Growth and yield performances of some home garden vegetables grown in poly bags as affected by different potting media

K M C Fernando* and S Subasinghe
Department of Crop Science, Faculty of Agriculture, University of Ruhuna, Kamburupitiya

Increasing prices and unavailability of reliable fresh vegetables without contamination of pesticides are one of the major constraints faced by consumers particularly in urban areas. Most of the families do not have enough land to cultivate vegetables eventhough they have an interest to grow vegetables. But some of the vegetables can be grown in poly bags with suitable potting media and providing required balanced nutrients. Not only for their home consumption but also for ornamental purposes.

Therefore, four separate experiments were conducted to evaluate the growth and yield performances of some vegetables, Tomato (*Lycopersicon esculentum*) var. Marglobe, Brinjol (*Solanum melongina*) var. Padagoda, Okra (*Hibiscus esculentum*) var. MI- 5 and Cabbage (*Brassica oleraceae*) var. Oxyles as affected by four potting media (coir dust alone; 1:1 coir dust: sand; 1:1:1: coir dust: sand: top soil and 1:1:1 coir dust: sand: compost). All experiments were arranged in a Randomized Completely Block Design with four replicates. Two weeks old seedlings of Tomato, Brinjal, Cabbage and seeds of Okra were planted in black poly bags (10" x 13). Albert's solution was applied twice a week and watering was done every day. Number of branches, number of leaves, shoot height, number of flowers, number of fruits and fresh yield were recorded as growth and yield parameters.

Results showed that the best potting media for different vegetables were varied. The highest yield of 812 g and 1559 g/poly bag were recorded Tomato and Cabbage respectively in 1:1 (coir dust: sand media) followed by 1:1:1 (coir dust: sand: compost); 1:1:1: (coir dust: sand: top soil) and coir dust only on both crops of Tomato and Cabbage. The highest yield of 442 g and better growth performances were recorded in 1:1:1: (coir dust: sand: top soil media) for Okra while for Brinjal, the highest yield of 651 g and better growth performances were recorded in 1:1:1 (coir dust: sand: compost media).

Potting media could be varied depending on the crop. Potting media of 1:1 coir dust: sand shows better growth performances in Tomato and Cabbage while it was 1:1:1: coir dust: sand: top soil media for Okra and 1:1:1 coir dust: sand: compost media was best for Brinjal.