

BASIC KNOWLEDGE IN MARINE SCIENCES

Edited by

Normawaty Mohammd-Noor



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Chapter 1 Algae

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Introduction

Algae are considered as a simple organism, ranging from unicellular to multicellular forms which reproduce sexually or asexually. The size of an alga can be as small as less than 1 μm and can reach up to a few meters. For example, the giant kelp which can be found in temperate areas can grow up to 65 m long. Most algae are autotrophic, but many are mixotrophic. Autotrophic means that the algae rely on photosynthetic activity to gain organic compound to support their growth. However, of late, there are many algae which have been recognized as mixotrophic algae. This means that the algae obtain the organic source from both ways which are photosynthetic activity and heterotrophic activity. This mode of feeding allows the algae to survive better in different kinds of environments.

Algae live in aquatic and terrestrial environment including in freshwater, marine and on certain substrates such as barks of trees and rocks. Terrestrial algae commonly live together with other organism such as fungi, for example lichen (Fig 1A). But majority of the algae are found in aquatic environments (Fig. 1B).