

A TAXONOMIC SURVEY OF MACROFUNGI OF KARURA FOREST,
WITH PARTICULAR REFERENCE TO THE GASTEROMYCETES //

BY

ADUNGAH, JOHN ANGEAS

(UNIVERSITY OF NAIROBI)

UNIVERSITY OF NAIROBI
LIBRARY
P. O. Box 30197
NAIROBI

A Thesis submitted in partial fulfilment for the degree of
Master of Science at the College of Biological & Physical
Sciences, Faculty of Science, University of Nairobi.

AUGUST, 1993

UNIVERSITY OF NAIROBI LIBRARY



0104539 2

A B S T R A C T

Specimens of the macrofungi were collected at two forest types at Karura namely, mixed indigenous and exotic forests. The spores of the collected specimens were examined by SEM and their surface configurations described and used together with other characters for purposes of classification. Keys for the determination of orders, families, genera and species have been prepared. Scanning Electron Microscope has been used in the study of spore and cephalial surfaces, where possible, to eliminate the ambiguity, normally common when studying the structures with light microscope.

The present study reveals that of the 13 species recorded, 3, viz; Geastrum coronatus, Scleroderma geaster and Cyathus olla are records new to Kenya; 8, viz; Dictyophora duplicatus, Geastrum saccatum, G. velutinum, G. fimbriatum, G. triplex, Calvatia gardneri, Scleroderma flavidum and Cyathus poeppigii, are records new to Karura forest, while only two, Lycoperdon fuligineum and G. pectinatum had previously been recorded. Cyathus nigro-albus, previously reported from the same locality was not found during this study.

The results indicate that while all the 13 species recorded are represented in the indigenous forest type, only three are represented in the Cupressus sp. forest type, and none is represented in both Eucalyptus sp. and the Araucaria sp. forest types. This may suggest that gasteromycete species population are threatened from existence, when indigenous forest types are replaced by exotic forests.