



## Effect of zinc, iron and boron on yield of bitter gourd (*Momordica charantia* L.) cv. PUSA VISHESH

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**Abstract :** Effect of zinc, iron and boron on yield of bitter gourd cv. PUSA VISHESH was studied. The experiment consisted of eighteen treatment combinations, comprising of three levels of zinc viz., control ( $Zn_0$ ),  $ZnSO_4$  0.5 per cent ( $Zn_1$ ) and  $ZnSO_4$  1.0 per cent ( $Zn_2$ ), three levels of iron viz., control ( $Fe_0$ ),  $FeSO_4$  0.5 per cent ( $Fe_1$ ) and  $FeSO_4$  1.0 per cent ( $Fe_2$ ) and two levels of boron viz., control ( $B_1$ ) and  $B_4O_7$  0.1 per cent ( $B_2$ ). Among different levels of zinc (0.0, 0.5 and 1.0%),  $Zn_1$  ( $ZnSO_4$  0.5%) significantly increased fruit yield (15.65 t/ha). Among different levels of iron (0.0, 0.5 and 1.0%),  $Fe_1$  ( $FeSO_4$  0.5%) significantly increased fruit yield (t/ha) (15.37 t/ha). Among different levels of boron (0.0 and 0.1 %),  $B_1$  ( $Na_2B_4O_7$  0.1%) significantly increased fruit yield (t/ha) (14.96 t/ha). While among all the interactions of zinc, iron and boron,  $Fe_1Zn_1$  ( $FeSO_4$  0.5% +  $ZnSO_4$  0.5%) significantly obtained highest fruit yield (16.33 t/ha) over control. The result based on one season data, it can be summarized that foliar application of micronutrients,  $ZnSO_4$  0.5 per cent +  $FeSO_4$  0.5 per cent at 30, 45 and 60 days after sowing along with a recommended dose of NPK (60+60+60 kg/ha) and FYM 20 tonnes/ha to the bitter gourd crop cv. 'Pusa Vishesh' was the most beneficial treatment for obtaining higher vegetative growth and yield of bitter gourd.

**Key Words :** Micronutrients, Bitter gourd, Zinc, Iron, Boron

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