Preliminary observations on the species composition and distribution of indigenous wild mushrooms in the Lake Victoria basin wetlands, Musoma, Tanzania.

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Abstract

Harvesting of wild mushrooms in the Lake Victoria basin for household food and inter-household trade is widespread and mushrooms contribute strongly to household food security. In spite of the importance of mushrooms to household food security the spatial and temporal distribution and ecological conditions influencing mushroom growth and availability in the Lake Victoria basin are yet to be documented adequately to enable development of plans for their conservation. The objective of this study was to document the composition, seasonal and spatial distribution of the mushrooms of the Lake Victoria basin wetlands and their habitats. Preliminary surveys identified a total of nine species most of which are of the genus Termitomyces. Generally most of the mushrooms were associated with termite mounds thus growing on clay soils and soils associated with low organic matter. Some species grow solely on termite mounds while others can grow a distance from a termite mound but associated with underground termite nests. Majority of the mushrooms appear during the rain season and are equally available during the short and long rains. This suggests that most species will grow well throughout the year whenever moisture level in the substrate is adequate irrespective of the season. Some of the species especially the Polypores (Ganoderma sp.) grow on dead wood as well as on living trees, infecting living trees through wounds. Most of the species grow in acidic (pH 6.5) substrates with a pH range between 5 and 6.8 though one species (Termitomyces clypeatus) was observed to grow on slightly alkaline conditions. Generally the substrate for most species had low organic carbon ranging from 3% to slightly above 4%. More detailed study of the ecology of the most important mushrooms in the Lake Victoria basin wetlands is important as a basis for their management and domestication.

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