

**USE OF GROWTH REGULATORS TO INDUCE
SHOOT PRODUCTION OF ANTHURIUM
(*Anthurium andraeanum*) VARIETIES M30 AND M36**

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ABSTRACT

Anthurium andraeanum is an important cut flower species and encompasses both domestic as well as international trade in Sri Lanka. Expansion programs within the country are impaired due to the absence of efficient propagation methods. Hence, the present study was conducted at RARDC, Makandura in 2013 aiming to identify the most efficient combination of growth regulators GA₃ and BAP on lateral shoot induction of *Anthurium*. Two varieties (M30 and M36) of *Anthurium* with potential value as export cut flower were selected for the study. Experiment was arranged in complete randomized design under 85% shade level. In order to evaluate the effect of growth regulators, number of shoots initiated per plant and the length of each shoot (cm) were recorded weekly during the time of treatment application. Seven different combinations of GA₃ and BAP concentrations were used as the treatments. Topped plants were treated four foliar runoff sprays of GA₃ on consecutive weeks and GA₃ with BAP on alternative weeks. The results revealed that, GA₃ and BAP alternative applications were better than sole GA₃ consecutive applications. Alternative application of 500 ppm of GA₃ with 500 ppm of BAP was adjusted to be the best treatment, followed by 500 ppm of GA₃ with 250 ppm of BAP as a close equal. The highest mean shoot yield of 5-6 shoot per plant was recorded in topped plants with the alternatively application of 500 ppm of GA₃ with 500 ppm of BAP. But according to the cost analysis for growth regulators, more cost effective recommendation would be the alternative spraying of 500 ppm GA₃ twice and 250 ppm BAP twice individually at weekly interval on topped plants.

Key words: *Anthurium andraeanum*, topping, GA₃, BAP, Rapid multiplication