

**SUITABILITY OF GELRITE, AGAR, ISUBGOL, THEIR BLENDS AND A LIQUID STATIC MEDIA IN *IN VITRO* PROPAGATION OF *Anubias barteri* var. *Nana***

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With the increase of aquarium keeping in worldwide, the ornamental aquatic plant industry of Sri Lanka has been developing rapidly and requires a continuous supply of high quality plants on a large scale. Although this demand could easily achieve by micro-propagation, high cost of production is one of the main barrier. Media cost plays an important role in production due to high cost of solidifying agents compared to other media ingredients. This study aims on finding a low cost medium using Gelrite, Agar, Isubgol, their blends and a liquid static medium on *in vitro* propagation of aquatic ornamental plant, *Anubias barteri* var. *nana*. Multiplication and rooting of the experimental plant was carried out using Murashige and Skoogbasal medium. Parameters such as number of shoots having more than 5 leaves, multiplication rate, root number per plant and total root length per plant were taken to evaluate efficiency of different media. No significant differences were observed among treatments ( $p > 0.05$ ) for multiplication rate and number of shoots having more than 5 leaves per explant. However, the best multiplication rate (3.68) and the highest number of shoots having more than 5 leaves (8.167) were recorded in static liquid medium. Significant differences among treatments ( $p > 0.05$ ) were observed in root number and total root length per plant. The highest total root length was observed in liquid static medium (33.54 cm), while the highest root number per plant (33.41) was observed in Isubgol-Agar blend (7.5 gL<sup>-1</sup> Isubgol + 3.5 gL<sup>-1</sup> Agar). However liquid static medium gave 13.81 number of roots per plant. However, apart from root number per plant, liquid static medium recorded highest results for all other investigated parameters. In conclusion, liquid static media can be used in *in vitro* propagation of *Anubias barteri* var. *nana* as low cost medium.

**Keywords:** Agar, *Anubias barteri* var. *nana*, Gelrite, Isubgol, Liquid static media