Revision and catalogue of worldwide staghorn corals *Acropora* and *Isopora* (Scleractinia: Acroporidae) in the Museum of Tropical Queensland

Carden C. Wallace, Barbara J. Done & Paul R. Muir
FIG. 34. *Acropora gemmifera*, Orpheus Is., North Queensland, 2008 (photo: P. Muir). Map of documented distribution: blue squares = MTQ specimens; pink squares = literature records; orange diamonds = type localities (where given), including primary synonyms.
Madrepora glauca Brook, 1893: 164, pl. 34 fig. D.

Type locality. Western Australia (holotype NHM).


Species group: lovelli.

Description. Colony outline: determinate, predominantly corymbose. Branches: tertiary branching order absent; length: 25–50 mm; diameter: 10.0–19.9 mm, axial-dominated, terete; radial crowding: most touching; axial/radial ratio: >1:10. Axial corallites: two synapticular rings; not porous; outer diameter 2.3–4.1 mm; inner diameter 0.9–1.3 mm; primary septa to ¾ R. Radial corallites: medium; two synapticular rings; one size or graded; inner wall developed; shape: rounded appressed; openings: oval-rounded; primary septa to ¾ R. Coenosteum: same on and between radials: reticulate; spinule shape: single point.

FIG. 35. *Acropora glauca*, G62873, Kochi, Japan, 2009 (photo: P. Muir). Map of documented distribution: blue squares = MTQ specimens; pink squares = literature records; orange diamonds = type localities (where given), including primary synonyms.
*Acropora globiceps* (Dana, 1846)
(Fig. 36)

*Madrepora globiceps* Dana, 1846: 454, pl. 34 fig. 3.

**Type locality.** Tahiti (holotype NMNH SI).

**MTQ Holdings. Australia:** G60453 South-East; G39834 Coral Sea; *Niue:* G36079, G36105, G36107-08, G49020–24, G54512; **Cook Is.:** G35931, G35943–44, G36080–85, G36115, G36122, G49053 *French Polynesia:* G44041, G56681–85, G58767; **Society Is.:** G49061; **Pitcairn Is.:** G35748–49, G35753, G49037, G49040–42.

**Species group:** *humilis*.

**Description.** **Colony outline:** determinate, predominantly corymbose. **Branches:** tertiary branching order absent; length: 50–100 mm; diameter: 10.0–19.9 mm, axial-dominated, reverse tapering; radial crowding: some touching; axial/radial ratio: >1:10. **Axial corallites:** greater than three synapticular rings; not porous; outer diameter 3.0–4.5 mm; inner diameter 1.2–2.1 mm; primary septa to $\frac{1}{2}$ R. **Radial corallites:** medium; greater than three synapticular rings; one size or graded; inner wall developed; shape: tubular; openings: dimidiate; primary septa to $\frac{1}{4}$ R. **Coenosteum:** same on and between radials: reticulo-costate; spinule shape: elaborate.

**Further literature.** Wallace (1999), Veron (2000).
FIG. 36. Acropora globiceps, East Holmes Reef, Coral Sea, 2010 (photo: P. Muir). Map of documented distribution: blue squares = MTQ specimens; pink squares = literature records; orange diamonds = type localities (where given), including primary synonyms.
Acropora grandis (Brook, 1892)
(Fig. 37)

Madrepora grandis Brook, 1892: 457; 1893: 42, pl. 1 figs A–B.


Type locality. Palm Island Australia (lectotype NHM).


Species group: muricata.

Description. Colony outline: indeterminate, predominantly arborescent. Branches: tertiary branching order absent; length: >100 mm; diameter: 10.0–19.9 mm, axial-dominated, terete; radial crowding: not touching; axial/radial ratio: >1:10. Axial corallites: two synapticular rings; porous; outer diameter 1.5–3 mm; inner diameter 0.8–1.7 mm; primary septa to ¾ R. Radial corallites: medium; two synapticular rings; one size or graded; inner wall developed; shape: tubular; openings: oval-rounded; primary septa to 0–¼ R. Coenosteum: different on and between radials: between radials: reticulate, on radials: costate; spinule shape: single point.

**Acropora granulosa** (Milne Edwards & Haime, 1860)  
(Fig. 38)

*Madrepora clavigera* Brook, 1892: 455; 1893: 183 pl. 9 figs A, A1.  

**Type locality.** Bourbon Islands (La Réunion) (holotype MNHN-SI).  

**MTQ Holdings. Maldives:** G59826, G59999-95, G60297, G60299, G60314, G60346, G60365, G61599-600, G61613, G61616-17, G61635; **Chagos:** G51349-53, G51755; **Sri Lanka:** G56332; **Thailand:** G55927-28; **Indonesia:** G50411 Sumatra; G50450-51, G51901 Bali; G50418-20 Alor; G51912-13, G48247 Lombok; G51910-11, G51914-17, G54440 Tukangbesi Islands; G50794 Ambon; G50412-13, G50415-16, G51019, G51021, G51191-92, G63323 Flores; G50436, G50439-43, G50446-48, G51022, G51197-99 Malimantan; G51193 Semau; G35526, G48241-44, G48272-74, G50422-29, G50431-35, G51194-96, G51902-04, G59658, G63339 Sulawesi; G51905-09 Halmahera; G48234-40, G48269-71 Band Sea; G50417, G50452 West Timor; G60753, G60760, G60991 Irian Jaya; **Australia:** G27021, G29255, G29257-60, G29262-63, G29265, G30122, G30124-31, G30787-90, G30792-97, G31102-9, G31179-84, G56923-26, G57041-46, G59019, G62213-14, G62217, G62221, G62228, G62232-33, G62235-36, G62239, G62241, G62249-50, G62253, G62255-56, G62258-62, G62265-68, G62271-75, G63917-20, G64774 Great Barrier Reef; G30791, G30798, G58044, G60535, G60539, G64783 Coral Sea; **South China Sea:** G52170-77; **Philippines:** G41551; **Palau:** G63115; **Papua New Guinea:** G35616, G53079-94, G53411, G53496-99, G53715-16; **Micronesia:** G62529 Pohnpei; **Solomon Is.:** G52108-09, G58582; **New Caledonia:** G58707, G58736, G59168-69, G61201, G61204; **Marshall Is.:** G33132, G37973, G56140-41, G57208-18.  

**Species group:** *loripes*.  

**Description.** **Colony outline:** indeterminate, predominantly plate. **Branches:** tertiary branching order absent; length: <25 mm; diameter: 2.5–4.9 mm, 50/50 axial/radial, terete; radial crowding: not touching; axial/radial ratio: <1:10. **Axial corallites:** two synapticular rings; not porous; outer diameter 1.3–2.8 mm; inner diameter 0.4–0.9 mm; primary septa to ¾ R. **Radial corallites:** medium; two synapticular rings; one size or graded; inner wall developed; shape: appressed tubular; openings: oval-rounded; primary septa to ½ R. **Coenosteum:** same on and between radials: dense spinules; spine shape: single point.  

FIG. 38. Acropora granulosa, Coral Sea, 2008 (photo: P. Muir). Map of documented distribution: blue squares = MTQ specimens; pink squares = literature records; orange diamonds = type localities (where given), including primary synonyms.
Acropora halmaherae Wallace & Wolstenholme, 1998
(Fig. 39)

Acropora halmaherae Wallace & Wolstenholme, 1998: 258, fig. 54.

Type locality. Halmahera, Indonesia.
Species group: horrida.

Description. Colony outline: indeterminate, predominantly arborescent. Branches: tertiary branching order present; length: >100 mm; diameter: 5.0–9.9 mm, 50/50 axial/radial, terete; radial crowding: not touching; axial/radial ratio: >1:10. Axial corallites: two synapticular rings; porous; outer diameter 1.3–2.2 mm; inner diameter 0.6–0.9 mm; primary septa to 2/3 R. Radial corallites: small; two synapticular rings; one size or graded; inner wall developed; shape: tubular; openings: oval-rounded; primary septa to 2/3 R. Coenosteum: same on and between radials: costate; spinule shape: elaborate.

**Acropora hemprichii** (Ehrenberg, 1834)  
(Fig. 40)

**Type locality.** Red Sea (syntypes MNB).  
**MTQ Holdings. Red Sea:** G54682, G54871, G55244, G62977, G62983, G62985 Saudi Arabia; G58868 Yemen.  
**Species group:** *rudis*.  
**Description.** **Colony outline:** indeterminate, predominantly arborescent. **Branches:** tertiary branching order present; length: 50–100 mm; diameter: >19.9 mm, axial-dominated, tapering; radial crowding: most touching; axial/radial ratio: >1:10. **Axial corallites:** greater than three synapticular rings; not porous; outer diameter 2.7–4.1 mm; inner diameter 0.8–1.2 mm; primary septa to ¾ R. **Radial corallites:** large; two synapticular rings; one size or graded; inner wall developed; shape: rounded tubular; openings: oval-rounded; primary septa to 2/3 R. **Coenosteum:** same on and between radials: reticulate; spinule shape: single point.  
FIG. 40. *Acropora hemprichii*, Red Sea (photo: L. Devantier). Map of documented distribution: blue squares = MTQ specimens; pink squares = literature records; orange diamonds = type localities (where given), including primary synonyms.
Acropora hoeksemai Wallace, 1997
(Fig. 41)

Acropora hoeksemai Wallace, 1997: 40, figs 11, 14D.

Type locality. Bunaken I., Sulawesi, Indonesia.

MTQ Holdings. HOLOTYPE G48984; PARATYPES G35967, G48476–79, G48481–86, G48982–83, G48985–87, G48989, G48991, G48993 Indonesia; Maldives: G60319; Thailand: G54839, G56000–01, G59320, G59398, G59400, G59412; Malaysia: G54995, G57655, G57683, G57686, G57689, G57761, G59149; Indonesia: G59198 Java; G49004, G49358 Bali; G50976–80, G51069 Nusa Tenggara; G48483–86, G48992, G49000, G49355–56 Alor; G35961, G35967 Maluku; G48476–79, G48991, G49357 Flores; G48985–90, G48994, G49002 Kalimantan; G48983, G48993, G49719, G53766, G53937–41, G53945 Sulawesi; G53765, G53767, G53942 Molucca Sea; G52410, G53943–44 Halmahera; G48982 Banda Sea; G48481–82 West Timor; G60730, G60733, G61052 Irian Jaya; Australia: G60504 North; Papua New Guinea: G35827.

Species group: divaricata.

Description. Colony outline: determinate, predominantly corymbose. Branches: tertiary branching order absent; length: 50–100 mm; diameter: 5.0–9.9 mm, radial-dominated, terete; radial crowding: some touching; axial/radial ratio: >1:10. Axial corallites: three synapticular rings; not porous; outer diameter 2.0–2.6 mm; inner diameter 0.6–1.1 mm; primary septa to ¾ R. Radial corallites: medium; three synapticular rings; one size or graded; inner wall developed; shape: nariform; openings: dimidiate; primary septa to 1/3 R. Coenosteum: different on and between radials: between radials: reticulate; on radials: reticulo-costate; spinule shape: forked.

Revision and Catalogue of *Acropora* and *Isopora*

**FIG. 41.** *Acropora hoeksemai*, G60319, Vabbinfaru I., N. Male Atoll, Maldives, 2006 (photo: P. Muir). Map of documented distribution: blue squares = MTQ specimens; pink squares = literature records; orange diamonds = type localities (where given), including primary synonyms.
Acropora horrida (Dana, 1846)
(Fig. 42)

Madrepora horrida Dana, 1846: 472 pl. 39 figs 2–2a.
Madrepora angulata Quelch, 1886: 160.
Madrepora inermis Brook, 1891: 462; 1893: 194 pl. 29 figs A–B.
Acropora sekiseiensis Veron, 1990: 107, figs 11–12.

Type locality. Fiji (holotype NMNH-SI).


Species group: horrida.

Description. Colony outline: indeterminate, predominantly arborescent. Branches: tertiary branching order present; length: >100 mm; diameter: 2.5–4.9 mm, 50/50 axial/radial; terete; radial crowding: not touching; axial/radial ratio: >1:10. Axial corallites: two synapticular rings; porous; outer diameter 1.4–2.4 mm; inner diameter 0.6–1.5 mm; primary septa to 2/3 R. Radial corallites: medium; two synapticular rings; one size or graded; inner wall developed; shape: tubular; openings: oval-rounded; primary septa to ½ R. Coenosteum: same on and between radials: reticulate; spinule shape: single point.

Acropora humilis (Dana, 1846)
(Fig. 43)

Madrepora humilis Dana, 1846: 483, pl. 31 fig. 4; pl. 41 fig. 4.
Madrepora spectabilis Brook, 1892: 462; 1893: 141, pl. 16 fig. B.
Madrepora fruticosa Brook, 1892: 457; 1893: 138, pl. 18 fig. A.
Madrepora guppyi Brook, 1892: 458; 1893: 158, pl. 23 fig. D.
Madrepora obscura Brook, 1893: 129, pl. 32 fig. A.

Type locality. Fiji (holotype NMNH-SI).


Species group: humilis.

Description. Colony outline: determinate, predominantly corimbosse. Branches: tertiary branching order absent; length: 25–50 mm; diameter: >19.9 mm, axial-dominated, tapering; radial crowding: some touching; axial/radial ratio: >1:10. Axial corallites: greater than three synappticular rings; not porous; outer diameter 3–9 mm; inner diameter 1.0–1.8 mm; primary septa to ¾ R. Radial corallites: large; greater than three synappticular rings; one size or graded; inner wall developed; shape: tubular; openings: dimidiate; primary septa to 1 R; Coenosteum: same on and between radials: reticulo-costate; spinule shape: elaborate.