Current States of Medicinal Plants Diversity at Ponnalai, Jaffna

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Abstract

In Sri Lanka, Siddha Medicine is one of the oldest medical systems. Medicinal plants play a crucial role in this system. The objective of the study is to identify the medicinal plants in Ponnalai, Jaffna for in situ and ex situ conservation. This area is a coastal region (Neidhal nilam). This area map was used to locate and count the number of medicinal plants. The medicinal plants in this area were calculated using the Belt Transect Method. The Herbarium, Unit of Siddha Medicine, University of Jaffna was used to authenticate all identified specimens collected from the field for further clarification. The research was conducted from October 2021 to December 2021. A total of 90 medicinal plants species belonging to 36 families were identified and Fabaceae family being particularly noteworthy. Based on morphology herbs (33.33%), shrubs (26.67%), climbers (18.89%), trees (16.67%) and cactus (4.44%). This comprises of annuals (36.67%), biennials (14.44%) and perennials (48.89%). According to the parts used medicine leaves (n=57), fruits (n=20), seeds (n=14), roots (n=42), stem (n=09), bark (n=17), young pot (n=06), root bark (n=05), gum (n=04), tuber (n=02), flower (n=14), whole plant (n=20), milky juice (n=05) and toddy (n=02). Among these medicinal plants, there were poisons plants (n=04), mangrove associates plants (n=07), edible fruits (n=09) and edible medicinal plants (n=20). Aloe vera was found abundantly in this region. Considering the diseases, among the identified medicinal plants 15 plants were used to treat Kheel vayu (Arthritis), 10 for Kapha noi (respiratory diseases), 16 for Sarma noi (Skin diseases) and 08 for Mathunegam (Diabetes mellitus). This area is extremely rich in medicinal plants which has high medicinal value due to the presence of natural compost. The diversity of costal medicinal plant is being threatened due to the unsustainable harvesting practices and growing commercial demand for these plants in local and international markets. To preserve coastal medicinal plants in their natural habitats, effective conservation measures must be implemented.

Keywords: Medicinal plants, Ponnalai, Conservation