

This is re-review of the manuscript titled “Assessment of intra- and inter-genetic diversity in tetraploid and hexaploid wheat genotypes based on omega, gamma and alpha-gliadin profiles (#83389)”. The authors have made significant improvement in the manuscript, but I do have suggestions. The manuscript can be published after minor revision.

Introduction

Mostly well organized. But a few points still need to be edited.

- Line 58-59: Wheat is not used specifically for gluten. Flour of wheat is used because it contains gluten. Remove the gluten in this sentence. The new sentence could be “Almost 5% of wheat is also used for seed planting and other purposes (alcohol, glues, etc.)” or you can remove this sentence.
- The research question is not still well defined. it would be great to add a research question at the end of the first paragraph (after line 61).
- Line 82. Please create a new paragraph with the sentence “The SDS-PAGE of seed protein is an approach to assess the genetic diversity and classify plant genotypes”.
- Line 121: “is” should be “was”
- Line 125: The meaning of "hybridization experiments" mentioned in the last part is not understood. If you are talking about selecting parents for plant breeding, please write it like this or you can remove this part. The new sentence may be “The main objective of this work is to evaluate the genetic diversity between and within durum and bread wheat genotypes to divide those genotypes into groups depending on the ω , γ , and α -gliadins profiles in addition to multiple alignment and computational analyses of ω , γ , and α -gliadins to determine the endosperm protein characteristics and the type of the amino acids.
- Line 127: “It is also of great value to evaluate the possible use of the gliadins banding profiles for predicting quality in hybridization experiments” This sentence is not understood. Maybe it can be better understood as follows; It is also of great value to evaluate the possible use of gliadin banding profiles to predict quality in plant breeding.

Material metot.

Mostly well organized. But no still enough information was given about the plant material.

- What is the plant identification number of genotypes given by ICARDA or CIMMYT.
- It is unclear what is the pedigree of genotypes.
- It is very important whether these genotypes are landrace, cultivated varieties or inbred breeding material.

Results

Acceptable

Discussion

Lines: 291-293.

This sentence must be edited or removed. Protein content of wheat grains may vary depending on environment, but band profiles of wheat proteins are not vary depending on environment. I could not also find such information in the given literature (Peng et al. 2011).

Conclusion

Acceptable

Figures

Good

Table

Good