

SPATIAL OCCURRENCE AND DISTRIBUTION OF ASCIDIAN FAUNA ALONG THE COASTAL WATERS OF SOUTHERN INDIA

ABDUL JAFFAR ALI H¹ & SUDHANDRA KARTHI²

¹Department of Biotechnology, Islamiah College (Autonomous), Vaniyambadi, Tamil Nadu, India

²Research Scholar, Department of Zoology, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India

ABSTRACT

Ascidians (Tunicata) are gaining paramount importance in raising marine biodiversity. Considering ongoing changes in marine ecosystem, seasonality in the recruitment of ascidians and their invasive nature, the arrival of ascidians is increasing in India. In this context, a field study was carried out in selected transects of South Indian coastline during 2012–2014 to understand occurrence and distribution of ascidians. The study revealed the occurrence of 36 species of ascidians belonging to 7 families and 17 genera inclusive of 2 new records. The highest number of species was found in the family Didemnidae followed by Styelidae. The most abundant colonial species were *Eudistomapyriforme*, *E. microlarvum*, *Botrylloides magnicoecum*, *B. schlosseri*, *Phallusianigra*, *Aplidium multiplicatum*, *Didemnum psammathodes*, *Lissoclinum fragile*, *L. bistratum* and *Eudistoma sluteri*. *Botrylloides magnicoecum*, *B. leachie* and *B. chevelence* were present exclusively in Colachel. Among the 37 species, *D. psammathodes* and *L. fragile* were found majority of the stations studied. *E. microlarvum* and *E. sluteri* were reported for the first time at Tiruchendur water. Four species of the sub-family Botryllinae of Styelidae and one species of Didemnids were fouling the entire hull of boat at Colachel station. An increasing trend in the occurrence of ascidians in southern Indian waters reinforces the need for continued and periodic monitoring of their population expansion and also for sustainable utilization towards human welfare.

KEYWORDS: Ascidians, Indian Coastal Waters, Distribution, Occurrence