

Influence of pre-harvest treatments of gibberellic acid (GA₃) and other chemicals on growth and yield attributing characters of tomato (*Lycopersicon esculentum* Mill.) cv. anand tomato-3

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ABSTRACT : The study was conducted at the main vegetable research station of the Anand Agricultural University, Anand during the period *Kharif* and *Rabi* (2010-11) to determine the effects of different concentrations of GA₃ and chemicals on growth and yield of tomato. The treatments comprised of GA₃ @ (20 and 40mg/l); KNO₃ (2000 and 4000mg/l); KHCO₃ (2000 and 4000mg/l); boric acid (100 and 200mg/l) with the control (without spray). The growth and yield contributing parameters differed significantly. The results revealed that the pre harvest treatments of GA₃ @ 40mg/l (T₂) had significant effect on plant height (114.77cm), number of leaves (80.10), branches (12.13) per plant recorded at 75 DATP. Similar trends were also observed for minimized the days required for the breaker stage (78.03days) and the red-ripe stage (86.47days) under the treatment (T₂). It was also observed that the pre harvest treatments of GA₃ @ 40mg/l had significant effect on yield and yield attributing characters viz., number of fruits per plant (30.70) and total yield (384.77q/ha).

Key Words : Boric acid, Gibberellic acid, Growth, Potassium bicarbonate, Potassium nitrate, Tomato, Yield

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