Taxonomic study on *Albizzia lebbek* and its substitute plants used in Ayurvedic preparations in Sri Lanka

Consumption of herbal medicines is widespread and increasingly used nowadays. The main supply of herbal materials for ayurvedic preparations is from the wild, which causes inherent problems; for instance, misidentification, phenotypic variability, extract variability and contamination. *Albizzia lebbek* (Sin- suriyamara, San- mahari, Hin- siris) is a South Asian medicinal plant, widely cultivated and naturalized in tropical and subtropical regions. It is extensively used in Ayurvedic preparations in India whereas many substitute plants are used in Sri Lanka due to the restricted distribution. This has caused ambiguity in utilizing accurate plant material in Sri Lanka. The present study focused to explore the use of *Albizzia lebbek* and its substitutes in Ayurvedic preparations with reference to their morphometric similarity and geographical distribution.

A survey carried out to determine the use of substitute plants through a sample survey questionnaire revealed that three plants in the subfamily Mimosoideae; *Albizzia odoratissima* (Sin- huriya mara), *Adenanthera pavonina* (Sin- madatiya) and *Samanea saman* (Sin- pare mara) were common and widespread, *Albizzia odoratissima* being predominantly used. The randomly selected sample population of one hundred included traditional Ayurvedic practitioners, Ayurvedic physicians, drug dealers/ suppliers, drug manufacturers and the general public. Further, *Albizzia lebbek* was recorded only in a few locations in Sri Lanka and use of this plant in Ayurvedic preparations is not reported. A comparative morphometric analysis of these plants was done based on seedling, leaf, bark, floral, pod and seed characters and multi-access key was constructed using DELTA (Description Language for Taxonomy) package which could serve as a pictorial guide for accurate identification.

**Keywords**: *Albizzia lebbek*, Ayurvedic preparations, Substitute plants, Morphometric analysis