

Development of a new marker system for identifying the complex members of the low-molecular-weight glutenin subunit gene family in bread wheat (*Triticum aestivum* L.)

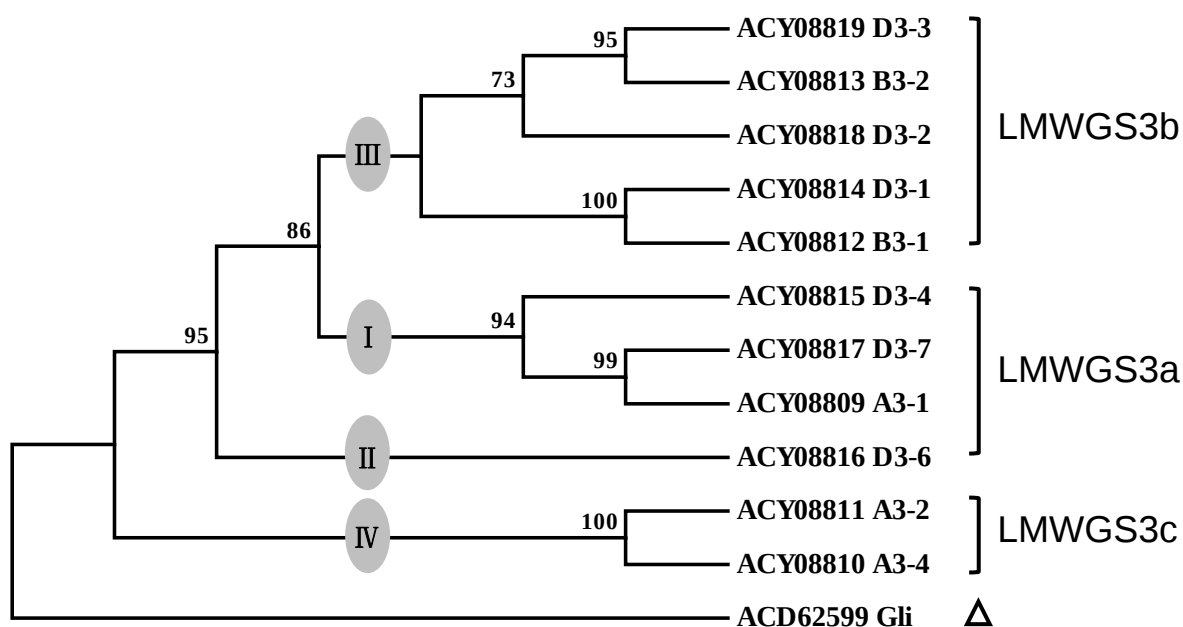
Theoretical and Applied Genetics

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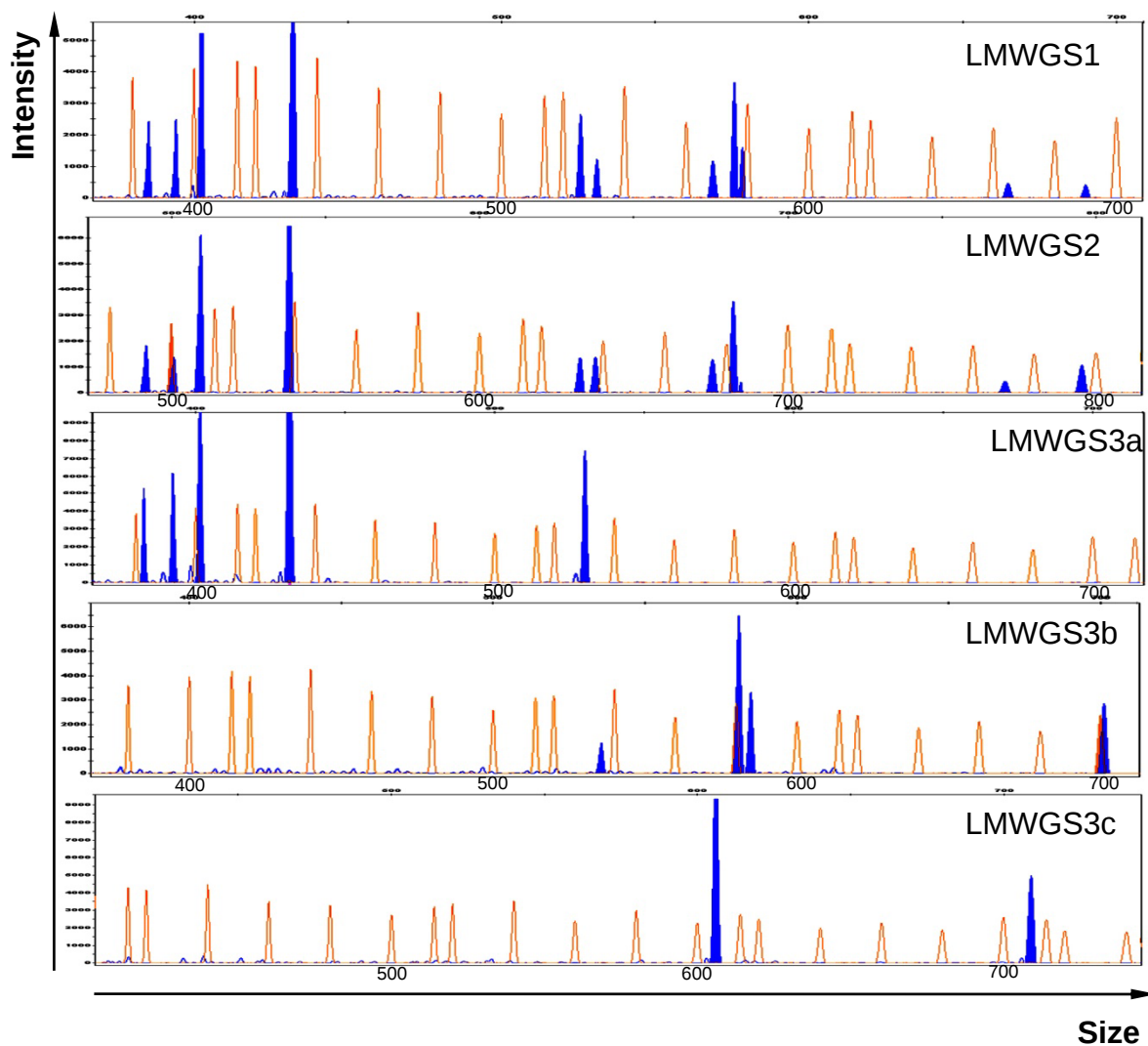
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Supplementary Fig. 1 Phylogenetic reconstruction of LMW-GS in Xiaoyan 54.

The alignment of amino acid sequences of the 11 LMW-GS in Xiaoyan 54 was performed with the software Mega 4.1 (Tamura et al. 2007). The LMW-GS could be classified into four groups (I, II, III and IV). Therefore, three group-specific primers, were designed and LMWGS3a was specific to the group I and II, LMWGS3b to the group III, and LMWGS3c to the group IV



Supplementary Fig. 2 Identification of the LMW-GS genes expressed in developing seeds of Xiaoyan 54 with the marker system developed in this study. 11 blue peaks (DNA fragments) could be detected with the conserved primers LMWGS1, 11 with LMWGS2, and totally 11 with LMWGS3 (5 with LMWGS3a, 4 with LMWGS3b, and 2 with LMWGS3c). All data provided are representative of four independent sets of PCR amplifications and analyses using the Applied Biosystems 3730 DNA Analyzer