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 work is about **Synthesis, Characterization and Ameliorative Effect of Iron Oxide Nanoparticles on Saline-Stressed Zea Mays. The results** can be deduced that FeONPs can improve the growth and development of saline-stressed *Zea mays* by lessening the negative effects that salt has on the plant.

The idea is OK, but I still have some comments.

When soil salinity exceeds thresholds for any given crop, crop yield is decreased; sweet potato, wheat, and maize are particularly sensitive, while cotton, barley, and sugar beet are highly tolerant (refere 1- Zinc oxide and silicone nanoparticles to improve the resistance mechanism and annual productivity of salt-stressed mango trees.NI Elsheery, MN Helaly, HM El-Hoseiny, SM Alam-Eldein.Agronomy 10 (4), 558

2-Physiological and molecular mechanisms of salinity tolerance in grafted cucumber

NI Elsheery, MN Helaly, SA Omar, SVS John, M Zabochnicka-Swiątek, …South African Journal of Botany 130, 90-102

3-Effect of biofertilizers and putrescine amine on the physiological features and productivity of date palm (*Phoenix dactylifera*, L.) grown on reclaimed-salinized soil

HM Naser, EH Hanan, NI Elsheery, HM Kalaji.Trees 30, 1149-1161

4-Cucumber grafting onto pumpkin can represent an interesting tool to minimize salinity stress. Physiological and anatomical studies.M Helaly, Z Mohammed, N El-Shaeery, K Abdelaal, I Nofal. Middle East J Agric Res 6 (4), 953-97

5-Impact of gamma irradiation pretreatment on biochemical and molecular responses of potato growing under salt stress.WJEN Elhamahmy Ali Mohamed, Elsadany Osama, Eid Manal, Abdelazeem Samah.Chemical and Biological Technologies in Agriculture 8 (35), 1-11

6-Comparative studies between growth regulators and nanoparticles on growth and mitotic index of pea plants under salinity.HG El-Araby, SFM El-Hefnawy, MA Nassar, NI Elsheery

African Journal of Biotechnology 19 (8), 564-575

7-Impact of Titanium Oxide Nanoparticles on Growth, Pigment Content, Membrane Stability, DNA Damage, and Stress-

Related Gene Expression in *Vicia faba* under …SA Omar, NI Elsheery, P Pashkovskiy, V Kuznetsov, SI Allakhverdiev, … Horticulturae 9 (9), 1030

Nanotechnology has recently caught the attention of research experts from numerous disciplines of science and plays an important role in medicine, agriculture, industry, the environment, energy, and electronics (Alvarez-Chimal & Angel Arenas-Alatorre, 2023)

plz added this refere

1-Nanotechnology for polluted soil remediation.TA Salem, NA Fetian, NI Elsheery.Nanotechnology for Agriculture: Advances for Sustainable Agriculture, 285-305

2-Nanomaterials: scope, applications, and challenges in agriculture and soil reclamation

TMS Attia, NI Elsheery.Sustainable Agriculture Reviews 41: Nanotechnology for Plant Growth and

improving plant nutrition concentration and water consumption efficiency, as well as crop protection against pests and diseases using molecular tools and procedures, and environmental protection by increasing plant tolerance to biotic and abiotic stress while reducing environmental pollution to the barest possible minimum (Singh et al., 2023).

plz read this

1-Application of silicon nanoparticles in agriculture.A Rastogi, DK Tripathi, S Yadav, DK Chauhan, M Živčák, M Ghorbanpour, ..3 Biotech 9 (3), 90

2-Effect of nanoparticles on biological contamination of 'in vitro' cultures and organogenic regeneration of banana.MN Helaly, MA El-Metwally, H El-Hoseiny, SA Omar, NI El-Sheery

Australian Journal of Crop Science 8 (4), 612

3-Zinc oxide and silicone nanoparticles to improve the resistance mechanism and annual productivity of salt-stressed mango trees.NI Elsheery, MN Helaly, HM El-Hoseiny, SM Alam-Eldein.Agronomy 10 (4), 558

4-Foliar application of nanoparticles mitigates the chilling effect on photosynthesis and photoprotection in sugarcane.NI Elsheery, VSJ Sunoj, Y Wen, JJ Zhu, G Muralidharan, KF Cao.Plant Physiology and Biochemistry 149, 50-60

5-Foliar iron and zinc nano-fertilizers enhance growth, mineral uptake, and antioxidant defense in date palm (Phoenix dactylifera L.) seedlings

HJ Shareef, AYL Hzaa, NI Elsheery.Folia Oecologica 50 (2), 185-195

6-Use of nanoparticles in improving photosynthesis in crop plants under stress

SM Elhefnawy, NI Elsheery.Photosynthesis, 105-135

Please make the aim of your study more clear.

Results

Table 2

Please check your statistics again; I feel it's wrong.

Fig 6 - the letters are wrong

Fig 7 is the same

Fig 8

Discussion needs to be more deep.