

## Interactive comment on "Efficient Eco-Friendly Organic Wastes Mixed with Growth Promoting Bacteria to Remediate and Increase Fertility of Saline Sodic Soil in Egypt" by Mohamed Hafez et al.

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## General comments for reviewer 2:

The manuscript presents the effcts of several treatments(soil amendments) on the sodicity/salinity of the selected soils. It is rather difficult to evaluate the effects of so many treatments using different amounts of the individual amendments, and resulting in differing effects related to the various parameters. The treatments are compared with solid or dotted lines as they were directly connected with time but there is non real con-

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nection among them. Each parameter variability should be related only to the effect of the treatment on the parameter itself. Comparing the variability of pH derived from 8 different treatments (with different chemical composizion, element content, C content, etc.) does not have any specific significance. All of the treatment produce indipendent results which cannot be connected with lines and discussed accordingly.

Dear reviewer 2, Thank you for your time and effort to review our paper. We appreciate your kind words and constructive remarks, but we would like to have serial comments about the manuscript in particular, not in general about the evaluation of our work.

But we will answer your general words, we used 8 types to find out what is the best level of treatments that will affect the decrease percentage of salts in the soil. Regarding the pH, the soil has the ability to change in acidity or alkalinity buffering capacity) without any additives, and the objectives of this work were to (i) the effect of eco-friendly organic wastes doses with Azospirillum inoculation on some chemical and biological properties of saline-sodic soil in the North-Western part of Egypt on reducing soil salinity, (ii) increase the content of beneficial microbes and activity of enzymes, and (iii) increase soil fertility in regards to the SOC improve the availability of macro and micro-nutrients in saline-sodic soil after 60 and 150 days of incubation.

Through the goals, the experiment was planned, and the different proportions of treatments that do not overlap with each other in the effect on the soil under study.

We discussed work on the side of influencing the improvement of the properties of saline-sodic soils, and the results are significantly related. Therefore, the effect on reducing the ESP content was very apparent in treatments that included spent grain with bacteria.

It is worth noting that the treatments were closely related through the time of incubation and mixing of treatments, wich enhancement the decomposition rate of organic wastes and increase soil fertility.

## Thank you

Interactive comment on SOIL Discuss., https://doi.org/10.5194/soil-2019-69, 2019.

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