

MOST SUITABLE FERTILIZER MIXTURE FOR VEGETATIVE GROWTH OF ANTHURIUM (*Anthurium andreanum*)

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Anthuriums are tropical plants of great beauty and are grown either for showy cut flowers or for attractive foliage. It is one of the priority crops that plays a significant role in the national economy. As a growing constraint, there is no specific fertilizer recommendation for Anthurium cultivation in Sri Lankan conditions. In this context, a study was conducted in National Botanic Gardens, Peradeniya, with an objective of finding the most suitable fertilizer mixture for vegetative growth of *Anthurium andreanum*. The experiment design was Completely Randomized Design. For this experiment, micro propagated plantlets of *Baroque* variety having an initial height of 2.5 cm were used as planting material and sand : coir dust 1:1 mixture was used as the growing media. There were eleven treatments, including six commercial fertilizer mixtures and their combinations. Effectiveness of those treatments was determined by measuring the leaf area, leaf petiole length (once a month), plant height and fresh weight (initially and at the end of the experiment). Significant differences of all the parameters were recorded at 5% probability level. Leaf area, leaf petiole length and fresh weight of the Anthurium plants have significantly ($p < 0.05$) increased with alternate foliar application of high nitrogen fertilizer (N: P: K 30:10:10 + trace elements) and balanced fertilizer (N: P: K-20:20:20). Application of a mixture of $(\text{NH}_4)_2\text{SO}_4$, TSP, MOP (10:4:3) showed poor growth of leaf area, petiole length and fresh weight. Plant height did not increase significantly, with any fertilizer treatment. Alternate foliar application of high nitrogen fertilizer (N: P: K 30:10:10 + trace elements) and balanced fertilizer (N: P: K - 20:20:20) is the best fertilizer mixtures for *A. andreanum* cultivation.

Key words: *Anthurium andreanum*, Fertilizer, Foliar application, Vegetative growth