



THE PRESENT STATUS OF DIVERSITY OF POTENTIAL MEDICINAL PLANTS OF VELLAIBMALAI FOREST IN MULLAITIVU DISTRICT

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The value of medicinal plants is not only to the pharmaceutical industry but also these plants are essential part of the natural eco system. They play a vital role in maintaining the ecological balance, in preserving soil fertility, and in sustaining the health of wild and domesticated fauna. The objective of the study was to determine the flora of VellaiMalai forest a dry mixed evergreen forest in Mullaitivu District. The forest was surveyed for medicinal plants over a period of three months (August 2014 – October 2014). Using a belt transect method. Interview was conducted with traditional physicians practicing around the surveyed area, to gather ethno-botanical information on medicinal plant flora of the forest. A total of 270 medicinal plants species belonging to 64 families were recorded during the study. This comprises of perennials (74.07%), annual (18.5%), and biennial (7.4%) poisonous plants which was only 8% were also recorded at vellaimalai forest. Out of 270 plants, 20 were used for diabetic mellitus, 10 in rheumatic diseases, 15 in treating skin diseases, and 20 for respiratory diseases. Further grouping based on morphology revealed herbs(40), trees(140), shrubs(52), climbers(24), Lianas(05), cacti(02), creepers(02), hole parasites(02). Based on the usage of plant parts the plant species are grouped as whole plant(30), leaves(45), roots(60), flowers(12), Buds(12), young pods(04), dry fruits(14), bark(35), rhizomes(06), gums(08), galls(02), root barks(21), and weeds(11). Out of the 270 plant species 40 were spinaches. It was observed that the species are collected for medicinal purposes by the Siddha Ayurvedic physicians surrounding the forest. *Solanum xanthrocarpum*, *Salvadora persica*, and *Andrographis paniculata* were recorded as economically useful medicinal plants in the surveyed area. Among the medicinal plants species recorded, 12 species were identified as native species, one endemic species, and one critically endangered species (*Rauwolfia serpentina*). In addition, medicinal plants recommended in **Pararaja Sekaram**(1929), a Jaffna Siddha text, for Siddha medicine, namely *Azima tetracantha*, *Malletus philippensis*, *Erythroxylum monogynum*, *Scutia indica*, *Trichosanthes palmate*, *Hugonia mystax*, *Capparis spinasa* were also found in vellaimalai forest.

Keywords: *VellaiMalai forest, Diversity, Medicinal plants*