

Characterization of the Forest Types of the University of Ife Campus.

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Abstract:

The rainforest in the University of Ife was characterized by species enumeration and girth measurements, and by attributes derived from these measurements in 17 sample plots. The seventeen plots were located around one of the three hills on the campus, Hill 1, a general uniformity in species composition was observed for all the plots studied with the exception of those on the hill top where *Brachystegia eurycoma* was found to be dominant and, at times slopes which differed in species composition. The Shannon-Weiner species diversity index for all the plots was in the range 1.88-3.36. Dominance by *Manihot glaziovii* and *Funtumia elastics* were, however, observed in two plots.

Plots ordination based on species showed plots on the hill top and slopes to be floristically different from those on the flat and gentle surfaces, while the species attributes ordination based on the plots showed that species diversity index, and basal area of species were more important in characterizing the sample plots.

The stem girth distribution was generally found in the 11-20cm girth class with the exception of three plots. Two of the plots have high number of big trees in the > 120cm girth class while one has the highest number of stems in the 21-30cm girth class. These observations were discussed in relation to past land use in the area.

The nature of succession of these plots was assessed by a modification of Horn's (1975) Markovian change. The application of this model was, however, found not to be satisfactory in assessing the succession of the sampled plots because it showed that regrowth species such as *Microdesmis puberula* and *Napoleons vogelii* will form the next generation canopy.

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