

STUDIES ON INDIAN SPONGES—IV*

ADDITIONS TO THE GENUS *Corticium* SCHMIDT WITH NOTES ON THE DISTRIBUTION OF *Corticium candelabrum* SCHMIDT

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Two species of the genus *Corticium* Schmidt (1862) of the Order Carnosida Carter (1875), family Halinidae de Laubenfels (1936) were collected by the author. The first one, *Corticium acanthastrum* is a new species and the second, *C. candelabrum* Schmidt is reported here from Indian region. The discovery of the latter species here helps in bridging a wide gap in its distribution in two widely separated zoogeographical areas such as Mediterranean Sea and Western Pacific.

Genus *Corticium* Schmidt

Halinidae with calthrops, some lumpy and with ray tips finely branched (Candelabra). Type of the genus is *Corticium candelabrum* Schmidt (1862).

Corticium acanthastrum n. sp.

(Fig. 1 a and b)

Material : One specimen from Palk Bay collected from a depth of 1.5 metres. Examined in fresh condition.

Description : Sponge encrusting, 2 mm. thick, growing irregularly on the under surface of a rock. Total area occupied 5×6 mm. Blood red in living condition, turning black in strong alcohol. It is slightly compressible with flesh-like consistency. Oscules and pores are not seen. The ectosome is thin and highly charged with candelabra. Endosome with good amount of calthrops scattered irregularly.

Spicules : 1. Triods and calthrops. Rays long and sharply pointed, and sigmatose. At the basal part of each ray usually there are 2 to 6 spines, blunt or sharply pointed. Total length of ray varies from 0.021 to 0.033 (0.029 mm average) and width (basal, excluding spines) from 0.002 to 0.004 (0.003 mm average). Suppression of rays quite common.

2. Candelabra. Resemble those of *C. candelabrum* Schmidt. Size 0.033×0.033 mm when well developed.

Remarks : This species is closely related to *C. candelabrum* Schmidt in the spicular characters. The chief difference noted is the echination of the rays of the

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calthrops. *Corticium quadripartitum* Topsent (1923) has trilophous calthrops added on to the ordinary type.

The shape of the calthrops resembles very much the one figured by Bowerbank (1864, Fig. 235) based on a spicule preparation from Freemantle (West Australia).

Locality, Register Number etc.: Palk Bay. Depth: 1.5 metres. CMFRI No. 147, 6-3-1966.

Corticium candelabrum Schmidt

(Fig. 2 a and b)

Corticium candelabrum Schmidt, 1862, p. 42, pl. 3, fig. 25.

Schulze, 1881, p. 410, pl. XXII.

Sollas, 1888, p. 280.

Lendenfeld, 1903, p. 122.

Babic, 1922, p. 292.

Burton, 1934, p. 521.

Topsent, 1934, p. 7.

Material: 16 specimens from different parts of India.

Description: Sponge encrusting, generally seen growing attached to the under surface of rocks, maximum thickness noted 2 mm; spreading irregularly, in the form of thin film, detachable from the substratum easily.

Colour is pale yellow or brown in the living state. Surface more deeply pigmented than the interior. Soft, rather friable when dry.

Oscules slit-like, highly contractile. 1 to 1.5 mm in diameter. Pores simple, outline irregular, up to 0.5 mm in diameter. Canal system diplodal. Flagellated chambers pear-shaped.

Spicules: 1. Microcalthrops. Densely distributed in the interior. Rays sharply pointed but curved slightly and length varies from 0.021 to 0.046 mm and basal width 0.002 to 0.003 (0.0031 mm average).

2. Candelabra. When well developed attain a maximum width of 0.029 mm and length of 0.030 mm. Suppression and malformations of rays quite conspicuous.

Distribution: Mediterranean Sea, Indian Ocean, Western Pacific.

Locality, Register Number etc.: Palk Bay (10 specimens), Gulf of Mannar (Galaxea reef) (5 specimens), Gulf of Kutch (1 specimen). CMFRI—S. 147



FIG. 1—*Corticium acanthastrum* n. sp. (a) Triods and Calthrops, (b) Candelabra. FIG. 2—*Corticium candelabrum* Schmidt—(a) Triods and Calthrops; (b) Candelabra.

SUMMARY

Two species belonging to the Genus *Corticium* Schmidt are described herein. Of these the first one, *C. acanthastrum*, is new to science, and the second, *C. candelabrum* Schmidt is recorded here from Indian region. The discovery of the latter in these waters has greatly extended its distribution.

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