Effects of *Myroxylon balsamum* on Regeneration of Native Species in Udawatta Kele Forest Reserve, Sri Lanka

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Invasive species negatively affect the regeneration of native species, degrade catchment areas, cause species extinction and alter ecosystem functions world over by reproducing their next generation more rapidly than the native species**.** The wet zone of Sri Lanka along with the Western Ghats of India has been considered as one of the world**'**s biodiversity hotspots**.** However alien invasive species are spreading rapidly in Sri Lanka and in many cases they negatively affect the biodiversity in Sri Lankan forest reserves**.** Thus, it is crucial to determine their effect on regeneration of native species in order to derive control measures**.** Udawatta Kele Forest Reserve **(**UKFR**)** which is located in Kandy district, Central Province of Sri Lanka is mainly composed of plantation and secondary forests has been invaded by an alien invasive species, *Myroxylon balsamum***.** *Myroxylon balsamum* **(**L**.)** Harms **(**Family**:** Fabaceae**)** has been introduced to Sri Lanka as a shade tree in plantations and along the road sides**.** Although there are only a few mature adult plants in the forest canopy layer, it is rapidly invading some parts of the UKFR**.** This study was conducted to investigate the effect of the *M. balsamum* on regeneration of native woody species, at UKFR using seedling emergence plots**.** Eighty**-**one **(**2 m × 2 m**)** plots were established in non**-**invaded, less invaded and highly invaded areas in the reserve and they were observed for seedling emergence during the wet season and dry season to determine the regeneration potential of the forest**.** A total of seedlings of woody plant species were recorded during the study**. For that first those seedlings have to be identified and it was done by using their leaf morphology, leaf arrangement and other plant morphological characters.** They were represented by families, genera and species**. To compare non, less and highly invaded sites anova analysis was conducted and to understand about the diversity in each site, Shannon Weiner index, Evenness index and relative abundance were calculated.** According to the study native plant seedling emergence, species richness, diversity and evenness are highest in non**-**invaded areas while lowest in highly invaded areas**. accoding to the results** it can be concluded that *M. balsamum* negatively affect the seedling emergence of native woody species at UKFR**.**

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