EFFECT OF DIFFERENT CONCENTRATIONS OF DIFFERENT LIQUID FERTILIZERS ON ACCLIMATIZATION OF WEAKLY GROWN IN VITRO PLANTLETS OF ANTHURIUM (Anthurium andraeanum L.). var. 'Lalani'



BY 17 OCT 2018 TO THE STATE OF THE STATE OF

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2018

ABSTRACT

An experiment was conducted to evaluate the effects of different concentrations of different liquid fertilizers on the acclimatization of weakly grown in vitro Anthurium plantlets at the Royal Botanic Gardens, Peradeniya from June to August 2018. Treatments were defined as T1 (1.11g/L Albert's solution applied as 1st application and 0.55g/L Albert's solution applied as 2nd application), T2 (1.11g/L Albert's solution applied in both application), T3 (0.55g/L Albert's solution applied in both application), T4 (0.625g/L N:P:K (30:10:10) solution applied as 1st application and 0.3125g/L N:P:K (30:10:10) solution applied as 2nd application), T5 (0.625g/L N:P:K (30:10:10) solution applied in both application), T6 (0.3125g/L N:P:K (30:10:10) solution applied in both application), T7 (1.333g/L N:P:K (20:20:20) solution applied as 1st application and 0.666g/L N:P:K (20:20:20) solution applied as 2nd application), T8 (1.333g/L N:P:K (20:20:20) solution applied in both application), T9 (0.666g/L N:P:K (20:20:20) solution applied in both application), T10 - Sterile water (control). First application was done at the time of transplanting and second application was done two weeks after transplanting. The experimental design was Completely Randomized Design with ten replicates for each treatment. Other agronomic practices were followed uniformly for all the treatments. Plant height, Number of roots, Number of leaves and Length of petiole were measured at four weeks after transplanting. Analysis of Variance was performed to determine significant difference among treatments (p < 0.05). Results revealed that better growth performances viz. increase in plant height, leaf number and roots number and length of petiole were observed in plantlets grown at T2. It could be due to optimum

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