

OVER-DOMINANCE OF *BAMBUSA BAMBOS* ALTERS STRUCTURE AND COMPOSITION OF NATIVE FORESTS: A STUDY FROM TROPICAL MOIST EVERGREEN FORESTS IN SRI LANKA

**M.P.T. Wijewickrama¹, W.A.I.P. Karunaratne², D.S.A. Wijesundara³
and H.M.S.P. Madawala^{4*}**

¹Postgraduate Institute of Science, Peradeniya, Sri Lanka

²Department of Zoology, Faculty of Science, University of Peradeniya, Peradeniya, Sri Lanka

³National Institute of Fundamental Studies, Hantana Road, Kandy, Sri Lanka

⁴Department of Botany, Faculty of Science, University of Peradeniya, Peradeniya, Sri Lanka

*sumedham@pdn.ac.lk

Far-reaching consequences of the over-dominance of native species have drawn less attention from the scientists. Some native bamboos have shown to expand their populations altering the structure and composition of native forests. *Bambusa bambos* (L.) Voss. is a native showing over-dominance in Dry and Intermediate Zone forests in Sri Lanka. The present study evaluated the impacts of *Bambusa bambos* in a tropical moist evergreen forest (TMEF) near Moragahakanda in Sri Lanka. Bamboo-dominated (BD) and non-bamboo (NB) plots were established in three forest patches viz., Galboda (GAL), Moragolla (MOR) and Maragamuwa (MAR). A vegetation survey (> 2 m in height) was conducted along three transects with six 100 m² quadrats placed at distances from the forest edge (0 m) towards the forest interior (20, 40, 60, 80 and 100 m). All individuals were identified and their numbers were recorded. Completely or partially dead individuals were also noted. The culm density of *B. bambos* decreased towards the forest interior at GAL. Of 127 species (69 trees, 28 shrubs and 30 woody climbers), 72 species (57%) were common to both forest types, while 28 and 16% were exclusive in BD and NB, respectively. At MAR, a higher density and richness of liana species were recorded in NB than in BD, indicating site-specific differences. Light-loving, early successional species were more abundant and frequent in BD forests while shade-loving, late successional species were more prevalent in NB. The mortality of forest species was significantly greater in BD than in NB. Overall results indicate that the over-dominance of *B. bambos* has altered the structure and composition of TMEFs significantly, possibly due to higher mortality incidences. The study highlights the importance of speedy action to mitigate the negative impacts caused by the over-dominance of *B. bambos* in natural forests in Sri Lanka.

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