

**EFFECT OF PLANT GROWTH REGULATOR ON PLANT GROWTH
AND FLOWER YIELD OF PETUNIA (*PETUNIA X HYBRIDA*) CV. PURPLE PRINCE.**

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ABSTRACT

The present investigation entitled “Effect of Plant Growth Regulators on Growth and Flower Yield of *Petunia (Petunia x hybrida)* cv. Purple Prince” was carried out during 2015– 2016 at research field of Department of Horticulture, Allahabad School of Agriculture, SHIATS, Allahabad. The experiment included thirteen treatments and three replications. Treatment details were T₀ (Control), T₁ (GA₃ @100ppm), T₂ (GA₃@150ppm), T₃ (GA₃@200ppm), T₄ (GA₃@300ppm), T₅ (CCC@250ppm), T₆ (CCC@500ppm), T₇ (CCC@700ppm), T₈ (CCC@800ppm) and T₉ (NAA@30ppm), T₁₀ (NAA@40ppm), T₁₁ (NAA@50ppm), T₁₂ (NAA60@1250ppm). It was concluded that application of GA₃ @300 ppm in treatment T₄ was found to be superior on plant height(23.00cm), plant spread(48.63cm), number of branches(13.30), number of leaves(570.50) and application of T₈ NAA@60ppm was found to be minimum on no. of days for first flower bud emerge(51.47days), and treatment T₈ CCC@800ppm fresh weight of flower(4.3g), diameter of flower(6.70cm) and treatment T₁ GA₃@100ppm was found to be superior on number of flowers per plant(54.47), yield of flowers per plant(126.63 g), yield of flowers per plot(1115.33 g) and yield of flowers per hectare(7.56 t) was observed as compared with control.

KEYWORDS: Plant Growth Regulators, GA₃, CCC, NAA, *Petunia* Etc