CHAPTER - VIII

SUMMARY
Documentation of ethnomedicine practices in Andaman and Nicobar islands is scanty, and are under reported. The present study documents the various ethnomedicine practices prevalent among the Nicobarese tribe. A total of 157 TKPs (78 male and 79 female) were identified and interviewed across the eight islands in Nicobar district. Utility of 196 plant species belonging to 152 genera of 72 families were reported, which includes nine endemic and three rare plant species. These 196 plant species were reported for the treatment of 57 ailments by the TKPs, either individually or in combinations.

The present study identified a number of useful flora, enabling the researchers to come closer to the traditions of the tribal community. Thus, awareness was created among the tribes, regarding the significance of their traditional medicine that needs preservation. In the present study comprehensive documentation covering all the Islands of Nicobar district, was undertaken, unlike earlier studies, which were confined to only a few areas with certain aspects of traditional practices. Therefore, this was the first attempt to systematically interview the TKPs in Nicobar district. Documentation of these traditional practices have been complied through Community Biodiversity Registers.

Among the plants screened for biological activity, *Jasminum syringifolium* Wall. ex G. Don, *Morinda citrifolia* L. *Boesemania rotunda* L. and *Glyptopetalum calocarpum* (Kurz.) Prain showed activity against the tested microorganisms viz., *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Vibrio cholera*, *Bacillus cereus*, *Proteus mirabilis*, *Shigella flexneri*, *Salmonella typhi*, *Klebsiella pneumoniae* and *Candida albicans*. Plant extracts of *Jasminum syringifolium* Wall. ex G. Don, *Morinda citrifolia* L. showed activity against all the microbial strains. While, 12 tested plant extracts showed activity against *Vibrio cholera*, 11 extracts each showed activity against *Staphylococcus aureus* and *Escheria coli*. Nine extracts each showed activity against *Bacillus cereus*, *Klebsiella pneumoniae* and *Salmonella typhi*. The plant extract of *Jasminum syringifolium* Wall. ex G. Don, *Morinda citrifolia* L. and *Senna alata* (L.) Roxb. showed activity against fungal strain *Candida albicans*.

Isolation and identification of active principles of an indigenous plant species *Glyptopetalum calocarpum* was attempted. Phytochemical investigation led to the
isolation of six compounds *viz.*, Lupenone, Stigmasterol, α- Lupene, Lupeol, β- amyrin and β- amyrin acetate.

These compounds were tested against Gram-positive and Gram-negative human pathogenic bacteria. It was found that compounds Lupenone, Stigmasterol and β- amyrin acetate showed bactericidal activities at tested concentrations. The compounds were also tested against pathogenic leptospiral strains belonging to ten serovars. Compounds, *viz.*, Lupenone and Stigmasterol showed leptocidial activity at tested concentrations. Identification of active principles and inhibitory effect on microorganisms, indicates that these compounds are potential candidates in the initial screening.

Lupenone, Stigmasterol, Lupeol, β- amyrin and β- amyrin acetate had negligible haemolytic activity. Therefore this indicates that these compounds are safe and could be of utility for undertaking further studies. The compound, α– Lupene showed high haemolytic activity.