

**Research Article**

## **Phyto diversity study of Nayagarh Forest Division, Odisha**

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### **ABSTRACT**

The Eastern Ghat offers better opportunity to link plant community structure and environmental drivers through their tropical mountain forests. However, the biotic and abiotic factors lead to rapid degradation and species loss. Systematic inventorization, documentation and conservation of these biological resources are necessary. Therefore, this study aims to document the diversity of vascular plants and their economic uses in the four protected reserve areas of Nayagarh Forest Division of Odisha. A total of 182 genera and 83 families comprising 364 vascular plant species were recorded. Of these, the most dominant family was Fabaceae (47 species), followed by Acanthaceae (21 species), Poaceae (19 species), Rubiaceae (18 species), Apocynaceae (17 species), Malvaceae (16 species), Asteraceae & Euphorbiaceae (11 each), and Amaranthaceae (9 species), among others. Trees were the dominant lifeforms possessing (122 species 33%), followed by herbs (108 plant species, 29%), shrubs (98 species, 27%), and climbers (36 species, 10%). In utility categories, medicinal plants were showing highest number of species (314), followed by economical (293), food (131) and timber (44) species, respectively. The documentation of diversity and economic uses of the vascular plants of the Nayagarh Forest Division will aid conservation biologists and policy makers in preserving the priceless plant resources and their sustainable utilization.

**Keywords:** Floristic diversity, Nayagarh Forest Division, Ecological services, Anthropogenic disturbances, biodiversity conservation

