



Hierarchical Clustering of Wild Edible Mushrooms used by Tribes based on Ecological Characteristics

N.K. Shahina, K. Madhusudhanan and T.A. Ferose Babu¹

Department of Botany & Research Centre, St. Albert's College, Ernakulam-682 018, India

¹Naval Physical and Oceanographic Laboratory, Cochin-682 002, India

E-mail: shahinaferose@gmail.com

Abstract: The study on classification of wild edible mushrooms consumed by six tribal communities of Kerala, India was done through hierarchical agglomerative cluster analysis. The study incorporated extensive field visits, documentation of ethnic knowledge, collection and identification of wild edible mushrooms from Attappady and Wayanad areas of Kerala. Hierarchical cluster analysis of thirty seven wild edible mushrooms species gave a realistic grouping based on ecological characteristics. The most distinguishing character that separate mushrooms in to two divergent groups was substance on which it grows; ie soil or wood. Mushrooms growing in soil were successively classified further in to individual groups based on soil type, association with trees or termites and according to growing pattern. The distinction of lignicolous mushrooms were based on the place where it sprout i.e. whether on dead wood or on roots/stumps of trees.

Keywords: Cluster analysis, Diversity, Ecology, Ethnic knowledge, Wild edible mushrooms