

## **An Effect of Organic Supplements on Stimulating Growth of Vanda and Mokara Seedlings in Tissue Culture**

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**Abstract :** This study aimed to investigate effect of different organic supplements on growth of Vanda and Mokara seedlings. Vanda and Mokara seedlings approximately 0.2 and 0.3 cm. in height were sub-cultured onto VW supplemented with 150 ml/L coconut water, 100 g/L potato extract, 100 g/L 'Gros Michel' banana (AAA group) and 100 g/L 'Namwa' banana (ABB group). The explants were sub-cultured onto the same medium every month for 3 months. The best medium increased stem height to 0.52 and 0.44 Cm. in Vanda and Mokara respectively was supplemented with coconut water. The maximum fresh weight of Vanda (0.59 g) was found on medium supplemented with 'Gros Michel' banana while Mokara cultured on medium supplemented with Potato extract had the maximum fresh weight (0.27 g) and number of roots (5.20 roots/shoot) statistically different ( $p \leq 0.05$ ) to other treatments. However, Vanda cultured on medium supplemented with 'Namwa' banana had the maximum number of roots (3.80 roots/shoot). Our results suggested that growth of different orchid genera was responded diversely to different organic supplements.

**Keywords :** orchid, in vitro propagation, fresh weight, plant height

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