

Supplementary Table S1. The *Fusarium*-infecting mycoviruses.

No.	Genus	Genome type	Mycovirus	Accession no.
1	<i>Chrysoviridae</i>	dsRNA	Fusarium graminearum mycovirus China 9(FgV-China 9)	dsRNA1:HQ282213; dsRNA2:HQ2228214; dsRNA3:HQ282215; dsRNA4:HQ2228216; dsRNA5:HQ282217
2	<i>Chrysoviridae</i>	dsRNA	Fusarium graminearum dsRNA mycovirus 2(FgV2)	dsRNA1:HQ343295; dsRNA2:HQ343296; dsRNA3:HQ3343297; dsRNA4:HQ343298;
3	<i>Chrysoviridae</i>	dsRNA	Fusarium oxysporum f. sp. dianthi mycovirus 1(FodV)	dsRNA1:KP876629; dsRNA2:KP876630; dsRNA3:KP876631; dsRNA4:KP876632
4	<i>Chrysoviridae</i>	dsRNA	Fusarium sacchari chrysovirus 1(FsCV1)	dsRNA1: MN295964; dsRNA2: MN295965; dsRNA3: MN295966; dsRNA4: MN295967
5	<i>Chrysoviridae</i>	dsRNA	Fusarium oxysporum chrysovirus 1(FoCV1)	dsRNA1:EF152346; dsRNA2:EF152347; dsRNA3:EF152348
6	<i>Megabirnaviridae</i>	dsRNA	Fusarium pseudograminearum megabirnavirus 1(FpgMBV1)	RNA1: MH057692 RNA2: MH057693
7	<i>Partitiviridae</i>	dsRNA	Fusarium solani virus 1(FsV1)	RNA1: NC_003885

				RNA2: NC_003886
8	<i>Partitiviridae</i>	dsRNA	Fusarium poae virus 1(FpV1)	RNA1: NC_003883 RNA2: NC_003884
9	<i>Partitiviridae</i>	dsRNA	Fusarium solani partitivirus 2(FsPV2)	LC006130
10	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. Cubense partitivirus 1 (FocPV1)	OQ685981
11	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. cubense partitivirus 2 (FocPV2)	OQ685986
12	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. cubense partitivirus 3 (FocPV3)	OQ685982
13	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. cubense partitivirus 4 (FocPV4)	OQ685980
14	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. cubense partitivirus 5 (FocPV5)	OQ685983
15	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. cubense partitivirus 6 (FocPV6)	OQ685984
16	<i>Partitiviridae</i>	dsRNA	Fusarium oxysporum f. sp. cubense partitivirus 7 (FocPV7)	OQ685985
17	<i>Partitiviridae</i>	dsRNA	Fusarium mangiferae partitivirus 1 (FmPV1)	segment 1:MZ493897 segment 2:MZ493898
18	<i>Partitiviridae</i>	dsRNA	Fusarium mangiferae partitivirus 2 (FmPV2)	segment 1:MZ493899 segment 2:MZ493800
19	<i>Polymycoviridae</i>	dsRNA and ssRNA	Fusarium redolens polymycovirus 1(FrPmV1)	RNA1:MK609920 RNA2:MK609921 RNA3:MK609922 RNA4:MK609923 RNA5:MK609924 RNA6:MK609925 RNA7:MK609926 RNA8:MK609927
20	<i>Totiviridae</i>	dsRNA	Fusarium asiaticum victorivirus 1(FaVV1)	MH615042
21	<i>Alternaviridae</i>	dsRNA	Fusarium graminearum alternavirus 1(FgAV1)	MG254901
22	<i>Alternaviridae</i>	dsRNA	Fusarium incarnatum alternavirus 1(FiAV1)	MH899114

23	<i>Fusagraviridae</i>	dsRNA	Fusarium poae dsRNA virus 2(FpV2)	KU728180
24	<i>Fusagraviridae</i>	dsRNA	Fusarium poae dsRNA virus 3(FpV3)	KU728181
25	<i>Fusagraviridae</i>	dsRNA	Fusarium virguliforme dsRNA mycovirus 1(FvV1)	JN671444
26	<i>Fusagraviridae</i>	dsRNA	Fusarium virguliforme dsRNA mycovirus 2(FvV2)	JN671443
27	<i>Fusagraviridae</i>	dsRNA	Fusarium graminearum dsRNA mycovirus-3(FgV3)	NC_013469
28	<i>Curvulaviridae</i>	dsRNA	Fusarium graminearum dsRNA mycovirus-4(FgV4)	RNA1: NC_013470 RNA2: NC_013471
29	<i>Curvulaviridae</i>	dsRNA	Fusarium graminearum dsRNA mycovirus-5(FgV5)	RNA1: KX380787 RNA2: KX380788
30	<i>Deltaflexiviridae</i>	+ ssRNA	Fusarium graminearum deltaflexivirus 1(FgDFV1)	KX015962
31	<i>Endornaviridae</i>	+ ssRNA	Fusarium oxysporum f. sp. cubense endornavirus 1 (FocEV1)	OQ685975
32	<i>Botourmiaviridae</i>	+ssRNA	Fusarium oxysporum f. sp. cubense ourmia-like virus 1 (FocOLV1)	OQ685967
33	<i>Botourmiaviridae</i>	+ssRNA	Fusarium oxysporum f. sp. cubense ourmia-like virus 2 (FocOLV2)	OQ685968
34	<i>Botourmiaviridae</i>	+ssRNA	Fusarium oxysporum f. sp. cubense ourmia-like virus 3 (FocOLV3)	OQ685970
35	<i>Botourmiaviridae</i>	+ssRNA	Fusarium oxysporum f. sp. cubense ourmia-like virus 4 (FocOLV4)	OQ685969
36	<i>Botourmiaviridae</i>	+ssRNA	Fusarium asiaticum ourmiavirus 2(FaOV2)	RNA1:MZ969060 RNA1:MZ969061
37	<i>Botourmiaviridae</i>	+ssRNA	Fusarium asiaticum ourmiavirus 1(FaOV1)	MZ969063
38	<i>Botourmiaviridae</i>	+ssRNA	Fusarium mangiferae botourmiavirus 1(FmBOV1)	MZ493907
39	<i>Botourmiaviridae</i>	+ssRNA	Fusarium mangiferae botourmiavirus 2(FmBOV2)	MZ493908
40	<i>Botourmiaviridae</i>	+ssRNA	Fusarium mangiferae botourmiavirus 3(FmBOV3)	MZ493909

41	<i>Hypoviridae</i>	+ ssRNA	Fusarium graminearum hypovirus 1(FgHV1)	KC330231
42	<i>Hypoviridae</i>	+ ssRNA	Fusarium graminearum hypovirus 2(FgHV2)	KP208178
43	<i>Hypoviridae</i>	+ ssRNA	Fusarium langsethiae hypovirus 1(FIHV1)	KY120321
44	<i>Hypoviridae</i>	+ ssRNA	Fusarium sacchari hypovirus 1(FsHV1)	MN295969
45	<i>Hypoviridae</i>	+ ssRNA	Fusarium sambucinum hypovirus 1 (FsamHV1)	NC_076613
46	<i>Narnaviridae</i>	+ ssRNA	Fusarium circinatum mitovirus 1(FcMV1)	KF803546
47	<i>Narnaviridae</i>	+ ssRNA	Fusarium globosum mitovirus 1(FgMV1)	LC006128
48	<i>Narnaviridae</i>	+ ssRNA	Fusarium boothii mitovirus 1(FbMV1)	LC425112
49	<i>Narnaviridae</i>	+ ssRNA	Fusarium andiyazi mitovirus 1(FaMV1)	MN295972
50	<i>Narnaviridae</i>	+ ssRNA	Fusarium andiyazi mitovirus 2(FaMV2)	MN295975
51	<i>Narnaviridae</i>	+ ssRNA	Fusarium sacchari mitovirus 1(FsMV1)	MN295976
52	<i>Narnaviridae</i>	+ ssRNA	Fusarium poae narnavirus 1(FpNV1)	NC_030865
53	<i>Narnaviridae</i>	+ ssRNA	Fusarium asiaticum narnavirus 1	MZ969062
54	<i>Mitoviridae</i>	+ ssRNA	Fusarium coeruleum mitovirus 1(FocMV1)	LC006129
55	<i>Mitoviridae</i>	+ ssRNA	Fusarium oxysporum f. sp. cubense mitovirus 1 (FocMV1)	OQ685973
56	<i>Mitoviridae</i>	+ ssRNA	Fusarium oxysporum f. sp. cubense mitovirus 2 (FocMV2)	OQ685971
57	<i>Mitoviridae</i>	+ ssRNA	Fusarium oxysporum f. sp. cubense mitovirus 3 (FocMV3)	OQ685974
58	<i>Mitoviridae</i>	+ ssRNA	Fusarium oxysporum f. sp. cubense mitovirus 4 (FocMV4)	OQ685972
59	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 1	MZ969051
60	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 2	MZ969052
61	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 3	MZ969053
62	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 4	MZ969054
63	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 5	MZ969055
64	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 6	MZ969056
65	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 7	MZ969057

66	<i>Mitoviridae</i>	+ ssRNA	Fusarium asiaticum mitovirus 8	MZ969058
67	<i>Mitoviridae</i>	+ ssRNA	Fusarium poae mitovirus 1	MZ969059
68	<i>Mitoviridae</i>	+ ssRNA	Fusarium mangiferae mitovirus 1 (FmMV1)	MZ493901
69	<i>Mitoviridae</i>	+ ssRNA	Fusarium mangiferae mitovirus 2 (FmMV2)	MZ493902
70	<i>Mitoviridae</i>	+ ssRNA	Fusarium mangiferae mitovirus 3 (FmMV3)	MZ493903
71	<i>Mitoviridae</i>	+ ssRNA	Fusarium mangiferae mitovirus 4 (FmMV4)	MZ493904
72	<i>Mitoviridae</i>	+ ssRNA	Fusarium mangiferae mitovirus 5 (FmMV5)	MZ493905
73	<i>Mitoviridae</i>	+ ssRNA	Fusarium mangiferae mitovirus 6 (FmMV6)	MZ493906
74	<i>Mitoviridae</i>	+ ssRNA	Fusarium verticillioides mitovirus 1 (FvMV1)	NC_076900
75	<i>Mitoviridae</i>	+ ssRNA	Fusarium andiyazi mitovirus 1 (FaMV1-162)	NC_076901
76	<i>Fusariviridae</i>	+ ssRNA	Fusarium asiaticum fusarivirus 1	MZ969065
77	<i>Fusariviridae</i>	+ ssRNA	Fusarium graminearum dsRNA mycovirus-1(FgV1)	NC_006937
78	<i>Fusariviridae</i>	+ ssRNA	Fusarium poae fusarivirus 2	OK524195
79	<i>Fusariviridae</i>	+ ssRNA	Fusarium pseudograminearum fusarivirus 1	OP100308
80	<i>Tymoviridae</i>	+ ssRNA	Fusarium graminearum mycotymovirus 1(FgMTV1)	KT360947
81	<i>Hadakaviridae</i>	+ ssRNA	Hadaka virus 1 (HadV1)	segment 1: LC519840 segment 2: LC519841 segment 3: LC519842 segment 4: LC519843 segment 5: LC519844 segment 6: LC519845 segment 7: LC519846 Segment t8: LC519847 segment 9: LC519848 segment 10: LC519849 segment 11: LC519850

82	<i>Mymonaviridae</i>	- ssRNA	Fusarium graminearum negative-stranded RNA virus 1(FgNSRV-1)	MF276904
83	<i>Mymonaviridae</i>	-ssRNA	Fusarium oxysporum f. sp. cubense mymonavirus 1 (FocMyV1)	OQ685977
84	<i>Mymonaviridae</i>	-ssRNA	Fusarium oxysporum f. sp. cubense negative-stranded RNA virus 1 (FocNSRV1)	OQ685978
85	<i>Phenuiviridae</i>	-ssRNA	Fusarium sibiricum coguvirus 1(FsCV1)	OQ295988
86	<i>Phenuiviridae</i>	-ssRNA	Fusarium asiaticum mycobunyavirus 1 (FaMBV1)	segment L:MZ969068 segment M:MZ969069 segment S:MZ969070
87	unassigned	+ ssRNA	Fusarium oxysporum f. sp. cubense alphavirus-like virus (FocALV)	OQ685976
88	unassigned	-ssRNA	Fusarium oxysporum f. sp. cubense negative-stranded RNA virus 2 (FocNSRV2)	OQ685979
89	unassigned	+ ssRNA	Fusarium boothii large flexivirus 1(FbLFV1)	LC425115
90	unassigned	+ ssRNA	Fusarium sacchari alphavirus-like virus 1(FsALV1)	MN295968
91	unassigned	-ssRNA	Fusarium asiaticum negative-stranded RNA virus 1(FaNSRV1)	MZ969066
92	unassigned	-ssRNA	Fusarium poae negative-stranded virus 1	LC150618
93	unassigned	-ssRNA	Fusarium poae negative-stranded virus 2	LC150619

Supplementary Table S2. The family Hypoviridae includes eight genera and 55 species.

Genus	No.	Virus protein for alignment	NCIB Accession number	Year
Alphahypovirus	1	Fusarium sacchari hypovirus 1 isolate LZ1	this study	2024
		Fusarium sacchari hypovirus 1 isolate LZ8	this study	2024
		Fusarium sacchari hypovirus 1 isolate LZ14	this study	2024
		Fusarium sacchari hypovirus 1 isolate FS18	this study	2024
		Fusarium sacchari hypovirus 1 isolate LZ12	this study	2024
		Fusarium sacchari hypovirus 1 isolate FSA1	this study	2024
		Fusarium sacchari hypovirus 1 isolate FS3	this study	2024
		Fusarium sacchari hypovirus 1 isolate FS66	this study	2024
		Fusarium sacchari hypovirus 1 isolate FS65	this study	2024
		Fusarium sacchari hypovirus 1 strain FZ06	MN295969	2020
		Fusarium sacchari hypovirus 1 isolate FS1	this study	2024
Fusarium sacchari hypovirus 1 isolate FS9	this study	2024		
	2	Wuhan insect virus 14	KX883007	2017
	3	Trichoderma asperellum hypovirus 1	MK279475	2019
	4	Alternaria alternata hypovirus 1	MK189193	2019
	5	Fusarium graminearum hypovirus 1	MK279472	2019
	6	Fusarium sambucinum hypovirus 1	LC596823	2022
	7	Bipolaris oryzae hypovirus 1	MH316122	2019
	8	Cryphonectria hypovirus 1	M57938	1995
	9	Cryphonectria hypovirus 2	L29010	1994
	10	Botrytis cinerea hypovirus 2	MN617169	2021
	11	Macrophomina phaseolina hypovirus 1	KP900893	2016

	12	<i>Macrophomina phaseolina</i> hypovirus 2	MT062425	2020
	13	<i>Pestalotiopsis fici</i> hypovirus 1	OP441373-OP441375	2022
	14	<i>Trichoderma harzianum</i> hypovirus 2	MW863664	2021
	15	<i>Cercospora beticola</i> hypovirus 1	MZ546195	2022
Zetahypovirus	16	<i>Sclerotinia sclerotiorum</i> hypovirus 6	MH766501	2018
Deltahypovirus	17	Beihai_hypolike_virus_1	KX883006	2017
	18	Beihai_sipunculid_worm_virus_6	KX883005	2017
Epsilonhypovirus	19	<i>Agaricus bisporus</i> virus 2	KY357507	2017
	20	<i>Entoleuca</i> hypovirus 1	MF375885	2018
	21	<i>Rosellinia necatrix</i> hypovirus 2	LC333733	2018
	22	<i>Sclerotinia homoeocarpa</i> hypovirus 1	MK279473	2023
	23	<i>Rosellinia necatrix</i> hypovirus 1	LC318482	2018
	24	<i>Fusarium graminearum</i> hypovirus 2	KP208178	2015
	25	<i>Fusarium langsethiae</i> hypovirus 1	KY120321	2016
	26	<i>Fusarium poae</i> hypovirus 1	LC150612	2018
	Betahypovirus	27	<i>Trichoderma harzianum</i> hypovirus 1	MN172262
28		<i>Cryphonectria</i> hypovirus 4	AY307099	2019
29		<i>Setosphaeria turcica</i> hypovirus 1	MK279474	2019
30		<i>Fusarium oxysporum dianthi</i> hypovirus 2	MN176979	2020
31		<i>Valsa ceratosperma</i> hypovirus 1	AB690372	2012
32		<i>Phomopsis longicolla</i> hypovirus	KF537784	2014
33		<i>Cryphonectria</i> hypovirus 3	AF188515	2000
34		<i>Botrytis cinerea</i> hypovirus 1	MG554632	2018
35		<i>Botrytis cinerea</i> hypovirus 3	MN617170	2021

	36	<i>Sclerotinia sclerotiorum</i> hypovirus 1	JF781304	2011
	37	<i>Sclerotinia sclerotiorum</i> hypovirus 1-A	MF444220	2018
	38	<i>Botryosphaeria dothidea</i> hypovirus 1 (BdHV1/SXD111)	OR387868	2023
	39	<i>Colletotrichum camelliae</i> hypovirus 1	OR077707	2023
Thetahypovirus	40	<i>Botrytis cinerea</i> hypovirus 5	MT157414	2021
	41	<i>Sclerotinia sclerotiorum</i> hypovirus 2	MH347276	2019
	42	<i>Sclerotium rolfsii</i> hypovirus 1	MH037014	2018
	43	<i>Botrytis cinerea</i> hypovirus 4	MN617171	2022
	44	<i>Rhizoctonia solani</i> hypovirus 1	MK558259	2019
Gammahypovirus	45	<i>Sclerotium rolfsii</i> hypovirus 7	MH766502	2018
	46	<i>Sclerotium rolfsii</i> hypovirus 5	MH766500	2018
	47	<i>Sclerotium rolfsii</i> hypovirus 4	MH766499	2018
	48	<i>Sclerotium rolfsii</i> hypovirus 2	MH766497	2018
	49	<i>Sclerotium rolfsii</i> hypovirus 3	MH766498	2018
Etahypovirus	50	<i>Sclerotium rolfsii</i> hypovirus 8	MH766503	2018
unassigned	51	<i>Rhizoctonia zeae</i> hypovirus 1	OQ559666	2023
	52	<i>Rhizoctonia zeae</i> hypovirus 2	OQ559672	2023
	53	<i>Alternaria dianthicola</i> hypovirus 1	ON843755	2022
	54	<i>Sclerotinia sclerotiorum</i> hypovirus 9	MW454884	2021
	55	<i>Erysiphe necator</i> associated hypovirus 2	MN558694	2021

Supplementary Table S3. Primers used in this study.

Primers for amplifying the full length of FsHV1			
	Primer Name	Sequence (5' → 3')	Product size
5'-RACE	3'-GSP1	GGAGTCTTCCAATCAGAGCAG	250 bp
	3'-GSP2	GAACAAGATGCAAGCTCTAACTG	
Fragment 1	197-F	GGCACTTGTGCCGTTTACTC	1,530bp
	1627-R	CACCACCTGACAACACTTTGAG	
Fragment 2	1524-F	GCCACGAGGTATGTCAATCAC	1,554bp
	3078-R	CAACCACCAATCATCAGGGA	
Fragment 3	2991-F	CGGTGATGATTGGTTGCTTGA	494bp
	3485-R	GATAAGTAACCGCCACGAAGG	
Fragment Defective	FsHV1-DVF	GCACAATGGATGACACGAAGA	2,580bp
	FsHV1-DVR	GTAACCTGATTGAGACCTTCCG	
Fragment 4	5726-F	GTGAACCTAGTGCCAGTGCTTC	1,498bp
	7224-R	AGCACTACCACTCACCCAACC	
Fragment 5	7102-F	CATACTTGAGGATTGGTGCA	1,611bp
	8713-R	CGGAGATATTCTTGAGCCATG	
Fragment 6	8564-F	CGAAAGACTCAATGATAACTGTGG	1,439bp
	10003-R	AGTCGTATTCTGGCTCGGTTA	
Fragment 7	9905-F	CAAGCGGTAATGGCAAGAA	1,569bp
	11474-R	CTTTCTTGAATAGCCTGGGACA	
Fragment 8	11370-F	CACTTACAACATGTGGACCGA	1,510bp
	12880-R	CGGCAGATTCTGGTTGATACAC	
Fragment 9	12486-F	TGCGTTCATGTTGGCTTGG	1,373bp
	13859-R	CATTCCTGGTGGCGTTGATAA	
3'-RACE	5'-GSP1	GCAGCCTAATAAGGTTCTCCGTGAA TG	450bp
	5'-GSP2	GCAAAGCCCACGGGAGGAAATCCC AC	
FsHV1 detection primer			
RdRp	FsHV1-RdRpF1	GCTCAAGGTGCTGATGGTGTT	1,733bp
	FsHV1-RdRpR1	AGCGACATTGTAAGCGTGACC	
Defective	FsHV1-DefectF	GCACAATGGATGACACGAAGA	2,500bp or 800bp
	FsHV1-DefectR	GTAACCTGATTGAGACCTTCCG	
Absolute quantitative primers			
FsHV1-Defective	FsHV1-qDF	CGGTTCTGCTTACGCTTTTG	123bp
	FsHV1-qDR	AAGCAGGTTGATGCTCCAAT	
FsHV1-RdRp	FsHV1-RqF	CAGATGCAACGGCATTTCGAC	102bp
	FsHV1-RqR	TGCCATTACCGCTTGGATGA	

translation elongation factor 1-alpha (TEF-1α)			
EF-α	EF1	ATGGGTAAGGARGACAAGAC	650 bp
	EF2	GGAAGTACCAGTSATCATGTT	
DNA-directed RNA polymerase II largest subunit			
RPB1	Fa	CAYAARGARTCYATGATGGGWC	1,600bp
	G2R	GTCATYTDGTDGCDGGYTCDCC	
DNA-directed RNA polymerase II second largest subunit			
RPB2	5f2	GGGGWGAYCAGAAGAAGGC	1,800bp
	7cr	CCCATRGCTTGYYTTRCCCAT	
	7cf	ATGGGYAARCAAGCYATGGG	
	11ar	GCRTGGATCTTRTCRTCSACC	

Supplementary Table S4. FsHV1-infected strains used in this study.

<i>Fusarium</i> species	Strain	Sample source	Location	Year of collection
<i>F. sacchari</i>	FZ06	Sugarcane diseased leaves	Fuzhou, Fujian	2012
<i>F. sacchari</i>	FS65	Sugarcane diseased leaves	Fusui, Guangxi	2019
<i>F. sacchari</i>	FS66	Sugarcane diseased leaves	Fusui, Guangxi	2019
<i>F. sacchari</i>	FS9	Sugarcane diseased leaves	Fusui, Guangxi	2019
<i>F. sacchari</i>	FS18	Sugarcane diseased leaves	Fusui, Guangxi	2019
<i>F. sacchari</i>	FS1	Sugarcane diseased leaves	Fusui, Guangxi	2017
<i>F. sacchari</i>	FSA1	Sugarcane diseased leaves	Fusui, Guangxi	2019
<i>F. sacchari</i>	LZ14	Sugarcane diseased leaves	Longzhou, Guangxi	2020
<i>F. sacchari</i>	LZ8	Sugarcane diseased leaves	Longzhou, Guangxi	2020
<i>F. andiyazi</i>	FS3	Sugarcane diseased leaves	Fusui, Guangxi	2017
<i>F. andiyazi</i>	LZ12	Sugarcane diseased leaves	Longzhou, Guangxi	2020
<i>F. solani</i>	LZ1	Rhizosphere soil of sugarcane	Longzhou, Guangxi	2020

Supplementary Table S5. The efficiency of horizontal transmission of FsHV1.

Virus	Species of the donor strain	Species of the recipient strains	Successful transmission/Total number
FsHV1-FZ06	<i>F. sacchari</i>	<i>F. sacchari</i>	18/30
FsHV1-FS1	<i>F. sacchari</i>	<i>F. sacchari</i>	9/30
FsHV1-FS9	<i>F. sacchari</i>	<i>F. sacchari</i>	10/30
FsHV1-FS65	<i>F. sacchari</i>	<i>F. sacchari</i>	8/30
FsHV1-FS66	<i>F. sacchari</i>	<i>F. sacchari</i>	4/30
FsHV1-LZ8	<i>F. sacchari</i>	<i>F. sacchari</i>	5/30
FsHV1-FSA1	<i>F. sacchari</i>	<i>F. sacchari</i>	8/30
FsHV1-LZ14	<i>F. sacchari</i>	<i>F. sacchari</i>	8/30
FsHV1-FS18	<i>F. sacchari</i>	<i>F. sacchari</i>	9/30
FsHV1-FS3	<i>F. andiyazi</i>	<i>F. sacchari</i>	11/30
FsHV1-LZ12	<i>F. andiyazi</i>	<i>F. sacchari</i>	4/30
FsHV1-LZ1	<i>F. solani</i>	<i>F. sacchari</i>	3/30

Supplementary Table S6. Amino acid variation between FsHV1-A1 and the other 11 FsHV1 isolates

Number	Position	Amino acids of FsHV1-A1	Amino acids of other 11 FsHV1 isolates
1	259	G	E
2	438	S	N
3	494	F	I
4	708	C	H or Y or R
5	740	G	E
6	1708	G	D
7	1874	L	P
8	1934	P	S
9	2093	I	V
10	2792	G	V
11	2815	F	I
12	2859	S	R
13	2890	T	N
14	3155	N	K
15	3453	R	Q
16	3193	G	D
17	4202	I	V