
                - 8a. ridges not formed ..... *M.reesi* (3:75)
                - 8b. irregular radiating ridges formed ..... *M.aliciae* (3:78)
            - 6b. colonies not thin laminae
              - 7a. valleys well developed ..... *M.danaana* (3:76)
              - 7b. valleys not well developed ..... *M.lamarckiana* (3:73)
          - 5b. valleys concentric ..... Genus *Australomussa*, *A.rowleyensis* (3:80)
  - 1b. non-colonial
    - 2a. septal teeth pointed ..... Genus *Scolymia* (3:66)
      - 3a. polyps <60 mm in diameter ..... *S.australis* (3:70)
      - 3b. polyps >60 mm in diameter
        - 4a. outer wall of polyp slopes inward ..... *S.cubensis* (3:66)
        - 4b. outer wall of polyp slopes outward ..... *S.vitiensis* (3:68)
    - 2b. septal teeth lobed
      - 3a. septal teeth very large ..... Genus *Cynarina*, *C.lacrymalis* (3:82)
      - 3b. septal teeth not very large ..... Genus *Indophyllia*, *I.macassarensis* (3:81)

<p><b>Family Mussidae</b></p> <p>1a. corallites &lt;15 mm in diameter - Group 1 (3:13)</p> <p>    2a. peripheral corallites not distinctive</p> <p>        3a. septa without very prominent teeth</p> <p>            4a. corallites not distinctly plocoid</p> <p>                5a. corallites sub-plocoid ..... <i>A.subechinata</i> (3:13)</p> <p>                5b. corallites cerioid ..... <i>A.hemprichii</i> (3:22)</p> <p>            4b. corallites distinctly plocoid</p> <p>                5a. primary septa equal ..... <i>A.faviaformis</i> (3:24)</p> <p>                5b. primary septa not equal ..... <i>A.regularis</i> (3:16)</p> <p>        3b. septa with very prominent teeth</p> <p>            4a. fleshy mantle covers septal spines</p> <p>                5a. corallites sub-plocoid ..... <i>A.lordhowensis</i> (3:14)</p> <p>                5b. corallites plocoid ..... <i>A.echinata</i> (3:18)</p> <p>            4b. septal spines protrude through mantle ..... <i>A.brevis</i> (3:17)</p> <p>    2b. peripheral corallites distinctive</p> <p>        3a. central corallite distinctive ..... <i>A.bowerbanki</i> (3:26)</p> <p>        3b. central corallite not distinctive ..... <i>A.rotundoflora</i> (3:20)</p> <p>1b. corallites &gt;15 mm in diameter - Group 2 (3:27)</p> <p>    2a. septa with &lt;4 very prominent teeth ..... <i>A.ishigakiensis</i> (3:30)</p> <p>    2b. septa with numerous equal teeth</p> <p>        3a. corallites sub-plocoid ..... <i>A.maxima</i> (3:27)</p> <p>        3b. corallites cerioid ..... <i>A.hillae</i> (3:28)</p>	<p><b>Genus <i>Acanthastrea</i></b></p>
<p><b>Family Mussidae</b></p> <p>1a. corallites mostly phaceloid</p> <p>    2a. corallites &lt;40 mm in diameter</p> <p>        3a. septal teeth pointed</p> <p>            4a. corallites &lt;20 mm in diameter ..... <i>L.diminuta</i> (3:39)</p> <p>            4b. corallites &gt;20 mm in diameter</p> <p>                5a. corallites closely compact ..... <i>L.dentatus</i> (3:46)</p> <p>                5b. corallites not closely compact ..... <i>L.corymbosa</i> (3:42)</p> <p>        3b. septal teeth thick lobes ..... <i>L.pachysepta</i> (3:40)</p> <p>    2b. corallites &gt;40 mm in diameter ..... <i>L.robusta</i> (3:50)</p> <p>1b. corallites becoming flabello-meandroid</p> <p>    2a. central and peripheral parts of colony similar</p> <p>        3a. colony flabello-meandroid ..... <i>L.flabelliformis</i> (3:48)</p> <p>        3b. colony not fully flabello-meandroid</p> <p>            4a. corallites &gt;45 mm in diameter ..... <i>L.serratus</i> (3:41)</p> <p>            4b. corallites &lt;45 mm diameter ..... <i>L.hemprichii</i> (3:44)</p> <p>    2b. central and peripheral parts of colony not similar ..... <i>L.hataii</i> (3:47)</p>	<p><b>Genus <i>Lobophyllia</i></b></p>
<p><b>Family Mussidae</b></p>	<p><b>Genus <i>Symphyllia</i></b></p>

- 1a. peripheral and central valleys similar  
 2a. valleys short, sub-meandroid ..... *S.erythmea* (3:54)  
 2b. valleys not short, fully meandroid  
 3a. valleys <12 mm in diameter  
 4a. septal teeth sharp ..... *S.recta* (3:56)  
 4b. septal teeth blunt ..... *S.wilsoni* (3:53)  
 3b. valleys >12 mm in diameter  
 4a. walls with prominent ambulacral grooves ..... *S.hassi* (3:52)  
 4b. walls without prominent ambulacral grooves  
 5a. valleys with single row of centres ..... *S.radians* (3:58)  
 5b. valleys with two rows of centres ..... *S.agaricia* (3:60)  
 1b. peripheral and central valleys not similar ..... *S.valenciennesi* (3:62)

### Family **Oculinidae**

- 1a. septa <2 mm exsert  
 2a. colony branching  
 3a. budding intra-tentacular ..... Genus *Oculina* (2:98)  
 4a. branches short  
 5a. branches thick ..... *O.patagonica* (2:99)  
 5b. branches thin ..... *O.diffusa* (2:102)  
 4b. branches elongate  
 5a. corallites <5 mm in diameter  
 6a. septa in two cycles ..... *O.valenciennesi* (2:100)  
 6b. septa in three cycles ..... *O.varicosa* (2:98)  
 5b. corallites >5 mm in diameter ..... *O.robusta* (2:101)  
 3b. budding extra-tentacular ..... Genus *Schizoculina* (2:104)  
 4a. branches primarily upright ..... *S.fissipari* (2:105)  
 5b. branches primarily prostrate ..... *S.africana* (2:104)  
 2b. colony not branching ..... Genus *Simplastrea*, *S.vesicularis* (2:103)  
 1b. septa >2 mm exsert ..... Genus *Galaxea* (2:106, see below)

### Family **Oculinidae**

#### Genus *Galaxea*

- 1a. colonies encrusting to massive  
 2a. corallites >5 mm in diameter ..... *G.fascicularis* (2:108)  
 2b. corallites <5 mm in diameter  
 3a. septa in two cycles  
 4a. corallites >3 mm in diameter ..... *G.astreata* (2:110)  
 4b. corallites <3 mm in diameter ..... *G.paucisepta* (2:112)  
 3b. septa in three cycles ..... *G.longisepta* (2:116)  
 1b. colonies branching  
 2a. branches lobed or truncated  
 3a. septa not very exsert ..... *G.cryptommosa* (2:114)  
 3b. septa very exsert ..... *G.acrhelia* (2:115)  
 2b. branches well defined ..... *G.horrescens* (2:107)

**Family Pectiniidae**

- 1a. corallites more conspicuous than coenostial structures  
 2a. non-colonial ..... Genus *Echinomorpha*, *E.nishihirai* (2:333)  
 2b. colonial  
 3a. coenostial pits present ..... Genus *Oxypora* (2:334, see below)  
 3b. coenostial pits absent  
 4a. corallites not inclined ..... Genus *Echinophyllia* (2:322, see below)  
 4b. corallites inclined ..... Genus *Mycedium* (2:342, see below)  
 1b. coenostial structures very conspicuous ..... Genus *Pectinia* (2:348, see below)

**Family Pectiniidae****Genus *Echinophyllia***

- 1a. laminae thick becoming sub-massive  
 2a. corallites immersed ..... *E.taylorae* (2:327)  
 2b. corallites exsert ..... *E.orpheensis* (2:328)  
 1b. laminae thin  
 2a. corallites immersed or nearly so  
 3a. septo-costae in three orders ..... *E.costata* (2:330)  
 3b. septo-costae not in three orders  
 4a. columellae well developed ..... *E.patula* (2:326)  
 4b. columellae not well developed ..... *E.pectinata* (2:331)  
 2b. corallites not immersed  
 3a. corallites <6 mm in diameter ..... *E.echinoporoides* (2:322)  
 3b. corallites >6 mm in diameter  
 4a. central corallite inconspicuous or absent ..... *E.aspera* (2:324)  
 4b. central corallite conspicuous ..... *E.echinata* (2:332)

**Family Pectiniidae****Genus *Mycedium***

- 1a. colonies mostly flat laminae  
 2a. costal ridges from corallites conspicuous ..... *M.umbra* (2:342)  
 2b. costal ridges from corallites not conspicuous ..... *M.elephantotus* (2:344)  
 1b. colonies mostly convoluted laminae  
 2a. corallites >6 mm in diameter ..... *M.mancaoi* (2:343)  
 2b. corallites <6 mm in diameter  
 3a. corallites well developed ..... *M.robokaki* (2:346)  
 3b. corallites superficial ..... *M.steeni* (2:347)

**Family Pectiniidae****Genus *Oxypora***

- 1a. laminae with conspicuous costal ridges ..... *O.crassispinosa* (2:334)  
 1b. laminae without conspicuous costal ridges  
 2a. corallites indistinct ..... *O.convoluta* (2:340)  
 2b. corallites distinct  
 3a. costal spines abundant ..... *O.lacera* (2:336)  
 3b. costal spines uncommon or absent

4a. corallites not very exsert .....	<i>O.glabra</i> (2:338)
4b. corallites exsert .....	<i>O.egyptensis</i> (2:341)
<b>Family Pectiniidae</b>	
<b>Genus <i>Pectinia</i></b>	
1a. colonies not branching	
2a. colony with tall bifacial laminae	
3a. costae have well developed teeth .....	<i>P.alcicornis</i> (2:356)
3b. costae do not have well developed teeth .....	<i>P.maxima</i> (2:349)
2b. colony without tall bifacial laminae	
3a. colony with radiating valleys	
4a. valleys mostly straight .....	<i>P.lactuca</i> (2:350)
4b. valleys mostly not straight .....	<i>P.africanus</i> (2:353)
3b. colony without radiating valleys	
4a. laminae with radiating walls .....	<i>P.ayleni</i> (2:352)
4b. laminae without radiating walls .....	<i>P.paeonia</i> (2:354)
1b. colonies branching	
2a. colonies with basal laminae .....	<i>P.elongata</i> (2:360)
2b. colonies without basal laminae	
3a. branches >3 mm in diameter .....	<i>P.teres</i> (2:358)
3b. branches <3 mm in diameter .....	<i>P.pygmaeus</i> (2:36J)

**Family Pocilloporidae**

- 1a. colonies have verrucae ..... Genus *Pocillopora* (2:24, see below)  
 1b. colonies do not have verrucae  
   2a. branches fine ..... Genus *Seriatopora* (2:46, see below)  
   2b. branches robust ..... Genus *Stylophora* (2:56, see below)

**Family Pocilloporidae****Genus *Pocillopora***

*Note: Because of the wide variation within species due to environment as well as geographic location, groupings of species in this key may not indicate similarity observed underwater.*

- 1a. verrucae intergrade with branches ..... *P.damicornis* (2:26)  
 1b. verrucae do not intergrade with branches  
   2a. colony consists of upright branches  
     3a. colony with short compact branches  
       4a. verrucae distributed uniformly on branches  
         5a. verrucae longer than wide ..... *P.verrucosa* (2:28)  
         5b. verrucae not longer than wide  
           6a. verrucae rounded, medium sized ..... *P.meandrina* (2:30)  
           6b. verrucae angular, small ..... *P.elegans* (2:34)  
       4b. verrucae distributed irregularly on branches ..... *P.ligulata* (2:38)  
     3b. colony with elongate branches  
       4a. verrucae longer than wide  
         5a. branches irregular ..... *P.capitata* (2:35)  
         5b. branches uniform ..... *P.indiania* (2:37)  
       4b. verrucae not longer than wide  
         5a. branches become laterally fused ..... *P.zelli* (2:36)  
         5b. branches not laterally fused ..... *P.eydouxi* (2:44)  
     2b. colony consists of prostrate branches  
       3a. branches large and elongate  
         4a. branches laterally compressed  
           5a. branches evenly spaced ..... *P.kelleheri* (2:32)  
           5b. branches irregular ..... *P.woodjonesi* (2:43)  
         4b. branches not laterally compressed ..... *P.molokensis* (2:42)  
       3b. branches not large and elongate  
         4a. branches uniform over whole colony ..... *P.danae* (2:25)  
         4b. branches irregular over whole colony ..... *P.effusus* (2:39)  
     2c. colony encrusting with irregular branches  
       3a. verrucae well developed  
         4a. branches compact ..... *P.ankeli* (2:33)  
         4b. branches irregular ..... *P.fungiformis* (2:40)  
       3b. verrucae not well developed ..... *P.inflata* (2:41)

**Family Pocilloporidae****Genus *Seriatopora***

- 1a. branches <2 mm in diameter ..... *S.dendritica* (2:46)



1b. branches 2-5 mm in diameter	
2a. branches taper to a point .....	<i>S.hystrix</i> (2:48)
2b. branches do not taper .....	<i>S.guttatus</i> (2:50)
1c. branches >5 mm in diameter	
2a. corallites aligned in rows	
3a. branches long and not tapered .....	<i>S.caliendrum</i> (2:54)
3b. branches short and tapered .....	<i>S.stellata</i> (2:53)
2b. corallites not aligned in rows .....	<i>S.aculeata</i> (2:52)
<hr/>	
<b>Family Pocilloporidae</b>	<b>Genus <i>Stylophora</i></b>
1a. colony with elongate branches	
2a. branches robust (>5 mm in diameter)	
3a. branches upright .....	<i>S.pistillata</i> (2:58)
3b. branches prostrate .....	<i>S.danae</i> (2:63)
2b. branches not robust (<5 mm in diameter)	
3a. branches closely compacted .....	<i>S.madagascarensis</i> (2:57)
3b. branches not closely compacted	
4a. spiny corallite hoods present .....	<i>S.kuehlmanni</i> (2:62)
4b. spiny corallite hoods absent .....	<i>S.subseriata</i> (2:60)
1b. colony without elongate branches	
2a. colony with knobby branches .....	<i>S.wellsi</i> (2:64)
2b. colony encrusting with mounded surface .....	<i>S.mamillata</i> (2:65)

**Family Poritidae**

- 1a. corallites <2 mm in diameter  
 2a. septa fused in non-cyclical pattern ..... Genus *Porites* (3:276, see below)  
 2b. septa not fused  
 3a. columella present ..... Genus *Stylaraea*, *S.punctata* (3:346)  
 3b. columella absent ..... Genus *Poritipora*, *P.paliformis* (3:347)
- 1b. corallites >2 mm in diameter  
 2a. skeleton robust, not very porous ..... Genus *Goniopora* (3:348, see below)  
 2b. skeleton delicate, very porous ..... Genus *Alveopora* (3:380, see below)

**Family Poritidae****Genus *Alveopora***

- 1a. colonies branching or branching columns  
 2a. corallites without a palisade of exsert spines  
 3a. septa fine, irregular  
 4a. columella tangle present ..... *A.allingi* (3:384)  
 4b. columella tangle absent ..... *A.gigas* (3:380)  
 3b. septa in comb rows ..... *A.catalai* (3:382)  
 2b. corallites with a palisade of exsert spines ..... *A.verrilliana* (3:387)
- 1b. colonies not branching or branching columns  
 2a. corallites >2 mm in diameter  
 3a. colonies lobed  
 4a. columellae distinct  
 5a. septa fine, irregular in shape  
 6a. septa do not clearly alternate ..... *A.spongiosa* (3:388)  
 6b. septa clearly alternate ..... *A.daedalea* (3:390)  
 5b. septa in comb rows ..... *A.excelsa* (3:394)  
 4b. columellae not distinct ..... *A.marionensis* (3:385)  
 3b. colonies hemispherical  
 4a. septa fine, irregular in shape ..... *A.fenestrata* (3:386)  
 4b. septa in comb rows  
 5a. comb rows cyclical ..... *A.tizardi* (3:392)  
 5b. comb rows irregular ..... *A.japonica* (3:392)
- 2b. corallites <2 mm in diameter  
 3a. corallites circular ..... *A.ocellata* (3:397)  
 3b. corallites not circular  
 4a. corallite structures coarse ..... *A.viridis* (3:395)  
 4b. corallite structures fine ..... *A.minuta* (3:396)

**Family Poritidae****Genus *Goniopora***

- 1a. colonies not encrusting  
 2a. corallites >5 mm in diameter  
 3a. colony massive - Group 1 (3:350)  
 4a. corallites with uneven walls ..... *G.stokesi* (3:352)  
 4b. corallites with even walls  
 5a. septa arranged cyclically ..... *G.djiboutiensis* (3:351)

5b. septa irregular .....	<i>G.pendulus</i> (3:350)
3b. colony branching or columnar - Group 2 (3:354)	
4a. columella large	
5a. septa irregular .....	<i>G.columna</i> (3:356)
5b. septa uniform .....	<i>G.sultani</i> (3:355)
4b. columella small .....	<i>G.lobata</i> (3:354)
2b. corallites 3-5 mm in diameter	
3a. colony massive - Group 4 (3:362)	
4a. septal development varies among corallites .....	<i>G.cellulosa</i> (3:363)
4b. septal development uniform among corallites	
5a. corallites excavated	
6a. primary septa not distinctive .....	<i>G.norfolkensis</i> (3:362)
6b. primary septa distinctive	
7a. primary septa form a delta .....	<i>G.minor</i> (3:366)
7b. primary septa do not form a delta .....	<i>G.tenuidens</i> (3:364)
5b. corallites shallow .....	<i>G.pearsoni</i> (3:365)
3b. colony branching or columnar - Group 5 (3:368)	
4a. colonies columnar	
5a. corallites shallow .....	<i>G.planulata</i> (3:368)
5b. corallites excavated .....	<i>G.ciliatus</i> (3:372)
4b. colonies branching	
5a. branches short, thick .....	<i>G.palmensis</i> (3:374)
5b. branches elongate	
6a. branches cylindrical .....	<i>G.eclipsensis</i> (3:371)
6b. branches laterally compressed .....	<i>G.pandoraensis</i> (3:370)
2b. corallites <3 mm in diameter - Group 6 (3:375)	
3a. colony lobed	
4a. corallites shallow .....	<i>G.stutchburyi</i> (3:377)
4b. corallites excavated .....	<i>G.burgosi</i> (3:375)
3b. colony columnar .....	<i>G.savignyi</i> (3:376)
3c. colony branching .....	<i>G.fruticosa</i> (3:378)
1b. colonies encrusting - Group 3 (3:358)	
2a. corallites shallow	
3a. septa compact	
4a. columella broad .....	<i>G.somaliensis</i> (3:358)
4b. columella not broad .....	<i>G.tenella</i> (3:360)
3b. septa widely spaced .....	<i>G.albiconus</i> (3:361)
2b. corallites excavated .....	<i>G.polyformis</i> (3:360)
<b>Family Poritidae</b>	
<b>Genus <i>Porites</i></b>	
<i>Note: This key is primarily based on corallite characters that are not observable underwater. Groupings of species are artificial and may not indicate general similarity.</i>	
1a. colonies massive - Groups 1 (3:280) and 2 (3:292)	
2a. corallites <1 mm in diameter	
3a. central fossa conspicuous .....	<i>P.murrayensis</i> (3:292)
3b. central fossa not particularly conspicuous .....	<i>P.strephsoni</i> (3:293)

2b.	corallites >1 mm in diameter	
3a.	columella indistinct or absent	
4a.	corallites >1.5 mm in diameter	
5a.	triplet fused .....	<i>P.panamensis</i> (3:283)
5b.	triplet not fused .....	<i>P.mayeri</i> (3:289)
4b.	corallites <1.5 mm in diameter .....	<i>P.densa</i> (3:294)
3b.	columella present	
4a.	triplet fused	
5a.	colony surface knobby .....	<i>P.somaliensis</i> (3:291)
5b.	colony surface not knobby .....	<i>P.lutea</i> (3:287)
4b.	triplet not fused	
5a.	pali conspicuous	
6a.	coenosteum conspicuously granulated .....	<i>P.echinulata</i> (3:290)
6b.	coenosteum not conspicuously granulated	
7a.	corallites deeply excavated .....	<i>P.myrmidonensis</i> (3:288)
7b.	corallites not deeply excavated .....	<i>P.australiensis</i> (3:286)
5b.	pali present but not conspicuous	
6a.	lateral pairs of septa mostly fused .....	<i>P.lobata</i> (3:284)
6b.	lateral pairs of septa mostly not fused	
7a.	denticle on septa conspicuous .....	<i>P.brighami</i> (3:295)
7b.	denticle on septa not conspicuous .....	<i>P.astreoides</i> (3:280)
5c.	pali absent .....	<i>P.solida</i> (3:282)
1b.	colonies thick columns or thick plates - Group 3 (3:296)	
2a.	colonies thick columns	
3a.	corallites deeply excavated	
4a.	denticles well developed .....	<i>P.pukoensis</i> (3:299)
4b.	denticles not well developed .....	<i>P.nodifera</i> (3:296)
3b.	corallites not deeply excavated	
4a.	walls thick ridges .....	<i>P.evermanni</i> (3:298)
4b.	walls not thick ridges .....	<i>P.columnaris</i> (3:300)
2b.	colonies thick plates	
3a.	pali well developed .....	<i>P.arnaudi</i> (3:301)
3b.	pali irregularly developed .....	<i>P.colonensis</i> (3:302)
1c.	colonies columns, laminae and branches - Group 4 (3:303)	
2a.	septa irregular	
3a.	colony nodular .....	<i>P.desilveri</i> (3:308)
3b.	colony not nodular .....	<i>P.heronensis</i> (3:306)
2b.	septa not irregular	
3a.	triplet fused	
4a.	septa thick, wedge-shaped .....	<i>P.okinawensis</i> (3:307)
4b.	septa not thick, wedge-shaped	
5a.	walls acute .....	<i>P.cocosensis</i> (3:311)
5b.	walls not acute .....	<i>P.aranetai</i> (3:303)
3b.	triplet not fused	
4a.	8 pali present	
5a.	denticles in 2 concentric circles .....	<i>P.vaughani</i> (3:308)
5b.	denticles not in 2 concentric circles .....	<i>P.annae</i> (3:310)
4b.	<8 pali present .....	<i>P.lichen</i> (3:304)
1d.	colonies composites of laminae and branches - Group 5 (3:312)	
2a.	corallites <1 mm in diameter	

3a.	columella present	
4a.	walls thin .....	<i>P.cumulatus</i> (3:324)
4b.	walls not thin .....	<i>P.monticulosa</i> (3:314)
3b.	columella absent	
4a.	colony surface patterned by ridges .....	<i>P.rus</i> (3:312)
4b.	colony surface not patterned by ridges .....	<i>P.deformis</i> (3:323)
2b.	corallites >1 mm in diameter	
3a.	lateral septa fused	
4a.	walls contorted .....	<i>P.latistella</i> (3:320)
4b.	walls not contorted	
5a.	septa short .....	<i>P.sillimani</i> (3:319)
5b.	septa not short	
6a.	corallites shallow .....	<i>P.horizontolata</i> (3:316)
6b.	corallites excavated .....	<i>P.eridani</i> (3:322)
3b.	lateral septa not fused	
4a.	septa short .....	<i>P.branneri</i> (3:325)
4b.	septa not short .....	<i>P.napopora</i> (3:318)
1e.	colony branching - Group 6 (3:326)	
2a.	corallites <1 mm in diameter	
3a.	columella present .....	<i>P.ornata</i> (3:340)
3b.	columella absent .....	<i>P.flavus</i> (3:341)
2b.	corallites 1-1.8 mm in diameter	
3a.	corallites not deeply excavated	
4a.	walls irregular	
5a.	branches very contorted .....	<i>P.rugosa</i> (3:342)
5b.	branches not very contorted .....	<i>P.nigrescens</i> (3:334)
4b.	walls not irregular	
5a.	columella inconspicuous .....	<i>P.divaricata</i> (3:329)
5b.	columella conspicuous	
6a.	walls angular .....	<i>P.harrisoni</i> (3:343)
6b.	walls rounded	
7a.	denticles absent .....	<i>P.attenuata</i> (3:330)
7b.	denticles present	
8a.	walls thick .....	<i>P.cylindrica</i> (3:332)
8b.	walls not thick .....	<i>P.compressa</i> (3:344)
3b.	corallites deeply excavated	
4a.	septa well developed .....	<i>P.negrosensis</i> (3:336)
4b.	septa not well developed .....	<i>P.profundus</i> (3:338)
2c.	corallites >1.8 mm in diameter	
3a.	walls irregular .....	<i>P.tuberculosa</i> (3:331)
3b.	walls not irregular	
4a.	branches not closely compact .....	<i>P.porites</i> (3:326)
4b.	branches closely compact .....	<i>P.furcata</i> (3:328)

### Family **Rhizangiidae**

Genus *Astrangia* ..... *A. poculata* (2:319)

**Family Siderastreidae**

- 1a. corallite walls well defined  
 2a. colony plocoid ..... Genus *Horastrea*, *H.indica* (2:136)  
 2b. colony not plocoid  
 3a. colony cerioid  
 4a. septal teeth saw-like ..... Genus *Pseudosiderastrea*, *P.tayami* (2:134)  
 4b. septal teeth not saw-like ..... Genus *Siderastrea* (2:138, see below)  
 3b. colony not cerioid ..... Genus *Anomastrea*, *A.irregularis* (2:137)  
 2c. corallite walls not well defined  
 3a. corallites <3 mm in diameter ..... Genus *Psammocora* (2:144, see below)  
 3b. corallites >3 mm in diameter ..... Genus *Coscinaraea* (2:158, see below)

**Family Siderastreidae****Genus *Coscinaraea***

- 1a. colonies plates or laminae  
 2a. colonies plate-like  
 3a. corallites aligned in valleys  
 4a. valleys irregular ..... *C.hahazimaensis* (2:159)  
 4b. valleys not irregular  
 5a. septo-costae alternate ..... *G.mcneilli* (2:165)  
 5b. septo-costae do not alternate ..... *C.marshae* (2:164)  
 3b. corallites not aligned in valleys  
 4a. septo-costae alternate ..... *C.crassa* (2:166)  
 4b. septo-costae do not alternate ..... *C.columna* (2:160)  
 2b. colonies laminate ..... *C.wellsi* (2:167)  
 1b. colonies not plates or laminae  
 2a. colonies hemispherical ..... *C.monile* (2:158)  
 2b. colonies columnar ..... *C.exesa* (2:162)

**Family Siderastreidae****Genus *Psammocora***

- 1a. colony branching  
 2a. colony surface smooth ..... *P.contigua* (2:146)  
 2b. colony surface not smooth  
 3a. columellae prominent  
 4a. colony finely branched ..... *P.obtusangula* (2:145)  
 4b. colony not finely branched ..... *P.decussata* (2:144)  
 3b. columellae not prominent ..... *P.stellata* (2:148)  
 1b. colony not branching  
 2a. colony composed of plates and columns  
 3a. colony plate-like ..... *P.explanulata* (2:156)  
 3b. colony becoming columnar ..... *P.digitata* (2:154)  
 2b. colony encrusting to sub-massive  
 3a. colony surface smooth ..... *P.superficialis* (2:150)  
 3b. colony surface not smooth  
 4a. corallites aligned in valleys  
 5a. valleys short, superficial ..... *P.profundacella* (2:149)

5b. valleys not short	
6a. valleys do not meander .....	<i>P.haimeana</i> (2:152)
6b. valleys meander .....	<i>P.nierstraszi</i> (2:153)
4b. corallites not aligned in valleys	
5a. primary septa petaloid .....	<i>P.verrilli</i> (2:151)
5b. primary septa not petaloid .....	<i>P.vaughani</i> (2:157)
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<b>Family Siderastreidae</b>	<b>Genus <i>Siderastrea</i></b>
1a. colonies small (<100 mm in diameter) .....	<i>S.glynni</i> (2:138)
1b. colonies large (>100 mm in diameter)	
2a. corallites <4 mm in diameter	
3a. septa in three cycles .....	<i>S.radians</i> (2:142)
3b. septa not in three cycles	
4a. corallite walls acute .....	<i>S.savignyana</i> (2:139)
4b. corallite walls not acute .....	<i>S.stellata</i> (2:143)
2b. corallites >4 mm in diameter .....	<i>S.siderea</i> (3:140)

<b>Family Trachyphylliidae</b>	
<b>Genus <i>Trachyphyllia</i></b> .....	<i>T.geoffroyi</i> (3:272)