

Morphological Characterization and Distribution of *Lagenandra praetermissa* de Wit & Nicolson

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Lagenandra praetermissa is an aquatic endemic species distributed throughout the Wet and Intermediate zones along the rivers, streams and marshy habitats. According to National Red List 2012 the plant is listed under the “Least Concern” category. The recent field observations indicated a reduction in subpopulations and variations in vegetative morphology. Hence the present study was focused on distribution and morphological diversity of *L. praetermissa* which would contribute to its conservation. Field collections were made covering Wet, Dry and the Intermediate zones of the country. At least three plants were studied in detail from each population for coding morphological characters. Twenty-three qualitative and quantitative vegetative characters of individuals from 34 different subpopulations were coded into a data matrix and a morphometric analysis was carried out using the PAST software. Distribution of the subpopulations were recorded using GPS locations. Further, the soil pH and threats were also recorded for each location. Although *L. praetermissa* was recorded as occurring in the Kandy and Kalutara districts during the revision of the family in 1986, according to the present study they were also recorded from Badulla, Kegalle, Kurunegala, Matara, Rathnapura and Monaragala districts which extends its distribution to the dry zone. Even they exhibit a wider distribution, most of these subpopulations occur outside protected areas in polluted disturbed streams and river banks. The soil pH ranged from 4.7-6.3 which is acidic indicating the polluted nature of the habitats. The cluster analysis identified two phenetic groups, separating at a 32 distance units, while these two groups further divided into sub-clusters. The petiole length and the leaf laminar length were the most contributing characters. The identification of two different phenetic groups of *L. praetermissa* indicates its morphological diversity which needs to be further studied using molecular data to identify whether these belong to distinct groups.

Keywords: Araceae, Conservation, Endemic aquatics, morphometric analysis

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