

GROWTH AND YIELD OF CARROT AS INFLUENCED BY MANURES AND ORGANIC MULCHING

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Executive Summary

Carrots are a good source of several vitamins, minerals and fiber, especially biotin, potassium, and vitamins A (from beta carotene), K1 (phylloquinone), and B6. They are also a good source of antioxidants. The cultivation of carrot requires an ample supply of plant nutrient. In Bangladesh, majority of the growers do not get high quality vegetables and higher yield because of lack of knowledge about manures and organic mulching. Use of organic manures essential for its proper growth and development, improve soil structure, increase water holding capacity. But increase cost of production. Considering the above facts, an experiment was conducted at the Horticulture Farm of Sher-e-Bangla Agricultural University, Dhaka during the period from November 2019 to October 2020 to study the effect of different types of manures (no organic manure, cowdung, compost and litter) and organic mulching on (non-mulch, rice straw, sawdust and water hyacinth) the growth and yield of carrot. The experiment was conducted in a Randomized Complete Block Design with three replications. Application of manures and organic mulching significantly influenced the growth and yield of carrot. Cowdung resulted in the highest gross yield (39.05 t/ha) whereas, the plants received no manure produced the lowest for the same (33.03 t/ha). The highest gross (39.12 t/ha) and marketable (35.79 t/ha) yield was obtained from the water hyacinth mulch, while the lowest was obtained from non-mulched plot. Cowdung with water hyacinth mulch produced the highest yield (42.75 t/ha) The lowest (32.00 t/ha) was recorded from the control.

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