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 following Sentence Revisions in the abstract section is suggested

Original: "In calcareous soil, the growth and production of Triticum aestivum depends on the availability of phosphates, which in turn reduces the uptake of nitrogen in the form of urea, which causes volatilization and partial leaching of both fertilizers, contributing to the greenhouse effect, and warming global." Revised: "In calcareous soil, the growth and production of Triticum aestivum depend on phosphate availability. However, this availability reduces nitrogen uptake from urea, leading to volatilization and partial leaching of both fertilizers, contributing to the greenhouse effect and global warming."

Original: "An alternative ecological solution for T. aestivum is to inoculate Pseudomonas putida and Rhizophagus irregularis with endophytes that increase phosphorus uptake such as P2O5 and urea." Revised: "An ecological alternative for T. aestivum is to inoculate it with Pseudomonas putida and Rhizophagus irregularis endophytes, which enhance phosphorus uptake (P2O5) and urea."

Original: "The objective of this research was to analyze the uptake and distribution of 15N-urea in T. aestivum with P. putida and R. irregularis fertilized with 50% urea and P2O5." Revised: "The research objective was to analyze the uptake and distribution of 15N-urea in T. aestivum when inoculated with P. putida and R. irregularis and fertilized with 50% urea and P2O5."

Original: "In this sense, P. putida and R. irregularis isolated from roots of Resenda luteola and Arista purpurea native to the calcareous soil of northeastern Mexico." Revised: "P. putida and R. irregularis were isolated from the roots of Resenda luteola and Arista purpurea, native to the calcareous soil of northeastern Mexico."

Original: "In T. aestivum with these endophytes, acid and alkaline phosphatase activity in root and stem, N (nitrogen) uptake from total urea (Nt) and yield (Y)." Revised: "In T. aestivum with these endophytes, we measured acid and alkaline phosphatase activity in the roots and stems, nitrogen uptake from total urea (Nt), and yield (Y)."

Original: "The results showed a positive response of T. aestivum to P. putida and R. irregularis with 60 kg/ha of urea and 40 kg/ha of P2O5, equivalent to the 50% recommended for this region of Mexico." Revised: "The results demonstrated a positive response of T. aestivum to P. putida and R. irregularis with 60 kg/ha of urea and 40 kg/ha of P2O5, which is

equivalent to the recommended 50% dosage for this region of Mexico."

Original: "It was evidenced that in T. aestivum, P. putida, and R. irregularis endophytes of desert weeds improved the uptake of urea and P2O5 to 50% by phytohormones that optimized nitrogen with phosphatases, soil phosphate and that from the applied fertilizer." Revised: "It was evident that in T. aestivum, P. putida, and R. irregularis endophytes from desert weeds improved urea and P2O5 uptake by optimizing nitrogen through phosphatases and soil phosphates, as well as those from applied fertilizers."

Original: "The Nt in stem and the yield of T. aestivum with P. putida and R. irregularis reached statistically different numerical values to those registered in T. aestivum with 120 kg/ha of urea and 80 kg/ha of P2O5 without P. putida and R. irregularis at 100% (relative control), consequently the performance of T. aestivum in calcareous soils. It is avoided by the generation of greenhouse gases, the contamination of surface water, by using the beneficial interaction of endophytes with weeds with T. aestivum, as well as global warming." Revised: "The Nt in the stem and the yield of T. aestivum with P. putida and R. irregularis showed statistically different numerical values compared to T. aestivum with 120 kg/ha of urea and 80 kg/ha of P2O5 without P. putida and R. irregularis at 100% (relative control). Consequently, the performance of T. aestivum in calcareous soils improved, leading to the avoidance of greenhouse gas generation and surface water contamination, as well as contributing to global warming mitigation."

The suggested revised text has refined to enhance clarity, conciseness, and readability for the readers.

Conclusion are suggested to written as;

The results obtained in T. aestivum with P. putida and R. irregularis (G1 and G2), isolated as endophytes from the root system of A. pupurea and R. luteola and associated with the growth of this gramine, demonstrate a positive effect on the uptake of nitrogen, particularly as 15N-urea, in comparison to uninoculated T. aestivum. P. putida and R. irregularis act as biological tools to increase urea and phosphates uptake, especially in alkaline conditions, through the action of phytohormones and phosphatases. Consequently, T. aestivum showed improved yield, being able to uptake insoluble phosphates from the soil as well as 50% of the phosphates and urea applied as fertilizers.

Good luck