

Table S1: Detailed information of RYMV isolates studied in this study.

Number	Accession number	Isolate	Length (bp)	Country	Host	Collection date
1	NC_001575	CI4	4,449	Cote d'Ivoire	NA	2018
2	KM487713.1	Ug230	4,447	Uganda	<i>O. sativa</i>	2010
3	KM487712.1	Ug207	4,447	Uganda	<i>O. sativa</i>	2010
4	KM487711.1	Ug148	4,447	Uganda	<i>O. sativa</i>	2009
5	KM487710.1	Ug1	4,448	Uganda	<i>O. sativa</i>	2000
6	JX966248.1	Tz1102	4,448	Tanzania	<i>O. sativa</i>	2007
7	JX966247.1	Tz21	4,448	Tanzania	<i>O. sativa</i>	2002
8	JX966246.1	Mg20	4,448	Madagascar	<i>O. sativa</i>	2004
9	JX966245.1	Mg15	4,447	Madagascar	<i>O. sativa</i>	2003
10	JX966244.1	Mg11	4,447	Madagascar	<i>O. sativa</i>	2003
11	JX961551.1	Tz16	4,446	Tanzania	<i>O. sativa</i>	2002
12	FN432841.1	Ng18	4,449	Niger	NA	2005
13	FN432840.1	Ma203	4,450	Mali	NA	1997
14	FN432839.1	Ke12	4,448	Kenya	NA	2008
15	FN432838.1	Ga4	4,450	Gambia	NA	2006
16	FN432837.1	Ch28	4,449	Chad	NA	2005
17	AJ877020.1	Tz18	4,446	Tanzania	NA	2002
18	AJ876793.1	Tz127	4,444	Tanzania	<i>O. sativa</i>	1999
19	AJ608219.1	CIa ⁴	4,452	Cote d'Ivoire	<i>O. sativa</i>	1975
20	AJ608218.1	Tz8	4,449	Tanzania	<i>O. sativa</i>	1996
21	AJ608217.1	Tz5	4,449	Tanzania	<i>O. sativa</i>	1997
22	AJ608216.1	Tz3	4,457	Tanzania	<i>O. sativa</i>	1997
23	AJ608215.1	Tz11	4,448	Tanzania	<i>O. sativa</i>	2001
24	AJ608214.1	SL4	4,453	Sierra Leone	<i>O. sativa</i>	1975
25	AJ608213.1	Ni2	4,449	Nigeria	<i>O. sativa</i>	1980
26	AJ608212.1	Ni1	4,449	Nigeria	<i>O. sativa</i>	1980
27	AJ608211.1	Mg2	4,447	Madagascar	<i>O. sativa</i>	1991
28	AJ608210.1	Mg1	4,447	Madagascar	<i>O. sativa</i>	1989
29	AJ608209.1	Ma77	4,450	Mali	<i>O. sativa</i>	2000
30	AJ608208.1	Ma10	4,451	Mali	<i>O. sativa</i>	1996
31	AJ608207.1	CI63	4,450	Cote d'Ivoire	<i>O. sativa</i>	1997
32	AJ608206.1	CI4	4,449	Cote d'Ivoire	<i>O. sativa</i>	1995
33	U23142.1	Nia	4,451	Nigeria	<i>O. sativa</i>	1980
34	AM883058.1	Tz209	4,446	Madagascar	NA	2005
35	AM883057.1	Tz202	4,449	Madagascar	NA	2005
36	AM883056.1	Mg16	4,447	Madagascar	NA	2003
37	MG599280	Ke345	4,447	Kenya	<i>O. sativa</i>	2016
38	MG599279	Ke323	4,447	Kenya	<i>O. sativa</i>	2016
39	MG599278	Ke105	4448	Kenya	<i>O. sativa</i>	2012
40	MG599277	Ke101	4448	Kenya	<i>O. sativa</i>	2012
41	MG599276	Ke2	4446	Kenya	<i>O. sativa</i>	1966
42	MF989228	Mw10	4449	Malawi	<i>O. sativa</i>	2014
43	MF784441	Tg274	4449	Togo	<i>O. sativa</i>	2014

44	MF784438	Ng109	4449	Niger	<i>O. sativa</i>	2007
45	MF784437	NA	4449	Niger	<i>O. sativa</i>	2017
46	MG599277	NA	4448	Keyna	NA	2017
47	MN233655	NA	4450	France	NA	2019
48	MN233654	NA	4450	France	NA	2019
49	MF784441	NA	4449	France	NA	2017
50	L20893.1	NA	4,450	NA	<i>O. sativa</i>	1990