



DIVERSE FLORA SPECIES AND FUTURE CONCERNS OF ‘SADDLE PEAK NATIONAL PARK’ ANDAMAN AND NICOBAR ISLANDS

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ABSTRACT

To understand the biodiversity and environmental conditions of a place, it is very important to have correct knowledge of the vegetation and flora of the place. In the future, detailed, up-to-date and accurate information on the flora will be useful for research and utilization of the area. It is also important to know the flora of such areas. This information is necessary for the protection and proper management of biodiversity. Many protected areas should be designated to ensure the safety of all major ecosystems, reduce habitat damage and prevent biodiversity loss. There are few studies on the tree flora of protected areas in India. So, the present study is carried out in Saddle Peak National Park to account its flora diversity.

Keyword: *Saddle Peak National Park, Flora, Andaman Tropical Evergreen Forest, Southern Hill-Top Tropical Evergreen Forest, Andaman Semi Evergreen Forest, Andaman Moist Deciduous Forest, Littoral Forest, Mangrove Forest.*

INTRODUCTION

The “Saddle Peak National Park” is one of the six national parks in Andaman and Nicobar Islands that were formed by volcanic rock of basaltic to andesitic composition covering an area of 36 sq km in between 13° 10’ 00” to 13° 12’ 00” North latitude and 93° 00’ to 93° 02’ 00” East longitude. The area of this national park comprises the highest mountain peak of Andaman & Nicobar Islands. The terrain of the park is highly undulating; elevation varies from sea level to 732 meter with a number of perennial & seasonal streams passing through. Due to altitudinal variations almost all types of forests that exist in Andaman & Nicobar Islands are found within the confines of the National Park.

Flora

The undulating terrain of the National park area exhibits altitudinal variations in the forest vegetation from the plains to the hills. Almost all sub types of forest of Andaman & Nicobar Island are found within the extent of the national Park. Forest types include Andaman Tropical Evergreen Forest, Southern Hill-Top Tropical Evergreen Forest, Andaman Semi Evergreen Forest, Andaman Moist Deciduous Forest, Littoral Forest and Mangrove Forest or Tidal Swamp Forest.

1. Andaman Tropical Evergreen Forest

They are not as luxuriant as the giant evergreen forests, particularly in high altitude. Density and size of the giant top storey is very irregular and incomplete, but otherwise very similar in composition. There are fewer species in the top canopy deciduous species being rather more frequent.



It is distributed mostly on the hill tops. The locality factors responsible for their distribution are rainfall of over 3000mm, well distributed and a sufficiently deep soil with good internal drainage. The hill top soil is very poor in fertility; it is rocky due to constant soil erosion in rain. The vegetation at the top of the park area appeared to be dwarf in comparison with the same species of plants in the low altitude of the park. The high wind and rain are the major causes for this variation of the appearance than in the normal growth of the plants.

2. Southern Hill-Top Tropical Evergreen Forest

The forest type is more or less inferior edition of the tropical evergreen, hardly more than 10m high in extreme cases. This develops on the exposed upper slopes and tops of hills and some time on steep slopes.

Lower down the local factors exposure to high wind and generally less favorable conditions of soil and climate than the main climate form. Annual rainfall is usually high over 3500 mm and humidity is high during the period of low rainfall.

3. Andaman Semi Evergreen Forest

A luxuriant type of forest, with many giant trees which includes both deciduous and evergreen species, often intimately mixed but frequently in group; particularly the evergreen climbers are found here which are often heavy.

4. Andaman Moist Deciduous Forest

There is typically, a somewhat irregular top storey of predominantly deciduous trees, about 40m or more in height. Many of the trees have very large girth and are heavily buttressed. Beneath these trees, is rather definite second storey of numerous species including some evergreen species? Though most area is deciduous, there is a fairly complete shrubby evergreen under storey with patches of bamboos. Climbers are heavy and often include canes. The forest type is found throughout the Andaman Islands covering nearly half the total forest area.

The underlying rock is chiefly hard, coarse grained sandstones, with bands of shale and conglomerate and the soil which is often shallow is a sandy or clayey loam, light yellow in colour. This type is confined to the hilly ground and does not extend much above 100 meter elevation, where Tropical Evergreen Forest displaces it. This occurs on flat alluvial ground where the low Evergreen forest is in possession.

5. Littoral Forest

Scattered smaller evergreen trees occur with fewer deciduous trees and these form the dominant canopy of the vegetation. Sea Mahua is prominent in the Andaman littoral forest associated with, Terminaliacattappa, Terminaliaprovera, pongamiapinnata, Monindacitrifolia, callophylluminophyllum.

6. Mangrove Forest (Tidal Swamp Forest)

Mangroves are salt tolerant forest ecosystems, found mainly in tropical and sub tropical inter-tidal regions. They are trees or shrubs specially adapted to survive in intertidal areas, with periodic inundation and varying degree of salinity and that have the common trait of growing in shallow and muddy salt water or brackish waters, especially along quiet shorelines and in estuaries. In another way, mangroves are the tidal forests of coastal wetlands, existing in the inter-tidal zones of sheltered shores estuaries, tidal creeks, backwaters, lagoons, marshes and mud- flats of the topical



and sub-tropical region of the world. The word ‘mangroves’ is used to refer to the plants and also to the forest community. These ecosystems are also otherwise called as tidal forests, oceanic rain forests or coastal woodlands.

CONCLUSION

Despite the presence of good stands of commercially valuable trees in these unique forests, stocking is variable. With an ever-increasing human population on these islands, pressure on forests for domestic needs, forest damage in the form of selective felling, and forest encroachment have all increased significantly in recent years. Because of the high tree diversity, particularly the unique dipterocarp diversity and *Myristica* association of the Andaman giant evergreen forests, effective conservation of the Andaman group of islands, which is one of India's centres of plant diversity and endemism as well as one of the eight global biodiversity hotspots, is imminent. There is an urgent need to protect and preserve these vital and vulnerable island forests.

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