

Figure S1

Species/Abbrev	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
* 1. Soybean chlorotic leafroll virus	V	F	L	L	S	L	L	L	R	G	P					
2. Suakwa aphid-borne yellows virus	I	F	L	L	P	L	C	L	N	P	L					
3. Melon aphid-borne yellows virus	L	A	R	L	P	L	L	I	S	E	Q					
4. Turnip yellows virus	L	Y	Q	L	P	L	L	L	G	G	H					
5. Cotton leafroll dwarf virus	L	F	L	L	P	F	F	I	R	G	I					
6. Brassica yellows virus	L	Y	Q	L	P	L	H	L	G	D	H					
7. Cucurbit aphid-borne yellows virus	L	A	R	L	P	L	L	I	S	E	Q					
8. Pepper vein yellows virus	C	A	L	L	P	F	L	L	S	S	K					
9. Siratro latent polerovirus	L	F	F	L	P	L	V	S	N	L	Q					
10. Groundnut rosette assistor virus	V	L	L	L	C	F	L	L	R	G	P					
11. Phasey bean mild yellows virus	L	F	L	L	C	F	L	L	R	G	P					
12. Beet western yellows virus	L	A	R	L	P	L	L	L	S	E	Q					
13. Carrot red leaf virus	L	Y	I	L	P	C	I	L	N	N	D					
14. Pepo aphid-borne yellows virus	L	F	L	I	P	I	A	L	R	S	D					
15. Cowpea polerovirus 2	V	F	L	L	P	F	L	L	R	G	P					
16. Pea enation mosaic virus-1	I	F	C	G	P	T	E	A	L	Q	R					