

*Celleporaria cylindrocystis* Tilbrook, 2006. Tilbrook, 2006, p.145, pl.27D-F.

***Celleporaria cylindrocystis*** new species  
Plate 27D-F

*Celleporaria tridenticulata*: Harmer, 1957 (part): 670, pl. 42, figs 6, 9, 10.

Type material      Holotype: SBMNH 265358, **501-87**.  
Paratypes: SBMNH 265359-361, **501-87**.

Other material examined      SBMNH 265362-363, **403-84**; SBMNH 265364 **406-84**; SBMNH 265365, **503-87**; SBMNH 265366-367, **506-87**; SBMNH 265368, **514-87**.

Description      Colony multilaminar. Autozooids large at growing edge (ca 0.75 x 0.50 mm), convex, hexagonal to irregularly polygonal when frontally budded (0.50–0.60 x 0.30–0.40 mm), slightly nodular in later ontogeny, with 10–20 conspicuous marginal pores. Primary orifice D-shaped, wider than long (ca 0.16 x 0.15 mm), the proximal border with three, extra-opercular, tooth-like processes which may be squared, pointed or bifid, no condyles seen. Two oral spines present distally, only visible in earliest ontogeny. Very low peristome developed. Suboral avicularian rostrum elliptical, its distal tip hooked, facing frontally, directed proximally, the cystid often developing as a tall cylindrical structure, the rostrum perched at its apex. Vicarious avicularia common, generally small, but may be two-thirds size of an autozoid, the rostrum slightly spatulate or elongate distally, its distal rim smooth, its rostral palate twice as large as its semicircular opesia, flush with colony surface, randomly directed when frontally budded, distally directed otherwise. Ovicell prominent, asymmetrically developed, occupying distal and one lateral border of orifice, the calcified portion thick and finely granular. Dried material with a light silver-grey sheen, opercula dark brown-black.

Etymology      From *kyllindros*, Gr. roller; *kystis*, Gr. sac, cell. Named for the appearance of the suboral avicularium.

Remarks      *Celleporaria cylindrocystis* is characterised by its primary orifice, particularly the three tooth-like proximal processes, its oral spines, seen only in earliest ontogeny, and suboral avicularium that is often raised above the colony surface on a cylindrical cystid.

Harmer's (1957) figure (pl. 72: fig. 6) of a specimen he took to be *C. tridenticulata* is unquestionably the same species as that described here as *Celleporaria cylindrocystis*. The suboral avicularia raised on cylindrical cystids Plated and described by him are unique to this species in the genus *Celleporaria*.

The small spatulate vicarious avicularia of *Celleporaria cylindrocystis* are similar to those seen in *C. erugo* but *C. erugo* does not produce the cylindrical cystid for the suboral avicularium.

As mentioned previously, *Celleporaria tridenticulata* appears in the past to have been used to accommodate specimens whose primary orifice had a denticulate proximal border. Some variations, however, have been noted in the material described as *C. tridenticulata*, as follows. The number of oral spines appears to vary within material assigned to *C. tridenticulata*. Ryland & Hayward (1992) described material with two (rarely three or four) spines from Heron Island, whereas Gordon (1984) described five spines in marginal zooids from Kermadec Ridge. This latter record agrees well with specimen SBMNH 265366 (nominally assigned to *C. cylindrocystis*) from the Solomon Islands, however the length of the "teeth" and the width of the gaps between them seem greater in the New Zealand material. Gordon (1984) also discusses previous records of *C. tridenticulata* noting several differences in spine

number and prominence or even number of the “teeth”. He concluded that these were variations within a single species. However, re-examination of material assigned to this species from the various populations within its recorded Indo-Pacific distribution may throw more light on this variation or perhaps highlight the presence of a species-complex. For instance, *Celleporaria trispinosa* (Maplestone, 1909) from the Gilbert Islands produces three long oral spines around a semi-circular primary orifice with three “teeth” proximally, the middle one more prominent than its more triangular neighbours. This species has not been recorded since its original description almost a hundred years ago, but could easily have been misidentified as *C. tridenticulata* if encountered.

**Distribution** In the Solomon Islands *Celleporaria cylindrocystis* was found at Mbanika Island, Russell Islands; Anuha Island and Nggela Sule, Florida Islands; and Ruaniu, Guadalcanal. It has also been recorded from Singapore.

