FOLIAR APPLICATION OF MANGANESE, ZINC AND COPPER ON GROWTH AND YIELD OF CHILLI (Capsicum annum L.)

S.D. Thennakoon, K.A. Renuka, M.G.T.S. Amarasekara

¹Department of Soil and W ater Resour ces Management, Faculty of Agriculture, Rajarata University of Sri Lanka, Puliyankulama, Anuradhapura, Sri Lanka. ²Field Cr ops Resear ch and Development Institute, Department of Agriculture,

Mahailluppallama, Sri Lanka.

Micronutrients are usually required in minute quantities, nevertheless are vital to the growth of plant. A pot experiment was conducted as a Completed Randomized Design with eight replicates to determine the effects of foliar application of Mn, Zn and Cu on growth and yield of chilli using variety KA-2, in Crops Research and Development Institute, MahaIluppallama during 2012/2013 *Maha* season. There were seven treatments; no micronutrients applied (T1), application of Manganese (T2), application of Zinc (T3), application of Copper (T4), application of Manganese, Zinc and Copper (T5), since Mn, Zn and Cu were applied as sulfates, to remove sulfur effect apply average amount of Sulfur (T6), application of total amount of sulfur in form of sulfates (T7). Micronutrients were applied with the dosage of 0.5% in three times with 50% flowering stage. Data were analyzed by the Analysis of Variance. Least Significant Difference was used for the mean separation of the treatments.

Green chilli yield, plant height at 50% flowering stage and 1 harvesting stage were not significantly different (p>0.05) among treatments. However, number of pods per plant, canopy width at 50% flowering stage and 1 harvesting stage were significantly different (p<0.05).

Highest and lowest green chilli yields were observed in T4 (1.20 t ha) and T5 (0.44 t ha) respectively. Results concluded that foliar application of Mn, Zn and Cu have no any significant effect on yield of green chilli.

Keywords: Chili, Copper, Foliar application, Manganese, Zinc