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.

This manuscript has some concerns. However, this work may be recommended for publication after careful revision considering the points below, and the revised version should be reviewed again before publication in Qeios:

i) The title contains “Synthesis, Characterization, and Ameliorative Effect of Iron Oxide Nanoparticles on Saline-Stressed Zea Mays"; however, justifications are not presented toward this claim.

ii) The intense peak of Fe is not clearly shown in the analysis. Authors should recheck it. Also, the average sizes of the samples widely range and are not consistent. Explain it properly.

iii) All the FTIR peaks are not properly assigned, and this is not clear.

iv) What will the band gap of FeO NPs be, and how is it related to the antioxidant property?

v) Some peaks are not assigned in the EDX analysis. Recheck it.

vi) Give the mechanistic path of the decline in root length sizes with salinity stress.

vii) ROS can damage plants’ DNA, lipids, and proteins, among other biological constituents. Give a mechanism.