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Impact of Fulvic Acid and Amino Acid on Growth Related Attributes of Tomato (*Solanum Lycopersicum* L.)

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ABSTRACT

The objective of this study was to determine the effect of fulvic acid and amino acid foliar application on growth of tomato. These substances are a type of bio stimulant used to promote plant growth and health. The experiment contained three active organic acids treatments amino acid and fulvic acid. They were applied twice a week until the stage of flowering and the first application was carried out 20 days after transplanting. This research was conducted at crop research center, School of Agriculture, ITM University, Gwalior (MP), India, during the season of 2024-25. The experiment was laid out in randomized block design and replicated thrice. Results indicated that foliar applications of fulvic acid and amino acid significantly enhanced the plant height (29.70 cm at 30 DAS and 58.23 cm at 45 DAS) and appearance of first flowering (40.93 days), number of fruits/plant (55.33) and number of branches/plant (16.13) compared to the control. The higher chlorophyll content (53.33) was recorded with foliar application of fulvic acid. In conclusion, application of fulvic acid and amino acid as foliar application increased the plant growth, number of branches and flower and fruit appearance of tomato.

Keywords: tomato, fulvic acid, amino acid, foliar spray, bio stimulant

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