

CORRECTION

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Correction: Overexpression of cotton PLATZ transcription factors *GhPLATZ01* and *GhPLATZ15* improves the drought resistance of tomato

Tao Liu^{1†}, Yanhua Xue^{1†}, Xiaoqin Ding¹, Yao Zhang¹, Zhongqing Li¹, Zhenhai Zhang¹, Zhihui Yang¹, Jianbo Zhu^{1*} and Ruina Liu^{1*}

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Following publication of the original article [1], the authors found duplicate paragraph which was mistakenly captured under Introduction section. Below paragraph has to be removed:

“In the early stages of this study, bioinformatics analysis identified 40 *GhPLATZ* genes and named them *GhPLAT01* to *GhPLAT40* [17] based on their chromosomal locations. Under drought stress, *Arabidopsis thaliana*'s *AtPLATZ11* gene showed significantly increased expression, suggesting its potential role in drought resistance [18]. Therefore, we specifically selected two E-Clade genes (*GhPLATZ01* and *GhPLATZ15*) with homologous sequences to *AtPLATZ11* (AT4G17900) as research subjects. These genes exhibit structural and functional conservation, indicating they may play crucial roles in plant drought response. To validate our hypothesis, we used tomato – a model organism with a

short growth cycle, clear genetic background, and ease of manipulation – for heterologous expression studies. By constructing overexpression vectors and transforming tomato plants, we obtained stable transgenic lines stably expressing *GhPLATZ01* and *GhPLATZ15*, providing experimental foundations for investigating their mechanisms in enhancing drought tolerance. This study not only examines changes in gene expression patterns but also comprehensively evaluates transgenic plants' performance under drought stress through physiological biochemical indicators and molecular biology methods, revealing the potential value of *GhPLATZ01* and *GhPLATZ15* in stress regulation. This study laid a foundation for further research on PLATZ gene in cotton, and provided possible candidate genes for cotton stress resistance research, genetic improvement and genetic modification.”

The correction does not affect the conclusion of the article. The original article [1] has been corrected.

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[†]Tao Liu and Yanhua Xue contributed equally to this work.

The original article can be found online at <https://doi.org/10.1186/s12870-025-07428-3>.

*Correspondence:

Jianbo Zhu
zhujiaboshz@163.com

Ruina Liu
shuilingzi123_4@126.com

¹College of Life Sciences, Shihezi University, Shihezi 832000, China

References

1. Liu T, Xue Y, Ding X, et al. Overexpression of cotton PLATZ transcription factors *GhPLATZ01* and *GhPLATZ15* improves the drought resistance of tomato. *BMC Plant Biol.* 2025;25:1388. <https://doi.org/10.1186/s12870-025-07428-3>.

