

**Figularia gemina** new species  
Plate 14C-F

Type material      Holotype: SBMNH 365210, **515-87**.  
Paratypes: SBMNH 365211-217, **515-87**.

Description      Colony encrusting, unilaminar. Autozooids rectangular or polygonal, slightly convex, separated by distinct grooves (0.65-0.75 x 0.35-0.45 mm). Primary orifice as wide as long (ca 0.18 x 0.18 mm), anter slightly squared in shape, separated from concave poster by small triangular condyles. Operculum in dried specimens light orange/brown, occasionally dark grey/brown. Frontal calcification smooth, with 20-30 regularly-spaced round pores; costate shield limited to a very small area just proximal to orifice, four costae (two large, making up proximal edge of orifice; two very small), no obvious pelmata. Vicarious avicularia rare, almost as long as autozooids (ca 0.50 mm); distally directed, rostrum waisted, spatulate distally, two denticles at distal end of rostrum. Ovicells longer than wide, displacing distal autozooids, convex, with distinct raised median suture and up to 40 large round pores, the pore at distal end of suture larger than remainder. Brooding autozooids with dimorphic orifices broader than long, a prominent distally directed process on the proximal edge of orifice and a proximally directed process on proximal edge of ovicell aperture, closed by maternal operculum. Ancestrula membranous frontally, with calcification around the distal edge of operculum.

Etymology      From *geminus*, L. twin. Named for its similarity to *Figularia lepida*.

Remarks      *Figularia gemina* is characterised by its smooth frontal calcification, regularly spaced pores and minimal costate shield.

*Figularia gemina* is similar to *Figularia lepida* Hayward, 1988, from Mauritius, in its reduced costate shield, a feature that distinguishes the two species from other known species of the genus. However, despite the superficial similarity between these obviously closely related species, there are a small number of characters which can be used to differentiate between them: *F. gemina* has 20-30 regularly spaced frontal pores, *F. lepida* only has up to 15 irregularly spaced pores; the two pores proximolateral to the orifice in *F. lepida* are enlarged and darker in colour than the others - this is not the case in *F. gemina*; ovicellate autozooids in *F. gemina* have two opposing processes at the proximal and distal edges of the orifice, not seen in *F. lepida*; *F. gemina* has a single enlarged pore on the midline of the ovicell, whereas *F. lepida* has two teardrop-shaped pores, one either side of the midline.

As noted above, all other described species of *Figularia* have a costate shield that all but covers the frontal surface of each zooid, similar to the condition seen in *F. figularis*, with imperforate gymnocrystal calcification. This may be reason enough to erect a new genus for the accommodation of these two species, *F. lepida* and *F. gemina*, with greatly reduced costate shields and regularly distributed gymnocrystal pores. However, an undescribed species of *Figularia* (NHM 2000.11.4.13) from Square Reef (part of the Great Barrier Reef) is intermediate between these two conditions having an expansive costate shield as well as gymnocrystal pores. The morphology of the ovicell and presence of vicarious avicularia is unknown in this species.

Distribution *Figularia gemina* has only been found on shell fragments from Mboli Passage, between Nggela Sule and Nggela Pile, Florida Islands.

