SUPPLEMENTARY DATA

FIG. S1. Alignment of SsGAMYB amino acids and the homologous genes in *A. thaliana*, *O. sativa* and *H. vulgare*. The asterisks mark the R2R3 domain and BOX 1, 2 and 3 of SsGAMYB.

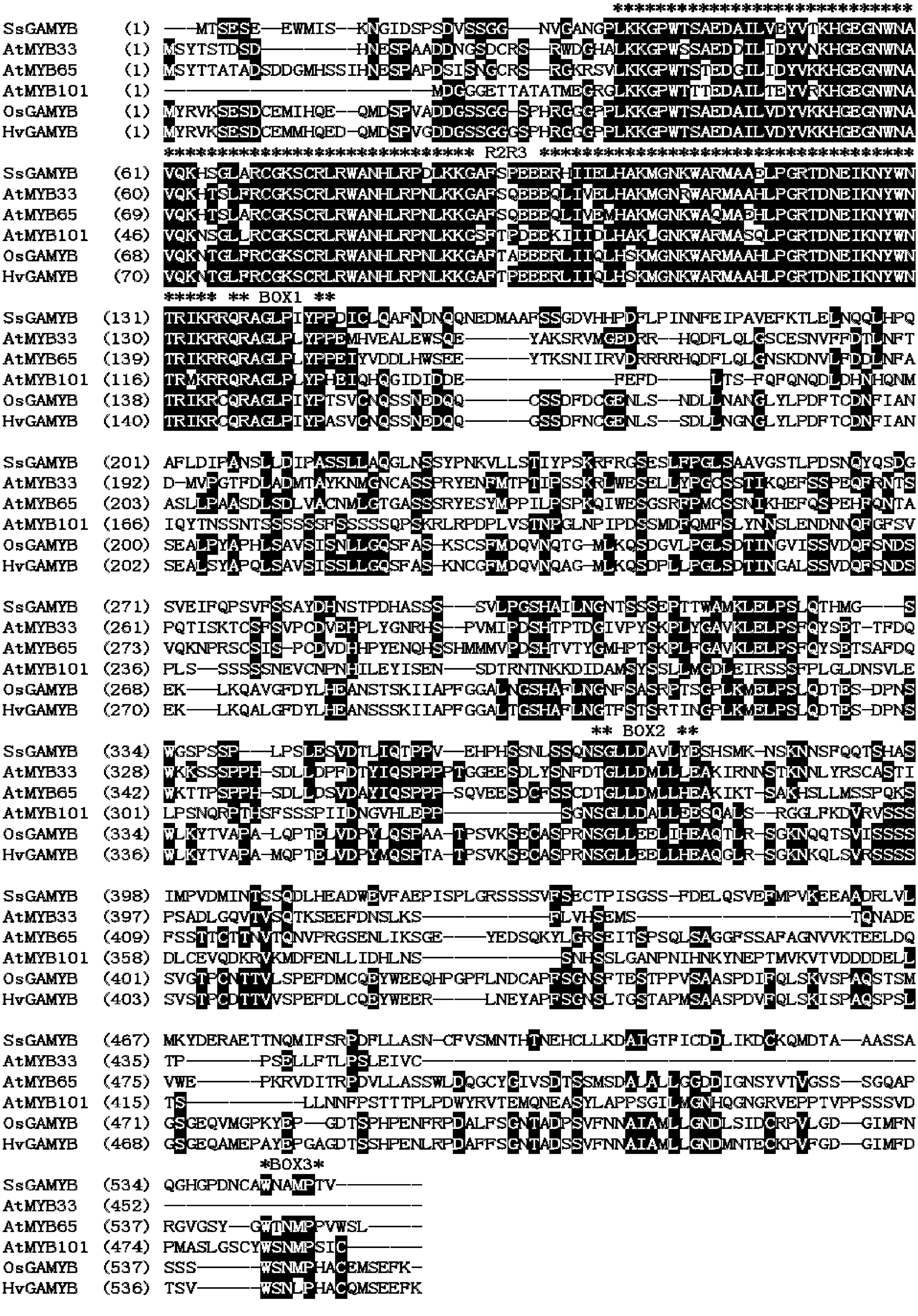

FIG. S2. Alignment of *SsLFY* nucleotide and its homologous genes in *A. thaliana* and *S. lycopersicum*.

SsLFY	(1)	GAAGTAGCACGTGGCAAAAAGAACGGCCTTGATTATCTGTTCCATCTGTACGAGCAGTGCCGCGAGTTCT
AtLFY	(730)	GAAGTGGCACGTGGCAAAAAGAACGGCTTAGATTATCTGTTCCACTTGTACGAACAATGCCGTGAGTTCC
SlLFY	(746)	GAAGTAGCACGTGGCAAAAAGAACGGCTTGGATTATCTGTTCCATCTCTACGAACAATGCCGTGATTTCT
SsLFY	(71)	TGATCCAAGTTCAGAATATTGCCAAGGAAAGAGGTGAAAAATGCCCTACCAAGGTGACGAA
AtLFY	(860)	TTCTTCAGGTCCAGACAATTGCTAAAGACCGTGGCGAAAAATGCCCCACCAAGGTGACGAA
SlLFY	(846)	TGATCCAAGTTCAGACTATTGCTAAGGAACGAGGTGAAAAATGCCCTACGAAGGTGACGAA

FIG. S3. Relative expression levels of *AP1* and *AP3* in abnormal flower organs of transgenic lines compared to WT using real-time quantitative RT-PCR. Relative expression levels are normalized using β-actin and WT levels are set at 1 using the software of Mastercycler ep realplex (Eppendorf, Hamburg, Germany).

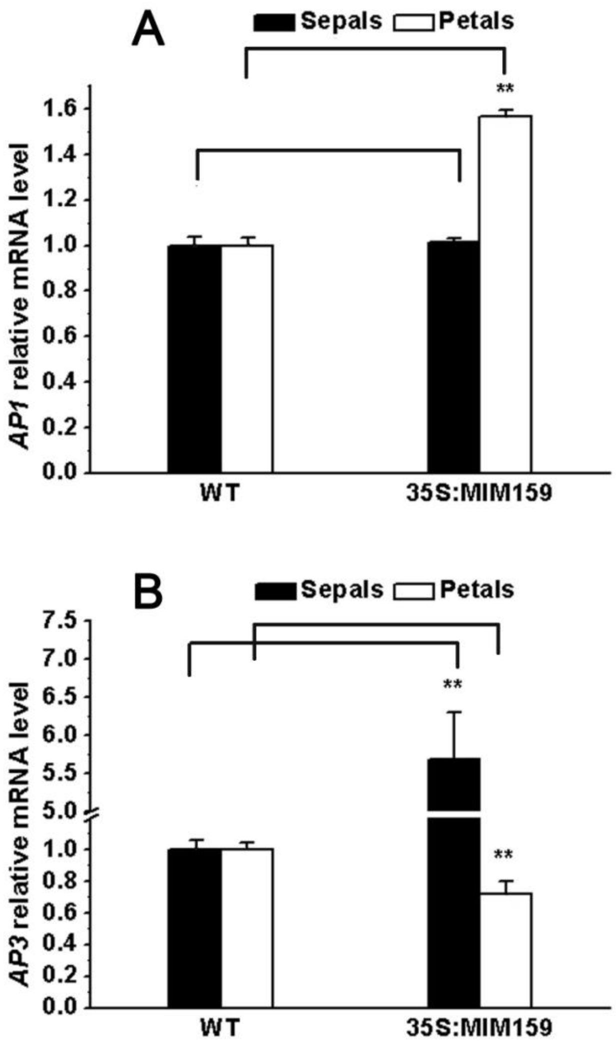

FIG. S4. Expression patterns of *AP1*, *AP3*, *AG* and *GAMYB* in various tissues of wild type gloxinia by semi-quantitative RT-PCR.

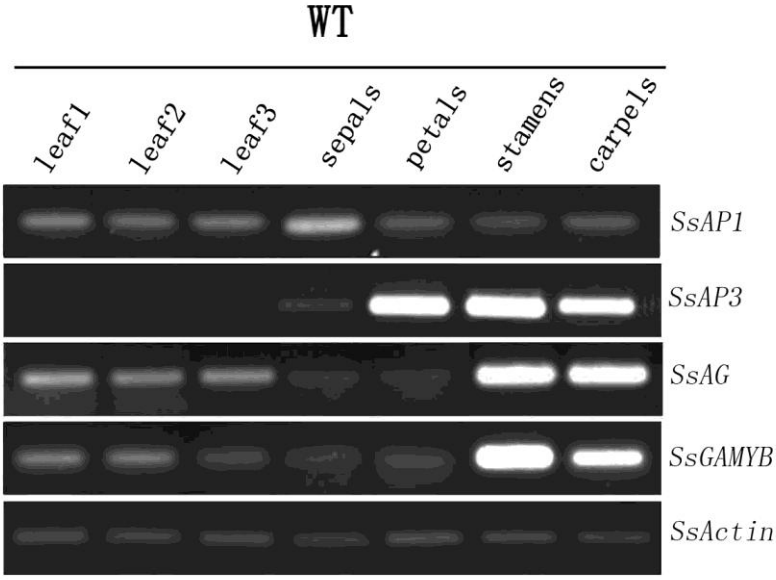

TABLE S1. Primers used in the experiments

	Primers
MIM159-I	CTTTTGGATTGAtagGGGGAGCTCTATTTCTAGAGGGAGATAA
MIM159-II	AATAGAGCTCCCCctaTCAATCCAAAAGCTTCGGTTCCCCTCG
miR159a-Stem-loop primer	GTTGGCTCTGGTGCAGGGTCCGAGGTATTCGCACcagagccaACTAGAGCTC
miR159a Forward	GCGGCGGTTTGGATTGAAG
UPM	GTGCAGGGTCCGAGGT
SsU6-UP	GACATCCGATAAAATTGGAACGATA
SsU6-DN	ATTTTGGACCATTTCTCGATTTGT
SsGAMYB-UP	GTATGACTAGTGAAAGTGAGGAATGG
SsGAMYB-DN	GACAGTAGGCATAGCATTCCAAGCAC
SsActin-UP	CAATAAATTGCGTGTTGCTCCTGAG
SsActin-DN	TGTTTCCGTACCGATCCTTTCTGATA
IPS1-UP	GGGGTACCCAAACACCACAAAAACAAAAGA
IPS1-DN	CGGGATCCACTATAAAGAGAATCGGAAGCA
SsLFY-UP	GAAGTRGCACGTGGCAAAAAGAACG
SsLFY-DN	TTCGTCACCTTSGTRGGGCATTTTTC
SsGAMYB-qRT-UP	CAACACTTCTTCTTCAGAGCCTACT
SsGAMYB-qRT-DN	GCCACTGTTTTGAGATGAAAGAT
SsActin-qRT-UP	TTCTCCTTTACATCACGAACAATTT
SsActin-qRT-DN	ATCCAGGCTGTCCTTTCATTGTAT
SsLFY-qRT-UP	GAAGTTGCACGTGGCAAAAAGAACG
SsLFY-qRT-DN	TTCGTCACCTTCGTTGGGCATTTTTC
SsAG1-qRT-UP	CTGATTGTCTTCTCTAGCAGAGGCCGCC
SsAG1-qRT-DN	GCACCCAAAGATTCACCAAGCATGTTCC
SsAP1-qRT-UP	TACTCAAGGCTCCGATTGGCAGGCGAC
SsAP1-qRT-DN	TCTCGCATGGACAGGATTCTTGAGAGG
SsAP3-qRT-UP	GACTTTTGCAGCCCTTCTACGACGTTGG
SsAP3-qRT-DN	TCCAAGTGCAGTTGGCGCAGCTTGAAT

TABLE S2. Sequence of MIM159 (the artificial miR159a sequence is in red)

AAACACCACAAAAACAAAAGAAAAATGGCCATCCCCTAGCTAGGTGAAGAAGAATGA
AAACCTCTAATTTATCTAGAGGTTATTCATCTTTTAGGGGATGGCCTAAATACAAAATG
AAAACTCTCTAGTTAAGTGGTTTTGTGTTCATGTAAGGAAAGCGTTTTAAGATATGGAG
CAATGAAGACTGCAGAAGGCTGATTCAGACTGCGAGTTTTGTTTATCTCCCTCTAGAAA
TAGAGCTCCCCctaTCAATCCAAAAGCTTCGGTTCCCCTCGGAATCAGCAGATTATGTA
TCTTTAATTTTGTAATACTCTCTCTCTTCTCTATGCTTTGTTTTTCTTCATTATGTTTGGG
TTGTACCCACTCCCGCGCGTTGTGTGTTCTTTGTGTGAGGAATAAAAAAATATTCGGAT
TTGAGAACTAAAACTAGAGTAGTTTTATTGATATTCTTGTTTTTCATTTAGTATCTAATA
AGTTTGGAGAATAGTCAGACCAGTGCATGTAAATTTGCTTCCGATTCTCTTTATAGTG