Dear Editor

The finding presented in the manuscript 'Similar and divergent responses to salinity stress of jamun (*Syzygium cumin*i L. Skeels) genotypes: biomass allocation and ion partitioning' improve the existing knowledge with respect to salt tolerance in jamun which is a neglected crop yet has a lot of therapeutic value. A perusal of manuscript revealed that little is known for salinity tolerance in jamun. In this context, this work is important as author studied a good number of jamun genotypes using biomass, mineral ion and physiological parameters. Another significant point is that authors have compared the responses of two seedling populations (monoembryonic and polyembryonic) to understand how they differ when subjected to salt stress. Although manuscript is mostly in order, I have found some deficiencies and shortcomings that must be rectified before the manuscript is accepted for publication.

Basic reporting

The article is authored in a clearly understandable way. In my thought, the author has presented various aspects of the study in a good manner. All the pertinent information about the experiment such as the study site, experimental material, growth environment, salt stress imposition, and standard methods for data recording is presented in full. Similarly, author has used different data analytics to derive major findings. Overall, the results and discussion parts are well written.

Experimental design

The methodological details outlined for the investigation are clear and adequate. The experiment design (Randomized block design) is appropriate. Data have been properly analyzed.

Validity of findings

The effects of salinity have been evaluated utilizing a wide range of parameters. This study had used 48 diverse genotypes of jamun to draw inferences. This appears adequate number of germplasm to obtain a fair understanding about salt effects. This was a relatively long experiment, assessing salinity stress impacts on important attributes for plant biomass, mineral absorption and partitioning as well as some key physiological traits. Future studies on salinity tolerance may take key messages and insights from the methods used and findings reported herein.

1. In the background section of Abstract, the sentence may be revised as 'Genetic variation for salt tolerance remains elusive in jamun (Syzygium cumini)'.

2. In the conclusion part of abstract, it is stated that Polyembryonic genotypes CSJ-7, CSJ-8, CSJ-14 and CSJ-19, which showed least reductions in leaf, root and plant biomass even after prolonged exposure to salinity stress, may particularly be useful as salt-tolerant rootstocks. Here, it is advised to

keep only term biomass and not leaf, root and plant biomass. Also, in place of 'may particularly be useful', write as 'may be used as'.

3. In line 67-69 of Introduction, author mentions that 'Comprehending the morpho-physiological mechanisms underlying salinity tolerance is also crucial for the development of appropriate breeding techniques aimed at enhancing salt tolerance'. However, this is not supported by relevant reference, and therefore should be looked into.

4. In line 85-88 of Introduction, the sentence should be revised for a better meaning. It may be written as 'Despite the fact that polyembryonic saplings may perform better under salt stress (Nimbolkar et al. 2019), the comparative reactions of mono- and poly-embryonic seedlings of jamun to salt stress are not known.'

5. The sentence written as 'This study intended to….' (line 88) may be revised as 'Considering the previously highlighted gaps in research, this experiment was conducted….'

6. In observation recorded part, write as 'Leaf, stem and root dry mass were recorded…….' and not as it is mentioned.

7. It is stated that gas exchange traits were determined by using a gas exchange system. However, I suggest writing it as portable photosynthesis system.

8. I could see that author has discussed the effect of salinity on biomass allocation to shoot and root (line 336-344). I also found that related data for shoot and root dry mass are provided in Supplementary Table 2. However, there is no mention of this in the results section. Therefore, it is advised to present the relevant data in table 2 along with results at the appropriate place in manuscript.

9. In lines 329-332, author has described the genotype differences for reductions in biomass along with numeric values which is essentially a repetition of the results already presented. So, it may be removed.

10. In discussion, the authors have stated that salinity stress increased leaf Na in mono-embryonic and poly-embryonic types to differing extents (line 347-349). This is clearly a repetition of the results presented under the head leaf ions (line 169-174). Therefore, this should be removed in order to avoid repetition.

11. In the conclusions part of manuscript, authors suggest that some poly-embryonic genotypes least affected by salt may be used as salt tolerant rootstocks. This raises an important question whether such genotypes have been conserved and maintained for future applications.