

**EFFECT OF NPK FERTILIZATION AND ROW SPACING ON GROWTH,  
YIELD TRAITS AND GRAIN QUALITY OF CHIA  
(*Salvia hispanica* L.)**

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**Executive Summary**

An experiment was conducted to evaluate the effect of NPK fertilization and row spacing on growth, yield traits and seed quality of Chia (*Salvia hispanica*) using foreign chia seed at the Farm of Sher-e-Bangla Agricultural University, Dhaka during October to March (Rabi season), 20122-23. The experiment was laid out in a two factor Randomized Complete Block Design (RCBD) with three replications. Factor A consisted of four levels of macronutrients combinations N= 0, 40, 60,80 kg ha<sup>-1</sup>, P = 0, 20, 40 ,60kg ha-1and K = 0,30,50,70 Kg per hectare respectively and Factor B consisted of three levels of row to row spacing S<sub>1</sub> (20cm x 20cm), S<sub>2</sub> (30cm x 20cm), S<sub>3</sub> (40cm x 20cm)were altogether 36 plots. Different levels of macronutrient combination significantly influenced on most of the parameters. In case of macronutrients, maximum number of branches (12.67) per plant, number of spikes per plant (11.67), spike length (22.71cm), number of flowers per inflorescence (55.28), seed yield (4.17 g/plant and 53.04 kg/ha) of chia recorded from T<sub>2</sub> treatment. In case of different row spacing maximum number of branches (11.50) per plant, number of spikes per plant (10.92), spike length (22.51cm), number of flowers per inflorescence (53.63), seed yield (4.16 g/plant and 52.74 kg/ha) recorded from S<sub>2</sub> treatment. Among the treatment combination, T<sub>3</sub>S<sub>2</sub> treatment gave the highest seed yield (56.08kg/ha) and the lowest (48.16kg/ha) was obtained from T<sub>1</sub>S<sub>3</sub> treatment. So, the T<sub>2</sub>S<sub>2</sub> treatment combination appeared to be the best for achieving the higher growth and seed yield of Chia.

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