



Supplementary Fig. S1. The Brassicales-associated clade of the Bayesian-likelihood tree of the RdRp ORF of tobamoviruses. Estimated substitution rates are placed above or near their respective lines and are in 10^{-9} substitutions per site per year.

Supplementary Table S1. Positions of polymorphic residues in PafMV-TGP RNA

Position	Region	Change
402	MT-Hel	A→G
424	MT-Hel	T→C
434	MT-Hel	A→G
735	MT-Hel	A→G
791	MT-Hel	G→T
797	MT-Hel	T→G
798	MT-Hel	G→T
807	MT-Hel	A→T
1627	MT-Hel	A→G
2090	MT-Hel	G→T
3643	RdRp	A→G
4087	RdRp	C→A
4088	RdRp	G→C
4658*	RdRp	A↔T
4728	RdRp	A→G
4863*	C-rich	G→A
4935	C-rich	T→A
5001	C-rich	C→T
5047	C-rich	G→T
5093	C-rich	A→G
5472	MP	A→G
5487	MP	T→A
5497	MP	A→G

5807	MP	A→G
5831†	MP	T→A
5832†	MP	G→T
5833†	MP	C→G
6238	CP	G→A
6240	CP	T→C

*Informatively polymorphic.

†Could be due to single nucleotide insertion of A before TGC Cys codon and deletion of C from the end of the codon, resulting in a Cys to Met coding change.

Supplementary Table S2. Virus names, abbreviations and GenBank accession numbers

Virus	Abbreviation	Source
Bell pepper mottle tobamovirus	BPeMV	DQ355023
Burgmansia mild mottle virus	BrMMV	AM398436
Cactus mild mottle virus	CMMoV	EU043335
Clitoria yellow mottle virus	CYMV	provided by A. Gibbs
Crucifer tobamovirus	crTV	AB017503
Cucumber fruit mottle mosaic virus	CFMoMV	AF321057
Cucumber green mottle mosaic virus	CGMMV	D12505
Cucumber mottle virus	CMoV	AB261167
Frangipani mosaic virus	FrMV	NC_014546
Hibiscus latent Fort Pierce virus	HLFPV	AY596456, AY250831 and FJ196834
Hibiscus latent Singapore virus	HLSV	AF395898
Kyuri green mottle mosaic virus	KGMMV	AJ295948
Maracuja mosaic virus	MarMV	DQ356949
Obuda pepper virus	ObPV	D13438
Paprika mild mottle virus	PaMMV	AB089381
Penstemon ringspot virus	PenRSV	DQ658743

Pepper mild mottle virus	PMMoV	M81413
Rehmannia mosaic virus	ReMV	EF375551
Ribgrass mosaic virus	RMV	AF254924
Streptocarpus flower break virus	SFBV	AM040955
Sunn-hemp mosaic virus	SHMV	provided by M. Deom
Tobacco mild green mosaic virus	TMGMV	M34077
Tobacco mosaic virus	TMV	V01408
Tomato mosaic virus	ToMV	AF332868
Turnip vein clearing virus	TVCV	U03387
Youcai mosaic virus	YoMV	U30944
Zucchini green mottle mosaic virus	ZGMMV	AJ295949