

Hippaliosina triforma (Canu & Bassler, 1929). Tilbrook, 2006, p. 268, pl.60A-B

Hippaliosina triforma Canu & Bassler, 1929
Plate 60A-B

Hippaliosina triforma Canu & Bassler, 1929: 392, pl. 54, figs 5-7.

Hippaliosina triforma: Ristedt & Hillmer, 1985: 138, pl. 5, fig. 1.

Hippaliosina spathulifera Harmer, 1957: 1093, pl. 72, figs 10, 11.

Hippaliosina spathulifera: Hayward, 1988: 319, pl. 9, fig. c.

Material examined SBMNH 365748, 514-87; NHM 1971.3.22.17,18 (Holotype and Paratype of *H. spathulifera*), Singapore, Hamitch Coll.; NHM 1962.2.20.34, Formosa Strait, China Sea, 23° 32'N, 119° 35'E, Ma Coll.; 1936.12.30.38, Sri Lanka, Thornely Coll.; NHM 1882.10.18.46, Providence Reef, Mascarenes; NHM 1971.3.22.15, Sri Lanka, Thornely.

Description Colony encrusting, unilaminar. Autozooids narrow, hexagonal or irregularly polygonal, convex (ca 0.60 x 0.28 mm). Frontal shield nodular, with numerous small marginal pores, a small, suboral umbo produced medially on many autozooids. Primary orifice egg-shaped, longer than wide (ca 0.12 x 0.10 mm), broadest distally, a broad, deep, U-shaped sinus constituting one-third orifice length, condyles short, triangular, downcurved. A pair of small avicularia on each autozooid positioned either side of sinus, distally directed, rostrum oval, crossbar complete very fine. Vicarious avicularia sporadic, as large as autozooids, rostrum occupying half its length, slightly spatulate yet coming to point distally, the distal edge raised, proximal border shallowly concave, lateral condyles robust triangular, opesia triangular, mandible spatulate but pointed distally. Gonozooids almost twice as wide as autozooids yet similar in length, orifice dimorphic, as wide as long, almost circular in outline, proximal sinus as wide as distal portion, shallow, occupying only one-quarter of length, condyles robust triangular. Distal end of gonozooid swollen, a small umbo produced distomedially of orifice as well as proximomedially, avicularia also present, lateral to condyles.

Remarks *Hippaliosina triforma* is characterised by its egg-shaped primary orifice, by the small lateral-oral avicularia and by the swollen gonozooids with dimorphic orifices. The sporadic presence of vicarious avicularia is unique in the genus.

Harmer (1957) in his discussion of *H. adhaerens* (Thornely, 1905), only briefly discussed *Hippaliosina triforma* seemingly dismissing Canu & Bassler's (1929) description of "special zoecia" commenting that their "nature is obscure". But, when Canu & Bassler's illustrations of (1929: pl. 54, figs 5, 6) of *H. triforma* are compared with Harmer's illustration (1957: pl. 72, fig. 10) of *H. spathulifera* there can be no doubt that the same species is being illustrated. No other *Hippaliosina* species appears to produce vicarious avicularia and only *H. oviceolata* Harmer, 1957 develops small oval lateral-oral avicularia similar to those seen in *H. triforma*. Examination of Harmer's type material of *H. spathulifera* shows it to be identical to Canu & Bassler's description and illustrations, however the voucher material of *H. triforma* lodged by the USNM in the NHM collections contains two species, neither of which is *H. triforma* (NHM 1931.12.30.150 = *H. adhaerens* (Thornely, 1906); NHM 1931.12.30.151 = *H. acutirostris sensu lato*).

Neither the specimen described by Hayward (1988) from Mauritius nor Thornely's specimen from Sri Lanka have any sign of the vicarious avicularia unique to this species, but, in terms of the morphology of the primary orifice and avicularia, they are identical to the other material cited above. The Sri Lankan material does, however, have a rather tuberculate distal rim to the orifice, not seen in any other material examined here. The material from the Solomon Islands does not bear the small, suboral umbo seen in other material, nor are there any brooding zooids present.

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Hippaliosina adhaerens material from Sri Lanka is here attributed to *H. triforma* but the material from Torres Strait is distinct. It has an orifice superficially similar to that of *H. triforma*, i.e. longer than wide, but it is widest proximally where the deeply arched anter joins the shallow, concave poster. It also produces paired lateral-oral avicularia but these are triangular and distally directed.

Distribution Originally described from the Philippines, *Hippaliosina triforma* has since been described from Singapore, Sri Lanka and Mauritius. In the Solomon Islands a single small colony of this species was found from Kokomu Tamba Island, Tulaghi Harbour, Nggela Sule, Florida Islands.

