INTRODUCTION

Exploration of coastal areas for studying marine life is very common in India. In Maharashtra, Konkan coast has been studied particularly with reference to Malvan, Ratnagiri and Vengurla (Ingole et al., 2002; Harkantra and Parulekar, 1994). However, little attention has been paid to the coastline of Alibaug from Raigad district. Present work deals mainly with diversity of macrofauna of sandy and rocky shore, about 7 km from Alibaug. The study location was a sandy, clean beach with around 1000 mt of rocky patch. This patch is exposed only when water recedes to the lowest line i.e. during low tide. Infra-littoral zone was exposed maximum during late post-monsoon season (i.e. January to March). Sandy shore has abundance of crustaceans and various molluscan shells whereas; rocky region is inhabited by colourful sponges, exotic species of corals, along with many molluscs. It is essential to record the sponges and corals from this coast. Hence, the present study has been taken up.

MATERIALS AND METHODS

Current study involves identification (Apte, 1998) and listing of exotic macrofauna like Gorgonia spp. reported for the first time on this shore and molluscan shells (Sarlaadevi et al., 1996; Rodrigues et al., 1998).

The study period was from January 2009 to March 2010. For collecting the data about marine life here, the shore was visited thrice a month particularly on full-moon days, no-moon days and on half moon days (ashtami). Visits were planned by considering the tidal activity. This made the visits quite fruitful. Information about the fauna was reported mainly in form of still photographs and few empty molluscan shells were collected for identification purpose. This was to prevent undue killing of fauna. Very few shells have been preserved in formalin solution in glass bottles.

Data collection was done 300 mt along the coastline and about 400 mt perpendicular to it at study location. Water recedes to over 400 mt from the seashore exposing sandy shore first and rocky shore thereafter. Thus, the intertidal zone mainly comprised sandy shore and a rocky patch of about 1000 mt along the infra-littoral zone. This revealed the diverse fauna of both sandy and rocky shores. The abundance of various marine forms has been displayed by assigning + sign. Significance of the sign is Dominant ++++; Abundant ++++; Average ++; Meager +; Absent —.

RESULTS AND DISCUSSION

The exposed treasure included sponges, some colourful corals and 47 molluscan species. (Table 1). The littoral zone can be divided into 3 regions: 1) Supra-littoral,
2) Mid-littoral and 3) Infra-littoral.
Supra-littoral zone was dry, sandy and showed growth of Ipomoea biloba. It was characterized by empty shells of bivalves and gastropods. Arca spp. was predominant among them followed by bivalves like Mactra cornea, Donax spp. and Cardium spp. Gastropod shells were relatively scanty in number.

Mid-littoral zone comprised of wet sand which provided a habitat for hermit crabs. Hence, this region was dominated by Hermit crab occupied gastropod shells. Umbonium spp. was seen to be abundant followed by bivalves like Arca spp., Solen spp., Mactra cornea, Donax spp. and few empty Mytilus spp. shells. Murex, Bulonaria, Astrea, Nerita, Turbo, Turris species which were found in infra-littoral zone were not seen in this zone though it showed maximum diversity of molluscan shells.

Infra-littoral zone on the other hand, showed dominance of live Gastropods like *Hemitillus pugilinus*, *Tibia insulaechorab* and *Thias lacera*, as the rocky patch provides a substratum for them. This region was mainly characterized by fascinating variety of colourful sponges, hydroid colonies and Bryozoan corals (*Pentapora* spp. *Lophogorgia* spp. and other *Gorgonian* species in red, yellow and white colours. Occurrence of live *Aplysia* spp was noted only once.

Thus, there is notable biodiversity at the study location and due cognizance needs to be taken to conserve it. These not only add to the beauty of seashore but also make the spot exotic. Tourist activity is seen at nearby coasts (5 km from the study location). Various water sports have also been introduced there for attracting tourists. These places, being close to metro cities like Mumbai (about 110 km) and Pune (about 200 km), are a paradise for weekend tourists. The tourist activity can pose a threat to the rich marine life here. Taking into consideration the diverse marine life at this coast, attempts have to be made to keep the tourists at bay so that, the exclusive marine treasure will not be disturbed.

### ACKNOWLEDGMENTS

The authors wish to express gratitude to Dr. Geetanjali Deshmukhe, Senior Scientist, CIFe, Mumbai and Mr. Deepak Apte, Asst. Director, BNHS, Mumbai for guiding in identification of fauna. Thanks are due to Dr. (Mrs.) M. K. Pejaver, Principal, B. N. Bandodkar College of Science, Thane for continuous encouragement and support and Dr. (Mrs.) M. U. Borkar and colleagues for their cooperation.

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