
Population Ecology of *Syzygium travancoricum* Gamble (Myrtaceae): An Endemic and Endangered tree species of Western Ghats, India

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Résumé

The study on population ecology of *Syzygium travancoricum* was conducted in Nadugani located in Nilgiri hills of Western Ghats of India. From this economically important tree mainly used for timber and as anti-diabetic agent, more than 32 phytochemical compounds were identified in the methanolic leaf and bark extracts. This species is under heavy risk of extinction in southern Western Ghats due to the degradation for agriculture land, formation of tea estates, road expansion, forage by primates, insects and microbial infestation are being key threats. This species is also included under "Critically Endangered C2a" category by IUCN. During this study, populations of *S. travancoricum* were also reported at agricultural land, tea estate, road side and natural forest areas and found in heavily disturbed site. The studies on population ecology revealed that major percentage of populations of *S. travancoricum* were eradicated for road expansion and the current status of populations are extremely small and narrow. The numbers of mature trees is very limited with poor regeneration potential by seeds. Consequently, all the populations of *S. travancoricum* in the entire study area should be preserved immediately. Tissue culture has been proved to be a promising technique for the conservation and large scale multiplication of *S. travancoricum* and the same could be adopted to save the tree species from extinction. Awareness can be created about the species and recovery programme among the people could be the best way to protect this species from local extinction.

Mots-Clés: Nilgiris, conservation, Habitat degradation, extinction.

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