

Research Article

Effect of soil and foliar application of ferrous sulphate and zinc sulphate on nutrient availability in soil and yield of Bt cotton

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Received : 23.12.2013; Revised : 02.05.2014; Accepted : 14.05.2014

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Summary

The present investigation was undertaken for three year (2010-2012) at Micronutrient Research Farm, Mahatma Phule Krishi Vidyapeeth, Rahuri to study the effect of soil and foliar application of FeSO_4 and ZnSO_4 on yield of Bt Cotton. The experiment was laid out in Randomized Block Design with eight treatment combinations and three replications. The treatments were different soil and foliar application of FeSO_4 and ZnSO_4 at different stages. The three years pooled data revealed that, the DTPA-Fe and Zn in soil was significantly increased (6.60 and 0.77 ppm, respectively) in treatment of T_5 (RD as per STCR equation + soil application of $\text{FeSO}_4 @ 25 + \text{ZnSO}_4 @ 20 \text{ kg ha}^{-1}$). The concentration of Fe and Zn in cotton leaves significantly higher in T_5 treatment at flowering and boll development stage and per cent plant affected with reddening was noticed low in T_5 treatment. The cotton yield was significantly increased in treatment of T_5 (40.96 q ha^{-1}) and highest gross and net monetary returns were also recorded in treatment of T_5 (Rs. 166297/- and Rs. 96037/-, respectively). The B:C ratio was also highest in treatment of T_5 (2.37).

Key words : Soil and foliar application of Fe and Zn, DTPA-Fe and Zn in soil, Uptake, Yield of Bt cotton

How to cite this article : Durgude, A.G., Kadam, S.R. and Pharande, A.L. (2014). Effect of soil and foliar application of ferrous sulphate and zinc sulphate on nutrient availability in soil and yield of Bt cotton. *Asian J. Soil Sci.*, 9(1): 82-86.