



RESEARCH PAPER

Effect of organic manures on growth and yield of carrot (*Daucus carota* L.) under low hill of Uttarakhand

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Abstract : An experiment was performed during the year 2021-22 at Horticulture Research Block, Department of Horticulture, School of Agricultural Sciences, Shri Guru Ram Rai University, Dehradun, Uttarakhand, India to examine the “Effect of organic manure on growth and yield of carrot (*Daucus carota* L.) under low hills of Uttarakhand”. The experiment was laid out in Randomized Block Design with three replications and nine treatments. The treatments comprised following levels of various organic nutrients concentrations viz., T₁-Control, T₂-FYM@20t/ha, T₃- Vermicompost@5t/ha, T₄- Cow Urine @ 20%, T₅- FYM @10t/ha + Vermicompost @ 2.5t/ha + Cow Urine @ 10%, T₆- FYM @10t/ha + Vermicompost @ 2.5t/ha, T₇- FYM @10t/ha + Cow Urine @ 10%, T₈- Vermicompost @ 2.5t/ha + Cow Urine @10%, T₉- FYM @20t/ha + Vermicompost @5 t/ha + Azotobacter @5.0 kg/ha. Among all, the organic treatment with Farmyard Manure (100%) + Vermicompost (100%) + Azotobacter (5.0 Kg/ha) has shown the significant improvement in growth and yield parameters than other treatments. The treatment recorded highest plant height (cm), Number of leaves per plant, Length of leave (cm), Width of leaves (cm), Root length (cm), Root diameter (cm), Fresh weight (g), Dry weight (g) and yield (kg/plot).

Key Words : Organic manure, Vermicompost, Cow urine, FYM, Azotobacter

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