



## Effect of Plant Growth Regulators on Dry Matter Accumulation, Partitioning and Fruit Retention of *Bt* Cotton

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**Abstract:** The present investigation was conducted in the Department of Agronomy, PAU, Ludhiana, to study the effect of different plant growth regulators on morpho-physiological traits of *Bt*-cotton. Amongst the treatments studied, mepiquat chloride (MC) 300 ppm followed by MC 200 ppm yielded the best result in terms of improved dry matter accumulation and its partitioning to fruiting bodies, setting percentage, boll weight and finally seed cotton yield per plant. Maximum seed cotton yield was obtained with MC 300 ppm which was 37.20 and 33.07 per cent higher than control respectively during both the years of study. Application of cycocel (CCC) 500 ppm produced the minimum total seed cotton yield, which was significantly lesser than control. Rest of the plant growth regulator treatments failed to influence the seed cotton yield significantly.

**Key Words:** *Bt* cotton, Mepiquat chloride, cycocel, Morpho-physiological traits, PGRs

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