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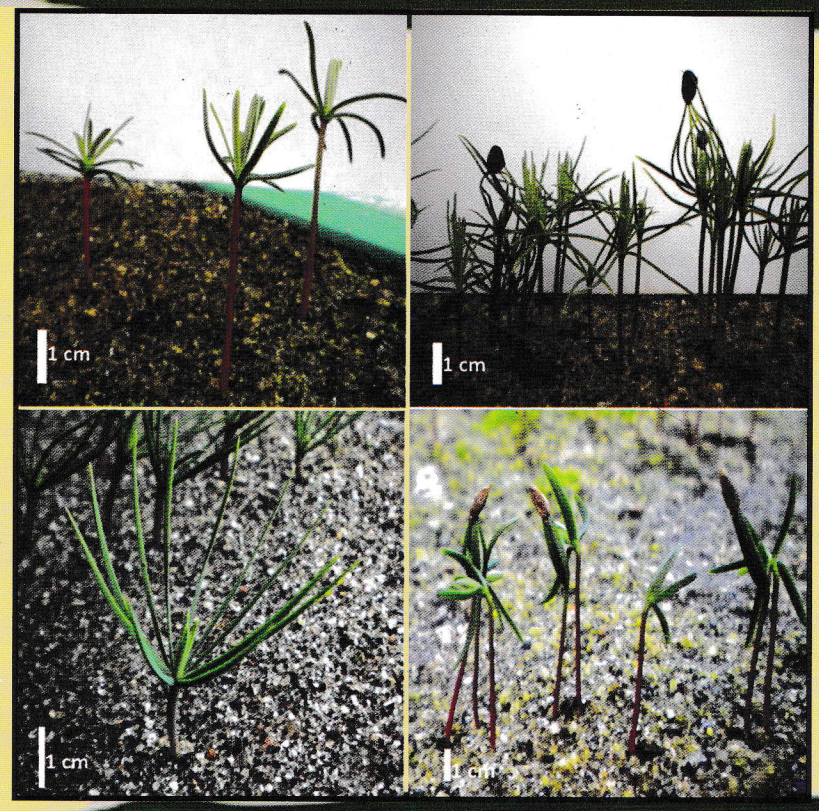

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Editorial

A BRIEF FOCUS ON BIODIVERSITY HOTSPOTS

The concept of "hotspot" was first developed by Myers (1988) which was subsequently recognised and emphasised as *biodiversity hotspot*. The Biodiversity Hotspots are the treasures of endemic and threatened flora and fauna around the world. These are specialised biogeographic regions containing significant and astounding biodiversity represented by both plants and animals, and which are facing considerable threats and extinctions due to manifold environmental and anthropogenic factors. According to Norman Myers (1988 & 1990), these are earth's biologically richest and most endangered terrestrial ecoregions of the world. To identify a region as hotspot, it should qualify to meet two important criteria : " it must contain at least 0.5% or 1,500 of the world's 3,00000 species of vascular plants as endemics, and it has to have lost at least 70% of its primary vegetation (Myers et al., 2000)." Around the world there are about 35 biodiversity hotspots till date including *hottest hotspots* of the world. The biodiversity hotspots have been considered as conservation priorities and accordingly, enormous efforts are being made in recent years for effective management of these hotspots with funding from various global sources. In spite of that only a small percentage of the total land area within the domain of biodiversity hotspots is now protected. Some of the international conservation initiatives are engaged to work in many ways to conserve biodiversity hotspots which include Critical Ecosystem Partnership Fund (CEPF), the World Wide Fund for Nature (WWF), Plant life International, the National Geographic Society, etc. However, although we are conscious about the importance and significant value of the hotspots regarding their role in conservations, there have been some criticisms also. According to some experts, the hotspots do not represent adequately the other forms of species richness, other taxa like fungi except vascular plants. Even these do not protect ecosystem services or consider phylogenetic diversity. However, hotspots are no doubt the practical means of an approach for direct conservation of plants and animals.

Myers et al.(2000) recognised nine leading hotspots which represent 30% of all plants and 25% of all species in four vertebrate groups. The leading hotspots are more enriched with endemic species than other hotspots. The *hottest hotspots* are recognized based on *five key factors* i.e. number of endemics and endemic species/ area ratios both for plants and vertebrates, and habitat loss. Some of them are Madagascar, and Indian Ocean Islands, Philippines, Sundaland, Brazil's Atlantic Forest, Carribbean, Indo-Burma, Western Ghats and Sri Lanka, and Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya (Myers et al., 2000).

India is one of the richest countries of the world in terms of biodiversity resources. These natural resources are vast and varied both for plants and animals. People at various corners of the globe are extracting biodiversity resources for their need at an alarming rate. We should know that every organism in earth has an inherent right to coexist with other organisms in nature, but we do not care for that. We are no exception from other countries.

Out of the 35 hotspots distributed globally, we have in India **four** hotspots, i.e. **Himalaya** (includes the entire Indian Himalayan region), **Indo-Burma** (includes entire north-eastern India, except Assam and Andaman group of Islands), **Sundalands** (includes Nicobar group of islands), and **Western Ghats and Sri Lanka** (includes entire Western Ghats and Sri Lanka). The Himalaya hotspot or more specifically, the Eastern Himalaya hotspot represents an approximate 10,000 species of plants out of which one-third are endemic. The Indo-Burma region contains about 13,500 plant species of which over half of them are endemic. Sundaland is a region in South East Asia which include the western part of the Indo-Malayan archipelago. This hotspot is one of the richest hotspots on earth representing 25,000 species of vascular plants with high endemism; about 60% of

these are endemic. India is represented by **Nicobar islands.** In Western Ghats and Sri Lanka, there are about 600 species of vascular plants, much of the world's spices have their origin in this region.

We have the past experience of mass extinction of species which eliminated a huge number of valuable species from the face of earth. The ongoing destruction of habitats, effects of climate change, habitat fragmentation, habitat degradation, overexploitation of species for human needs, etc. are going on at accelerating rate. Considering the worst effect of biodiversity loss, we are planning and trying to control and manage the same for posterity of mankind for years to come. In this context, to maintain, manage and protect our existing hotspots and create more such hotspots in future will definitely offer the extended scope for species survival on earth and keeping this in mind we must guard against all kinds of misdeeds towards conservation of biodiversity.

N. D. Paria