Characterization of microbial population inhabiting coconut husk retting area by mass spectrometry

Published on: Proceedings of the International and National Seminar: Coir Kerala, 1st - 5th February, 2015

Anil K.R., Director, National Coir Research & Management Institute Soumya T.V., Technical Officer, National Coir Research & Management Institute

Drishya.S, Research Associate, National Coir Research & Management Institute

Abstract

Coir fibre belongs to the group of hard structural fibers obtained from coconut husk. Chemically coir is composed of cellulose, lignin, pectin and hemicellulose, the percentage of which vary very much depending upon the age of the nut, from which the coir is derived. As lignin is the main constituent of coir, provides protection to cellulose from degradation as lignin itself is extremely resistant to chemical and biological degradation and only a few microorganisms are able to mineralize it During the retting process lignolytic, pectinolytic, cellulolytic and hemicellulolytic organisms altogether degrade the fibre binding material of the husk. Microbes that selectively remove lignin without loss of appreciable amount of cellulose are extremely attractive in bio softening. The aim of the study is an attempt to screen the bacterial population of coir retting localities and to environmental friendly bacterial population for lignin degradation. find out efficient