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
**Acropora clathrata (Brook 1891)**

(Fig. 19)

*Acropora clathrata* Brook, 1891: 459; 1893: 49, pl. 5, pl. 6 figs A–B.

*Madrepora clathrata* Brook, 1891: 459; 1893: 49, pl. 5, fig. C.

*Madrepora orbicularis* Brook, 1892: 460; 1893: 37, pl. 2.

*Madrepora vasiformis* Brook, 1893: 37, pl. 26 fig. A.

**Type locality.** Mauritius (holotype NHM).

**MTQ Holdings. Kenya:** G59733; **Mayotte:** G63181, G63266–68, G63386–87, G63422; **Seychelles:** G47947–48, G51864–65, G59454, G59503, G59536; **La Réunion:** G33218; **Mauritius:** G33203, G39783, G54467; **Chagos:** G51368–70; **Thailand:** G32787, G55974–77, G56128; **Indonesia:** G47188, G48801–02 Sumatra; G49749, G49766, G51695 Bali; G50925 Nusa Tenggara; G48807–09 Alor; G51713–15 Lomblen; G47486 Lombok; G47031–32, G62723 Ambon; G48803, G49748, G50926 Flores; G49761–65 Kalimantan; G48805 Semau; G47210–21, G49750–60, G51696–97 Sulawesi; G51698–702, G51711–12 Molucca Sea; G51703–10, G52405 Halmahera; G46848–55, G36218 Banda Sea; G48804, G48806 West Timor; G60755, G35767, G36035, G36041 Irian Jaya; **Australia:** G40780, G60662, G61672 West; G27359–60, G27362, G27364–65, G27367–70, G27372–73, G27375–76, G30356, G41070, G47384, G60517, G61764, G61772, G64758 Great Barrier Reef; G47283, G64980 South-East; G27361, G27377, G63800 Coral Sea; **South China Sea:** G37565, G46823, G52157, G52285; **Japan:** G38294, G47737; **Taiwan:** G43847, G45940, G47575–76, G47593; **Philippines:** G52317; **Palau:** G36237, G36537, G56639, G60438; **Papua New Guinea:** G35611, G35668, G35674, G35678, G53469–78, G53538–41, G54657; **Micronesia:** G62771 Kosrae; G41238, G62375–77 Pohnpei; **Solomon Is.:** G52586, G57912; **New Caledonia:** G35013, G58706, G58729; **Chesterfield Atoll:** G27371, G27374, G58922; **Kiribati:** G50006; **Samoa:** G34875, G34881, G41295, G54273–74.

**Species group:** divaricata.

**Description.** Colony outline: determinate, predominantly table. Branches: tertiary branching order absent; length: 25–50 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 1.6–3.0 mm; inner diameter 0.5–0.9 mm; primary septa to 1/3 R. Radial corallites: medium; three synapticular rings; one size or graded; inner wall developed; shape: nariform; openings: dimidiate; primary septa absent. Coenosteum: different on and between radials: between radials: reticulate, on radials: reticulo-costate; spinule shape: forked.

**Taxonomic note.** *Acropora clathrata* reported from Kuwait in Carpenter *et al.* (1997) was found to be a new species in the *A. robusta* group, and described as *A. downingi* in Wallace (1999).

Acropora cytherea (Dana, 1846)
(Fig. 20)

Madrepora cytherea Dana, 1846: 441, pl. 32 figs 3a–b.
Madrepora efflorescens Dana, 1846: 441, pl. 33 fig. 6.
Madrepora candelabrum Studer, 1878: 528, pl. 2 figs 3a–b.
Madrepora symmetrica Brook, 1891: 470; 1893: 94, pl. 15.
Madrepora arcuata Brook, 1892: 452; 1893: 102, pl. 12.
Madrepora reticulata Brook, 1892 p.461; 1893: 68 pl. 4 figs A–B.
Madrepora armata Brook, 1892: 461; 1893: 100, pl. 10 figs A–B.
Acropora cytherella Verrill, 1902: 253, pl. 36 fig. 7, pl. 36A fig. 7, pl. 36F fig. 1.

Type locality. Tahiti (lectotype NMNH-SI).


Species group: hyacinthus.

Description. Colony outline: determinate, predominantly table. 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: 1:1. Axial corallites: two synapticular rings; porous; outer diameter 1.3–2.5 mm; inner diameter 0.7–1.0 mm; primary septa to 2/3 R. Radial corallites: small; two synapticular rings; one size or graded; inner wall not developed; shape: dimidiate/lipped; openings: elongate lip; primary septa absent. Coenosteum: different on and between radials: between radials: reticulate, on radials: costate; spicule shape: laterally flattened.

Acropora dendrum (Bassett-Smith, 1890)
(Fig. 21)

Madrepora dendrum Bassett-Smith, 1890: 452.

Type locality. Macclesfield Banks, China Sea (lectotype NHM).


Species group: selago.

Description. Colony outline: determinate, predominantly corymbose. Branches: tertiary branching order absent; length: 25–50 mm; diameter: 5.0–9.9 mm, axial-dominated, terete; radial crowding: not touching; axial-radial ratio: >1:10. Axial corallites: two synapticular rings; porous; outer diameter 1.4–2.2 mm; inner diameter 0.5–1.2 mm; primary septa to ¾ R. Radial corallites: medium; two synapticular rings; one size or graded; inner wall not developed; shape: dimidiate/lipped; openings: cochleariform; primary septa to 2/3 R. Coenosteum: same on and between radials: reticulate; spinule shape: laterally flattened.

Acropora derawanensis Wallace, 1997
(Fig. 22)

Acropora derawanensis Wallace, 1997: 33, fig. 5.

**Type locality.** Karang Tababinga, East Kalimantan, Indonesia.

**MTQ Holdings.** HOLOTYPE G48963, PARATYPES G48958–62, G48965 Indonesia; Indonesia: G50317, G50967–70 Kalimantan; G55431–32, G58634, G58794 Sulawesi; G63173–75 Halmahera; Philippines: G53571; Micronesia: G59253–55, G62541, G62542 Pohnpei.

**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 synaptycular rings; porous; outer diameter 1.1–1.4 mm; inner diameter 0.5–1.0 mm; primary septa to ¾ R. Radial corallites: small; two synaptycular rings; one size or graded; inner wall developed; shape: tubular; openings: oval-rounded; primary septa to ¼ R. Coenosteum: same on and between radials: costate; spinule shape: blunt irregular.

**Acropora desalwii** Wallace, 1994
(Fig. 23)

_Acropora desalwii_ Wallace, 1994: 972, fig. 12.

**Type locality.** Banda Sea, Gunung Api, Banda Islands, Indonesia.

**MTQ Holdings.** HOLOTYPE G46450, PARATYPES G46448–49, G46451–52, G46902 Indonesia; Mayotte: G63769; _Indonesia:_ G48229, G48231–33, G59663, G63341 Sulawesi; G48159, G50620 Banda Sea; G60737–38 Irian Jaya; **Papua New Guinea:** G59106, G59704; Micronesia: G59263, G59646, G62466, G62590, G62633–35 Pohnpei; **Solomon Is.:** G58571.

**Species group:** _loripes._

**Description.** _Colony outline:_ indeterminate, predominantly corymbose. _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 synapticcular rings; porous; outer diameter 1.0–1.2 mm; inner diameter 0.6–0.8 mm; primary septa to ¼ R. _Radial corallites:_ medium; two synapticcular rings; one size or graded; inner wall developed; shape: appressed tubular; openings: oval-rounded; primary septa absent. _Coenosteum:_ different on and between radials: between radials: open spinules, on radials: costate; spinule shape: blunt irregular.

FIG. 23. Acropora desalwii, G62466, Pohnpei, Micronesia, 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.
Madrepora digitifera Dana, 1846: 454.
Madrepora pyramidalis Klunzinger, 1879: 12, pl. 1 fig. 2, pl. 4 fig. 6, pl. 9 fig. 7.
Madrepora leptocysthus Brook, 1891: 463; 1893: 159, pl. 16 fig. C.
Madrepora baeodactyla Brook, 1892: 453; 1893: 158, pl. 27 figs A–B.

Acropora wardii Verrill, 1902: 248, pl. 36 fig. 3, pl. 36B fig. 4, pl. 36F fig. 4.

Type locality. Arno Atoll, Marshall Islands (neotype MTQ).


Species group: humilis.

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: three synapticular rings; not porous; outer diameter 2.2–3.8 mm; inner diameter 0.6–1.6 mm; primary septa to 2/3 R.

Radial corallites: medium; three synapticular rings; one size or graded; inner wall developed; shape: tubular; openings: dimidiate; primary septa to 1/3 R. Coenosteum: different on and between radials: between radials: reticulate, on radials: reticulo-costate; spinule shape: elaborate.

Acropora divaricata (Dana, 1846) (Fig. 25)

Madrepora divaricata Dana, 1846: 477, pl. 41 fig. 2–2a.
Madrepora tenuispicata Studer, 1880: 20, fig. 1a–b.
Madrepora scabrosa Quelch, 1886: 152, pl. 10 fig. 2.

Type locality. Fiji (holotype NMNH-SI).

MTQ Holdings. Red Sea: G54711 Saudi Arabia; G54733–34, G54772, G54854, G54945 Yemen; Kenya: G55567, G59605–06; South Africa: G41047; Mayotte: G63209, G63294, G63403; Persian Gulf: G47951, G59474, G59513, G59515, G59526, G59532, G59541, G59544, G59581, G59585; Aldabra: G36935, G36937; Madrepora scabrosa Quelch, 1886: 152, pl. 10 fig. 2.

**Acropora donei Veron & Wallace, 1984**

(Fig. 26)

*Acropora donei* Veron & Wallace, 1984: 287 figs 698, 702, 708.

*Acropora akajimensis* Veron, 1990: 102 figs 7, 9.

**Type locality.** Turtle Islands, Australia.

**MTQ Holdings.** HOLOTYPE G55080 Great Barrier Reef, Australia; G32475 *A. akajimensis* HOLOTYPE from Japan; **Red Sea:** G54280–81, G62970 Yemen; **Mayotte:** G63305–06, G63362; **Maldives:** G59815–16, G59853, G59974–82, G60323, G60373; **Thailand:** G56087–89; **Malaysia:** G57668, G57763 mainland and islands; G53931 Sabah; **Indonesia:** G50320, G53661 Sumatra; G50326–27 Bali; G48657, G50322, G53662 Alor; G53964 Lombok; G47511–12 Lombok; G53965 Tukangbesi Islands; G47513 Ambon; G50321 Flores; G50324, G50325 Kalimantan; G47492–510, G47514, G49347, G50323, G53946 Sulawesi; G53947–49, G53962–63 Molucca Sea; G53950–61, G63153 Halmahera; G47491, G48041, G50319 Banda Sea; G48656, G60763–69, G61000 Irian Jaya; **Australia:** G40855 West; G48126, G48129–30 North; G27120–22, G27125–34, G27136, G27146–51, G27153–56, G27160, G27162, G27164, G27300, G27302, G27306–7, G27379, G29481, G29483, G30738, G31176–78, G35058–59, G35407, G39953, G40961, G47389, G57986, G60597, G64717 Great Barrier Reef; G27123–24, G27158, G29482, G29484, G56607, G58414, G58423, G58500, G60059–60, G64982 South–East; G27305, G57618 Coral Sea; **South China Sea:** G46827, G52186–89; **Japan:** G38017, G38019, G38037, G47767–68, G62854; **Taiwan:** G43839–40, G45821–23, G45942, G45945, G47591; **Palau:** G36533, G36635, G60196; **Papua New Guinea:** G35654, G52940–44, G53598; **Micronesia:** G36612 Chuuk; G62511–12, G62548, G62551 Pohnpei; G62753 Kosrae; **Solomon Is.:** G52595, G58595; **Chesterfield Atoll:** G27303, G27314; **Marshall Is.:** G37483, G56157, G57242, G57316.

**Species group:** *selago*.

**Description.** **Colony outline:** determinate, predominantly arborescent-table. **Branches:** tertiary branching order absent; length: 50–100 mm; diameter: 2.5–4.9 mm, 50/50 axial/radial, terete; radial crowding: some touching; axial/radial ratio: >1:10. **Axial corallites:** two synapticular rings; porous; outer diameter 2.0–4.2 mm; inner diameter 0.8–1.4 mm; primary septa to ½ R. **Radial corallites:** medium; two synapticular rings; one size or graded; inner wall developed; shape: dimidiate/lipped; openings: cochleariform; primary septa to ½ R. **Coenosteum:** different on and between radials: between radials: reticulate, on radials: costate; spinule shape: single point.