Subject: PG Elective course for Environmental Science/biological science/chemistry/Agriculture
Course: Biomass characterization
Development Team

Course Coordinator: Dr.K. Arunkumar,Ph.D
Associate Professor& Head, Department of Plant Science, Central University of Kerala, Kasaragod-671320, Kerala, India

Content Writer: Dr.K. Arunkumar,Ph.D
Associate Professor& Head, Department of Plant Science, Central University of Kerala, Kasaragod--671320, Kerala, India

Content Reviewer: Prof. (Dr.)Muthukumar Muthusamy,Ph.D
Professor& Head
Department of Environmental Science, Central University of Kerala, Kasaragod--671320, Kerala, India

Module Title :16. Biomass characterisation (Techniques)-II

Id   : BC/BCPLA/16

Pre-requite: Biomass constituents,Organic compounds; Inorganic compounds;
Key words: Carbohydrates; Protein; cellulose; lipids;Lignin

Objectives: To estimate the major biochemical constituents of the biomass such as carbohydrates, cellulose,protein,lipids and lignin.

Outcome: At the end of this module, learners get practical experience to estimate the carbohydrates, cellulose, protein, lipids and lignin present in the biomass and also the principles of each biochemical estimations.

16. Introduction

Biomass mainly constitutes soluble and insoluble sugars like some monosugars, sucrose, cellulose, hemicelluloses as well as protein, lipids, lignin etc. These are major organic compoundswhich reflect the energy potential of the biomass. In this module we will estimate this major biochemical compounds of biomass by using the standard methods.