

## Abundance of Invasive Alien Plants beside the nature trail of the Udawattakele Forest Reserve

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Invasive Alien Species (IAS) are considered as a key driver responsible for forest degradation. They alter species composition, change structure of the communities and impair ecosystem functions and services. Therefore a better understanding of the abundance of plant invaders with regard to density, frequency, cover and age structure estimations is vital to prioritize species specific control programs in forest management. Here we report the abundance of Invasive Alien Plants beside the nature trail at Udawattakele Forest Reserve and identify the most dominant plant invaders that threaten the ecosystem. Nature trail, that serve as a foot path for visitors and villagers was considered as the highly disturbed area of the interior of the forest. Systematic random sampling was conducted during November 2013 to February 2014, along the nature trail using 22 sampling plots (3m x 6m) established within 200m intervals. Adult trees ( $\geq 20$ cm girth) and saplings ( $< 20$ cm girth) were identified and counted, DBH was measured. Herbaceous cover within plots was also recorded. Frequency distribution of tree and sapling of woody species and the age structure distribution of the most common invader was determined. Important Value Index (IVI) was calculated using relative density, relative frequency and relative cover. *Myroxylon balsamum* (KattaKumanchal) and *Alstonia macrophylla* (HavariNuga) were the woody alien invaders recorded at Udawttekele forest reserve while *Ageratina riparia* (Mist Flower) *Mikania cordata* (Vatu Palu) and *Panicum maximum* (Gini Thana) were alien invasive herbs that occupied the floor of the forest. The highest IVI value for woody species was reported by *Sweitenia macrophylla*. An exceptional high frequency of young saplings ( $< 20$ cm) of *Myroxylon balsamum* was observed. This species was ranked 5<sup>th</sup> by the IVI. Hence manual removal of seedlings and saplings of *Myroxylon balsamum* is recommended to control its further spread in the coming years.