

**Review Form 1.6**

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	Ms_IJPSS_88054
Title of the Manuscript:	Effect of Biofertilizer and Phosphorus on Growth and Yield of Chickpea (Cicer arietinum)
Type of the Article	Original Research Article

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This journal’s peer review policy states that **NO** manuscript should be rejected only on the basis of ‘**lack of Novelty**’, provided the manuscript is scientifically robust and technically sound.  
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### PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>The observations on different growth parameters are Plant height (cm), Number of nodules per plant, Plant dry weight (g) and yield parameters are Number of pods per plant, Number of seeds per pod, Test weight (g), Seed yield (kg/ha), Stover yield (kg/ha) and Harvest index (%) were recorded.</p> <p><u>How many plants per plot?</u></p> <p><u>How many plants were collected/utilized to measure these variables?</u></p> <p><u>The tables are very well presented but I think a couple of column charts would help to highlight the results.</u></p> <p>At the same time higher Gross return (108523.7 INR/ha), Net return (75364.02 INR /ha) and Benefit Cost Ratio (2.27) was obtained in treatment Rhizobium+PSB + Phosphorus 60kg/ha.</p> <p><u>Please add 1/2 paragraphs to support these statements.</u></p> <p>However, Rhizobium+PSB 20g/kg seed + Phosphorus 40kg/ha was statistically at par with Rhizobium+PSB 20g/kg seed + Phosphorus 60kg/ha</p> <p>From the above study it is concluded that the Treatment 9 with Rhizobium+PSB + Phosphorus 60kg/ha gave best results and performed better in growth and yield parameters.</p> <p><u>I think that it is necessary to apply a statistical test besides the F-test (e.g. t-test) to confirm these conclusions.</u></p>	
<b>Minor</b> REVISION comments	<p>Some corrections.</p> <p>Pulses contain high percentage of quality protein nearly three times as much as cereals-(Umadevi and Ganeshan 2007).</p> <p>...of biomass to soil, and secretion of growth promoting substances.</p> <p>and it is 5 lakh ?? tonnes in Andhra Pradesh.</p> <p>yield of chickpea is 0.9 t ha<sup>-1</sup>,(add space)which is much lower than its estimated potential</p> <p>under the optimum cultivated conditions,(FAO, 2012). T</p> <p>However, PSB also increases <del>increase</del> the yield of chickpea by 10-30%. Both and may cause up(add space) to 29-45% yield losses in chickpea. (Ahlawat et al 2007).</p> <p>Most of the phosphorus present in the soil is unavailable to plants which are is made available through the activities of efficient microorganisms microorganisms like bacteria, fungi, and cyanobacteria with production of organic acid and increasing phosphatase enzyme activity. (Rajneesh et al 2018).</p> <p>Rhizobium(add comma) originally called <i>Bacillus redicicola</i> (add comma) was first isolated by Beijerinck (1901).</p> <p>the availability of phosphorus through <del>mobilising</del> mobilizing the unavailable.</p> <p>At the time of harvest, <del>significantly</del> the significantly effective number of pods per plant (34.29) was recorded with a combined application of Rhizobium+_PSB 20g/kg seed + Phosphorus 60kg/ha</p> <p>(replace , Rhizobium+PSB → Rhizobium + PSB ) in the rest of the document</p> <p>Application of Phosphorus + Rhizobium + PSB recorded higher value of growth as well as yield contributing characters. <del>s</del>Similar result was given by Jarande et al 2006 than all other treatments.</p> <p>Rhizobium+PSB 20g/kg seed + Phosphorus (extra space) 60kg/ha.</p> <p>The minimum grain yield (1.65t/ha) was recorded in <u>the</u> control plot</p> <p>of chickpea is 0.9 t ha<sup>-1</sup>,(add space)which is ...under the optimum cultivated conditions,(FAO, 2012)</p> <p>However, PSB also increases the yield of chickpea by 10-30%.</p> <p>branches per plant and dry(add space) matter accumulation</p> <p>Inoculation of seed with Rhizobium+PSB produce significantly higher number of nodules in comparison to other inoculants- Add space(Akansha 2018).</p> <p>) <del>was</del> were obtained in treatment <u>with</u> Rhizobium+PSB + Phosphorus 60kg/ha.</p>	
<b>Optional/General</b> comments		

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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