

ABSTRACT

In this thesis diversity index has been carried out on plants data collected from the Botanic Garden of GC University, Lahore. A group is said to have high species diversity if many equally or nearly equally abundant species are present. High species diversity indicates a high complex community for a greater variety of species. Global biodiversity can be expressed as the total number of species currently living on earth. Methodology consists of Shannon's and Simpson's diversity indices and cluster analysis of the plants. These indices have been obtained for the plots on the basis of plant families, plant species, fruiting plants and regenerating plants. Almost all the plots are equally abundant with species except fruiting plants which are less diverse. Cluster analysis technique has also been carried out. Distance levels based upon fruiting plants, regenerating plants, trees and shrubs have also been calculated using cluster analysis technique on computer software STATISTICA and SPSS.