

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

Sumanth B

Potential competing interests: No potential competing interests to declare.

There is some value to the manuscript that discusses the creation of iron oxide nanoparticles from plants and how it affects Zea mays plant salt tolerance. While the work is excellent, there is room for improvement in the manuscript's organization to make it easier to read. There are a few things to consider:

- The authors should strengthen and improve the abstract by merely outlining the procedures utilized in the synthesis and characterisation of FeO NPs. Also, describe the concentrations of the salts and NPs used in the experiment.
- Kindly list the keywords using semicolons to separate them in alphabetical order.
- Please structure the introduction chapter so that you talk about nanotechnology first, then how different crops—especially maize—are affected by salinity, and last, how plant-based nanoparticles help to mitigate stressors. Provide your goals and the novelty of your research in the final paragraph of the introduction.
- Throughout the entire research article, use references that are largely from after 2020 (recent research articles).
- There is no need for a lengthy discussion; just include the citations for each protocol in the Methods and Materials chapter.
- The authors have discussed the average size of the obtained nanoparticles without performing the DLS method.
- The references and the citations need to be proper throughout the article. One referencing style should be used.
- Authors need to focus on rewriting the captions of all figures. The figures with sub-legends A, B, C, D, and E should be clear with which treatments they represent. Also, mention the name of the test used to find out significant differences.
- Authors should separate the discussion and result chapters to make the article more clear and authentic.
- Authors need to improve the conclusion section. They might include a few significances of the study.