

Title Foliar spray of ethanol affected fruit growth, yield and postharvest performance of 'Sahil' tomato

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Abstract

This study was carried out to enhance yield, fruit quality, and shelf life of tomato using pre-harvest foliar sprays of ethanol at different concentrations 0 (control spray), 5, 10, 15 and 20%. Application of 10% ethanol resulted in greater plant height, number of leaves per plant, number of flower clusters per plant, and yield per plant. After 12 days postharvest storage, fruit treated with 20% ethanol had the highest fruit firmness, and lowest total soluble solids (TSS). Titratable acidity and vitamin C content was highest in untreated fruit and least in fruit treated with 20% ethanol. Similarly, sugar content was highest in untreated fruit and lowest in fruit treated with 20% ethanol. Foliar spray of 10% ethanol enhanced growth and yield of tomato, while 20% ethanol prolonged the shelf life as compared to other treatments. Differences were significant for color parameters that is; L^* , a^* and b^* . Analysis of data also showed significant differences for chroma and hue angle among the treatments. Moreover, 5 and 10% ethanol treatment improved fruit color, taste and texture.