

Research Article

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# Effect of different fertility level and micronutrients on nodulation and nutrient uptake by chickpea

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## Summary

The field experiment was conducted during *Rabi* season 2013-14 to evaluate the effect of different fertility level and micronutrients on nodulation and nutrient uptake of chickpea (*Cicer arietinum* L.) to fertility levels and micronutrients. Twelve treatments combinations was comprised with three fertility levels -F<sub>1</sub>: 40 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup>, F<sub>2</sub>: 60 kg P<sub>2</sub>O<sub>5</sub> + 20 kg S ha<sup>-1</sup> and F<sub>3</sub>: 80 kg P<sub>2</sub>O<sub>5</sub> + 40 kg S ha<sup>-1</sup> and four micronutrient levels- M<sub>0</sub>: control, M<sub>1</sub>: 3 kg Zn ha<sup>-1</sup>, M<sub>2</sub>: 0.3 per cent B spray ha<sup>-1</sup> and M<sub>3</sub>: 3 kg Zn + 0.3 per cent B spray ha<sup>-1</sup> were laid out in Spilt Plot Design. The maximum growth, yield, nodulation and nutrient uptake were recorded with higher level of fertility application F<sub>3</sub>: 80 kg P<sub>2</sub>O<sub>5</sub> and 40 kg S which was significantly superior over lower level of fertility F<sub>1</sub> and statistically at par with F<sub>2</sub>. The minimum response was recorded with the application of lower fertility level F<sub>1</sub> with micronutrient application.

**Key words :** Chickpea, Fertility level, Micronutrients, Nodulation, Nutrient uptake

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