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Different Habitats, Distribution Range and Diversity of *Strobilanthes* Species in Sri Lanka

Renuka N.R.M.[1*], Wijesundara D.S.A.[2]., Bandaranayake P.C.G.[3]

[1]Department of Wildlife Conservation, Sri Lanka
[2]National Institute of Fundamental Studies, Sri Lanka
[3]Agriculture Biotechnology center, University of Peradeniya, Peradeniya, Sri Lanka
**nilanthi.dwc@gmail.com.*

Abstract

Strobilanthes belongs to Family Acanthaceae, first described by Blume in 1826 from specimens collected in West Java. This is one of the largest genera in the flora of Sri Lanka and most interesting for its diversified habits, gregarious occurrence and elegant flowering. Approximately 450 *Strobilanthes* species are distributed in worldwide. Although a tentative list of 30 species of *Strobilanthes* occurring in Sri Lanka was provided by Wood in 1998 no updated report has subsequently been published. According to this study 33 species are currently known from Sri Lanka including one new species and out of them 27 species are endemic. Extensive plant explorations were conducted across the entire distribution range of the genus *Strobilanthes* in Sri Lanka covering 21 administrative districts from September 2005 to July 2020. The species of genus *Strobilanthes* grow from 100 m up to 2,800 m, in a very wide range of different habitats such as, dense aggregations along steep rocky slopes, along margins of grasslands, dense aggregations along slopes at lower altitudes, in plains, thick rainforest undergrowth, shaded places in ravines, open rocky cliffs, on the exposed rocks, along stream banks, evergreen forest margins, primary forests, scrambling shrub growing through other plants, moist rocks along streams. *S. gardneriana*, critically endangered possibly extinct species could be found from Hantana at 1,330 m elevation in 2020 after 1927 and critically endangered species, *S. rhytisperma* could also be found from Gendalala in 2019. Species distributions are wider with increasing altitude. Some species were not found in their type locality, such as *Strobilanthes laxa*, *Strobilanthes stenodonbut* but they were found at other locations. The extended distributional record for many species of *Strobilanthes* could be found. The principle threats in the study area are urbanisation, cultivation, tourism activities, fire, overgrasing, pollution, road and dam constructions. In near future, plant diversity may decline and threatened species may disappear in the area if necessary conservation measures are not taken.

Keywords: Gregarious, Altitudes, Undergrowth, Locality, Exploration