**Current scenario in distribution pattern, ecology and conservation of tropical lichen along the Western Ghats a biodiversity hotspot region of India**

**Vinayaka K.S\***

Plant Biology lab., Dept. of Botany, SVS College, Vidyagiri, Bantwal-574211, Dakshina Kannada, Karnataka, India

[\*Email:ks.vinayaka@gmail.com](mailto:*Email-ks.vinayaka@gmail.com)

Tropical forests often referred to as one of the most special diverse terrestrial ecosystem. Tropical lichens are referred as successful and diversified group of symbiotic group of organisms. Tropical forests exhibit the highest number of species distribution and having largest proportion of endemics per unit area for many biological groups making them important hotspots for biodiversity worldwide. The Western Ghats stretches from Gujarat to Kanyakumari and it is one among the biodiversity hot spot regions in the world. A total of 1170 lichens belonging to 189 genera and 50 families were recorded from Western Ghats of India. The Western Ghats has maximum number of crustose lichens represented by 820 taxa followed by foliose and fruticose groups with 285 and 65 species respectively. Cyanolichens were luxuriantly grown in the understory of shola forests. Among different states Tamil Nadu has the highest number of lichens with 760 taxa followed by Karnataka, Kerala, Maharashtra, Goa and Gujarat with 485, 457, 288, 118 and 39 taxa respectively. Graphidaceous, Parmelioid, Physcioid lichens dominate the region they were represent with 42%, 36%, and 14% respectively. Western Ghats with high percentage of endemism (28%), which is highest for any lichenogeographic regions in India and 78% of them, are Neoendemic to that region. The lichens growth is influenced by substrates and microclimate. The evergreen forest in the Western Ghats dominated by *Leptogium*, *Coccocarpia*, *Parmotrema*, and *Heterodermia* species. The Corticolous lichens represented about 40%, saxicolous lichens represented by 26% and they are having species like *Dirinaria applanata*, *Endocarpon* , *Parmotrema grayanum*, *Leptogium pichneum* while,terricolous lichens represented about 18% they includes *Cladonia* and *Cetraria* genera. We will discuss potential factors influencing the distribution pattern and ecology of lichen along the different gradients of Western Ghats of India.

**Key Words**: Western Ghats, Foliose lichens, Graphidaceae, *Trebouxia*, Tropics