

# Effect of Foliar Application of Growth Regulators on Growth and Yield of Onion (*Allium cepa*)

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## Abstract

A field experiment was conducted at Horticulture Farm of Agriculture and Forestry University, Rampur, Chitwan, Nepal from December 1 to April 30 of 2018/19 to evaluate the effect of plant growth regulators on onion (*Allium cepa* L.). The experiment was laid out in a Randomized Complete Block Design (RCBD) with 13 treatments viz. 75, 150 and 200 mg/ml each of GA3, NAA, GA3 at 3 leaf stage and NAA at 7 leaf stage, NAA at 3 leaf stage and GA3 at 7 leaf stage and a control with three replications. The application of NAA 150 mg/ml at 3 leaf stage and GA3 150 mg/ml at 7 leaf stage resulted in highest values for plant height (76.67 cm), number of leaves (11.33), stem diameter (2.19 cm), bulb diameter (7.55 cm), dry weight (69.83 gm) and fresh weight (72.66 gm) while the control treatment resulted in the lowest value for all these attributes. Therefore, the application of 150 mg/ml of NAA at 3-leaf stage and 150 mg/ml of GA3 at 7-leaf stage can be recommended to enhance the plant growth and yield of onion.

**Keywords:** Gibberellic acid (GA3), Naphthalene acetic acid (NAA), Plant Growth Regulators