

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

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Potential competing interests: No potential competing interests to declare.

The introduction is conceptually fine, but needs to be rewritten because many sentences are grammatically and syntactically incorrect. For example the sentences "While evolutionarily wild plants have these interactions as prokaryotic endophytic microorganisms, such as the eukaryotic genus, that allow them...." Or "weeds that grow successfully in adverse environments such as nutritional stress and tolerance to salinity..." cannot go. In the first line of the introduction "the soil is of calcareous origin, they have.." soil is singular, then it becomes plural.

Materials and methods.

Pragraph "Isolation of Pseudomonas putida and Rhizophagus irregularis from desertic weed."

- 4th row the 10<sup>18</sup> dilution is definitely wrong.
- 8th row the bacteria are not "reseeded" but "reinoculated".
- 9th line "This bacterial biomass was resuspended in sterile saline.." Did you centrifuge it? Describe how you resuspended it.

Paragraph "Effectiveness test of Pseudomonas putida and Rhizophagus irregularis on Triticum aestivum in greenhouses conditions."

4th line: "in Petri dishes in Agar-water."

In the third last line (and in the next paragraph) why do you mix the seeds with 10% sucrose? Please explain. Was the sucrose dissolved in water?

## Results.

Nt content in the grain of T. aestivum inoculated with P. putida and R. irregularis. Nt I suppose is total Nitrogen, please put it in full the first time you use the acronym.

## Discussion.

1st line of page 11 "where this problem is critical". Please explain what problem.

As I also indicated in the introduction, the discussion needs to be rewritten. I suggest shorter, less convoluted sentences. It is very difficult to read.

Also the conclusions: a single sentence of 5 lines is unacceptable.



In conclusion, the work is well set up, the idea of isolating PGPR from weeds in the field is interesting. The results are not exceptional, but an effect of the inoculated microorganisms is seen. However, the work needs to be rewritten in better English.