

Table S1 Primer sequences used in this study

Primer names	Purpose	Forward primers (5'-3')	Reverse primers (5'-3')
<i>PtrMYB3-T</i>	Gene cloning	ATGGCGGGTAAGCGCAAGAC	TCACCAAATCCCAAATCCG
<i>PtrMYB3-pBI121</i>	Overexpression	GAGAACACGGGGGACTCTAGAA TGGCGGGTAAGCGCAAGAC	ATAAGGGACTGACCACCCGGGT CACCAAATCCCAAATCCG
<i>PtrMYB3-101LYFP</i>	Subcellular localization	ATGGGATCTACTAGTGAATTCAT GGCGGGTAAGCGCAAGAC	GGGGGTACCGTCGACGGATCCC CAAAATCCCAAATCCGATT
<i>PtrMYB3-pGBKT7</i>	Transactivation	ATGGCCATGGAGGCCGAATTCAT GGCGGGTAAGCGCAAGAC	CCGCTGCAGGTCGACGGATCCC CAAAATCCCAAATCCGATT
<i>PtrMYB3-pTRV2</i>	VIGS	AGAAGGCCTCCATGGGGATCCAG AAGAAACCAAAGACCAG	TGTCTTCGGGACATGCCCGGGC CAAAATCCCAAATCCGATTGC
35S-F	Transgenic identification for tobacco	TCCTCGGATTCCATTGCCCAGC	
<i>NPT II</i>		CGGCTATGACTGGGCACAACA	CGGCAGGAGCAAGGTGAGATG
<i>pTRV1</i>	Positive identification for VIGS	ATTGAGGCGAAGTACGATGG	CCATCCACAATTATTTTCCGC
<i>pTRV2-F</i>		ATTCACTGGGAGATGATACGCT	
<i>PtrMYB3-qPCR</i>	qPCR	GAGGCACATTCCCAAAGCTG	TGTTTCGTCCTGGAAGTCTCC
<i>PtrPOD</i>		ATCGCTCTTGCTGGAGACAG	TTCAAGGGGCATTCAGCCTC
<i>PtrMYB3-62-SK</i>	Dual-luciferase activity assay	CGCTCTAGAACTAGTGGATCCAT GGCGGGTAAGCGCAAGAC	GATAAGCTTGATATCGAATTCTC ACCAAATCCCAAATCCG
<i>pPOD-0800-Luc</i>		GTCGACGGTATCGATAAGCTTGC ACGTCATGATCCATGCCA	CGCTCTAGAACTAGTGGATCCC ATTTTCTGATAAGCACTTGC
<i>ACTIN</i>	Internal reference	CCGACCGTATGAGCAAGGAAA	TTCCTGTGGACAATGGATGGA
<i>Ubiquitin</i>		GGTGTTTCCAGTGGCGGACG	TCCTCCCCTCAGCTACGGGGTAT

(Underlines indicate enzyme site.)

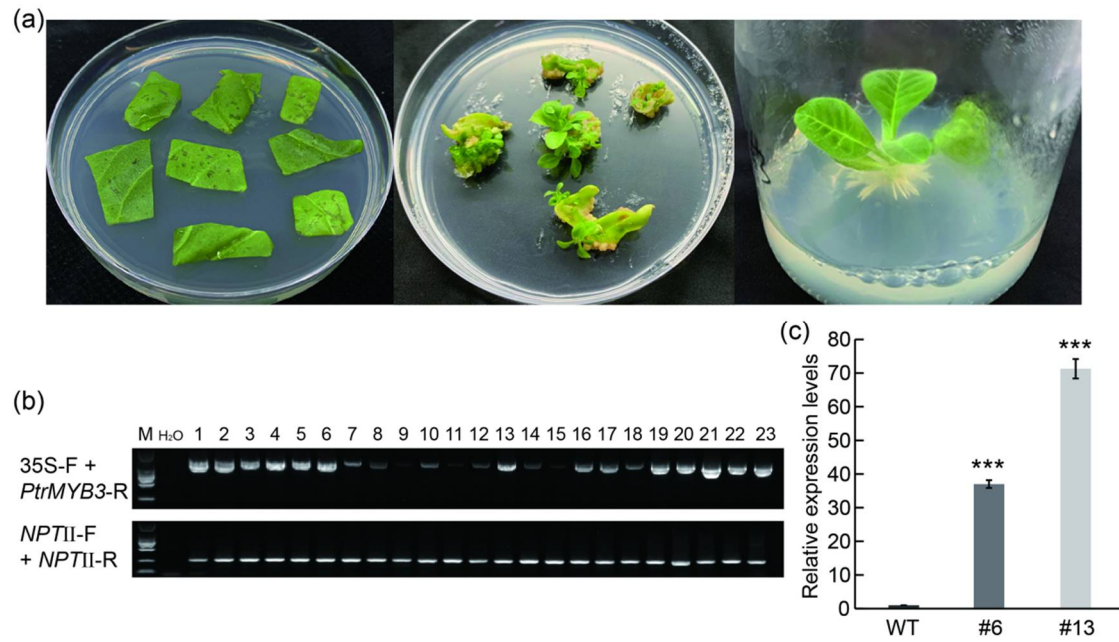


Figure S1. Genetic transformation and molecular identification of *PtrMYB3* overexpressed tobacco plants. (a) The representative pictures of genetic transformation. (b) The molecular identification of 23 transgenic tobacco plants using two pairs of primers. M: DNA marker. (c) The relative expression levels of *PtrMYB3* in WT and two transgenic lines (#6 and #13) measured by qPCR. Asterisks indicate significant differences between the transgenic line and WT: $p < 0.001$ (***)).

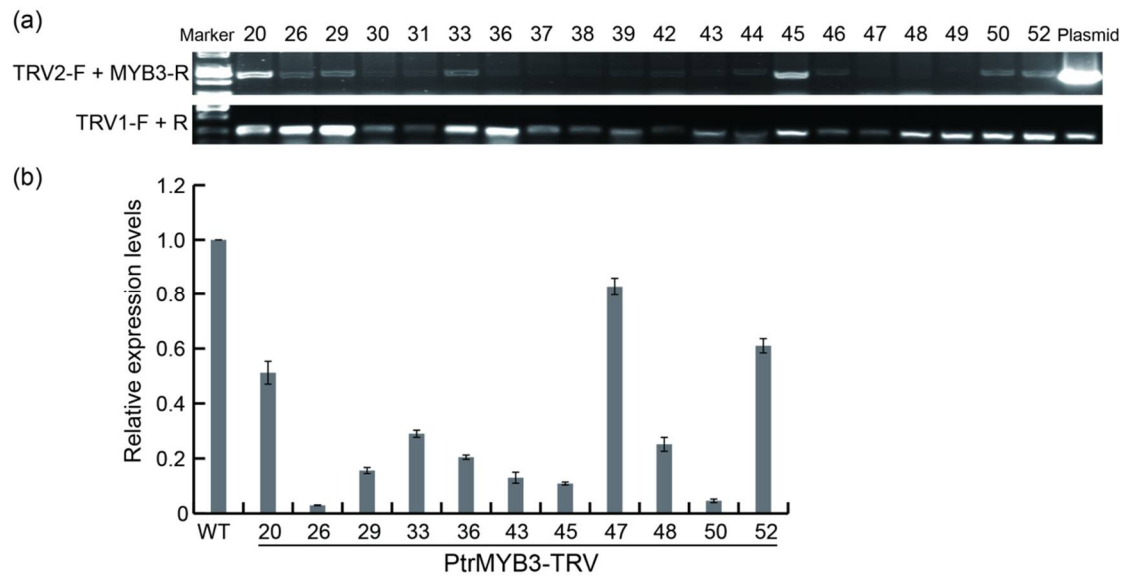


Figure S2. Molecular identification of *PtrMYB3*-silenced *Poncirus trifoliata* plants by genomic PCR and qPCR. (a) Genomic PCR of *PtrMYB3*-silenced plants using two pairs of primers. (b) The relative expression levels of WT and *PtrMYB3*-silenced plants (*PtrMYB3*-TRV) measured by qPCR.