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## Effects of zinc and nitrogen fertilizer and their application method on yield and yield components of *Phaseolus vulgaris* L.

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### ABSTRACT

An experiment in factorial format based on randomized complete block design with 3 replications was conducted to study the effects of zinc spray (0 and 1 g/L) and nitrogen fertilizer (0, 25, 50 and 75 kg/ha pure nitrogen) on yield and yield components of *Phaseolus vulgaris*. In maturity time, seed yield, 100 seed weight, number of pods per plant, number of seeds per pod and plant height were measured. Results showed that, use of zinc spray had a significant effect in 1% probability level on all measured traits. Also, the effect of nitrogen on all studied traits was significant in 1% probability level. Interaction effect of zinc spray and nitrogen fertilizer on number of seed per pod in 1% and on seed yield and plant height in 5% was significant and on other traits was non significant. The highest seed yield was obtained by zinc spray application with 1996 kg/ha. Among nitrogen fertilizer levels, use of 90 kg/ha pure nitrogen showed highest seed yield.

### KEYWORDS

*Phaseolus vulgaris*; Zinc Spray; Nitrogen Fertilizer

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