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**Rapid propagation of *Syzygium zeylanicum* and *Memecylon umbellatum*, native tree species with high landscape potential in Sri Lanka**

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**Abstract**

The climate in Sri Lanka is ideal for growing a wide range of ornamental plants, which are widely used in the landscape industry for both aesthetic and functional purposes. Despite the presence of many native plants with high potential ornamental values, a large number of exotic plants are currently favored for landscaping. Given the difficulty of seed propagation and the scarcity of successful propagation techniques for commercialization, this study aims to develop a successful propagation technique for two selected ornamental native trees: *Syzygium zeylanicum* (Yakadamaran) and *Memecylon umbellatum* (Korakaha) which are having a high ornamental value. In the present study, softwood and semi hardwood cuttings were treated with two different Plant Growth Regulators (PGR) at a rate of 8000 ppm (IBA and IAA) along with non-treated control and established in sand : coir dust (1:1), sand : coir dust : topsoil (1:1:1) media. The experiment was carried out in three factor factorial Completely Randomized Design (CRD) with 10 replications comprising 12 treatment combinations inside a propagator under a net house. The study was conducted separately for each species as two different experiments. After a 3-month period following planting, the number of shoots, number of roots, and survival percentage were recorded. It was found that the interaction effect of cutting type, potting media, and hormone type was significant in terms of the number of shoots and roots ( $p < 0.05$ ), but not for survival percentage in *S. zeylanicum*. Moreover, interaction effect of only potting media and hormone type is significant ( $p < 0.05$ ) on number of shoots and roots in *M. umbellatum*. Overall, semi hard wood in the sand: coir dust: topsoil medium treated with IAA is recommended as it provided a well-developed quality root system along with a moderately high survival rate in propagation of both species.

**Keywords:** Landscape, *Memecylon umbellatum*, Native, Propagation, *Syzygium zeylanicum*

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