

Throughout the paper the Authors use the phrase sp for species. I think it would be more correct to add a point after sp (writing sp.) because it is an abbreviation.

Abstract

Line 21-22 Please, could the Authors change “G15-treated condition” into “G15-treatment condition”?

Introduction.

Line 34-35: Please, add species or sp., as you like, after the genus name *Fusarium*.

Line 40 I think you should remove the article “the” because it seems that overwinter works as a verb. causingchlamydospores to ~~the~~ overwinter in the plant residues and field soil.

Line 77 Please, change semicolon into a comma would fit: the grown plants, thus, maintaining pepper field sustainability. The last clause is a dependent one.

Mat and Meth

Line 87. Please, could you better grammar on lines 87-89? Ridge forming first, the 0.8 m ridge
88 distance, applying the powdery G15 microbial fertilizer strips to the middle of the ridge distance
89 at one time, and use a ridge mulching machine to mulch the microbial fertilizer.

Could you spend a few words about your G15 fertilizers in Mat&Met too? You told about it in the Introduction, but I think a few words in the first paragraph of the Mat and Met section would fit.

Line 112: sample was put into a sealed bag, and immediately put in a dry ice box and stored at low
113 temperature with dry ice.

Line 154: between biological agents treatments and control. Please, not using a plural s, when the noun works as an adjective before a noun, would be more correct.

RESULTS

Line 169: The title of the paragraph could be improved writing as follows: ***Impacts of G15-treatment on pepper root rot, biological characteristics, and yield*** .

Line 176: The title of the paragraph could be improved writing as follows: ***Impacts of G15-treatment on soil physicochemical characteristics***

Line182: The title of the paragraph could be improved writing as follows: ***Impacts of G15-treatment on microbial community α -diversity***

Line 195: Please, remove the letter n from the article. Three-quarters of the genera of bacteria had an richness of more

Line 198: The title of the paragraph could be improved writing as follows: ***Impacts of G15-treatment on microbial community taxonomic composition***

Line 201: I think the use of the word conditions would be more appropriate to include control too, because the control is not properly a treatment but a condition. For the fungal population, there were 39 genera in the two ~~treatments~~ conditions

Line 202: The fungi were mostly rotted on
203 humus-rich soil, plant residues, or manure. Please, clarify better that you are referring to G15 treatment.

Line 207: Please, add "that". group was significantly higher than that of the control group

Line 214 Please, remove comma. maintained at around pH 5.35, and in some places, the soil acidity is even lower.

Line 240 Please, change "G15-treated condition" into "G15-treatment condition".

Line 259-265. Please, could the Authors add any reference about the relation between ammonia N decreasing and root rot prevention, which seems to be a key role of G15 to prevent root rot?

Line 272 I would remove the comma after soil because it separates two parallel phrases (increasing... and enriching....) especially increasing the pH value of the soil and enriching K,

Figure 2 legend. Please, remove the n of the indefinite article. the genera of bacteria had an richness of more

Figure 3. For the fungal population, there were 39 genera in the two treatments conditions
The fungi were mostly rotted on humus-rich soil, plant residues, or manure. Please, clarify better that you are referring to the G15 treatments.

G = biological agent, C = Control treatment. Please, rewrite: G = biological agent treatment, C = Control condition.

Figure 4 legend. G = biological agent, C = Control treatment. Please, rewrite: G = biological agent treatment, C = Control condition.

Table 2. Selected physicochemical characteristics for soils according to biological agent and control treatment. Rewrite: **Table 2.** Selected physicochemical characteristics for soils according to biological agent treatment and control condition.

G = biological agent, C = Control treatment. Please, rewrite: G = biological agent treatment, C = Control condition.