

Research Article

Growth, flowering, fruiting, yield and quality of tomato (*Lycopersicon esculentum* Mill.) as influenced plant bio regulators

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SUMMARY

A field experiment was carried out to assess the growth, flowering, fruiting yield and quality traits of Tomato cv. KASHI VISHESH (H-86). The experiment was laid out in randomised block design with three replications for tomato crop consisted of 10 treatments namely, Control, GA₃ 20 ppm, GA₃ 40 ppm, GA₃ 60 ppm, NAA 10 ppm, NAA 20 ppm, NAA 30 ppm, 2, 4-D 10 ppm, 2, 4-D 15 ppm and 2, 4-D 20 ppm to find out the effect of the growth, flowering, fruiting, yield and quality of tomato and various horticulture characters namely; plant height (cm), number of branches, number flowers per plant, number of clusters per plant, number of fruits per clusters, number of fruits per plant, average fruit length (cm), average fruit diameter (cm), average fruit weight (g), fruit yield per plant (kg), fruit yield per plot (kg), fruit yield per hectare (q), acidity (%) and total soluble solids TSS (^oBrix). However, application of the plant bio regulators had a significant influence on plant growth, flowering, fruiting, yield and quality traits of tomato and GA₃ gave the highest yield than other plant growth regulators. So, GA₃ was superior among all treatments under investigation for response tomato production.

Key Words : Tomato, Plant bio regulators, Growth, Flowering, Fruiting yield, Quality

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