

GROWTH AND YIELD OF BROCCOLI IN RESPONSE TO ORGANIC FERTILIZER UNDER DRIP IRRIGATION

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Abstract:

Broccoli (*Brasica oleracea* var. *italic*) is one of the valuable vegetable that consist a lot of nutrients. Vermicompost one of the important organic fertilizer, has high fertility for plants. So, the present study examines the effects of vermicompost on Growth and yield of Broccoli. Vermicompost in 4 levels as 0, 5, 10 and 15 t/h were added to Broccoli (Sakora cultivar) planting bed in the Karaj (Iran) condition. Then some vegetative trait and yield of Broccoli were measured after harvesting . The results revealed that the Broccoli main and lateral curd yield, main and lateral curd weight and leaf number increased with application of vermicompost. The lowest yield was observed in control treatment. Regression model showed that the content of main and lateral curd yield, main and lateral curd weight and leaf number increased nonlinearly to 10 t/h vermicompost. But Broccoli leaf fresh weight increased directly with the increased of vermicompost. The highest leaf fresh weight was recorded at 15 t/h vermicompost. Finally 10 t/h vermicompost application is recommended for growing of Broccoli in the Karaj condition.

Key words: Broccoli, Vermicompost, Curd yield, Leaf number.



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