

INTEGRATED MANAGEMENT FOR HIGHER CURD YIELD AND QUALITY OF BROCCOLI (*Brassica oleracea* var. *italica* L.)

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ABSTRACT

An integrated management was taken to investigate the effect of macronutrients, micronutrients, cowdung, mustard oilcake and mulches on different yield contributing characters, yield and quality parameters of broccoli during October 2011-March 2012 at the Horticulture Farm, Sher-e-Bangla Agricultural University, Dhaka. The experiment included six treatments using T₁= 15 t/ha Cowdung + N₁₁₅P₇₂K₁₂₀ (recommended dose of cauliflower), T₂= 15 t/ha Cowdung + N₁₂₀P₁₀₀K₁₄₀S₂₀ kg/ha, T₃= 15 t/ha Cowdung + N₁₂₀P₁₀₀K₁₄₀S₂₀ + Zn₄B_{1.5}Mo₁ kg/ha, T₄= 20 t/ha Cowdung + 400 kg/ha mustard oilcake, T₅= N₁₂₀P₁₀₀K₁₄₀S₂₀ + Zn₄B_{1.5}Mo₁ kg/ha + 20 t/ha Cowdung + 400 kg/ha mustard oilcake and water hyacinth mulch, T₆= N₁₂₀P₁₀₀K₁₄₀S₂₀ + Zn₄B_{1.5}Mo₁ kg/ha + 20 t/ha Cowdung + 400 kg/ha mustard oilcake. Significant variation was recorded in case of plant height, number of leaves, leaf length, leaf breadth, days to curd initiation, stem length, stem diameter, primary curd diameter, curd weight, number and weight of secondary curd, curd yield, moisture (%), ascorbic acid, β carotene content, protein and carbohydrate percentages except total fat percentages, iron and calcium content. The maximum curd yield (24.15 t/ha) was found from T₆ treatment and the minimum was recorded from T₄ (15.26 t/ha) treatment. T₆ treatment showed the best performance on the maximum yield and quality curd production over all the other treatments.

Keywords: broccoli, integrated management, yield and quality.