GROWTH, FLOWERING AND YIELD OF CUCUMBER (CUCUMIS SATIVUS L.) AS INFLUENCED BY DIFFERENT LEVELS OF NAA AND GA₃

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Abstract: An experiment was conducted to assess the effect of various doses of GA₃ and NAA on growth, flowering, yield and yield contributing parameters in cucumber. Total eight treatments of the growth regulators viz, GA₃ 10, GA₃ 20, GA₃ 30 ppm, NAA 50, NAA 100, NAA 150 ppm, GA₃ 20 + NAA 100 and control were tried in Randomized Block Design and replicated thrice. Out of these, an application of combined dose @ GA₃ 20 ppm + NAA100 ppm was found significantly superior in terms of growth, flowering and yield and yield attributing parameters i.e. vine length plant⁻¹ (cm), number of primary branches plant⁻¹, number of leaves plant⁻¹, length and width of longest leaf (cm), days to first flower formation, number of male and female flower plant⁻¹, sex ratio, number of fruits plant⁻¹, length and width of fruit (cm) at alternate days, length and width of fruit (cm) at five days, weight of fruit⁻¹, fruit yield plant⁻¹, fruit yield plot⁻¹ and yield (qha⁻¹) as compared to control and other applied treatment. Overall the impact of above observation, the highest yield (173.60 qha⁻¹) of tender green was recorded with a combined dose of GA₃ 20 ppm + NAA100 ppm and minimum yield (150.53 qha⁻¹) of tender green under control.

Keywords: Cucumber, Pusa Uday, GA3 NAA

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