

The manuscript submitted by Ibrahim et al., titled *Identification and Characterization of Novel SUMO Genes in Bread Wheat*, reports the identification of four novel SUMO genes, *TaSUMO4-7*, in bread wheat. The manuscript is well-written; however, I have several comments that may help improve its clarity and scientific rigor:

- The identification of four new SUMO genes is significant. However, it would strengthen the study if the authors demonstrated the conjugation ability of these SUMO proteins using techniques such as an *in vitro* SUMOylation assay.
- It would further support the study if the authors could give an insight on the conservation of these genes across different wheat varieties and other related plant species.
- In Figure 1, the panels are labelled as a, b, a, b and c. It would be nice if they could name the different panels with different alphabets.
- In Figure 7, the authors present the nuclear localization of *TaSUMO4-7*. Including a nuclear marker would enhance the clarity of localization. Additionally, a negative control should be included to distinguish specific signals from background fluorescence, thereby strengthening the validity of the data.
- In Figure 9, the authors use GFP:SCE1a. However, they do not specify whether *SCE1a* is from wheat or another plant system. Given that *SCE1a* is not well-characterized in wheat, how can the authors be certain that the *SCE1a* used in this study functions as expected? Clarifying this point would improve the study's credibility.
- In line 360, the authors claim, "These findings are the first reports on SUMO genes in the wheat genome." However, *TaSUMO1-3* have already been identified. The authors should revise this statement to reflect the novelty of their findings accurately.