

## DEVELOPMENT OF AN EFFECTIVE POTTING MIXTURE FOR DOMESTIC CHILLI CULTIVATION

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Chilli is one of the economically important condiments cultivated in both *Yala* and *Maha* seasons in Sri Lanka. However, chilli prices become high during the rainy season, due to its weather dependency. This problem can be overcome by growing chilli domestic level as a potted plant. Thus, it is important to identify a suitable potting mixture to promote chilli cultivation at domestic level. An experiment was conducted to evaluate the growth and yield performance of chilli under different potting mixtures in a home garden, Bogambara, Kandy in Sri Lanka. The Completely Randomized Design with four treatments and four replicates per treatment was carried out. Ten plastic pots with chilli plants were included in one replicate. Treatments used were T<sub>1</sub>/control (only basal and no top dressing), T<sub>2</sub> (basal and *Gliricidia* leaves as top dressing), T<sub>3</sub> (basal and compost as top dressing) and T<sub>4</sub> (basal and *Gliricidia* leaves and compost as top dressing). The time taken for flower initiation, height of plants at harvesting, average leaf area per plant at harvesting, number of pods at harvesting and weight of the pods were measured. The ANOVA test shows significant differences among treatments ( $p < 0.05$ ) for all recorded variabilities. The fastest flowering was observed in T<sub>4</sub> (76 days) while the slowest flowering (89.8 days) in T<sub>1</sub>. The tallest plants were observed in T<sub>2</sub> (79.6cm/plant) while the shortest plants (68 cm/plant) were in T<sub>1</sub>. The maximum average leaf area was recorded in T<sub>2</sub> (7cm<sup>2</sup>/plant) while minimum average leaf area (4.75cm<sup>2</sup>) in T<sub>1</sub>. The highest pod number was observed in T<sub>4</sub> (27.8 pods/plant) while the lowest pod number (13 pods/plant) in T<sub>1</sub>. The maximum pod weight was recorded in T<sub>4</sub> (53.7g/plant) while the minimum pod weight (39.6 g/plant) in T<sub>1</sub>. Based on the overall growth and yield performance, it can be concluded that potting mixture with compost and *Gliricidia* leaves is suitable for home gardening of chilli.

**Keywords:** *Gliricidia* leaves, Growth and yield performance, Home gardening