

Habitat Ecology, Association and Niche Specificity Of Selected Threatened And Endemic Tree Species In The Western Ghats And Impact Of Kerala Flood 2018

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The present study “Habitat Ecology, Association and Niche Specificity of the Selected Threatened and Endemic Tree Species in the Western Ghats and Impact of Kerala Flood 2018” brought out distribution, status, community composition and structure, population trend and impact of Flood and landslide due to last year heavy rainfall in Kerala (Kerala flood 2018) on 13 important species reported IUCN threatened category form Western Ghats. The niche specificity of all these species through assessment of community composition, population characteristics and vertical profiling (Bachan 2010) is the unique output of the work. This along with assessment of population reduction due to flood 2018 shall provide an overall information on the IUCN status of each species. This study recommend status of *Diospyros crumenata* of Ebenaceae endemic species with very low distribution to include under IUCN threatened category. Species such as *Diospyros paniculata*, *Dipterocarpus indicus*, *Dysoxylum malabaricum*, *Aporosa*

cardiosperma, *Myristica beddomei*, *Psydrax dicoccos*, *Pterocarpus marsupium* and *Pterospermum reticulatum* lost almost 4.3 hectare form the habitat. About 0.2-hectare loss is estimated for ‘endangered’ of *Kingiodendron pinnatum* and *Hopea ponga*, habitat. About 0.8 hectare is lost from the habitat of ecorestoration, an important aspect where in depth ecological information are essential. Present study has contributed an in depth understanding of association, habitat, niche & impact of flood on selected threatened species in Western Ghats.

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