



Effect of biofertilizer and different sources of phosphatic fertilizers on the growth and yield of field pea (*Pisum sativum* L.) in alluvial soil

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Abstract : An experiment was conducted during *Rabi* 2001 to assess the effect of biofertilizer (*Rhizobium*) and different sources of phosphatic fertilizers (Diammonium phosphate and single super phosphate) on the growth and yield of field pea (*Pisum sativum* L.) in alluvial soil. The experiment was laid out in Randomized Block Design with six treatments and four replications. In this experiment, it was observed that the diammonium phosphate + *Rhizobium* had higher values of plant height, number of leaves, nodules per plant, fresh and dry weight of plant and grain yield followed by single super phosphate + diammonium phosphate. The diammonium phosphate + *Rhizobium* had given favorable results with regards to at various stages of 20, 40, 60 and 80 days after sowing. The diammonium phosphate + *Rhizobium* and single super phosphate + diammonium phosphate were found to be more effective in producing maximum growth extension than rest of the treatments, although the difference was significant among the treatments. Field pea crop applied with diammonium phosphate + *Rhizobium* recorded highest yield (102.6 q ha⁻¹) followed by single super phosphate + diammonium phosphate (98.6 q ha⁻¹) while minimum in control (77.4 q ha⁻¹). Among the diammonium phosphate + *Rhizobium* evaluated, showed better response compared all the treatments.

Key Words : Field, Pea, Phosphate fertilizer, *Rhizobium*, Yield, Alluvial soil

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