

**DETERMINATION OF A SUITABLE
GROWING MEDIUM AND A COMMERCIAL
FERTILIZER FOR *Echinodorus parviflorus*
'TROPICA' IN THE NURSERY LEVEL**

AMARAKOONGE KUMUDU

**Aquatic Resources Technology Degree Programme
Faculty of Animal Science and Export Agriculture**

Uva Wellassa University

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Abstract

This research was carried out in aquatic plant section at, National Aquaculture Development Authority (NAQDA) Ornamental Fish Breeding and Training center in Rambadagalle, Sri Lanka to investigate the effect of growing medium and fertilizer on the increasing of growth of *Echinodorus parviflorus* 'Tropica' variety was used for experiment. A study was undertaken to determine the optimum conditions for growth of *Echinodorus parviflorus* 'Tropica' by using four different fertilizer ratios mixed with medium N: P: K (5:3:2, 4:2:1, 3:1:1, 20:20:20). Three types of growing medium boggy soil Bricks particles, top soil and sand were used as the growing medium for nursery bed arrangement with high humidity condition. *Echinodorus parviflorus* 'Tropica' is a commercially available aquatic garden plant. In my experiment plants were grown for 12 weeks in a greenhouse and received Nitrogen (N), Phosphorus (P), and Potassium (K) and micro nutrients with four mixers of nutrient solution, every two weeks after one month of the planting.

The performance of *Echinodorus* plants in response to the growing medium and fertilizer treatments were measured by growth parameters such as average plant height, fresh weight, dry weight and root length of the plant. Growth rate is a very important term to describe the plant development over time, measured above values were used to compare plant growth rates.

Data were analyzed by using Minitab 16 computer package and significant differences between treatments were identified using Analysis Of Variance (ANOVA) produce at 5% probability level.