

Ethanobotanically important tree species and their distribution in Pusphagiri Wildlife Sanctuary, Central Western Ghats, Karnataka

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Forests are the most important and valuable medicinal plant resource and also repositories of terrestrial medicinal plants and diversity. The resurgence of public interest in plant-based medicine coupled with rapid expansion of pharmaceutical industries necessitated resources assessment of medicinal plants for conservation in the forest. Six 1-ha permanent sample plots were installed in Pusphagiri Wildlife Sanctuary, central Western Ghats, Karnataka, to appraise the diversity and distribution of tree species, which are used as ethno-medicine. A total of 3738 trees were enumerated, which represents 126 species. Among the total species, 54 species were documented as having ethno-medicinal properties and used in traditional system of medicines like Siddha, Ayurveda, Unani and Folk. For preparation of medicine, 45 species were used in Siddha, 38 species in Ayurveda and 9 species in Unani. Among the different plant parts, the stem-barks (28.5%) and fruits (23.8%) were frequently used for the treatment of diseases. Most of the medicinal trees were used for rheumatism, diarrhoea and leprosy. Of these 33 tree species were distributed narrowly (occurring in < 3 plots), predominant species among this group includes *Aporosa lindleyana* (75 trees), *Terminalia paniculata* (30), *Macaranga peltata* (17) and remaining species with <10 individuals. Twelve species showed a wider distribution (occurring in >4 plots), species such as *Vateria indica*, *Myristica dactyloides*, *Knema attenuata* and *Dipterocarpus indicus* representing with >100 individuals. This study generated baseline data on population status of medicinally important tree species in the central Western Ghats and further monitoring of these plots will provide information required for conservation of species in the native environment.

KEY WORDS:

endangered tree species, endemic, distribution, dipterocarp forest, *in-situ* conservation.