

**IUCN Red List Assessment and Niche modelling for Potential Conservation Locations of *Goniothalamus wightii* Hook. f. & Thomson (Annonaceae) Endemic to Western Ghats**

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**Abstract**

*Goniothalamus wightii* Hook. f. & Thomson is a little-known shrub or small tree species endemic to Western Ghats. The genus *Goniothalamus* comprises 130 species across the globe and 13 in India. The IUCN threatened status of the species is analyzed here based on scrutinized occurrence data using the criteria B1 and B2, Extent of occurrence (EOO) and Area of Occupancy (AOO) using GeoCAT facility. The present reassessment of the taxon *Goniothalamus wightii* Hook. f. & Thomson for IUCN indicate it as Endangered (EN). Ecological Niche Modelling has been used to predict potential habitats across the Western Ghats. This has helped to prioritize major threat factors as conversion of primary forest into plantations, agriculture expansion and river valley projects. These criteria were again correlated with standardized spatial vegetation and land use information using QGIS to fine tune the actual potential conservation and Eco-restoration sites. This can help in incorporation of the data into particular conservation and management plans of the predicted and actual distribution regions. This can also contribute to extract population information contributing further to the IUCN status assessment and niche based Eco-restoration efforts.