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# Effect of plant growth regulators on growth and sex expression of bitter gourd

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**ABSTRACT :** The study was conducted to know the effect of exogenous application of different plant growth regulators on grain and sex expression of bitter gourd. The treatments comprised of plant growth regulators viz., NAA @ 50 mg L<sup>-1</sup> and 75 mg L<sup>-1</sup>, ethereal @ 50 mg L<sup>-1</sup> and 100 mg L<sup>-1</sup>, spermine @ 5 mg L<sup>-1</sup> and 10 mg L<sup>-1</sup>, putrescine @ 20 mg L<sup>-1</sup> and 40 mg L<sup>-1</sup> and control (water spray) were applied at 2 and 4 leaf stage of bitter gourd crop. All the treatments significantly increased flowering and thereby yield over control. However, foliar spray of NAA 75 mg L<sup>-1</sup> followed by spermine @ 10 mg L<sup>-1</sup> were found most significant in influencing maximum vine length, number of branches per vine, number of days taken for first male and female flower, number of male flowers, number of female flowers with highest yield of 2.25 kg/vine.

**KEY WORDS :** Bitter gourd, PGR, NAA, Spermine, Yield

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