

H6 [37]

CONSERVATION OF THREATEN SPECIES IN THE NORTHERN PROVINCE OF SRI LANKA: BIODIVERSITY, ADAPTATION, FOOD SECURITY AND LIVELIHOODS

K. Jeyavanan¹, S. Sivachandran¹, T. Sivananthawerl² and D.K.N.G. Pushpakumara²

¹Department of Agronomy, Faculty of Agriculture, University of Jaffna, Sri Lanka ²Department of Crop Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka

ABSTRACT

Sri Lanka riches in biological diversity and endemism identified as one of the top 34 biological hotspots in the world. Biodiversity is getting eroded in a rapid pace at present and it is well recognized that the current loss of biodiversity is a result of both direct and indirect influences, such as habitat loss and fragmentation, deforestation, encroachment, excess use of agro-chemicals, climate change impacts and resettlements. On identifying the gravity and the importance of this issue, the biodiversity secretariat of the Ministry has taken steps to conserve threatened plant and animal species through In-situ and Ex-situ conservation as per the biodiversity conservation action plan and the updated red data list of threatened fauna and flora in Sri Lanka. From the literatures, it can be seen that scientific research made on threatened species was mostly related to pharmacological activity in elsewhere of the country. However, in Northern Province of Sri Lanka, there is less evidence on its distribution, species, crop phenology and other phenotypic characters. The aim of the study is to identify the threatened species in the Northern Province of Sri Lanka options for biodiversity, adaptation, food security and livelihood. The study was carried out in homegardens of Jaffna district and, reserve and plantations forest of Mullaitivu district in Sri Lanka. Result of the study revealed that there were most significant and threaten species recorded in both homegarden's and reserved forest's in the Northern Region of Sri Lanka and these were identified as least concerned (LC), near threatened (NT), vulnerable (VU), endangered (ET) and critically endangered (CR). Among them, some trees were also recorded as highly medicinal important and rarely distributed in these areas. Hence, it is urgently needed to conserve these threaten species through scientific studies, public private partnership, conservation and management of critical habitats, policy/legal and institutional support, environmental education and awareness in the Northern Regions of Sri Lanka.

Keywords: Conservation, Red Listed Species, Northern Province, Sri Lanka