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This paper reports the results of an ecological survey of marine algae of the intertidal zone of Goyambokka algal bed near Tangalle. The research project commenced in 1996 to study the ecology of marine algae around Tangalle. The main objective of the project was to study the algae communities with special reference to habitats and diversity.

Ecological survey was conducted at 3 month intervals. All species were collected and identified using the identification keys of Durairatanam (1958). At each harvest 50 x 50 cm quadrats were placed approximately 1 m apart along line transects running perpendicular to the water front. The harvested material was then separated into different species and dried at 80°C for 72 h for determination of dry matter availability.

A total of 30 species of marine algae representing 10 green, 7 brown and 13 red algae were recorded. The highest yield of 250 kg/ha was obtained from *Sargassum cracifolium* followed by *S. swartii* with an estimated 210 kg/ha. Six habitat types were identified. They were: the vertical or oblique rock surfaces facing strong waves occupied by *Sargassum*, the rock facing less frequent strong waves with red algae, habitats usually sheltered by the rock (*Turbinaria* and *Valoniopsis* communities), horizontal rocks submerged in stirring water species of Siphonales, sea water ponds up to 1 m deep, stirred slowly by the currents and inhabited by many corals and few red algae and the rocks bordering the beach, bathing almost always by sea water passing over the rocks and inhabited by *Ulva* spp.