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**Effect of bio-agents and polymer on yield and quality**

**of chickpea seed (*Cicer arietinum* L.)**

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**ABSTRACT**

*The present study was carried out atSam Higginbottom Institute of Agriculture, Technology and Sciences, Allahabad during rabi*

*season 2011-12 to know the effect of bioagent and polymer on seed yield and seed quality of chickpea. The experiment consisted ofseven treatments T : Control, T : Rhizobium @ 30 g kg–1 seed, T : Pseudomonas fluorescence @ 30 g kg seed, T : Bacillus subtilis 0 1 2 3@ 30 g kg–1 seed, T :Trichodermaviridae@ 10 g kg–1 seed, T : VAM @ 15 kg/ha, T : Polymer@1.5 g kg–1 seed. The bioagents and 4 5 6polymer for chickpea variety were evaluated following 11 quantitative characters viz., Days to 50% flowering, number of pods per plant, number of seeds per pod, biological yield per plant, seed index, seed yield per plant and seed yield quintal per hectare and 6 qualitative characters viz., protein content, germination %, root length, shoot length, seedling length and seedling dry weight . The present investigation revealed that the treatment T (Pseudomonas fluorescence @ 30 g kg–1) seed was found to be 2 significant superior in yield on the basis of mean performance of the seed yield per plant and seed yield quintal per hectare. High protein content and germination per cent were also recorded in treatment T . Thus with the present study it can be concluded 2 thatthe T is the best treatment for chickpea variety on basis of seed yield and seed quality. 2*

***Keywords***: Bio-agent, chickpea, polymer coating, protein