

## AN ADDITION TO THE KNOWLEDGE OF *CODIUM* STACKH., FROM PAKISTAN

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### Abstract

*Codium repens* Vickers is reported herewith for the first time from Pakistan. It is very rare in occurrence and prostrate in habit.

### Introduction

*Codium* Stackh., is a siphonous green alga which occurs mostly in tropical and subtropical waters. It occurs all along the shores of Pakistan and so far 31 species of this genus have been described from the area (Anand, 1940; Børgesen, 1934; Nizamuddin, 2001). The present paper describes *Codium repens* Vickers which is rarely found along the coast and which could not be reported earlier from Pakistan.

### 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. Camera Lucida drawings were made. The studies are based both on fresh and preserved materials.

#### *Codium repens* (Crouan) Vickers 1905: 56

Figs. 1 & 2 A-D

Hold fast flat-discoid 8-10mm diam., stipe cylindrico-compressed, erect up to 1.5cm long and 5mm diam. Thallus procumbent, dichotomously branched (to 3 orders), monopodial, 6.5 cm long. Interdichotomal segments basally terete, upwards compressed to 6 mm broad, to 3 mm diam., dichotomies slightly-broadly rounded, to 1.5 cm broad, segments terminally proliferous dichotomously (to 4 orders) branched, to 4 cm long and 3mm diam., these proliferation-like segments are in Cox-comb appearances. Utricles cylindrical, clavate, barrel-shaped, ovoid, sub-lunate, (1) from tip of thallus 383-765 (-892)  $\mu$ m long and (77-) 102-306 (-459)  $\mu$ m diam, L/B 1.8-3 (-6.6), (2) from medial part of thallus 893-1530 (-1836)  $\mu$ m long and 153-510 (-1148)  $\mu$ m diam, L/B (1.3-) 3-5 (-7.5), (3) from stipe of thallus 383-969 (-1224)  $\mu$ m long and (102-) 153-280 (-510)  $\mu$ m diam., L/B (1.3) 2-4.6 (-7.6). Apices rounded-broadly rounded, narrowly projected, flat. Apical utricular wall 2-15  $\mu$ m thick, lamellate. Hairs (or hair scars) 2 per utricles at a distance of 188-306 (-375)  $\mu$ m below apex. Medullary filaments 1-4, 25-75  $\mu$ m diam. Gametangia pedicellate, papillate, lance-ovoid, fusiform, 3 per utricle, 250-360  $\mu$ m long and 75-125  $\mu$ m broad, L/B 2.2-4.6., at a distance of 450-560  $\mu$ m below apex of utricle.

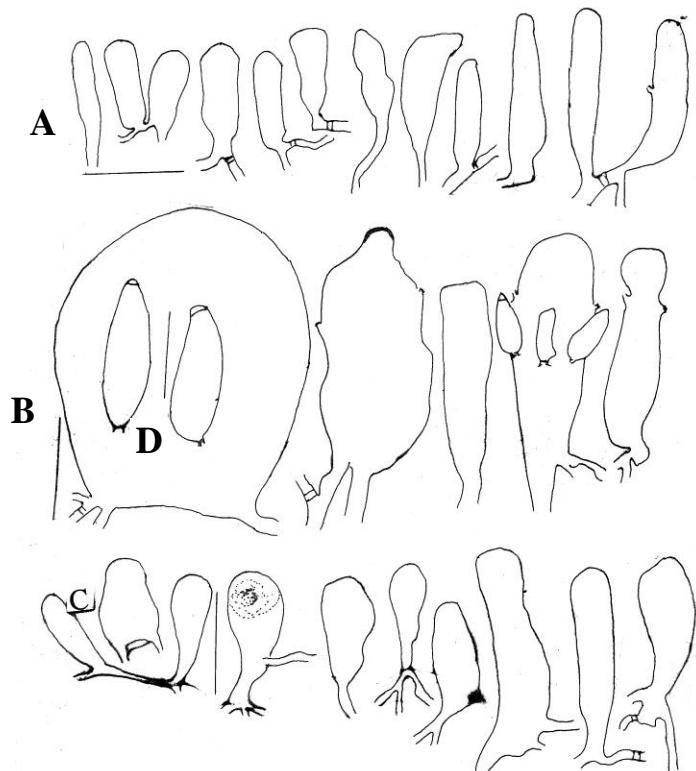
Fig. 1. Habit of *Codium repens* Vickers.

Fig. 2. A-D. Internal structure of the thallus.

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

**Specimens examined:** Buleji (Leg.M.Nizamuddin 5-3-1989 drift no. A3-89a; leg. A. Rehman 5-3-1989 drift no. N3-89a)

Pakistani specimens resemble Sri Lankan specimen (Durairatnam, 1961) in being prostrate in habit but segmental rhizoids were either lacking or not observed. There is also difference in shape of utricles.

#### References

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