

Addition to the marine algal flora of Goa

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ABSTRACT

Seven species of marine algae (2 Chlorophyta, 2 Phaeophyta and 3 Rhodophyta) are recorded from various localities of Goa for the first time. In the present paper a detailed account of habitat, distribution, morphological and reproductive features of these algae is given.

Introduction

Goa, a tiny dot on map of India is surveyed for marine algae extensively. The first contribution on marine algal vegetation is given by Untawale and Dhargalkar (1975). Later on Agadi and Untawale (1978) gave a complete report on marine algal flora of Goa coast. While working on some ecological aspects of marine algae of Goa coast, some species of marine algae were collected which were not reported by earlier workers. In the present paper details of habitats, occurrence, season of growth, brief morphological and reproductive details of these newly recorded species are given.

Materials and Methods

Goa is located along the west coast of India between lat. 14° 9' - 15° 52' N and long. 73° 35' - 74° 24' E with a length of 120 km. Goa coast is segmented due to cliffs and estuaries. Intertidal expanse is less (Ahmed, 1972). As falling along west coast, it shows a greater fluctuation in tidal levels (Srinivasan, 1960). Average rainfall is around 3000 mm. Atmospheric temperature fluctuates between

21-34°C. In most of the places moderate sized boulders of granite, laterite provide numerous sheltering areas. Specimen were collected by hand picking method from intertidal region of different localities (Fig. 1). Drifts from these areas were also analysed. Frequently observed species in the drift are included in this account. Specimens were preserved by both dry and wet method and deposited at Department of Botany, Goa University, Goa.

Results and Discussion

Altogether seven species of marine algae-2 Chlorophyta, 2 Phaeophyta and 3 Rhodophyta are recorded from various localities of Goa which are briefly discussed below.

Ulva lactuca C. Ag.

Thalli were found attached to rocks in lower intertidal region often in tide pools at Anjuna, Baga and Vagatore. Plants bright green with short but distinct lamina. Lamina ovate to orbicular and deeply lobed. Lobes 5-10 cm long and 3-4 cm wide. Occurrence - common and predominant in August - October and January - February.

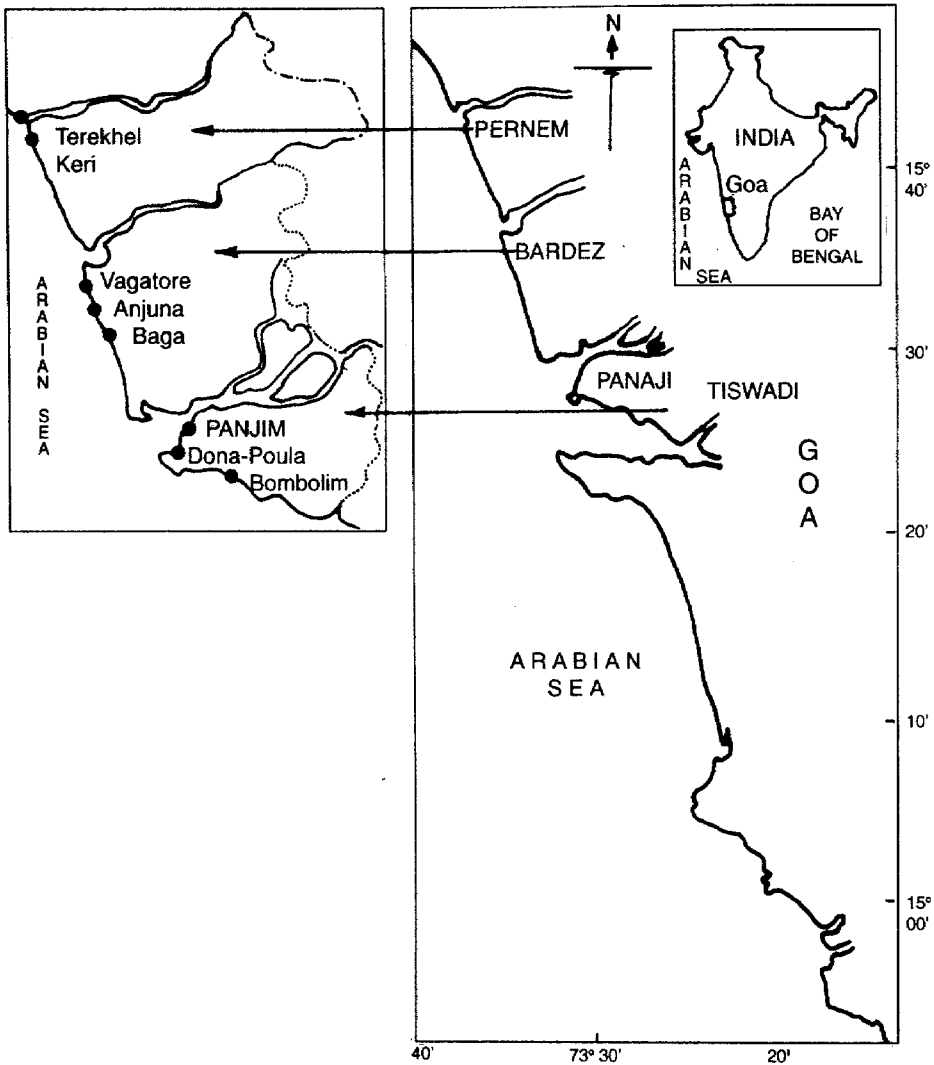


Fig. 1. Map of Goa showing collection localities

***Enteromorpha linza* var. *linza*. J. Ag.**

Alga was collected from muddy region (near Goa Medical College, Old Campus). Plants upto 12 cm long 1-1.5 cm wide, attached by basal disc, linear-lanceolate,

simple except in the lower portion of the frond. Frond is flat and broad above, gradually tapering to tubular, more or less wrinkled on the surface. Plants growing solitary over the mud. Occurrence relatively common in January to February.

***Dictyota fasciola* (Roth) Lamour.**

This alga was found growing in small pools of midlittoral region (Anjuna, Baga and most of the sandy localities of Goa). Plants 3-4 cm in height, brownish to olive green. Basal portion stoloniferous, creeping on substrata (mostly sandy). Branches broad at base and narrowing upwards. Occurrence predominant during December - February. Young tetrasporangia were observed.

***Iyengaria stellata* (Boergesen) Boergesen**

Plants were frequently found cast ashore at Keri (Terkhol) and Bambolim. Thalli vesicular. Surface rough with branched projections giving stellate appearance to thallus. Plants were found vegetative in February - March.

***Sahlbergia subintegra* (Rosenvinge) Kornmann**

Plants were found epiphytic on *Chaetomorpha media* (at almost all places of Goa coast) forming minute rose coloured sub-orbiculate discs 80-100 µm in diameter. Marginal cells furcating. Occurrence abundant in August - September.

***Galaxaura marginata* (Ellis et.Sol.) Lamour.**

Plants were found cast ashore (at Kankra, Bambolim only). Fronds were greyish pink in colour, lightly calcified, 6-8 cm in height. Dichotomously branched. Distinct annulations were seen on the surface. Occurrence rare, found only in drift in December - January. Plants collected were vegetative.

***Scinaia carnosa* (Kuetzing) J. Agardh**

It was collected only from Anjuna. Thalli were found attached to rocks in the lower midlittoral region. Fronds pinkish red in colour. Thallus is erect, growing to the height of 17-22 cm, attached with small holdfast. The main axis dividing dichotomously,

3-4 mm in diameter. Thallus is constricted irregularly at many places. Occurrence is rare, grows during January - February. Cystocarpic plants were collected.

Agadi and Untawale (1978) have listed 50 marine algal species from Goa coast where as Untawale *et. al.* (1983) have listed 72 species from Goa region. The present attempt has added 7 more species to the algal flora of Goa. These species are recorded from other places of India (Krishnamurthy and Joshi 1970; Untawale *et. al.*, 1983). Their occurrence along Goa coast, suggests their wide distribution along west coast of India.

Acknowledgement

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