Supplementary Information

Diterpenoid compounds from *Wedelia trilobata* induced resistance to *Tomato spotted wilt virus* via the JA signal pathway on tobacco plants

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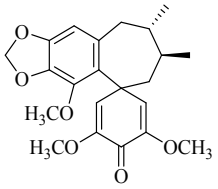
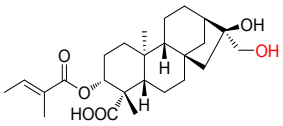
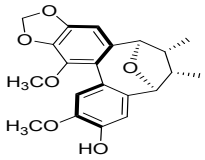
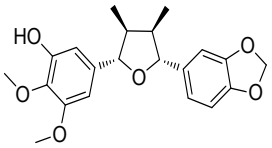
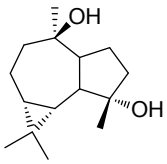
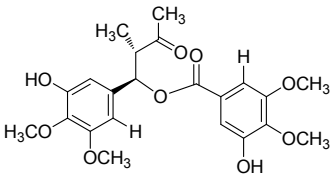
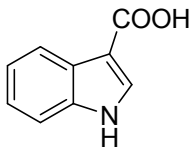
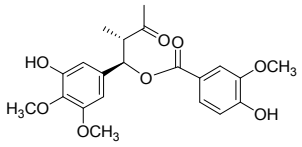
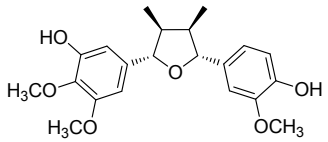
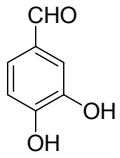
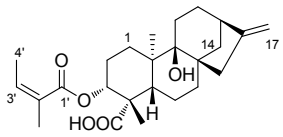
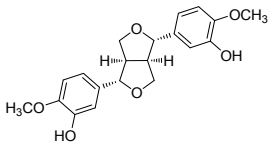
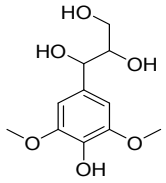
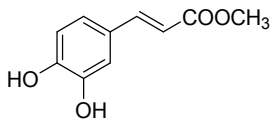
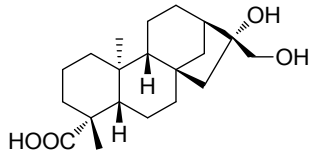
Supplementary Table 1. The struction of compounds

Compound number	Compound name	Compound struction
1	ManglisinA	
2	32-(Tiglinoyloxy)-162-17-dihydroxy-ent-kauran-19-oil-acid	
3	Manglisin B	
6	Manglisin C	
7	(-)-4,7-aromadendranediol	
8	Manglisin F	
9	Indol-3-carboxylic acid	

13	Manglisin G	
16	Schinlignins B	
18	Protocatecualdehyde	
20	32-(Angeloyloxy)-9β-hydroxy-ent-kaur-16-en-19-oil acid	
22	Clemaphenol A	
25	Syringylglycerol	
27	Methy caffeoatte	
28	16α-17-dihydroxy-*ent*-kauran-19-oic acid	

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Supplementary Table 2. Primers of qRT-PCR and VIGS

Primer	Squence（5'-3'）	Base pai（bp）	Notes
TSWV-N-F	GTGAAGAAAGGGAAAGAGTATGCTGC	26	qRT-PCR
TSWV-N-R	GGGGTTAAAAAACAGGCAAAACTCAC	26	qRT-PCR
TSWV-NSs-F	TGCTCAAATACAGTCAATGCTAACG	24	qRT-PCR
TSWV-NSs-R	GGAGCTGGAATCGGTCTGTAATAT	24	qRT-PCR
TSWV-NSm-F	ATCTTGATGACCTTATTAGCGTT	22	qRT-PCR
TSWV-NSm -R	GAATGATAGTAGATACAAACCACCA	24	qRT-PCR
TSWV-RdRP-F	CCTTCAACTACAGGTATCCACTTCT	23	qRT-PCR
TSWV- RdRP -R	GGATTCTGCATACCCTTGTGA	20	qRT-PCR
TSWV-Gn-F	CTGTGGAAGTTCTGGTCAATAATG	23	qRT-PCR
TSWV- Gn -R	ATATAATCCCAGAAGCCCCAT	19	qRT-PCR
QCOI1-F	TTGTGCCAATTGGGCTTGAC	20	qRT-PCR
QCOI1-R	AGTTGGGACACCTTTGCAGT	20	qRT-PCR
VIGCOI1-F	CCC**AAGCTT**TTGGGGAATCCGATGAAGGC	29	Bold letters Hind III
VIGCOI1-R	CG**GGATCC**CGGCAAGTATATGGGCGGGAT	28	Bold letters BamHI
M13F	CAGGAAACAGCTATGAC	17	
M13R	ACTGGCCGTCGTTTTAC	17	
pTV00F	CTAGTTCATCTGCACCGCCT	20	pTV00

Supplementary Table 3. Inhibitor rate of genes

Gene names	Treatment			
	Curative effect		Protective effect	
	Inoculated leaves	Systemic leaves	Inoculated leaves	Systemic leaves
N	No effect	6.40%	11.11%	90.14%
NSs	No effect	74.15%	11.59%	80.12%
Gn	No effect	10.79%	13.41%	27.91%
NSm	No effect	57.33%	29.88%	69.61%
RdRp	No effect	25.88%	46.64%	85.05%