## *STYLOPOMA SPONGITES* (PALLAS, 1766)
*(Fig. 1A–E)*

*Eschara spongites* Pallas, 1766: 45 (in part).
*Schizoporella* (*Stylopoma*) *spongites*: Levinsen, 1909: 406, pl. 18, fig. 4a–d.
*Stylopoma spongites*: Thomas & Hastings, 1967: 316; Hastings, 1968: 355.
*Schizoporella falcifera* Canu & Bassler, 1928: 95, pl. 10, fig. 2.
*Stylopoma duboisii*: Cook, 1968 (in part): 196; Cook, 1973 (in part): 69, figs 3, 4; Cook, 1985 (in part): 163, figs 17, 18.

### *Material*

Neotype: Zoologisk Museum, Copenhagen (unregistered), St. Jean Bay, W. Indies. 10–15 fms. Th. Mortensen, 19.12.1905. Selected by Thomas & Hastings (1967).

Other material examined: NHM 1926.10.1.15, Cape Verde Islands; NHM 1986.8.14.23, G.O.S.700, 20°49.5′N, 79°58′W. 60–90 m; NHM 1979.7.12.4 (as *Stylopoma duboisii*), Axim Hospital Reef, Gold Coast (Ghana), 7.1.1951. Bassindale Coll.; USNM 7583 (Holotype, *Schizoporella falcifera*), East of Yucatan, Mexico.

### *Description*

Colony encrusting, multilaminar. Autozooids irregularly polygonal, convex, distinct, separated by grooves; reddish-orange in colour when dried. Primary orifice as long as wide, suborbicular, with narrow, straight distal edge, lateral corners at angle to orifice rim; anter rounded with a sparsely denticulate inner rim; sinus slit-like, deep; condyles smooth, deep and wide, i.e. covering little of the proximal margin, with distinct processes pointing medially. Frontal shield evenly perforated with round pores (35–55) at the bottom of deep hollows with angular rims; marginal pores and lateral walls distinct. Adventitious avicularia often single, proximo-lateral to primary orifice and absent from anywhere else on frontal shield; rostrum inclined to frontal plane, equilateral triangular with complete crossbar, disto-laterally directed. Vicarious avicularia of two types: (1) autozooid-sized, rostrum spatulate with a tapering tip; complete crossbar and almost entire rostral palate, incomplete medially; usually distally directed but with varying orientation; (2) rare, very large avicularia on a much raised cystid; rostrum laterally directed, crossing two or more autozooids with a long, parallel-sided, terminally pointed mandible; complete crossbar and almost entire rostral palate, incomplete medially; mandible curved downwards toward colony, its distal end below the point of attachment. Ovicells prominent, globular but slightly frontally flattened, aperture largely occluded by an entire, almost triangular proximal labellum, visible in frontal view, arising from the proximal edge, leaving only a crescentic lumen. The ancestrular complex consists of three primary zooids, produced at an angle of 120° to each other. Both brooding zooids and autozooids have 18–20 tentacles (Cook, 1985).

### *Measurements*

Means and standard deviations, mm ($n=30$).
Neotype.
Autozooid: length, $0.51\pm0.05$; width, $0.36\pm0.05$.
Orifice: length, $0.10\pm0.01$; width, $0.12\pm0.01$.
NHM 1979.7.12.4.
Autozooid: length, $0.56\pm0.05$; width, $0.38\pm0.08$.
Orifice: length, $0.10\pm0.00$; width, $0.12\pm0.00$.

### *Remarks*

The most distinguishing character of *Stylopoma spongites* is the denticulation on the inner rim of the anter of the primary orifice, a feature never before described for this or any other species of *Stylopoma* although as it now appears not unique (see *S. thornelyae* below). The denticulation in the neotype specimen is sparse and more rounded than the more angular denticulations seen in the material from the west coast of Africa.

Thomas & Hastings (1967) selected a neotype and neoparatype specimens of *Stylopoma spongites* (Pallas). Hastings (1968) further justified this selection but the neotype specimen has not been adequately described. This lack is made good above. In light of Jackson & Cheetham's (1994) discovery of 15 new species of *Stylopoma* from the Caribbean and Gulf of Mexico, all references to *S. spongites* by previous authors have been omitted from the synonymy of the species.

Cook (1973, 1985) described larval release, settlement, metamorphosis and the formation of an ancestrular triad, and early astogeny in *Stylopoma duboisii* from West Africa. Examination of her material revealed that she was describing two species (Cook [1985] described two colour forms), neither of which was *S. duboisii* (see *S. duboisii* below), but one of which was *S. spongites*.

Herrera *et al.* (1996) found *S. spongites* most abundant between 10 and 20 m depth on the reef they surveyed, with a mean density of over 40 colonies $m^{-2}$.

*Stylopoma spongites* forms quite extensive unilaminar sheets, developing ovicells prior to frontal budding of secondary laminae.

### *Distribution*

*Stylopoma spongites* is found throughout the Caribbean Sea, from the Gulf of Mexico and south to Brazil, as well as off the coasts of Ghana and the Cape Verde Islands on the eastern side of the Atlantic Ocean.

*Stylopoma spongites* (Pallas, 1766). Tilbrook, 2001, p.4, fig. 1A-E

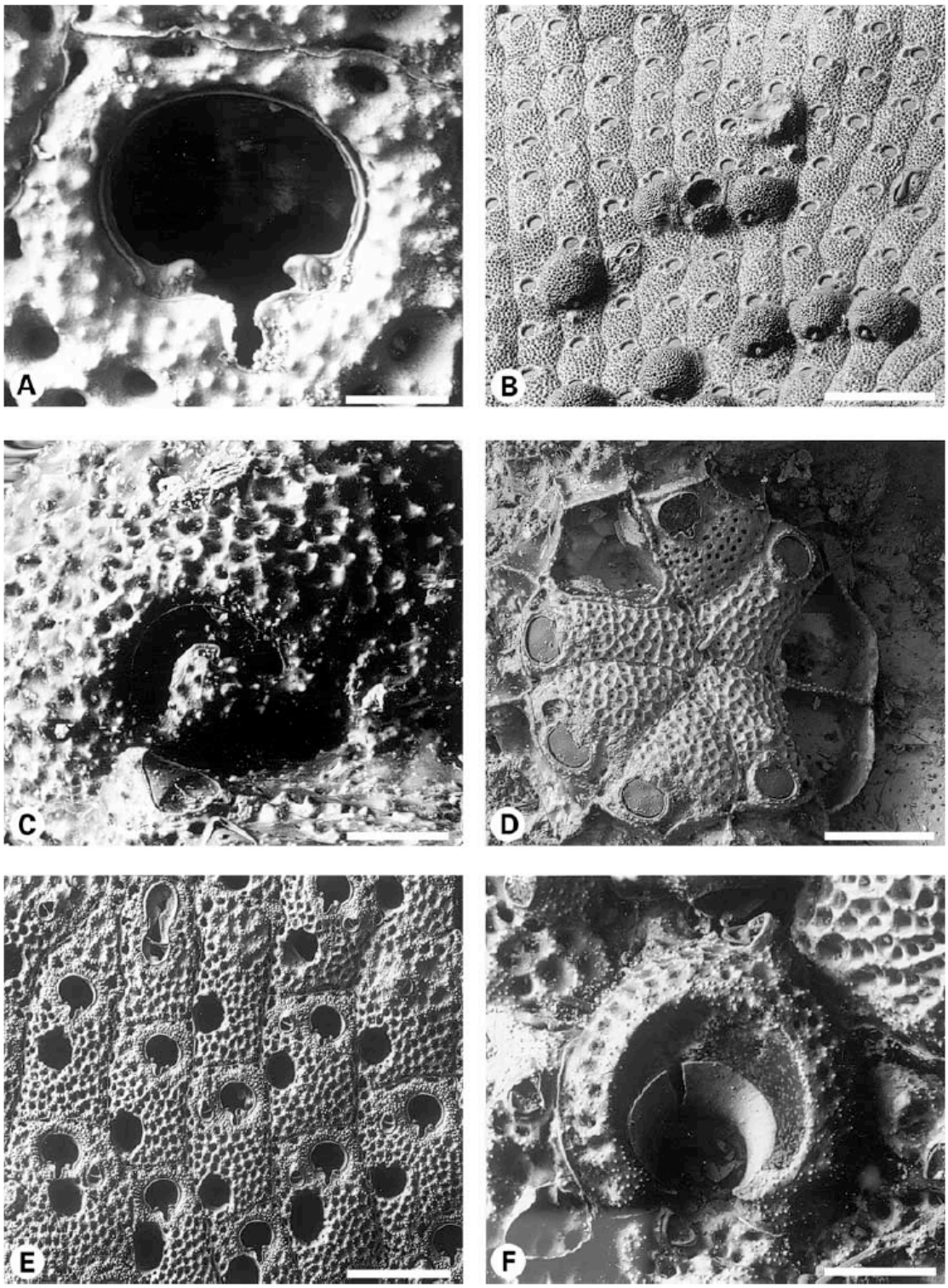


**Figure 1.** A–D, neotype *Stylopoma spongites* (Pallas). A, primary orifice, showing pronounced articulatory condyles and denticulate anter; B, view of colony showing several ovicells; C, ovicell, crescentic aperture and entire proximal labellum; D, three-zooid ancestrula complex, with daughter zooids (acute proximal ends) between the primary ancestrular zooids; E, *Stylopoma spongites* (Pallas), Caribbean specimen showing borings through the frontal shield signs of systematic predation; F, ***Stylopoma timorensis* sp. nov.**, formation of an ovicell. Scale bars: A = 0.06 mm B = 1.1 mm; C = 0.09 mm; D = 0.33 mm; E = 0.44 mm; F = 0.15 mm.