



Sustainable Nutritional Supplementation for Green Economy through Hydroponics System

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Abstract: Hydroponics is a cultivation of plants without soil with formulated nutrient medium growing in a fabricated set of unit. The present study focused on the nine different medicinal and ornamental plants. They were grown in the hydroponics unit supplied with macro and micro nutrients of three different treatments ranges from 200ppm to 450ppm. Experiment was laid to study the length of plants, number of shoot lets and number of days of experimentation with replicates. *Dieffenbachia bowmannii* showed highest length of 38 to 50 cm at 4th & 5th week compared to the remaining plants grown in hydroponics unit. Number of multiple shoots was increased in *Mentha arvensis* grown to the length of 19-45cm with 15-37 numbers of shoots and Table top plant with 25-38 shoots after five weeks of nutritional treatment. Mostly in the process of hydroponics the growth rate and shoots number increased followed by Table top, *Mentha arvensis*, *Capsicum annum*. This study gives the comparative values of growth rate in selected plants through hydroponics system.

Keywords: Green economy, Hydroponics system, Medicinal plants, Nutritional supplements
