

Mucropetraliella bifidata Tilbrook, 2006, p.203, pl.44C-E.

Mucropetraliella bifidata new species
Plate 44C-E

Mucropetraliella serrata: Harmer, 1957 (part): 718.

Mucropetraliella thenardii: Liu, Yin & Ma, 2001: 642, pl. 62, figs 3,4.

Type material Holotype: NHM 2003.5.13.30, **501-87**.
Paratype: SBMNH 365631, **501-87**.

Other material examined SBMNH 365632, **403-84**; NHM 2000.5.1.4, (672.H¹/1758) "Siboga" Station 181, Ambon Anchorage, 36-54 m.

Description Colony encrusting. Autozooids very large (ca 1.20 x 0.80 mm), irregularly polygonal, separated by deep grooves, frontal shield convex, uniformly perforated by up to 100 round pores, marginal pores indistinct, lateral walls distinct. Primary orifice round, as wide as long (ca 0.31 x 0.31 mm), thick paired lateral denticles and a moderately wide anvil-shaped median denticle (over one-third width of orifice). Two widely spaced spines distolaterally. Suboral complex prominent, mucro tall, generally bifurcating, almost antler-like, arching over proximal border of primary orifice, associated avicularium elongate-oval, ascending mucro, the rostrum raised from it and minutely denticulate distally, crossbar complete, mandible rounded. Lateral-oral avicularia rare, single, small, oval, the rostrum minutely denticulate distally, crossbar complete, mandible rounded triangular, directed distolaterally. Rare frontal avicularia produced proximally later in ontogeny, similar to lateral-oral avicularia, proximally directed. No other avicularia observed. Ovicells prominent, globular, longer than wide, minutely perforate frontally, an imperforate band produced across the top of the ovicell opening.

Etymology From *bifidus*, L. split into two parts. Named for the tall, prominent, antler-like mucro.

Remarks *Mucropetraliella bifidata* is characterised by its large size, the shape of the bifurcating suboral complex, two oral spines and general lack of avicularia. The distolateral orientation of the lateral oral avicularia, when present, also sets this species apart from most other *Mucropetraliella* species; their lateral-oral avicularia are proximolaterally directed.

The presence of only two oral spines in *Mucropetraliella bifidata* makes it easily distinguishable from other species of *Mucropetraliella*. Most other species bear either four or six oral spines, though *M. bennetti* (Livingstone, 1926) bears up to nine. There are other *Mucropetraliella* specimens that do bear only two oral spines and these were attributed to *M. thenardii* (Audouin, 1826) by Harmer (1957). Thornely's specimen from Sri Lanka (Ceylon) (NHM 1963.9.8.83), figured by Harmer, has a round primary orifice, an extremely narrow median denticle, large lateral denticles and the most massive and complicated suboral complex seen by this author. The erect suboral complex appears to bifurcate, but in fact it is the enormous suboral avicularian rostrum that occupies one half of the mucro, the other part branches from the top of this expanded cystid. The branch curves out laterally producing smaller branches as offshoots as it grows frontally. Each small branch and the main branch itself is ultimately tipped with a minute avicularium. This species might best be as-

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signed to *M. bispinata* Liu *et al.*, 2001 until Audouin's *M. thenardii* can be stabilised through the erection of a neotype specimen. The type material of *M. aviculifera* (Hincks, 1869), from either Singapore or the Philippines, (NHM 1899.5.1.853) was listed under *M. thenardii* by Harmer (1957), but this specimen differs from both *M. bifidata* and Thornely's specimen described above. It has a round primary orifice, a very small anvil-shaped median denticle and small lateral denticles. The suboral complex is extremely simple, consisting of only an acute mucro; no suboral avicularium appears to be present. The two oral spines are close and distally positioned, joined on the oral rim by two or more small avicularia on raised, tubular cystids. This species commonly produces large avicularia lateral to the orifice, originating at the autozooidal margin and directed medially, the rostrum is very slightly spatulate, raised and deeply cupped distally, terminating alongside or above the suboral mucro. Until Audouin's *M. thenardii* is stabilised perhaps *M. aviculifera* should be regarded as a species in its own right.

Mucropetraliella bifidata is also similar to *M. robusta* (Canu & Bassler, 1929), which is described as having a bifurcating suboral mucro. However, the original description states a lack of oral spines, although only dead material was found, and Harmer's (1957) description states that four to six spines are present. Type material was not available for examination so no firm conclusions can be drawn.

Distribution *Mucropetraliella bifidata* is known from the Solomon Islands, Ambon Anchorage in Indonesia and the South China Sea. This species is probably to be found elsewhere in the Indo-Malaysian region. In the Solomon Islands it was found at Anuha Reefs, Anuha Island, Florida Islands and Yandina, Mbanika Island, Russell Islands.

