

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

Kelimah Elong<sup>1</sup>

<sup>1</sup> Universiti Teknologi Mara

Potential competing interests: No potential competing interests to declare.

1. In this work, add the table of comparison from previous work so that we can see clearly the novelty, improvement, and the advantages of this study.
2. In 3.2, the author discusses wavelength against absorbance, but how about the band gap? It would be highly valuable if the author provided the data.
3. In 3.3, the value of the average particle size is provided. What is the basis for determining the average crystallite sizes? Please supplement the granularity test analysis. Is it the data calculated from SEM or TEM? Better provide lower and higher magnification SEM images to prove the crystallinity of the FeONPs.
4. For the TEM image, it would be highly valuable if the author provided a selected area FFT so that we can clearly see the arrangement of the atoms and proof that the material is in nano sizes. Calculate the d-spacing using TEM so that it can tally with the d-spacing of the XRD.
5. In 3.4, the author mentions EDX values in weight % and atomic %. What is the indication of these values and the actual composition of FeONPs? Add a citation for the energy peak at 2.5 keV referred to the Fe.
6. In 3.5, the author mentions there are no prominent peaks in the XRD results. It would be better to add a reference pattern with ICDD to prove this material is amorphous. The measurement of the XRD is in the range 20.52° to 80.30°, but the XRD results start measurement below 20°; please check.