Biometric analysis of pollen from anthropogenic indicator taxa, Cymbopogon nardus (Mana) and Imperata cylindrica (Illuk) from the flora of Sri Lanka

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## **Abstract**

The most common taxa of two species of (Poaceae), i.e., Illuk (*Imperata cylindrica*) and Mana (*Cymbopogon nardus*) pollen biometric studies were carried out using LM. These two species produce relatively large size pollen and annulus diameter under the environments with high human impact including clearing forests, burning of woodlands and number of other human influences. Pollen grain diameter and annulus diameter of some cereal species e.g., *Eleusine coracana, Setaria italica*, and *Avena sativa* appear to have overlapped with the same characteristics from wild grass species. It seems that palynological identification of these cereal species from wild grass species is problematic only in biometric analysis. Pollen biometric data can be employed to document the evolution of human-induced environments in archaeological contexts in Sri Lanka and these biometric records are more likely to provide a support to earlier pollen records of very early stage of anthropogenic activities traced from the Horton Plains, central Sri Lanka (Premathilake 2003, 2006 and 2012).