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Diversity and Distribution of Medicinal Plants in Vedukkunarimalai, Located at Nedunkeny, Northern Province of Sri Lanka

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Abstract

Medicinal plants are the primary source of Indigenous healthcare system in Sri Lanka. This study aimed to document and analysed the diversity and distribution of medicinal plants in *Vedukkunarimalai*, a forest area situated in *Nedunkeny*, at Northern Province of Sri Lanka. The forest area was identified using map and also with the help of local public. To identify medicinal plants in the forest area, systematic sampling method was done using belt transect method for the duration of three months. Medicinal plants are identified based on phytomorphology. Altogether there are 104 medicinal plants species belonging to forty-two families are identified and documented. Leguminosae, Euphorbiaceae and Malvaceae are the dominant families. Trees are the most dominant life form with 47%, herbs with 25%, shrubs with 17% and there are only 10% of climbers. 62 perennial medicinal plants are identified. Leaves, root, flowers, tubers, whole plant, fruits, seeds bark are the most commonly used plant parts and gum, resin, galls are the most commonly used secretory materials. The highest number of identified medicinal plants are used to treat gastrointestinal tract disorders (26%), then for skin (22%) and then for respiratory disorders (20%) and for skeletal system disorder, urinary disorders, fever, Diabetic mellitus with 10%, 8%, 8%, 2% respectively. Only one medicinal plant is identified for the treatment in gynecology disorder and one for the snake bite. In Siddha Medicine, property of a plant depends on *suva* (taste), *veerya* (potency) and *vipaka* (post digestive effect of ingested substance). Among the identified medicinal plants, most of them have bitter taste (44%), seconded with astringent taste (24%). Sweet, pungent and sour taste with 13%, 8%, 7% respectively. And only 18% of the identified medicinal plants have cold *veerya* & sweet *vipaka* and the other medicinal plants have hot potency and pungent *vipaka*. An alternative species for *Wrightia tinctoria*, has a dense diversity in *vedukkunarimalai* which is a specific dye separating plant. Identified medicinal plants from this study area indicates the abundant availability of natural resources in our forest. *Vedukkunarimalai* has rich diversity of medicinal plants so that it should be declared as a protective zone by the authority to conserve the natural resource.

Keywords: Diversity, Medicinal plants, Vedukkunarimalai, Nedunkeny