

Review of: "Synthesis, Characterization and Ameliorative Effect of Iron Oxide Nanoparticles on Saline-Stressed Zea Mays"

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Potential competing interests: No potential competing interests to declare.

The research area seems well motivated; data presented are sound; data analyses are technically correct, and research findings support the claims and objectives properly made in the manuscript. This manuscript contains sufficient information for publication in your journal. So, this manuscript can be accepted with minor revisions. I have gone through the manuscript thoroughly and would like some revisions that can be helpful in further improvement of the manuscript.

Mention the brief methodology in the abstract section, i.e., site, experimental design, treatments, etc. Also, add that this is a bioassay/pot experiment.

Keywords are not appropriate. Keywords should be words not contained in the title or in the abstract. Their usefulness is to make the searching of the article easier using common scientific search engines. Since several keywords are already present in the title, and/or repeated several times in the abstract, I strongly advise the authors to replace some of them and add more.

Arrange your introduction section in a systematic scientific way and identify the study gap and provide a robust hypothesis. Try to avoid stating general information and be specific.

Add some data regarding why there is a need to fortify maize with iron in the introduction section.

Mention the criteria for sample collection of fresh leaves of *Diodella sarmentosa*, i.e., either mature leaves or leaves taken pre-flowering or post-flowering or newly emerged leaves?

Mention the concentration of the solution w/v, v/v, and 10:20 or 1:10, etc.

Mention the name of the maize genotype. What was the criterion for selection of the specific genotype of maize? If it was based on previous findings, then cite a reference.

Mention pot size, date of sowing, and duration of the bioassay.

Mention the stage for foliar application, i.e., 2-leaf stage, and give a reference.

How did you maintain 5 seedlings per pot till 45 days?

Did the authors apply any other fertilizer to the pots? If yes, then mention the quantity and source?

Mention the experimental design.

It is better to present meteorological data in graphical form in the materials and methods section for better understanding.

Improve the reporting language and avoid jargon. Directly state the results and treatments' performance. Make the results section concise and specific.

Try to discuss results with recent literature and provide reasoning for the responses recorded.

The conclusion section is missing.