Effect of micronutrients on fruit yield and quality of fruit in tomato *Solanum lycopersicum* L.

Trilok Chand and J.P. Collis

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ABSTRACT : A field experiment was carried out to study the effect of foliar application of micronutrients on growth and yield of tomato (*Lycopersicon esculentum* Mill.) during 2012-13 and 2013-14 on tomato variety Pusa Rohini (DT–39) at the at the vegetable research farm of the Department of Horticulture, Allahabad School of Agriculture, Sam Higgin Bottom Institute of Agriculture, Technology and Sciences, Allahabad. The results based on two years mean revealed that out of nine different treatments, the combined application of Boron (100ppm) x Zn (100ppmm) x copper 100ppm resulted in maximum more number of fruits per plant (37.28), fruit weight (0.0714g), yield per plant (3.01 kg kg) and fruit yield (262.5 q/ha). Followed by 100ppm Zn and Boron @ 100 ppm recording fruit yield differed significantly from the control as well as other treatments. The total soluble solids in tomato fruits was maximum under combined spray of 100 ppm of Boron, Zn and Copper at both the stages. Maximum increase in ascorbic acid content of tomato fruits (22.93 mg/100 g) was recorded with the application of zinc, Boron and copper @ 250 ppm which accounted for an increase of 62.39 per cent as compared to 14.11 mg/100 g in control. Highest specific gravity was observed in Boron 250ppm x Zn 250ppm x Cu 100ppm (1.125).

Key Words : Tomato (*Lycopersicon esculentum* Mill.), Pusa Rohini (DT–39), micronutrients, foliar spray, fruit quality, yield and yield attributes, total soluble solids (TSS), ascorbic acid.