Subject: PG Elective course for Environmental Science/biological science/chemistry/Agriculture
Course: Biomass characterization
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Module Title : 11. Non-ligno Cellulosic Biomass(Algae) and microalgae cultivation

Id   : AB/NLCMA/11

Pre-requite: Algae, Algae biomass, Microalgae cultivation.

Objectives: To study

 ➤ About what are algae and its types

 ➤ Advantages of algae biomass and its cultivation

 ➤ Methods of microalgae cultivation

Key words: Algae biomass; microalgae; seaweeds; photobioreactor; raceway pond.

Outcome: After learning this module one can acquire overall knowledge about algae and its diversity, types of algae, algae as source for biomass and multiple types of algae cultivation methods including photobioreactor and open systems.

11.1. Introduction

What is the significance of Algae biomass? Algae are renewable non-lignin biomass rich of cellulose and other polysaccharides. What is algae? Algae are photosynthetic, autotrophic protists, primitive and simple plants. On the basis of size, they are two types. 1) microalgae and