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Identification of Efficient Propagation Method for *Dendrocalamus latiflorus* in Sri Lanka**Palihakkara I.R.^{1*}, Weerasingha C.M.¹, Schulz N.B.²**¹*Department of Crop Science, Faculty of Agriculture, University of Ruhuna, Sri Lanka*²*Department of Agri-Business Development, United Nations Industrial Development Organization, Galle Road, Colombo 03***irpalihakkara@gmail.com***Abstract**

Dendrocalamus latiflorus is one of the most popular edible bamboo species in the world and recently introduced to Sri Lanka. One of the main concerns of cultivation is to get extra income by selling the edible shoots which has high market value. Lack of availability of suitable planting materials is a key issue in Sri Lanka. Therefore, identification of effective low cost propagation method is very important. This study was planned to select suitable vegetative propagation methods such as culm cuttings (lower part, middle part, tender upper part), and different layering methods (air layering, ground layering). There were two different experimental designs were used for culm cutting method and layering method separately. Subsoil (pH 5.4) was used as the medium for both air layering and planting of cuttings. Number of days to sprouting, number of shoots per node, shooting percentage and rooting percentage were recorded in culm cutting method. Number of days to rooting, rooting percentage, number of days to sprouting, number of sprouts per node and sprouting percentage were recorded as parameters of the layering method. Each recorded data finally analysed with statistical method of ANOVA and Duncan's multiple range test. According to the results there was significant different in number of days to sprouting and sprouting percentage of culm cutting type, and there is a significant different in air layering and ground layering method. Finally with the analysed data and the referenced data, air layering method consider as most effective propagation method through tested propagation method.

Keywords: Culm cutting, Air layering, Rooting percentage, Shooting percentage