

Figure S1. Cloning of the open reading frame of *PmMYB45*. M: NormaLRun™ 250bp - II DNA ladder; ORF: open reading frame for *PmMYB45*.

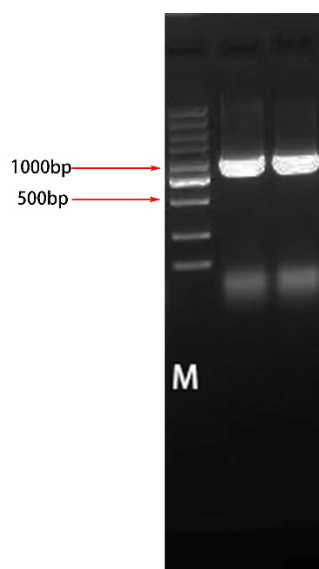


Figure S2. Cloning of the *PmMYB45* promoter

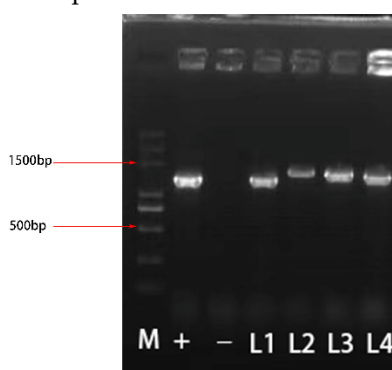


Figure S3. PCR assay for overexpression of *PmMYB45* tobacco. M: DL 5000 plus DNA Marker; +: positive control. -: wild type (negative control); L1-L4: transgenic strains

Table S1. Primer sequences used in this study

Name of primer	Primer sequences
PmMYB45-F	ATGGGGCGCACGCCTTGCTG
PmMYB45-R	TTAATTCGAAGGATACTGTG
Pro- PmMYB45-F	AGGTCGCCACCTCAAGCC
Pro- PmMYB45-R	ATTTTACAAGAAGATCGTCCTCC
PmMYB45-GFP-F	GGCGTGCAGGTCGACTCTAGAATGGGGCGCACGCCTTGC
PmMYB45-GFP-R	GCCCTTGCTCACCATGGATCCATTCTGAAGGATACTGTGATGATGG
PmMYB45-GUS-F	CATGATTACGCCAAGCTTCGTTGAACCTCCTCATTG
PmMYB45-GUS-R	GGGGATCCTCTAGACGGTTAGGGTTACAGAGCCCCGCCTGCA
PmMYB45-PGBKT7-F	ATGGCCATGGAGGCCGAATTCATGGGGCGCACGCCTTGC
PmMYB45-PGBKT7-R	CCGCTGCAGGTCGACGGATCCATTCTGAAGGATACTGTGATGATGG
T7-F	GGCAAAACGATGTATAAATGA
T7-R	TAATACGACTCACTATAGG
PmMYB45-PBI121-F	GAGAACACGGGGGACTCTAGAATGGGGCGCACGCCTTGC
PmMYB45-PBI121-R	CGATCGGGGAAATTCGAGCTCTTAATTCGAAGGATACTGTGATGATG
PBI121-Q-F	ATTGGGCACTGCATTTTTCTTCAAC
PBI121-Q-R	AGTGTTCTCCAGCCTCCTTCT
PBI121-DNA-F	GACAGTGGTCCCAAAGA
PBI121-DNA-R	AAACAGCGGAAGAGTAAG
PmTUA-F	CAAACCTTGGTCCCGTATCCTC
PmTUA-R	CACAGAAAGCTGCTCATGGTAA
NtActin7-F	TTTCCTAGCATTGTGGGTCG
NtActin7-R	CCCCTCTTGGATTGAGCTTC
Nt4CL-F	GCAGCGATTTTGATTATGCAGA
Nt4CL-R	AGTTCTTTTCCTAATGGTGCAGC
NtPAL1-F	TGCCAACAGGATAAATGAATGCAG
NtPAL1-R	CACCATTCCATTCTTGAGACAT
NtCAD-F	ATGAAGTGGTGGGAGAAG
NtCAD-R	GGGTTTGCCATCAGTGTA
NtHCT-F	AAAACACCACCAACCCTG
NtHCT-R	TCCTGCCAACATCTCGTA

Table S2. Gene name and GenBank ID in this study

Gene name	GenBank ID
PmMYB006	Potri.001G005100.1
PmMYB126	Potri.003G219900.1
PmMYB050	Potri.013G056400.1
PmMYB051	Potri.013G056500.1
PmMYB060	Potri.019G036300.1
PmMYB061	Potri.019G036400.1
PmMYB201	Potri.014G100800.1
PmMYB123	Potri.003G144200.1

PtMYB153	Potri.003G144300.1
PtMYB113	Potri.017G126000.1
PtMYB118	Potri.017G125600.1
PtMYB120	Potri.017G125700.1
PtMYB119	Potri.017G125800.1
PtMYB117	Potri.017G125900.1
PtMYB155	Potri.002G173900.1
PtMYB009	Potri.001G086700.1
PtMYB7	ABD60281.1
VvMYB5	RVW48712.1
VvMYB5b	AAX51291.1

Table S3. Summary of acronyms

Abbreviation	Full name in English
6-BA	6-Benzylaminopurine
NAA	1-Naphthaleneacetic acid
Cef	Cefotaxime sodium
Kan	Kanamycin sulphate
MS	Murashige and Skoog Medium
CCoAOMT	caffeoyl-CoA O-methyltransferase
PAL	phenylalanine ammonia-lyase
4CL	p-coumarate CoA ligase
COMT	caffeic acid 3-O-methyltransferase
CAD	cinnamyl alcohol dehydrogenase
HCT	Hydroxy cinnamoyl transferase
CCR	cinnamyl-CoA reductase
AS	Acetosyringone
KT	kinetin

>PmMYB45

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>Pro- PmMYB45

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