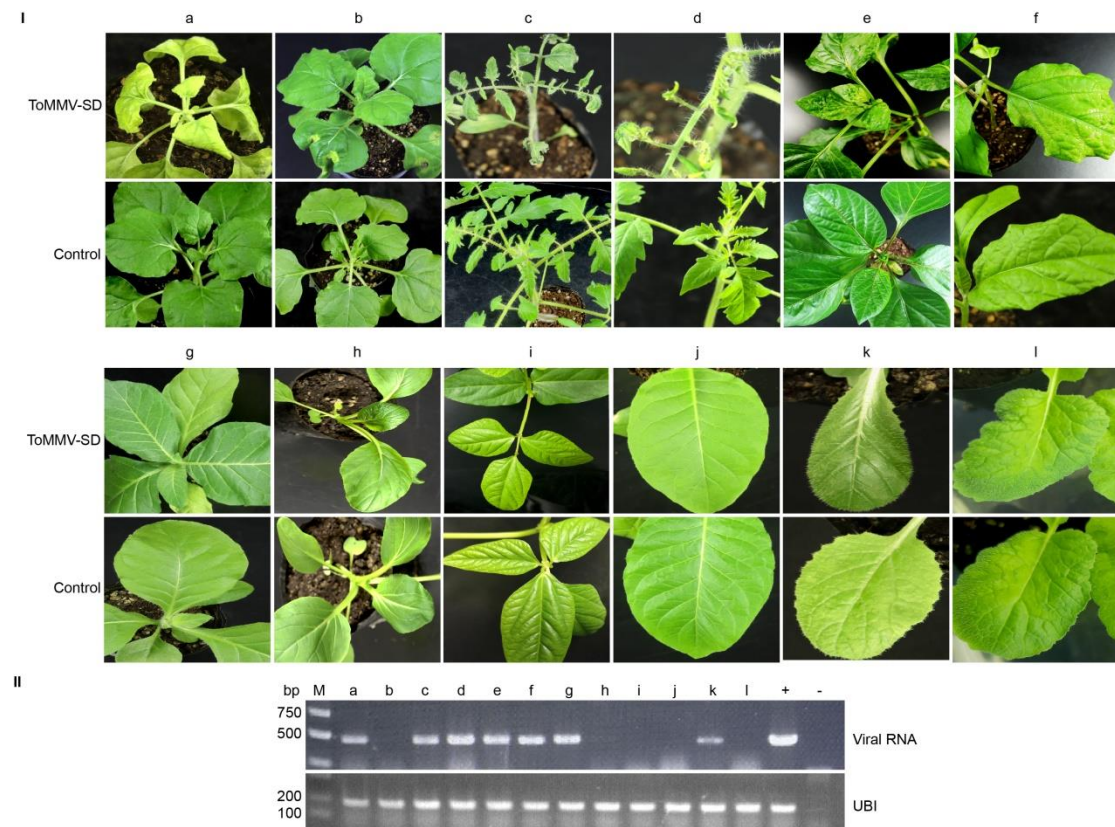


Appendix A Primers used in this study

Primer Name	Sequence	Purpose	Source
CMV-F	TCTCATGGATGCTTCTCCGCG	CMV detection	Li et al., 2019
CMV-R	CCGTAAGCTGGATGGACAACC		
ToCV-F	GCTTCCGAAACTCCGTCTTG	ToCV detection	Li et al., 2019
ToCV-R	TGTCGAAAGTACCGCCACC		
ToMMV-4290-F	CTGGAGAAGACTGGGTCTAG	ToMMV detection	Li et al., 2019
ToMMV-5482-R	TTCGGTAAGTTCAATGGGACCT		
Tm-2 ² -CDS1720-F	GCATATGTCACTATCCCAA	Tm-2 ² detection	Current study
Tm-2 ² -3'UTR46-R	CCCTGTACGTAAATAGTTATAC		
L1-4-F	ATGTGGGACCCAGATGACGT	L1-4 detection	Current study
L1-4-R	TCCAATTCTCACCACCAAC		
pCB301-ToMMV-F	TTTCATTTGGAGAGGGTATTTATTATTAC AACAATTACC	ToMMV infectious cDNA clone construction	Current study
pCB301-ToBRFV-R	GATATAAGTACAGACTGGGCCCCTACCG GGGGTTCCGG		
pCB301-F	GGAATTCAGATTGTCGTTTCCCGCCTTC		
pCB301-R	AAAACCACCCCAGTACATTAAAAACG		



Appendix B Host range determination. (I) Symptom expression in host plants inoculated with ToMMV-SD. The upper pane shows infected plants and the lower pane shows the healthy controls. a, *N. benthamiana* plant showing yellowing and leaf rolling. b, *Tm-2²* transgenic *N. benthamiana* showed no symptoms. c, Susceptible tomato cv. Moneymaker showing necrosis, mosaic, and leaf roll. d, tomato cv. Jinpeng harboring *Tm-2²* showing severe necrosis, leaf rolling, and mottling. e, pepper (cv. Taiwan oversized 948 ox horn pepper) plant showing mottling, necrosis, and chlorotic symptoms. f, eggplant showing mottling. g, *N. tabacum* cv. Zhongyan 100 with no symptoms. h, *Brassica rapa* ssp. chinensis (bok-choy) with no symptoms. i, *V. unguiculata* cv. Yuanzhong 28-2 (cowpea) leaf showing no symptoms. j, *N. tabacum* cv. Xanthi NN with no symptoms. k, *Brassica pekinensis* (napa cabbage) leaf showing mottling symptom. l, *Raphanus sativus* (Radish) showing no symptoms. (II) RT-PCR

detection of ToMMV-SD in the systemic leaves of inoculated host plants. M, marker.

The lines indicated with a-l are corresponding to the plant in (I); +, positive control; -, negative control.