

**RESEARCH ARTICLE :**

## Effect of pre-harvest spray of plant growth regulators and nutrients on yield and marketable quality of guava (*Psidium guajava* L.)

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**SUMMARY :** A field experiment to study the effect of pre-harvest application of plant growth regulators and nutrients namely gibberellic acid (30, 60 & 90 ppm), naphthalene acetic acid (30, 60 & 90 ppm), calcium nitrate (1.0, 1.5 & 2.0 %), zinc sulphate (0.3, 0.6 & 0.9 %) and control (Water spray) on yield and marketable quality of guava (*Psidium guajava* L.) cv. Gwalior-27 was conducted at Fruit Orchard, College of Agriculture, RVSKVV, Gwalior (M.P.) during the year 2015-16 & 2016-17. The experiment was laid out with thirteen treatments replicated three times in a Randomized Block Design. In the present investigation, the application of plant growth regulators, gibberellic acid had significantly enhanced the yield parameters viz., maximum number of fruits/tree was recorded with NAA, (90 ppm), average fruit weight and the maximum yield (kg) per tree was recorded with GA<sub>3</sub> (90 ppm) followed by GA<sub>3</sub> (60 ppm). Nutrients namely; zinc sulphate and calcium nitrate had also significantly enhanced the yield parameters and retained marketable quality during different storage period (0, 3, 6, & 9 days) viz. marketable fruits retained (%), unmarketable fruits (Decay loss) (%) & marketable fruits retained over control (%) in the year of 2015-16, 2016-17 & in pooled..

**KEY WORDS :**

Pre-harvest application, Plant growth regulators, Nutrients, Yield, Marketable Quality, Guava

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