

**INVESTIGATION ON FUNGAL CONTAMINATION IN
EXPORT COIR CONSIGNMENTS**

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
In partial fulfillment of the requirements for the award of
Bachelor of Science in Export Agriculture

By
**WEERAPURA HERATHLAGE THARINDU
PRIYADARSHANA WEERAPURA**

**Export Agriculture Degree Programme
Faculty of Animal Science and Export Agriculture
Uva Wellassa University of Sri Lanka**

2017

ABSTRACT

Coir or coconut fiber is a natural hard fiber which extracted from the husk of coconut. It is a good medium for harboring and growth of large array of fungi species due to the association of moisture and the nutrients. They can include the growth of pathogens harmful to human, animals and plants. In the present study an attempt was made to identify the fungal species present as contaminants in the export coir consignments, which could violate the bio security of coir importing countries. Therefore, export market is always looking for coir products with minimum contaminants. Nine fungal species were isolated on PDA plates using direct culture method and dilution series under aseptic conditions. Isolated fungi were sub cultured and morphologically identified under the inverted compound microscope (Labomed TCM 400) and confirmed as *Mucor* spp., *Aspergillus* spp., *Fusarium* spp., *Colletotrichum* spp., *Geotrichum* spp., *Paradoxa* spp., *Rhizopus* spp., *Trichoderma* spp., and *Penicillium* spp. Among those, *Aspergillus* spp. and *Mucor* spp. were the most abundant fungal species encountered among the samples while *Paradoxa* spp., *Fusarium* spp., and *Trichoderma* spp., were recorded only in three samples. This study may help in planning treatment methods for microorganisms which are considered as quarantine important.

Key words: Coir, Fungi, Bio security, Contaminants