ANTIBIOTIC PRINCIPLES FROM SRI LANKAN MARINE ALGAE and CHEMICAL INVESTIGATION OF CAULERPA RACEMOSA

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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 occuring only in mammalian nervous tissues
The plant
was also screened for the presence of alkaloids
Spray reagents
Indicate alkaloids are present in this algae