

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 :18. Proximate analysis in prepared biomass

Id : PA/VMFC/18

Objectives: Objectives of this module are to brief the principles and methods for analysing the proximate compositions from the prepared biomass.

Prerequisite: Biomass samples; biochemical constituent of biomass;organic and inorganic content of biomass.

Key words: Biomass moisture; fixed carbon content; ash; volatile matter.

Outcome: At the end of this module learners get information to analysis the various proximate compositions such as moisture content, volatile matter, ash content and fixed carbon content in the prepared biomass in detail.

18.1 Introduction

Proximate contents like moisture content, volatile matter, ash content and fixed carbon content have to be estimated to find out the energy potential of prepared biomass. The