

MORPHOLOGICAL VARIATIONS OF *Terminalia chebula* IN SRI LANKA

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Medicinal plants have been considered as a valuable and economical source of unique phytoconstituents, which are used extensively in the development of drugs against various diseases. *Terminalia chebula* (Aralu) belongs to the family Combretaceae, is a well-known medicinal plant in Asian countries including Sri Lanka. In Sri Lanka, *chebula* occurs naturally in dry areas of the low-country up to 833 m altitude. It is gregarious and abundant in certain areas such as; Bibile, Mahiyanganaya, Lunugala, Gal-oya and Batticalo. Many studies have been conducted regarding medicinal values of *T. chebula*, while only a few studies have focused on the morphological properties. Morphological variation could effect on chemical properties as well as medicinal value of a plant, therefore it is important to study these details. Owing to that this research was conducted to assess the morphological variation of *T. chebula*. Samples were collected from natural and planted trees in different areas of Sri Lanka. Leaf characters, flower characters, fruit characters and bark characters were assessed using a cluster analysis. Results revealed that, there was a significant morphological variation among *T. chebula* populations in Sri Lanka. Five distinct groups were found among the study populations and these variations did not relate with the geographic characters. Further studies on genetic variation of *T. chebula* are suggested to confirm these results. This study will be helpful to streamline the studies on chemical properties and medicinal value of *T. chebula*.

Key words: Cluster analysis, Medicinal plants, Morphological variation, *Terminalia chebula*