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Diversity of macrofungi in IFS Sam Popham arboretum and adjacent woodlands in Dambulla

S S Ediriweera*, R L C Wijesundera and C M Nanayakkara
Department of Plant Sciences, University of Colombo, Colombo 03

Sri Lanka being a tropical island with a warm and humid climate is likely to have a large number of different species of macrofungi. Most have not been surveyed and identified. Macrofungi includes species belonging to several different taxonomic groups and which are quite different in appearance, but having one common feature, the easily observed spore-bearing structures that form above or below ground. This study was carried out with the objective of identifying the diversity of macrofungi in woodlands in the Dambulla area.

Macrofungi were collected from IFS Sam Popham Arboretum and adjacent woodlands in Dambulla which is about 34.5 acres in extent. Identification was carried out using morphological and reproductive characters compared with published keys and guides.

A total of 50 species were identified based on morphological characters. Out of which two were from the phylum Ascomycota (*Xylaria polymorpha*, *Peziza* sp.) and the rest from the phylum Basidiomycota. Most commonly found specimens were from the order polyporales which was 36% out of the total collection. Polypores such as *Microporus xanthopus*, *Irpex* sp. and *Hexagonia tenuis* were frequently observed within the area. Out of the total collection about 24% was from the order Agaricales which were more delicate, most of them disintegrated in less than one day. *Mycena* sp. was the most frequently encountered specimen from the order Agaricales. In addition the collection included 6% Boletes and 8% jelly fungi such as species of *Tremella, Calocera* and *Auricularia*. Distinct types of macrofungi *Geastrum* sp., *Cyathus* sp., *Phallus* sp. and *Ramaria* sp. were also observed. Ten percent of the collection was mycorrhizal types which is an important relationship among fungi and plant roots.

The collection also included the commonly known edible macrofungi *Schizophyllum commune* and *Auricularia* sp. and medicinally important *Ganoderma* sp. and *Phellinus* sp.

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suranise@yahoo.com Tel: 077 3157639