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Authors' response to final evaluator's comments

SDI FINAL EVALUATION FORM 1.1

PART 1:

| Journal Name: | International Journal of Plant & Soil Science |
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| Manuscript Number: | Ms_IJPSS_19992 |
| Title of the Manuscript: | Mitigate climate change impact: Maximizing the tolerance of eggplant to salinity stress using selenium supplements |
| Type of Article | Original Research Article |

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)

The paper "Mitigate climate change impact: Maximizing the tolerance of eggplant to salinity stress using selenium supplements" was previously revised and several issues were pointed. These issues were not significantly changed. The abstract had minimal changes and maintains too much details, without indicating ow selenium interacts (at a metabolic perspective) with NaCl. The Materials and Methods still does not indicates significant details to allow reproduction of data or even to understand that the methods are adequate (for instance: how have the micronutrient been furnished to the plant? Can we consider the interaction of Se without viewing the interactions with the other micronutrients? What was the relative water humidity? How can we understand the effects of Se and the interactions with NaCl without a clear perspective with the flow in the xylem and its relation with stomata opening? Besides, how can we understand the ions flux in the plant and the synthesis of photoassimilates - which implicates proline synthesis - without knowing the photoperiod? Also, it is well known that photoinhibition increases mineral stresses - so, how can we conclude anything about the experiment without knowing the light intensities or at least the GPS coordinates with a synthetic description of this parameter? Etc...). Additionally, the discussion is sharply poor, being just a limited description of data without presenting sounding hypothesis, and besides in some cases is only speculation (for instance, just as examples, the authors say - "Increasing N and P contents in leaves and fruits of eggplant with increasing salinity of irrigation water may be due to increase the amino acids inside the plant with increasing the stress - THIS IS NOTHING - Indeed, every specialist on plant nutrition should immediately say that it is exactly the opposite – AS N AND P INCREASES THIS MIGHT TRIGGERRED AMINOACIDS INCREASE - nevertheless, all this appointment is just speculation; Also following the sentence of the authors - "Increasing N, P and K contents in leaves and fruits of eggplant by increasing foliar Se supplements under irrigation with saline water may be, again, due to the role of Se in increasing antioxidant activity of the plant to face the stress." - THIS AGAIN IS A PURE SPECULATION - According to the authors as Se controls reative oxygen species N, P and K increases, yet how can this be accepted? Just speculation since clearly Se is only integrated in a specific enzyme (GSH) of the Asada-Halliwell cycle but and what about the other interactions with metabolites and enzymes of the cycle? For instance, even if we accept this speculation, how can we consider the interaction of GSH with the xanthophyll cycle, as we do not know the light intensities or even have a clear picture about its functioning - remember the interactions of the cycle with NaCl?). More criticism could be provided just to show the scientific poverty of the discussion of this work, yet I think that this points are sufficient. Conderning to the conclusion, again it is without any novelty since it lacks an scientific answer to the main question "How does Se affect (if really affects) NaCl stress?".

Reviewer Details:

| Name: | Anonymous |
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| Department, University & Country | University of Lisbon, Portugal |

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