WOOD DECAYING AGARIC FUNGI AND THEIR PREFERENCE TO SOME SRI LANKAN TIMBER SPECIES.

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For satisfactory use of wood products in indoors and outdoors it is necessary to understand the agents and conditions that decay or deteriorate timber. Sri Lanka being a tropical Country, loss of wood due to fungal attack is relatively high. Basidiomycetes and Ascomycetes are the major wood destroying fungi, which cause three types of decay brown rot, white rot and soft rot.

Main objective of the study was to determine the susceptibility and resistance of different wood species to fungal attack in the natural environment. Large numbers of wood inhabiting fungi were found in different wood species observed in natural habitats, out of these species only lignicolous agarics were studied in the present study.

These agarics were collected from indoor and outdoor habitats and macroscopic features were studied. The microscopic examination followed, together with the documentation and photographs. The identification of the agarics was undertaken by using reliable keys, illustrations and suitable descriptions. 22 agarics spp were identified and out of them *Lentinus* spp were identified as brown rot fungi while *Armillaria mellea, Schizophyllum commune* and *Pleurotus* spp were identified as white rot fungi.

Schizophyllum commune was found on a large number of wood species followed by genus *Lentinus*. The appearance of mushroom fruiting bodies coincided with the rain. Fruiting bodies of *Pleurotus reticulates*, *Coprinus macropus* appeared during rainy seasons while *Schizophyllum commune* was found throughout the year. Most of the wood inhabiting agarics appeared as clumps.

Coprinus spp and *Marasmius* spp were found on old rotting logs and stumps, while *Schizophyllum commune*, *Lentinus* spp and *Cantharellus* spp were found on intermediately decayed tree trunks, stumps and building timbers. *Schizophyllum commune* was found on outer barks as well as sapwood and heartwood regions of logs and building timber. They appeared throughout the

year and fruiting bodies were fresh under moist conditions, dry and leathery in dry seasons. *Schizophyllum commune* was able to attack wide range of hardwood and softwood species.

Chloroxylone swietenia, Vitex altissima, Manilkara hexandra were found to be resistant to fungal attack; therefore could be categorized as durable timber species in terms of fungal decay while *Swietenia macrophylla, Artocarpus heterophyllus* and *Pericopsis mooniana* were less attacked by fungi. *Hevea brasiliensis, Mangifera indica* were mostly attacked by fungi and hence can be categorized as susceptible timber species. It is recommended to use preservative treatments for the effective utilization of these perishable timber species.