## OCCURRENCE OF *CODIUM PROSTRATUM* LEVERING, 1938 (NON- P. C. SILVA, 1959) FROM NORTHERN ARABIAN SEA COAST (PAKISTAN)

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#### **Abstract**

A rare species, *Codium prostratum* Levering 1938 was earlier described from Isipingo beach Durban (South Africa) and now for the first time reported from the Karachi coast, Pakistan. It is a sterile species without any sex organs.

#### Introduction

During the survey of the seaweeds along the coast of Pakistan, 30 species of *Codium* were described by Nizamuddin (2001). It is a very rare species and does not bear gametangia. Levering (1938) also described non-occurrence of gametangia in type species and therefore could be considered as a sterile species of the genus *Codium*. Most probably this species is sub-littoral. The present report describes *Codium prostratum* which is rarely found along the coast and this could not be reported earlier.

#### **Materials and Methods**

Specimens were either fixed in 4-5% formalin-seawater solution or mounted on herbarium sheets which are deposited in the seaweed Herbarium (KUH-SW), Department of Botany, University of Karachi. For anatomical studies, a pinch of material was mounted on a slide in lactophenol. Projection method was used for the drawings. Scale bars for utricles were  $500\mu m$  and  $200\mu m$ . the studies are based on fresh or preserved materials.

# Codium prostratum Levering 1938: 16 Figs. 1-2 A, B, C

Holdfast conico-discoid up to 5mm diam., stipe very short up to 2mm long and compressed up to 3mm broad. Thallus prostrate and expanded up to 10 cm and up to 7cm long, regularly dichotomously branched (10-12 orders), divaricate; dichotomies flat 5-8mm broad, at short distances; axils broadly narrow. Lower segments compressed up to 5mm broad and upper segments gradually attenuated above to 3mm diam.

Thallus dissecting out into individual utricles; utricles slender, cylindrical, oblong, sub-clavate, constricted below apex (1) from tip of thallus 338-500 (-588)  $\mu$ m long and (63-) 100-213 $\mu$ m diam., L/B (2.3) 3.3-4.6 (5.8); (2) from medial portions of thallus 510-816 (-1530)  $\mu$ m long and (77-) 128-255 (-434)  $\mu$ m diam., L/B (2.2-) 3-7 (-8.8) and (3) from stipe of thallus 250-750 (-875) long and (63-) 188-250  $\mu$ m diam., L/B (0.3-) 1.8-7 (-10); apices smooth, round, flat, truncate; utricular wall 6-8 $\mu$ m thick at apices of utricles. Hair or hair-scars 1-2 per utricle at 63-113  $\mu$ m below apices of utricles. Medullary filaments 25-63  $\mu$ m diam. Material sterile.

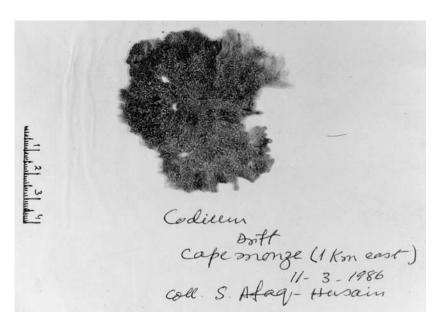


Fig. 1. Habit of *Codium prostratum* Levering.

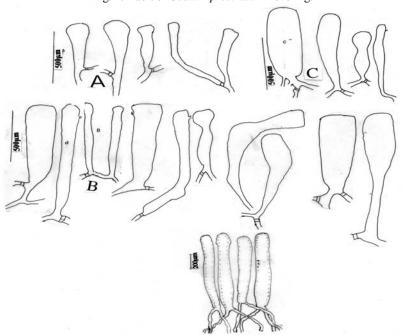


Fig. 2. Series of utricles Codium prostratum Levering 1938

- A. Utricles from tip of thallus. Scale 500μm.
- B. Utricles from medial part of thallus. Scale  $500\mu m$ .
- C. Utricles from stipe of thallus. Scale  $500\mu m$  and  $200\mu m.$

Specimens examined: Cape Monze (Leg. Afaque-Husain, 11-3-1986 Drift).

Pakistani specimen resembles type species in habit of the thallus and absence of gametangia but differs in length as well as in breadth of utricles.

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