

Reptadeonella fissa (Hincks, 1880). Tilbrook, 2006, p.128, pl.22A-B.

Reptadeonella fissa (Hincks, 1880)
Plate 22A-B

Microporella fissa Hincks, 1880b: 381, pl. 17, fig. 4.

Reptadeonella fissa: Tilbrook, Hayward & Gordon, 2001 (part): 66, fig. 11E, F.

Reptadeonella joloensis: Harmer, 1957 (part): 816; Ryland, 1974: 343.

Microporella falcifera Maplestone, 1909: 415, pl. 27, fig. 11.

Type material Holotype: NHM 1899.5.1.1217, Indian Ocean.
Paratype: NHM 1897.5.1.668, Indian Ocean.

Other material examined SBMNH 265281-286, **401-84**; SBMNH 265287-288, **515-87**; SBMNH 265289-291, **407-84**; SBMNH 265292-293, **413-84**; NHM (unregistered, SEM 134), Green Island, Great Barrier Reef; NHM 1998.8.4.86, Port Vila Harbour Efate, Vanuatu.

Description Colony forming extensive unilaminar sheets often. Autozooids hexagonal or irregularly polygonal (0.55–0.65 x 0.25–0.35 mm). Frontal shield finely granular, more pronounced tuberculations developed in ontogeny, single, round, oval or slit-like (longitudinally) spiramen, with thin, slightly raised rim, in depression at centre of zooid, and a single series of large, closely spaced, marginal pores. Primary and secondary orifices semicircular, the latter surmounting a short peristome, proximal border straight or slightly convex, minutely denticulate, distal border minutely denticulate. Avicularia dimorphic, either: suboral, rostrum triangular, distal tip tapering to a point free of frontal surface, directed distolaterally; or, extremely large, a gently curving sickle-shape, originating lateral of midline between spiramen and peristome, looping out distolaterally away from orifice, expanded proximally, narrowing distally, lateral edges smooth, outer edge higher than inner, no crossbar. Secondary orifice in autozooids with large avicularia more rounded than that seen in other autozooids. Additional avicularia, similar in size and shape to suboral avicularia, often produced later in ontogeny at proximal end of autozooid, randomly directed. Gonozooids with shorter, wider, crescent-shaped orifice. Colony origin unknown.

Remarks *Reptadeonella fissa* is characterised by its large, sickle-shaped avicularia, which loop distolaterally away from the peristome. The denticulations in the secondary orifice and the free ends of the suboral avicularia have not been noted before.

Hincks (1880b) originally described *Reptadeonella fissa* (as *Microporella fissa*) from Indian Ocean specimens (locality unknown). The description and illustration of his new species had been overlooked until resurrected by Tilbrook *et al.* (2001). Tilbrook *et al.* (2001) compared Hincks' type material of *R. fissa* with other *Reptadeonella* material from the Indo-West Pacific area. They concluded that all the material that they had examined, which had formerly been assigned to *R. joloensis* (Bassler, 1936) (*nomen novum* pro *Adeona porosa* Canu & Bassler, 1929) from the Philippines, appeared identical to Hincks' species. They noted a few slight variations though. Bassler's specific epithet thus became a junior synonym of *R. fissa*. However, re-examination of the material Tilbrook *et al.* (2001) cite, especially the type of *R. joloensis*, compared with material found from the Solomon Islands, leads to the conclusion that this was an error. It is now known that there is more than one species of *Reptadeonella* in the Indo-West Pacific with sickle-shaped avicularia (see below). The position, size, and orientation of these large avicularia differ between these spe-

cies. In Hincks' type material the avicularia are large and robust extending laterally and distally to the orifice, without affecting the shape of the orifice itself. In Canu & Bassler's holotype (USNM 8170, Jolo, Philippines) of *Adeona porosa* (= *R. joloensis*) on the other hand, these avicularia are smaller, more gracile and more intimately connected with the orificial calcification, distorting the side of the peristome along which it lies. This also occurs in material from Funafuti (NHM 1903.1.29.51-54). The frontal shield of *R. joloensis* is also more tuberculate, with not only a single series of marginal pores, but also numerous accessory pores occupying the whole frontal area in some autozooids. This is not the case in *R. fissa*, which has only one set of pores, although the pores surrounding the large avicularian cystid may give the impression of accessory pores. It is therefore believed that *R. joloensis* (Bassler, 1936) is a valid species. The other material described by Harmer (1957) and Tilbrook *et al.* (2001) has been reviewed in light of this and new species described herein.

Microporella falcifera Maplestone, 1909 has been overlooked until now, but the shape and orientation of its large adventitious avicularia suggest its junior synonym status to *Reptadeonella fissa*.

Distribution *Reptadeonella fissa* has been noted on a number of occasions from the Indo-West Pacific; however these should now be re-examined. Originally described from the Indian Ocean, this species is present on the Great Barrier Reef, Vanuatu and the Gilbert Islands. In the Solomon Islands it was found from Mbokona Bay, Honiara, Guadalcanal; Gibson Island, Hamilton Passage, Choiseul; West Bay, Russell Islands and Mboli Passage, between Nggela Sule and Nggela Pile, Florida Islands.

