

## EFFECTS OF NITROGEN AND POTASSIUM ON BULB TO BULB ONION PRODUCTION

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### ABSTRACT

The experiment was conducted at the research farm in the Department of Agronomy and Agricultural Extension at Rajshahi University, Bangladesh during 2015-16 growing season to find out the performance of nitrogen and potassium level on bulb to bulb onion production. The experiment was laid out Randomized Complete Block Design (RCBD) with four replications. Two different factors were considered, factor: (A) Nitrogen level (0, 50, 100, 150) kg/ha, (B) Potassium level (0, 30, 60, 90 kg/ha). The results showed that plant height, leaf length, number of leaf per plant, length of the bulb, the diameter of the bulb, single bulb weight and bulb yield were significantly influenced by different treatments. The yield of onion increased with increased levels of different treatment combination. Synergistic effects of nitrogen and potassium at different days after sowing that 150 kg N with 90 kg K per hectare gave the tallest plant (34.64cm), maximum number of leaves (7.87) per plant, the highest individual bulb weight (26.93g), bulb length (6.30 cm) as well as bulb diameter (4.33cm) of the onion among varying dose level either applied in combined or separate manners. The highest bulb yield 18.43 t/ha found in N150 K90 treatment. The treatment with 150kg N with 90kg K per hectare is most suitable a preferable dose for maximum production of the bulb to bulb onion

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