

Research Article

# Effect of FYM, biofertilizers and zinc on yield and micronutrients uptake in maize

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## Summary

A field experiment was conducted to study the effect of FYM, biofertilizers and zinc on grain, stover yield and micronutrients uptake of maize under maize-wheat cropping system two consecutive years of 2006-07 and 2007-08 at Instructional Farm, Rajasthan College of Agriculture, Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan) on Typic Haplustepts. The experiment consisted of 32 treatment combinations comprising of two levels of farmyard manure (0 and 10 t FYM ha<sup>-1</sup>), four levels of biofertilizers [no inoculation, *Azotobacter*, vesicular arbuscular mycorrhizae (VAM) and *Azotobacter* + VAM co-inoculation]. *Azotobacter* and VAM were used as biofertilizers for fixing atmospheric nitrogen and increasing phosphorus availability and four levels of zinc (0, 2.5, 5.0 and 7.5 kg Zn ha<sup>-1</sup>). The application of FYM @ 10 t ha<sup>-1</sup>, inoculation, *Azotobacter*, vesicular arbuscular mycorrhizae (VAM) and *Azotobacter* + VAM co-inoculation] and zinc application resulted in significant increase in grain yield and stover yield of maize and significantly increased micronutrients uptake of (Fe, Cu, Zn and Mn) was higher over control.

**Key words :** FYM, Biofertilizers, Zinc, Yield, Micronutrients uptake, Maize

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