Role of Benthic Algae in the Coral Reef Ecosystem: Introductory Remarks

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Past studies on benthic algae of tropical reefs have focused on the descriptive aspects. In recent years, there has been an increase in interdisciplinary studies whereby researchers in various disciplines have pooled their knowledge to better interpret certain aspects of reef function. Since the benthic algae are the primary producers on the reef and knowledge on this group is basic to other studies, emphasis has focused on the role of benthic algae in the coral reef ecosystem.

Thus, it seemed timely to bring together some of these researchers to discuss some of the important roles of benthic algae. The five authors who were invited to participate in this Symposium represent researchers with various backgrounds. The papers differ in content in the sense that some were written as review articles while others elaborated on their own research.

The energetic role of benthic algae is critically reviewed by Dr. Marsh. Dr. Wiebe, a microbial ecologist, discusses the role of blue-green algae in the nitrogen cycle of coral reefs and is based mainly on studies carried out in Enewetak. Coralline algae represents one of the most important frame-building organisms on reefs and is reviewed by Dr. Littler. Dr. Dahl discusses the role of the turf community as an important contributor to overall reef productivity. The role of marine macroalgae as pollution indicators is discussed by Dr. Thorhaug and is mainly based on her work with thermal effluents off Florida.

Additional works are needed on all topics presented here. It is our sincere hope that the papers presented will encourage further studies on the role of benthic algae on coral reefs.