

Influence of plant growth regulators and foliar nutrients on growth and yield of chilli

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Abstract

Application of growth promoters and stimulants containing plant growth regulators is a common practice among chilli farmers. An experiment was conducted in *Yala* 2017 and *Maha* 2017/18 seasons to identify the influence of analytical grade plant growth regulators Gibberellic Acid (GA3), Naphthalene Acetic Acid (NAA) and one commercial product containing of 10% GA3, 6% Ca and 2% B and followed by Albert solution as a foliar nutrient spray on growth and yield of chilli variety MICH hy 1. The experiment consisted of two factors, (i) application of different plant growth regulators ((T1) - 50 ppm GA3, (T2) - 100 ppm GA3, (T3) - 50 ppm commercial product, (T4) - 100 ppm commercial product, (T5) - 50 ppm NAA, (T6) - control - spray distilled water and two levels of Albert solution, namely, application of the Albert solution and without Albert solution. The treatments were applied at the flower initiation stage. Three days after the application of plant growth regulator, the Albert solution was applied and another dose of Albert solution was applied 20 days later. Application of GA3 and the commercial product significantly increased the plant height and canopy width while it reduced the SPAD meter value which is an indication of the chlorophyll content. Application of plant growth regulators did not influence the green chilli yield.

Key words: Albert solution, Chilli, Foliar spray Gibberellic Acid, Naphthalene, Acetic Acid