

**Genetic diversity in a population of *Dendrocalamus giganteus* Wall.
ex Munro (giant bamboo) in the Royal Botanic Gardens in Peradeniya,
Sri Lanka.**

Abstract: Random Amplified Polymorphic DNA (RAPD) was used to study the genetic diversity within a population comprising of 23 clumps of *Dendrocalamus giganteus* Wall. ex Munro in the Royal Botanic Gardens, Peradeniya. The species introduced as a single plant to Sri Lanka in 1856 showed a relatively low genetic diversity of 0.045 ± 0.004 . The population was uniform phenotypically indicating that it was mainly raised by clonal propagation. Only seven clumps in this population flowered in recent years and seed set was rare. The presence of genetically identical groups of clumps with no polymorphism indicated clones that were possible survivors of plants established originally, 150 years ago.

Keywords: Bamboo, *Dendrocalamus giganteus*, dendrogram, genetic distance, RAPD, Royal Botanic Gardens, Sri Lanka.
