Cite this as: Yun WU, Minyi SUN, Shiqi LI, Ruihan MIN, Cong GAO, Qundan LYU, Ziming REN, Yiping XIA. Molecular cloning, characterization and expression analysis of three key starch synthesis-related genes from the bulb of a rare lily germplasm*, Lilium brownii* var. *giganteum*[J]. *Journal of Zhejiang University Science B*, 2021, 22(6): 476-491. https://doi.org/10.1631/jzus.B2000545

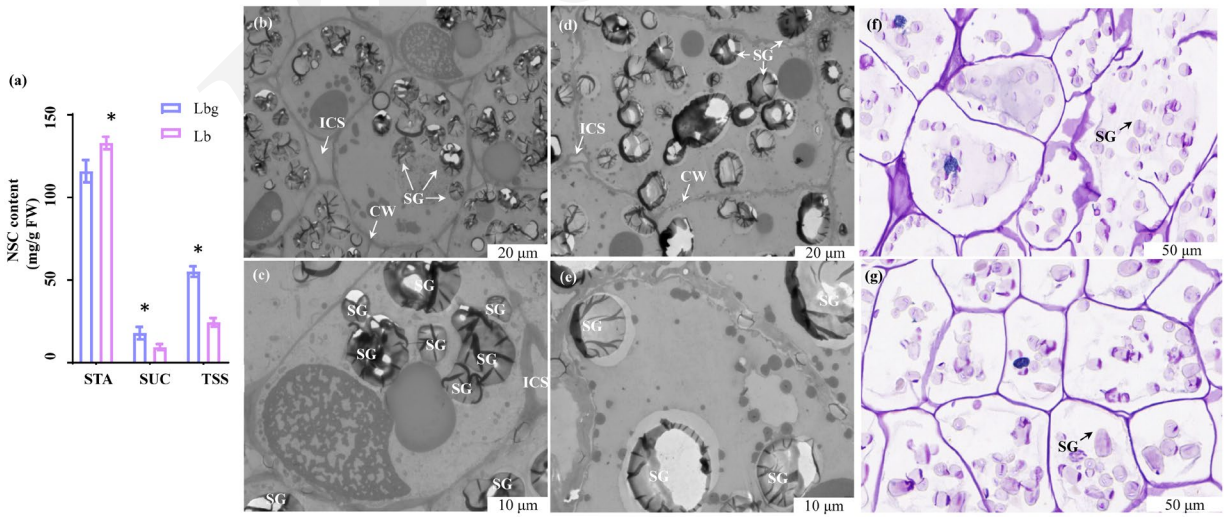
Molecular cloning, characterization and expression analysis of three key starch synthesis-related genes from the bulb of a rare lily germplasm, *Lilium brownii* var. *giganteum*

Key words: ***Lilium*, starch synthesis, bulblet development, SNPs, expression pattern**

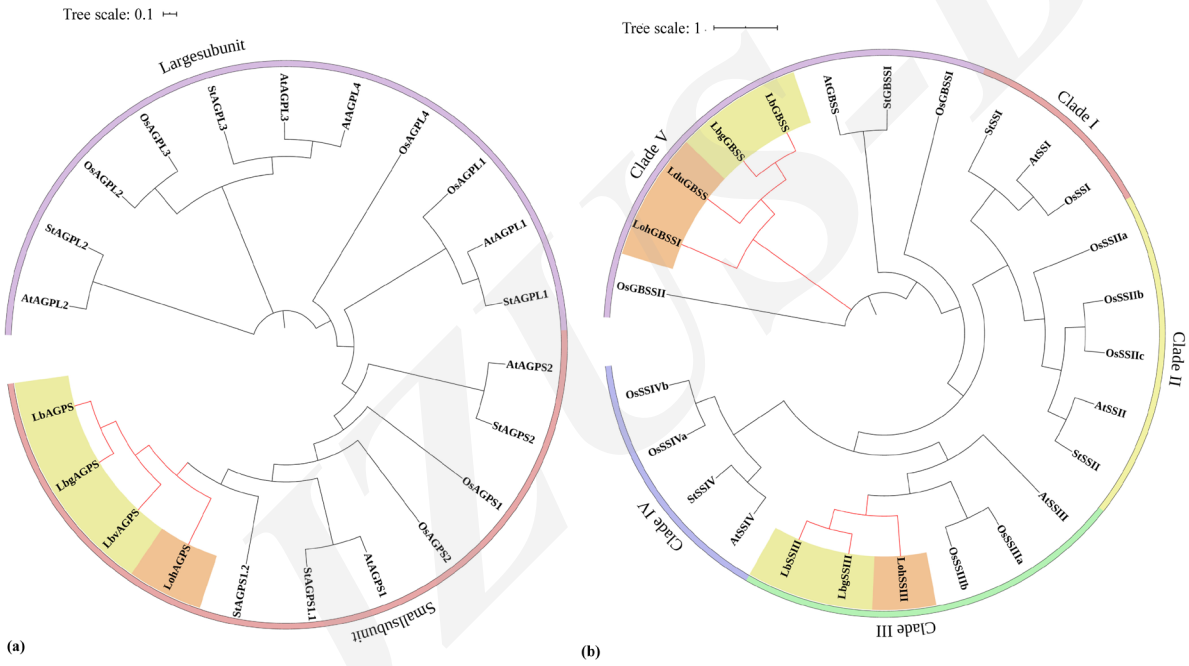
Research Summary

This article mainly focused on the rare lily germplasm, *Lilium brownii* var. *giganteum* from the starch synthesis pathway as follows:

- **Comparison of starch content and characteristics**

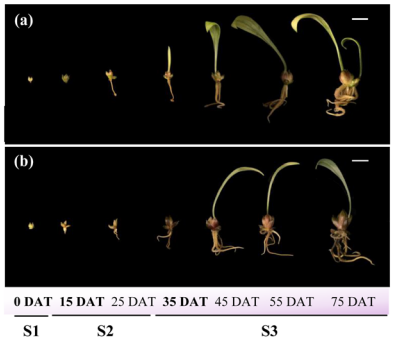


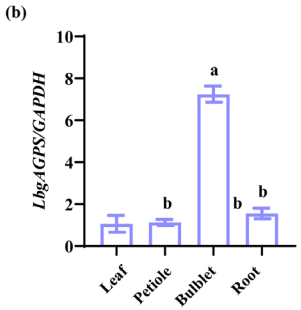
- **Cloning and classification of three key starch synthesis-related genes**

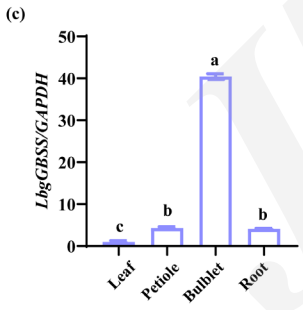


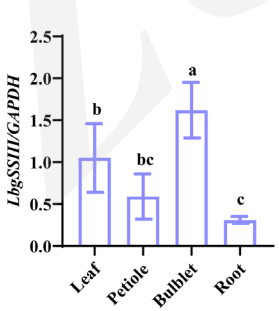
- **Expression pattern of three key starch synthesis-related genes**

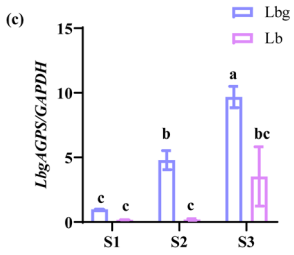


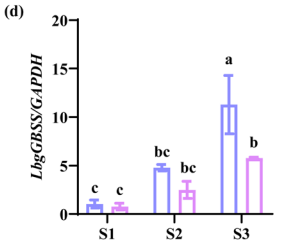


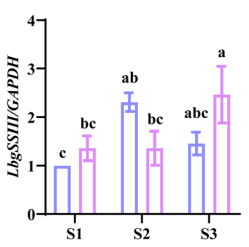












Innovation points

- **Cloning** **of the tree key starch synthesis-related genes for the first time in this rare species.**

- **Discovery** **of a set of single nucleotide polymorphisms (SNPs) for further validation.**

JZUS-B