VIII. CONCLUSION
CONCLUSION

Biodiversity refers collectively to all aspects of biotic diversity, which increases with expanding architectural complexity of the physical habitat. Indian subcontinent has rich, unique biodiversity, which forms a wider platform to understand the relationship between ecosystem functioning and aspects of environmental sustainability. The evaluation of biodiversity index by conservationists shows a decline in species number due to anthropogenic activities, which have jointly contributed in fragmentation of species habitat (Whitmore and Sayer, 1992). One of the most conspicuous aspects of contemporary global change is the rapid decline of diversity in many ecosystems leading not only to species extinction but loss in genetic and functional diversity across population, community, ecosystem, landscape and global scales (Padalia et al., 2004). The wide-ranging decline in biodiversity results largely from habitat modifications and destruction, increased rates of invasions by deliberately or accidentally introduced non-native species, over-exploitation and other human-caused impacts (Bobo et al., 2006). Information on the distribution and abundance of plant species is of primary importance in the planning and implementation of biodiversity conservation.

Andaman group of island is a treasure house of distinct floral and faunal elements and home to four unique aboriginal tribes viz. the Great Andamanese, the Onges, the Jarawas and the hostile Sentenelese. A century-old cultural history of human occupation in these islands and indiscriminate utilization of plant resources by human in the recent past, have posed a threat to the plant species diversity (Padalia et al., 2004). The study island Little Andaman although disturbed due to mass plantation of oil palm, tourism and related activities, harbours rich flora including endemics, and constitutes one of important
forests in the Indo-Burma biodiversity hotspot. In the present study, the tree species richness (18 to 84 species ha\(^{-1}\)), density (79 to 935 trees ha\(^{-1}\)) and basal area (41 to 59.10 m\(^2\) ha\(^{-1}\)) were greater in all the undisturbed forests as compared to the disturbed forests. For understory plants, the alien weeds formed about one fourth of the species richness (31 species; 28%) and density (1926 individuals; 28.3%) and the maximum weeds were recorded from the disturbed sites (98.7%). The disturbed sites had lowest tree species richness and the highest understory plant species richness due to bioinvasion of weeds.

Overall, the species richness of trees and understory plants were affected by man-made and natural calamities. Hence, to improve biodiversity conservation in this tropical forest region, it becomes crucial to redesign anthropogenic habitats, regulate the inflow of human population and there is an urgency of special weed eradication programmes to save the small fragile island ecosystem.