

## Review of: "Uptake of 15N-urea and phosphates in Triticum aestivum with Pseudomonas putida and Rhizophagus irregularis endophytes of calcareous soil weeds"

Wenliang Ju<sup>1</sup>

1 Tsinghua University

Potential competing interests: No potential competing interests to declare.

Dear editors,

Thank you for inviting me to revise this manuscript. The current manuscript needs to address the following issues before it can be considered further.

Title: "Uptake of phosphates in Triticum aestivum". How does the article show phosphorus uptake by plants? The authors did not test for phosphorus levels in plants. In addition, the TP and AP concentrations in the soil are not known. Phosphatase activity alone does not represent plant uptake of phosphorus. The title should be revised.

Abstract: How to quantify "the uptake of urea and P2O5 to 50%"? It is suggested that the authors should consider this carefully. I don't think "phytohormones" is accurate here, because phytohormones include more than just plant growth hormones. What are the main phytohormones determined by the authors? Need to get the concept right.

"It is avoided by the generation of greenhouse gases, the contamination of surface water.....". A bit of an exaggeration, since this study did not measure greenhouse gases, nitrate and phosphorus levels in the soil.

This study is a managerial study and lacks scientific nature. Changes in soil properties such as pH after inoculation with plant-promoting bacteria are important for nutrient uptake by plants. However, this study lacked data on soil properties. It is recommended that the authors focus on soil properties and how they relate to plant uptake of N and P.

I'm confused as to why the authors didn't choose "T. aestivum uninoculated plus urea and P2O5 at 50%" as the RC? The authors studied soil phosphatases, so why not consider N-converting enzymes, such as urease?

Discussion: It is recommended that the author organize the discussion according to cause and effect and logic rather than according to figures. Also, authors should focus more on the results and implications of this study rather than the findings that have been reported.

Qeios ID: CS4PM4 · https://doi.org/10.32388/CS4PM4