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Chapter 3

Fungal Endosymbionts of Seaweeds

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Abstract Seaweeds are being studied for their role in supporting coastal marine life and nutrient cycling and for their bioactive metabolites. For a more complete understanding of seaweed communities, it is essential to obtain information about their interactions with various other components of their ecosystem. While interactions of seaweeds with herbivores such as fish and mesograzers and surface colonizers such as bacteria and microalgae are known, their interactions with marine and marine-derived fungi are little understood. This chapter highlights the need for investigations on the little-known ecological group of fungi, viz. the fungal endosymbionts, that have intimate associations with seaweeds.

3.1 Introduction

Seaweeds are constituents of highly productive ecosystems and play a major role in nutrient cycling and stabilizing the habitat (Mann 1973). While a lot of information has accumulated on the roles played by fungi in structuring and maintaining

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