

## EFFECT OF BORON AND POULTRY MANURE ON SOIL FERTILITY AND YIELD PERFORMANCE OF WHEAT (BARI GOM 25)

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### ABSTRACT

An experiment was carried out in Randomized Complete Block Design to investigate the effects of different levels of boron (B) and poultry manure (PM) on the yield and yield components of wheat (BARI gom 25). Four levels of boron (0, 4, 8, and 12 kg ha<sup>-1</sup>) and three levels of poultry manure (0, 5 and 10 t ha<sup>-1</sup>) were used as experimental treatments. Plant height, tillers plant<sup>-1</sup>, spike length, grains spike<sup>-1</sup>, 500-seed weight, grain yield and biological yield were significantly increased by application of B and PM. The tallest plant (99.50 cm), maximum tillers plant<sup>-1</sup> (5.67), most prolonged spike (13.17 cm) maximum grains spike<sup>-1</sup> (49.00), maximum 500-seed weight (36.37 g), highest grain yield (4.72 t ha<sup>-1</sup>) and highest biological yield (9.76 t ha<sup>-1</sup>) were observed in T<sub>7</sub> treatment. The T<sub>7</sub> treatment also improved the soil fertility by improving organic matter content, N, P, K, S and B content of the soil. The performance of treatment T<sub>7</sub> (8 kg B ha<sup>-1</sup> + 10 t PM ha<sup>-1</sup>) was the best among the other treatments in respects to all parameters studied and it can be more economical and eco-friendly for sustainable wheat production.



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