



Comparative Study on Diversity of Trees and Shrubs in Protected Areas - Vansda National Park and Ratanmahal Sanctuary of Gujarat State, India

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Abstract: This study deals with comparative floral inventory in two Protected Areas (PAs)-Vansda National Park (VNP) and Ratanmahal Sanctuary (RS) of Gujarat state. During the study, transect and quadrat methods have been applied to achieve qualitative and quantitative information of flora in which the quadrat size varied for the trees and shrubs, respectively. The analysis of the plant inventory study shows that RS harbors a total of 99 trees and 32 shrubs species whereas VNP harbors a total of 93 trees and 21 shrubs species. The plant inventory study also revealed that VNP has less species diversity than RS. However, in quadrat study, more diversity of tree species has been recorded in VNP than RS. Furthermore, Simpson and Shannon indices were calculated to know sustainability of plant species which shows that VNP has more tree diversity than RS whereas the shrub species showed decline of its richness and evenness. The similarity and dissimilarity indices of trees and shrubs have been calculated between two PAs. The similarity has been found to be 75 % and 64 % for trees and shrubs, respectively and dissimilarity have been found to be 25 % and 36 % for trees and shrubs, respectively.

Keywords: Comparative, Diversity, Trees, Shrubs, VNP, RS
