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## **Research** Paper

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## Effect of growing media and organic nutrition on vegetative growth in Anthurium plants (*Anthurium andreanum* cv. TROPICAL)

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**ABSTRACT :** An investigation was carried out at the Department of Pomology and Floriculture, College of Agriculture, Vellayani during 2003 – 2005 with a view to standardize the growing media and organic nutrient dosage for young Anthurium plants. The treatment consisted of thirty six combinations of four media treatments namely sand + leaf compost ( $M_1$ ), sand + coir pith compost ( $M_2$ ), granite + leaf compost ( $M_3$ ) and granite + coir pith compost ( $M_4$ ) and nine nutrients treatments including three cow dung treatment (2, 4 and 6 g l<sup>-1</sup> extract) and three organic manure mix (25, 50 and 75 g) treatments. Among the media treatments, sand + coir pith compost ( $M_2$ ) was found to produce the maximum plant height(41.66cm),leaf area(574.48cm<sup>2</sup>) and petiole length at the fourth week after emergence (16.29cm)and shortest phyllachron(39.94 days),highest fresh and dry weight of leaves(5.14 and 1.2 g, respectively) and their N and K content(1.61and 2.23, respectively)at 225 days after planting. Vegetative growth enhancement was also obtained with 4 g l<sup>-1</sup> and 6 g l<sup>-1</sup> fresh cow dung extract. Plants receiving 25 g organic manure mix recorded greater plant height and leaf area during the latter stages of growth.

KEY WORDS : Anthurium, media, nutrients

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nthuriums are herbaceous perennials of the tropics and belong to the largest genus of the Aroid family. Because of their spectacular blooms, elegance, variety of colour and long shelf life, Anthuriums attract a vast majority of growers. Among the various species, *Anthurium andreanum* Lind and *Anthurium scherzerianum* Schott. are the two important species cultivated extensively for the production of flowers.

In India, the major Anthurium growing states are Kerala, Karnataka and Maharashtra. Anthurium cultivation on a commercial basis is gaining popularity in Kerala because of its high demand in the foreign market. Kerala is identified as one of the best places for growing Anthurium because of the congenial climatic conditions. Several studies have been conducted to evaluate the effect of media and nutrition on the growth of Anthurium plants. The effect of various substrates such as coconut coir pieces (CCP), brick pieces (BP) and wood charcoal (WC) alone or in combination, on the vegetative growth of *Anthurium andreanum* cv. TROPICAL RED was evaluated by Pawar *et al.* (2002). For the cultivar Temptation, NPK @ 20:20:40 at 0.25 per cent along with BA 500 ppm produced the maximum number of leaves/plant and high leaf area (Anand and Jawaharlal, 2003). However, the cultivation and management practices adopted are varying and yet to be standardized.

The present work was thus taken up with a view to standardize growing media and organic nutrient dosage for young Anthurium plants, for enhancing their early vegetative growth which will further lead to the earlier production of flowers having desirable floral attributes of size and quality.

## **RESEARCH METHODS**

The present investigation was carried out for standardizing growing media and organic nutrient dosage for young Anthurium plants. The experiment was conducted during 2003-2005 at the Department of Pomology and