

SUMMARY

The work described in this thesis is divided into two parts.

The first part is concerned with a survey of antibacterial properties of marine algae collected along the coasts of Colombo, Jaffna and Galle. Results indicate that the intensity of antibacterial property is related to the environment of the plant. Extracts of Enteromorpha sp. recorded very high antibacterial activity. Biotests with the extracts of Ulva reticulata also recorded high antibacterial activity.

The second part of this thesis is concerned with studies on Caulerpa racemosa. Chemical investigation of this plant resulted in the isolation of a sphingosine derivative. Sphingosine is a compound so far regarded as occurring only in mammalian nervous tissues. The plant was also screened for the presence of alkaloids. Spray reagents indicate alkaloids are present in this algae.