

Occupation of Nutmeg in Kandyan Homegardens: Is it a Blessing or Threat to its' Biodiversity and Performing Ecosystem Services

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Kandyan homegardens is a well-established and culturally important land use system found in the mid country wet zone especially in and around the Kandy district. This study aims to investigate the occupation of Nutmeg in Kandyan homegardens and their impact on the biodiversity by comparing the species diversity of homegardens that are having and not having Nutmeg trees. The study evaluated a total of 48 homegardens in Kandy district which are having and not having Nutmeg by estimating relative height, relative DBH, relative density and relative frequency for calculating Relative Importance Value (RIV) for plant species. The results showed that RIV value for nutmeg is 14.54 in the homegardens that have selected for study as nutmeg is present in them. RIV values of coconut, hawarinuga, clove, aricanut, mahogany, mango, avocado and rambutan are higher in homegardens that do not have nutmeg trees. When Nutmeg shows some dominance, RIV of the other species have decreased substantially. It is observed that Nutmeg suppresses and eliminates other tree species from the homegarden as it grows bigger. People place a lot of care on Nutmeg as they have emerged as one of the main species providing cash to the farmers and hence they don't thin or prune them.

Keywords: Kandyan homegardens, Nutmeg, Relative importance value, Species diversity

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