## **General comment**

Overall, this manuscript presents a comprehensive study on the evaluation of Aegilops tauschiiderived introgression lines (ILs) for heat and drought tolerance in wheat. The study is very interesting and well-designed, and the findings may give significant resources for research and may aid in deciphering the Salicaceae's complicated evolutionary architecture. <u>I have some minor comments which could be addressed to improve the manuscript and increase the chance of publication.</u>

## Here are some specific comments and suggestions for improvement:

- 1. Clarity and Organization: The manuscript is well-structured and organized, with a clear delineation of the objectives, methods, results, and conclusions. However, some sections could benefit from further clarification or elaboration, particularly in explaining the rationale behind certain experimental approaches or data interpretation.
- 2. Methodological Rigor: The methodology appears robust, with appropriate experimental designs and statistical analyses. However, more details could be provided regarding specific protocols and procedures, particularly in the seedling evaluation and field trials sections, to ensure reproducibility by other researchers.
- 3. Results: Additional discussion on the implications of the findings in the context of previous research or theoretical frameworks could enhance the manuscript's scientific significance.
- 4. Significance and Novelty: The manuscript addresses an important issue in agriculture improving stress tolerance in wheat and utilizes novel genetic resources from Aegilops tauschii. Emphasizing the novelty and potential impact of the findings could strengthen the manuscript's contribution to the field.
- 5. Language and Style: Overall, the language is clear and concise. : Additionally, there are instances where terminology could be clarified or jargon reduced to improve accessibility to a broader audience, particularly in describing complex genetic concepts or experimental techniques.
- 6. Figures and Tables: The figures and tables provided are informative and well-designed. : Additionally, ensuring consistency in labeling and clarity in presentation would enhance their effectiveness in conveying key results and trends.
- 7. Future Directions: It would be beneficial to include a brief discussion on future research directions or potential applications of the findings, particularly regarding further genetic studies or breeding efforts aimed at developing stress-tolerant wheat varieties.

## # Also check all references in the text and reference list carefully some are missing from the list or not cited in the text.

Overall, the manuscript presents valuable research on improving stress tolerance in wheat through the utilization of introgression lines from Aegilops tauschii. Addressing the above points could strengthen the manuscript and increase its impact in the field of agricultural genetics and breeding