Mucropetraliella philippinensis (Canu & Bassler, 1929)
Plate 44A-B

Petraliella philippinensis Canu & Bassler, 1929: 261, pl. 25, figs 3-11.
Petraliella philippinensis: Lu, 1991: 52, pl. 8, fig. 7a,b.
Petraliella falcifera Canu & Bassler, 1929: 263, pl. 26, figs 1, 2.
Mucropetraliella philippinensis: Harmer, 1957 (part): 710, pl. 45, figs 19-21; Winston, 1986: 21.
? *Mucropetraliella philippinensis*: Dumont, 1981: 635; d'Hondt, 1986: 705.
Not *Mucropetraliella philippinensis*: Gordon & d'Hondt, 1997: 24, fig. 42.

Type material

Cotype: NHM 1931.12.30.83, "Albatross" Station 5147, Sulade Island, Sulu Archipelago, Philippines, 38 m.

Other material examined

SBMNH 365621-630, **501-87**; NHM 1931.12.30.84, (cotype of *M. falcifera*), "Albatross" Station 5151, Sirun Island, Sulu Archipelago, Philippines, 44 m.

Description

Colony encrusting. Autozooids very large (ca 1.20 x 1.00 mm), separated by shallow grooves, polygonal, frontal shield, convex, uniformly perforated by approx. 50 large round pores, marginal pores indistinct, lateral walls raised, distinct. Primary orifice rounded, wider than long (ca 0.38 x 0.35 mm), robust paired lateral denticles and a moderately wide anvil-shaped median denticle (less than one-third width of orifice). Oral spines lacking. Suboral complex prominent, mucro tall, thin, spire-like, associated avicularium elongate-oval, ascending mucro, the rostrum raised from it and minutely denticulate distally, crossbar complete, mandible rounded. Lateral-oral avicularia paired, small, oval, the rostrum minutely denticulate distally, crossbar complete, mandible rounded triangular, bearing small "teeth" distally, directed proximolaterally. Other frontal avicularia produced later in ontogeny, particularly proximally around distal border of preceding zooid's primary orifice, similar to lateral-oral avicularia, randomly directed. Large lateral avicularium sometimes present, varying in length the rostrum spatulate, cupped and denticulate distally, large rostral palate, opesia triangular, crossbar complete with a small columella, orientated proximolaterally. Ovicells prominent, globular, as wide as long, minutely perforate, a series of small avicularia, similar to lateral oral avicularia, produced across the top of the ovicell opening.

Remarks

Mucropetraliella philippinensis is characterised by its large size, the shape of the median and lateral denticles in the primary orifice, lack of oral spines and shape of large lateral avicularia.

Mucropetraliella philippinensis differs from ***M. bifidata*** in its lack of oral spines, ***M. bifidata*** has two spines. Very few *Mucropetraliella* species lack oral spines. *Mucropetraliella ellerii* (MacGillivray, 1869), originally described from Port Phillip Bay, Victoria, also lacks oral spines, although blunt processes may develop lateral to the orifice. It has very small median and lateral denticles, a small proximal mucro and avicularian complex. *M. ellerii* also has large frontal avicularia, proximal to the mucro, not lateral to it, which are elongate-oval in shape and proximally directed. Its ovicell has an imperforate proximofrontal area.

The Solomon Islands material of *Mucropetraliella philippinensis* has larger lateral denticles than the Canu & Bassler cotype specimens of both *M. philippinensis* and *M. falcifera*. However, these characters can be quite variable in other *Mucropetraliella* species, e.g. *Mucropetraliella serrata* (Livingstone, 1926) (Tilbrook & Cook, 2004). Material cited by Harmer (1957), as *M. philippinensis*, differs slightly both from the Solomon's material and that of Canu & Bassler. For instance, the Japanese specimen (NHM 1963.9.8.79) has an extremely wide median denticle and lacks a tall mucro and the large lateral avicularia. The Talaut Island (Philippines?) specimen (NHM 2000.5.17.5) also lacks the mucro but possesses large lateral avicularia, however its frontal-shield pores are smaller, particularly centrally, and the frontal avicularia developed in ontogeny are larger than the lateral oral avicularia it produces. Neither of these specimens should be included in *M. philippinensis sensu stricto*. Other unregistered material, in the NHM collection, from Papua New Guinea is similar to *M. philippinensis*, but consists of large, unilaminar, erect, fenestrate colonies. The individual autozooids in these colonies produce a tall, steeple-like mucro and large lateral avicularia but the frontal pores are large and the ovicells are not surrounded by avicularia. Finally, another unregistered NHM specimen from Port Elizabeth, South Africa, is similar to *M. philippinensis*, however this differs in having very large lateral-oral avicularia, seemingly replacing the large lateral avicularia, and very small lateral and median denticles. A more thorough investigation of the variations seen within *Mucropetraliella* species would aid the assignation of specimens such as those just noted.

Gordon & d'Hondt (1997) illustrate a species they assign to *Mucropetraliella philippinensis*, however, as their Plate clearly shows oral spines present, this must be a misidentification.

Distribution

Originally described from the Philippines, *Mucropetraliella philippinensis* has only been found, with certainty, from its type locality until this survey was undertaken. In the Solomon Islands, *M. philippinensis* was found at Anuha Reefs, Anuha Island, Florida Islands.