Subject: PG Elective course for Environmental Science/biological science/chemistry/Agriculture

Course: Biomass characterization

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Module Title : 10. Lignin content in various biomass

Id :LC/LCVB/10

Pre-requisites: Lignin in plants, Lignin in biomass, Recalcitrance.

OBJECTIVE: To study the lignin content in various biomass

KEYWORDS: Biomass, lignin, hard wood, soft wood, lignin content

OUTCOME: At the end of this module, learners understand the lignin level in vareous plant biomasses that give idea on adopting the suitable method for biomass for vareous energy conversion.

In this module, we will discuss about lignin content in various biomass.

10.1 Lignin content in various biomass

Lignin is an important component in biomass. It binds between cellulose and hemicellulose components, giving plants to mechanical strength and resistance to microbial attack. Lignin is mainly accumulated in different plant tissues including tracheary elements, sclerenchyma cells, endodermal cells, seed coat and siliques cells. Endocarp of olive, eastern black walnut and coconut are containing high lignin content among the lignocellulosic