

Effect of different combinations of PGR's and micronutrients on quality, shelf life and yield in papaya (*Carica papaya* L.) cv. Pusa Nanha

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ABSTRACT : An investigation was carried out to assess the effect of different combinations of PGR's and micronutrients on quality, shelf life and yield of papaya (*Carica papaya* L.) cv. Pusa Nanha, during 2013-14 and 2014-15 at Central Research Field, Deptt. of Horticulture, SHUATS, Allahabad. The experiment was laid out in Randomized Block Design (RBD) with fifteen treatment combinations replicated thrice. Observations were recorded during both years of successive experiment on fruit length, fruit breadth, fruit diameter, shelf life and yield. The results revealed that all micronutrients and their combinations with PGR's significantly influenced the quality, shelf life and yield of papaya during both experimental years. From the pooled data it is clear that maximum fruit length during 2013-14 was recorded 19.32 cm was with foliar application of Copper sulphate 0.25%+Manganese sulphate 0.25%+NAA 30 ppm+GA₃ 60 ppm (T₁₅) whereas, minimum value 11.78 cm was obtained in control (T₀). From the pooled data it was observed that the maximum shelf life (8.21), maximum fruit breadth (18.07 cm), maximum fruit diameter (15.77 cm) and maximum yield (39.24 tonnes/ha) was obtained with foliar application of Copper sulphate 0.25%+Manganese sulphate 0.25%+NAA30 ppm + GA₃ 60 ppm (T₁₅).

Key Words : Papaya (*Carica papaya* L.), quality, yield, shelf life, plant growth regulators (PGR), copper sulphate (CuSO₄) and manganese sulphate (MnSO₄).