

Trematoecia clivulata new species
Plate 64D-F

Cigclisula turrita: Harmer, 1957 (part): 1059, pl. 69, figs 21-24, 27.

Holoporella turrita: Canu & Bassler, 1929, 420, text-fig. 164, pl. 59, figs 1-5.

Trematoecia turrita: Ristedt & Hillmer, 1985, 137, pl. 2, fig. 7.

?*Trematoecia turrita*: Dumont, 1981: 635.

Type material Holotype: NHM 1998.8.4.184, Poanangisu, Efate, Vanuatu.

Other material examined SBMNH 365766-768, 403-84; NHM 1931.12.30.162, "Albatross" Station 5148, off Sirun Island, Tawi-tawi Islands, Philippines, 31 m; NHM 1931.12.30.163, "Albatross" Station 5147, off Sulade Island, Sulu Archipelago, Philippines, 38 m; NHM 1903.1.29.56, Funafuti; NHM 1889.8.21.30, 1932.9.10.3, Tizard Reef, China Sea, 64 m; NHM 2000.4.11.777, Deuba Reef, Viti Levu, Fiji.

Description Colony encrusting to calyciform, forming multilaminar mounds. Autozooids hexagonal or irregularly polygonal, erect and deep-bodied, distinct in early ontogeny, with obvious lateral walls, but becoming less distinct during ontogeny (0.50–0.60 x 0.40–0.50 mm). Frontal shield almost smooth, becoming granular in ontogeny, slightly convex, imperforate apart from 10-20 round pores of varying size, mainly around margins or avicularian cystids, raised into five or six, often large, conical processes around primary orifice which becomes deeply immersed in ontogeny. Primary orifice longer than wide (0.15–0.20 x 0.12–0.15 mm), a deeply arched, smooth-rimmed anter, separated from shallow, saucer-shaped poster by large, robust, triangular, proximally directed condyles. Adventitious avicularia dimorphic: either small, but varying in size, oval, generally marginal, marginally directed, crossbar complete; or rarely large, spatulate, proximolateral oral, recumbent on frontal shield, rostrum narrows distal of complete crossbar, expanding distally with a slightly cupped, smooth distal rim, rostral palate extensive, proximal opesia transverse, elongate oval, distal opesia D-shaped, directed distolaterally. Ovicells hyperstomial, rounded, ectooecium imperforate, an oval slit medially.

Etymology From *clivus*, L. hill. Named for its mound-forming encrusting habit.

Remarks *Trematoecia clivulata* is characterised by its mound-forming encrusting habit, its large primary orifice, often obscured by large conical perioral processes, its small, marginal avicularia and large, spatulate avicularia.

Trematoecia clivulata appears to have been misidentified as *Trematoecia turrita* (Smitt, 1873) (see Plate 64A) on a number of occasions. On examination of Smitt's type material (SMNH 1885), from off Florida, USA, several differences can be identified between this and the species described above. *T. clivulata* has a larger primary orifice than *T. turrita*, it has fewer and larger pores in its frontal shield, generally five perioral conical processes rather than four, and its large avicularia are larger and more spatulate than those of *T. turrita*, their distal opesia D-shaped rather than triangular. The autozooids of *T. clivulata* are also more obvious than those of *T. turrita*, being less erect.

