

Table S1 Primers in this study

Primer name	Primer sequence (5'→3')	Uses for the primer
Qa-F	AAAAAAAAAAAAAAAGCTTGAGCTGA GTCCTCGTCACTCTGCTCACTGG-3'	3'RACE of the TSWV sgRNA
Q0	5'-CCAGTGAGCAGACTGACG-3'	3'RACE of the TSWV sgRNA
Q1	5'-GAGGACTCGAGCTAAGC-3'	3'RACE of the TSWV sgRNA
TS-S-1185-F	5'-TGAACAGCTATGAGCTAACCTCC-3'	3'RACE of the TSWV sgRNA
TS-S-VC-702-F	5'-ATGACACCAGGAAAGCCTTAG-3'	3'RACE of the TSWV sgRNA
TS-NSs-Bam5U-D1-F	5'- CAGGATCTAATTATTATTCTTAATCAAACCT CA-3'	F-Ts-NSs-5U-D1 reporter construct
TS-NSs-Bam5U-D2-F	5'- CAGGATCCAGAGCAATTGTGTCAAAATCA CAATACTG-3'	F-Ts-NSs-5U-D2 reporter construct
TS-NSs-Sm5U-D2-R	5'- CACCCGGTATGGTTATTGGTACTGTGTTCT TA-3'	F-Ts-NSs-5U-D2 reporter construct
TS-NSs-Bam5U-D3-F	5'- CAGGATCCAGAGCAATTGTGTCTAAATT 3'	F-Ts-NSs-5U-D3 reporter construct
TS-NSs-Sm5U-D3-R	5'- CACCCGGGTATTGTGATTCTAAGTGAGG T-3'	F-Ts-NSs-5U-D3 reporter construct
Ts-BamHI-S-5U-F	5'- CAGGATCCAGAGCAATTGTGTCTAAATT TTCTTAATCAAAC-3'	F-Ts-S-5U, reporter construct
Ts-SmaI-S-5U-R	5'- CACCCGGTATGGTTATTGGTACTGTGTTCT TATTACAGT-3'	F-Ts-S-5U-3U, reporter construct
Ts-Nru1-S-3U-F	5'- GCTCGCGAGATGATCGTAGAAGTTGTTAT GCT-3'	F-Ts-S-5U-3U, reporter construct
Ts-Ssp1-S-3U-R	5'- GCAATATTAGAGCAATTGTGTCAATTATT CAAACCTTAACAC-3'	
Ts-Nru1-NSs-3U-F	5'- GCTCGCGATCTGCCGTGTCAGCTTT-3'	
Ts-Ssp1-NSs-3U-R	5'- GCAATATTGTTGTTTATTCATTTTGATT TTGTTGATTGTTGT-3'	F-Ts-S-5U-3U, reporter construct
Ts-BamHI-T7-S-5U-F:	5'- CAGGATCTAATACGACTCACTATAGGAGA GCAATTGT	In vitro transcription for TSWV gRNA
Ts-BamHI-T7-NSs-5U-F	5'- GTCATAATTATTCTTAATCAAAC-3'	In vitro transcription for TSWV sgRNAs NSs
Ts-SmaI-S-3U-R	5'- CACCCGGAGAGCAATTGTGTCAATTATT CAAACCTTAACAC-3'	In vitro transcription for TSWV gRNA S
Ts-SmaI-NSs-3U-R	5'- CACCCGGGTTGTTTATTCATTTTGAT TTTGTGATTGT-3'	In vitro transcription for TSWV sgRNAs NSs
TS-NSS-NT-630-R	5'-CCCAAAGCTGATTGTAGCACACATC-3'	cDNA probe
TS-S-189-F	5'-AACTGGTACTGGTCTCCAC-3'	RT-PCR detection of TSWV gRNAs and sgRNAs
TS-S-790-R	5'-CTGAGAGTTAGGCATGATGTTG-3	RT-PCR detection of TSWV gRNAs and sgRNAs
TS-S-1559-F	5'-TCTGTTTGTCAATTCTTTGAATTCT-3	RT-PCR detection of TSWV gRNAs
TS-S-2175-R	5'-TGCTGCTACTTAGCTCCAGC-3	RT-PCR detection of TSWV gRNAs

TS-NSS-NT-412-F	5'-CGGAGTGAAACATCAAGGTCAATT-3'	cDNA probe
TS-NSS-NT-630-R	5'-CCCAAAGCTTGTAGCACATC-3'	cDNA probe
