

## Review Form 1.7

Journal Name:	<b>Microbiology Research Journal International</b>
Manuscript Number:	<b>Ms_MRJI_117597</b>
Title of the Manuscript:	<b>Exploring the Hidden Treasures: Isolation, Characterization, and Screening of Phosphate Solubilizing Bacteria (PSB) for Plant Growth-Promoting traits from Chilli Field Weeds Rhizosphere</b>
Type of the Article	<b>Original Research Article</b>

### **General guideline for Peer Review process:**

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. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalmri.com/index.php/MRJI/editorial-policy> )

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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)
<p><b>Compulsory REVISION comments</b></p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>1. <b>For now, as long as the experimental evidence and especially the map of the geographical locations of the soil samples do not exist in the work, the importance of this work for the scientific world is not significant. The work is not a methodical one of research regarding the identification and characterization of soil bacteria. The work exposes the identification and characteristics of bacteria discovered in insufficiently specified geographical locations.</b></li> <li>2. <b>Yes, the title of the article is suitable.</b></li> <li>3. <b>Yes the abstract of the article is comprehensive, but it must be reformulated to correct some grammatical errors and raise the expression level to an academic one.</b></li> <li>4. <b>The subsections and structure of the manuscript are appropriate, but the Keywords are missing. However, from the Journal Template, it appears that the keywords are not mandatory.</b></li> <li>5. <b>From a scientific point of view, the research plan or the conduct of the research is correct. The results and discussions must be verified, as I noted in the reviewed manuscript. Abstracting from the required checks, if we believe the numbers and codes in the tables, the results and the discussions, and finally the (few) conclusions, are well conducted. However, we cannot accept experimental data without a minimum of required evidence: - a map (the best would be a GIS one, easy to make), of the locations of the soil samples; - photographs of soil processing for the identification and characterization of bacteria. For example, I gave the works [1,2,3,4,5,6] in the review form. Any serious paper publishes experimental evidence. Under these conditions, the publication of the work in its current form is not recommended. If the authors add a minimum of such experimental evidence in the framework of a major, very serious revision (they must also remedy the very poor writing).</b></li> <li>6. <b>The citation of references in the manuscript's text and the way of writing the list of references do not agree with the journal template.</b></li> </ol> <p><b>References proposed by the reviewer</b></p> <p><b>[1] Pathak R., Paudel V., Shrestha A., Lamichhane J., Gauchan D.P.,</b> Isolation of phosphate solubilizing bacteria and their use for plant growth promotion in tomato seedling and plant, Katmandu University, Journal of Science, Engineering and Technology, vol. 13, no. II, 2007, pp. 61-70;</p> <p><b>[2] Mohamed, A.E., Nessim, M.G., Abou-el-seoud, I.I. et al.</b> Isolation and selection of highly effective phosphate solubilizing bacterial strains to promote wheat growth in Egyptian calcareous soils. <i>Bull Natl Res Cent</i> <b>43</b>, 203 (2019). <a href="https://doi.org/10.1186/s42269-019-0212-9">https://doi.org/10.1186/s42269-019-0212-9</a></p> <p><b>[3] Sharma S., Kumar V., Tripathi R.B.,</b> Isolation of Phosphate Solubilizing Microorganism (PSMs) From Soil, Journal of Microbiology and Biotechnology Research, 1(2):90-95, 2011;</p> <p><b>[4] Gaikwad S.D., Bhosale P.A., Ukey P.V., landage K. B.,</b> Isolation and Characterization of Phosphate Solubilizing Bacteria from Calcareous Soil, International Journal of Plant &amp; Soil Science, 33(24): 409-417, 2021;</p> <p><b>[5] BARTHOLOMEW JW, MITTWER T.</b> The Gram stain. <i>Bacteriol Rev.</i> 1952 Mar;16(1):1-29. doi: 10.1128/br.16.1.1-29.1952. PMID: 14925025; PMCID: PMC180726</p> <p><b>[6] Janati W, Mikou K, El Ghadraoui L, Errachidi F.</b> Isolation and characterization of phosphate solubilizing bacteria naturally colonizing legumes rhizosphere in Morocco. <i>Front Microbiol.</i> 2022 Sep 26;13:958300. doi: 10.3389/fmicb.2022.958300. PMID: 36225374; PMCID: PMC9549286.</p>	

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<b>Minor</b> REVISION comments <b>1. Is language/English quality of the article suitable for scholarly communications?</b>	1. The text of the manuscript abounds with grammatical mistakes, especially articulation. We recommend checking with the features of the text editor and with specialized programs (Grammarly or Quill Bot) for free or higher versions.	
<b>Optional/General</b> comments	Due to the observations from 1., 4., 5. and 6., I gave the grade 5 to give the authors the chance of a serious major revision to make the work publishable in a serious journal. In addition, a more detailed review than this requires more than two days, as much as I received for this work.  $SE\%=(Z-C)/C \cdot 100$  Where, Z: Solubilization zone, C: Colony diameter, SE: solubilization efficiency	

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

### **Reviewer Details:**

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