

ON *CAULERPA SERRATA* (FORSSK.) J. AG. EMEND BOERGS.  
(CHLOROPHYCEAE) ON THE ANDAMAN COAST

P.S.N. RAO\* AND MARCEL TIGGA  
*Botanical Survey of India, Port Blair*

A B S T R A C T

*Caulerpa serrata* (Forssk.) J. Ag. emend Boergs., a rare marine alga in the Indian region is dealt, with an emphasis on its localised distribution in the insular habitats and the need for its conservation.

INTRODUCTION

The genus *CAULERPA* Lamouroux of the order Siphonales under Chlorophyceae is well distributed on the Indian coast represented by more than 20 species. It is considered as the largest genus with highest number of species among the Chlorophyceae. The genus is represented by 7 species viz. *C. cupressoides* Waber van Bosse, *C. peltata* Lamour., *C. racemosa* (Forssk.) J. Ag., *C. scalpelliformis* (R. Br.) C. Ag., *C. serrata* (Forssk.) J. Ag. emend Boergs., *C. sertularioides* (Sgmelin) Howe and *C. taxifolia* (Vahl) C. Ag. on the Andaman coast.

Among the seven species of *CAULERPA* recorded, *C. serrata* is extremely rare in the Indian region having distribution only in a couple of islands in the Andaman & Nicobar archipelago and Krusadai island off the Tamil Nadu coast.

TAXONOMIC DESCRIPTION

Plants cartilaginous up to 40 cm, creeping on rocky or sandy to silty substratum by stolons giving out rhizoids below and assimilators above. Stolon 1 mm thick. Fronds almost glabrous, erect, decomposito-dichotomous, sub-

fastigate. Stipe terete, 4-6 mm high, 1 mm thickness. Assimilators green, unequal, twisted or coiled, with dentate margins. Tips of assimilators almost rounded with teeth all over. (Fig.1).

The marine alga is curious owing to its spirally tortuous, twisted or coiled assimilators entirely different from that of other species thus easy to identify and distinguish for collection in the field.

*Habitat* : As reported for Krusadai island off Tamil Nadu coast (Srinivasan, 1969) the alga frequents sandy to silty lagoons on the coast of Henry Lawrance island in the Rani Jhansi Marine National Park, South Andaman while vigorously colonises the coralline rocks on the coast of Little Andaman island at Harmindar Bay site. The alga is almost habitat specific not occurring in other types of habitats in the A & N Islands.

The detailed studies made on some of the extremely rare seaweeds found in the insular habitats of the Indian region indicate that the species like *Tydemania expeditionis* Weber van Bosse, a green alga (Rao and Marcel Tigga, 1998) and *Botryocladia skottsbergii* (Boergs.)

\*Botanical Survey of India, Kolkata.

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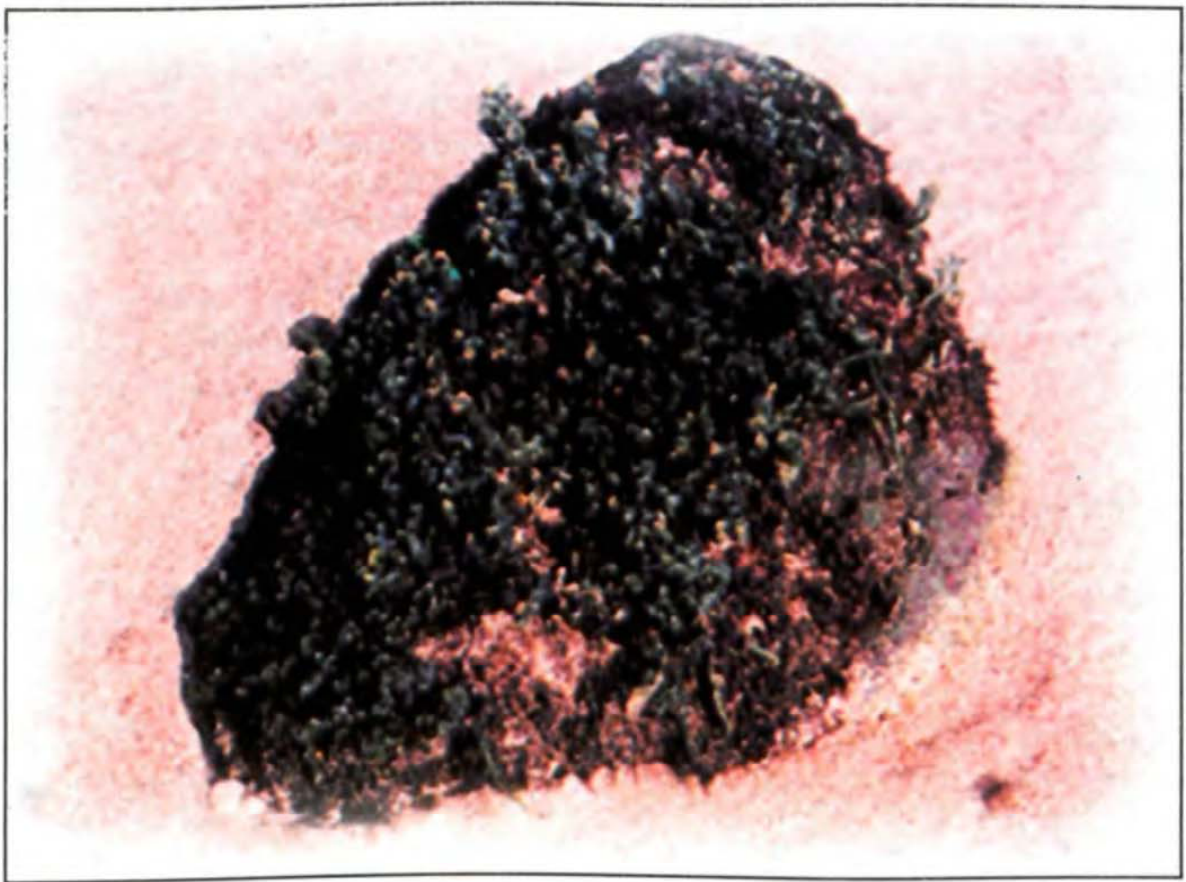


Fig. 1 : *Caulerpa serrata* (Forssk.) J. Ag. emed Boergs. (Chlorophyceae) on the Andaman coast.

Levr., a red alga (Rao and Marcel Tigga, 1999) are habitat specific having been reported only from one or two islands in the Andaman & Nicobar and Lakshadweep groups of islands in the Indian region and *Caulerpa serrata* is no exception to this.

*Conservation* : For the conservation of rare seaweeds, the known habitats in the Indian region need to be made free of all types of human impacts. The Henry Lawrance island from where this rare alga was collected by the authors was already declared as Rani Jhansi Marine National Park in South Andaman. The Little Andaman island, being the second place of occurrence of the alga in the archipelago, is susceptible to various human impacts endangering the algal habitat. It is, therefore, necessary to have the individual species of vulnerable category such as *Caulerpa serrata*, *Tydemania expeditionis* and *Botryocladia skottsbergii* cultured in the laboratory and the raised populations are reintroduced in other

islands of the archipelago where similar or near similar climatic conditions prevail.

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