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IVAIR JOSÉ DE MORAIS JÚNIOR

PATTERNS OF RECOMBINATION DETECTED IN THE GLOBAL
METAPOPULATION OF BEGOMOVIRUSES BASED ON DNA-A SEQUENCES

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MINAS GERAIS

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Orientador

Prof. Dr. Alison Talis Martins Lima

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**Patterns of recombination detected in the global metapopulation of begomoviruses
based on DNA-A sequences**

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RESUMO

MORAIS-JR, Ivair José de. **Padrões de recombinação detectados na metapopulação global de begomovírus baseado em sequências de DNA-A**. 2020. 590p. Dissertação (Mestrado em Agronomia/Fitopatologia) – Universidade Federal de Uberlândia, Uberlândia.¹

A metapopulação global de begomovírus (vírus de DNA de fita simples do gênero *Begomovirus*) está estruturada em duas grandes subpopulações que podem ainda ser divididas em oito menores, devido a barreiras geográficas e a gama de hospedeiros. A recombinação é um dos mecanismos evolutivos que mais contribuem para a diversificação de populações virais, e acredita-se que exista um padrão de distribuição de sítios de recombinação em genomas de vírus de DNA de fita simples. Entretanto, o isolamento genético pode dar origem a padrões distintos e únicos de recombinação em cada subpopulação viral. Neste contexto, o objetivo deste estudo foi determinar a estrutura genética da metapopulação global de begomovírus e comparar os padrões de recombinação para cada subpopulação. Sequências de DNA-A de isolados de begomovírus disponíveis no GenBank foram analisadas utilizando a análise discriminante de componentes principais. A detecção dos eventos de recombinação foi realizada utilizando-se o programa RDP4 e validada por meio da evidência de diversificação não-bifurcada pelo método de Neighbour-Net. As subpopulações de begomovírus foram designadas: (i) vírus pertencentes às espécies EACMV e SACMV, (ii) ACMV, (iii) begomovírus que infectam batata-doce (sweepovírus), (iv) begomovírus nativos da América Latina e Mesoamérica, (v) nativos da América ou Oriente Médio, (vi) TYLCV, (vii) isolados de várias espécies nativas do Extremo Oriente e subcontinente indiano, (viii) isolados de vários países asiáticos e africanos. Os padrões de recombinação apresentaram diferenças de acordo com a subpopulação analisada, sugerindo que, ao contrário do que tem sido postulado na última década, não há um padrão amplamente conservado em genoma de begomovírus.

Palavras-chave: Padrão de recombinação, Vírus de DNA-fita simples, Evolução de vírus

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ABSTRACT

MORAIS-JR, Ivair José de. **Patterns of recombination detected in the global metapopulation of begomoviruses based on DNA-A sequences.** 2020. 590p. Dissertation (Master in Agronomy/Plant Pathology) – Universidade Federal de Uberlândia, Uberlândia.¹

The global meta-population of begomoviruses (single-stranded [ss]DNA plant viruses of the genus *Begomovirus*) is structured in two large subpopulations that can be further subdivided into eight smaller ones due to geographical barriers and host range. Recombination is one of the evolutionary mechanisms that most contribute to the diversification of viral populations, and it is believed that a conserved pattern of breakpoints distribution exists in ssDNA virus genomes. However, the genetic isolation might give rise to unique recombination patterns within each virus subpopulation. In this context, the aim of this study was to determine the genetic structure of global meta-population of begomoviruses and to compare the recombination patterns from each subpopulation. DNA-A sequences of begomoviruses available from GenBank were analysed using discriminant analysis of principal components (DAPC). Detection of recombination was performed using RDP4 and validated by evidence of non-bifurcated diversification by the Neighbour-Net method. The begomovirus subpopulations were designated as: (i) EACM- and SACM-like viruses, (ii) ACM-like viruses, (iii) sweepoviruses, (iv) Meso- and Latin Americas, (v) America and Middle East, (vi) TYLC-like viruses, (vii) isolates from various native species from Far East and Indian subcontinent and (viii) isolated from various Asian and African countries. The recombination patterns showed differences according to the subpopulation analysed, suggesting that, contrary to what has been postulated over the last decade, there is no widely conserved pattern in begomoviruses genomes.

Keyword: Recombination pattern, ssDNA viruses, Virus evolution

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1 **Introduction**

2 Begomoviruses (family *Geminiviridae*) are circular ssDNA plant viruses with
3 mono- or bipartite genomes of about 2,600 and 5,200 nucleotides, respectively. They are
4 transmitted by a cryptic species complex of whiteflies (referred as *Bemisia tabaci*) to a
5 number of dicotyledonous plant species (BROWN et al., 2015; ROJAS et al., 2005a;
6 ZERBINI et al., 2017). Over the last decades, these viruses have emerged as important
7 pathogens for agriculture, reducing production and becoming a limiting factor, especially
8 in developing countries (HARIMALALA et al., 2015; JUÁREZ et al., 2014; ROCHA et
9 al., 2013). The short generation time added to their replication strategy and the bipartite
10 genome structure of many begomoviruses make them unique biological entities with
11 impressive ability for rapid diversification and adaptation (LIMA et al., 2017; MORENO
12 et al., 2004; SILVA et al., 2014).

13 The evolution rates estimated for begomoviruses are similar to those of RNA
14 viruses (DUFFY; HOLMES, 2008, 2009), which leads to the emergence of numerous
15 genetic variants. In fact, mutations/substitutions represent the main source of genetic
16 variation for begomovirus populations (LIMA et al., 2017). In addition, during co-
17 infections, begomoviruses have the ability to exchange complete DNA molecules
18 between distinct viral isolates, a process known as pseudo-recombination or reassortment
19 (MORENO et al., 2004; PITA et al., 2001; SILVA et al., 2014).

20 The recombination-dependent replication strategy of begomoviruses (JESKE;
21 LÜTGEMEIER; PREISS, 2001) is speculated as the main cause of the frequent
22 exchanges of genome segments between distinct viruses (FIALLO-OLIVÉ et al., 2019;
23 MARTIN et al., 2011; PADIDAM; SAWYER; FAUQUET, 1999; PITA et al., 2001;
24 PRASANNA et al., 2010; SILVA et al., 2012). The recombination-prone nature of
25 begomoviruses has been extensively studied due to its ability of randomizing the genetic

variation primarily generated by the mechanism of mutation. Taken together, these three evolutionary mechanisms allow the begomoviruses to explore a wide sequence space (DRAKE, 1991; SZTUBA-SOLIŃSKA et al., 2011).

Studies on the genetic structure of begomovirus populations have been carried out (PRASANNA et al., 2010) and indicate a strong geographic structuring due to the limited gene flow amongst the major global subpopulations (GE et al., 2007; MAR et al., 2017; PRASANNA et al., 2010; RAMOS SOBRINHO, 2014; ROCHA et al., 2013; SILVA et al., 2012). The long-term genetic isolation can lead to unique evolutionary profiles in which the mechanisms of mutation, recombination and pseudo-recombination may act in a qualitatively and quantitatively different manner.

It is believed that ssDNA viruses share a widely conserved recombination pattern in their genomes (LEFEUVRE et al., 2009). Additionally, a body of evidences indicate that complementary-sense genes are frequently targeted by recombination in contrast to the viral-sense ones (LEFEUVRE et al., 2007a, 2009). A common issue of studies on the evolutionary aspects of begomoviruses is that most of them are focused on DNA-A or DNA-A-like sequences, due to the essential roles played by their genes in virus replication and encapsidation, in addition to their use for taxonomic and nomenclature purposes (BROWN et al., 2015; ZERBINI et al., 2017).

Assuming the genetic isolation imposed by geographical barriers, it is possible that the evolutionary mechanisms act differently in each virus subpopulation. To elucidate evolutionary aspects of geographically isolated begomovirus subpopulations, we conducted a global population genomics study based on DNA-A sequences of isolates collected from around the world. Based on our analyses, we show that the recombination dynamics of the global meta-population of begomoviruses is a combination of at least four distinct profiles. These findings have direct implications for proposing long-term

control measures, such as in plant breeding programs, since generalist alternatives may not be applicable or effective for all begomovirus subpopulations.

Material and methods

Sequence data sets

Full-length genomic (DNA-A or DNA-A-like, $N = 5,873$) sequences were retrieved from Genbank (SAYERS et al., 2019) using Taxonomy Browser (www.ncbi.nlm.nih.gov) on January 2019 (Supplementary Table S1). The sequences of begomovirus isolates collected from around the world include all representative species according the ICTV established 91% DNA-A identity threshold (BROWN et al., 2015). All sequences were organized to begin at the nicking site of the conserved nonanucleotide (5' TAATATT↓AC 3').

Multiple sequence alignments and genetic structure of the viral meta-population

DNA-A-based multiple sequence alignments were constructed using MUSCLE (EDGAR, 2004) and manually edited using MEGA X (KUMAR et al., 2018). The aligned sequence data sets were submitted to a multivariate statistical-based approach of population subdivision using the discriminant analysis of principal components (DAPC). We simulated distinct population genetic structure scenarios by subdividing the meta-population into sequential numbers of subpopulations (K -value varying from 2 to 10) by K -means retaining all principal components (PC). All analyses were done out using the adegenet package (JOMBART, 2008; JOMBART; AHMED, 2011) implemented in R software (R CORE TEAM, 2018). In addition, haplotype composition and the average pairwise number of nucleotide differences per site (nucleotide diversity, π) were

computed for the meta-population and the DAPC-inferred subpopulations using DnaSP v.6 (ROZAS et al., 2017).

Recombination analysis

Detection of recombinant sequences and determination of recombination breakpoints distribution (RBD) were performed using RDP (MARTIN; RYBICKI, 2000), Geneconv (PADIDAM; SAWYER; FAUQUET, 1999), Bootscan (MARTIN et al., 2005), Maximum Chi Square (MAYNARD-SMITH, 1992), Chimaera (POSADA; CRANDALL, 2001), Sister Scan (GIBBS; ARMSTRONG; GIBBS, 2000) and 3Seq (LAM; RATMANN; BONI, 2018) methods, implemented in RDP4 (MARTIN et al., 2015). Statistical significance was estimated by P values lower than a Bonferroni-corrected $\alpha = 0.05$ cutoff. Only recombination events detected by at least four methods were considered for the subsequent analyses. RBD plots were constructed using a 200-nucleotide sliding window under a permutation test with 5,000 replications to estimate the statistical significance of recombination hotspots and coldspots (HEATH et al., 2006).

The occurrence of recombination in full-length DNA-A sequences was further validated by evidence of a reticular network using Neighbour-Net method (BRYANT; MOULTON, 2003) implemented in Splits Tree v.4 (HUSON; BRYANT, 2006).

Results

The geographical structuring of the global meta-population of begomoviruses

In this population genomics study, we maintained a single representative sequence of each haplotype, totalizing 5,684 unique sequences. A previous study using a model-based approach of population subdivision identified the existence of eight major begomovirus subpopulations using 690 full-length genomes (PRASANNA et al., 2010).

Here, we also simulated eight genetically differentiated populations (the list of isolates from each begomovirus subpopulation is available in Supplementary Table S1). In this scenario, the sample sizes of most begomovirus subpopulations were large enough to provide a detectable/robust signal for subsequent recombination detection analyses and the Bayesian Information Criterion (BIC, Supplementary Figure S1) indicated that the simulation assuming eight subpopulations had higher likelihood than that assuming fewer subpopulations.

The closer relationship among specific begomovirus subpopulations was evident as two well-defined large clusters and a single divergent subpopulation were observed (Figure 1). The two large clusters were comprised of subpopulations with isolates native from ‘Old World’ (OW) and ‘New World’ (NW) begomoviruses (Figure 1; top left and right panels, respectively); while a single subpopulation (Figure 1; bottom left panel) was entirely comprised of sweet potato-infecting begomoviruses (“Sweepoviruses”, $N = 179$).

The OW begomovirus cluster was subdivided into five subpopulations, one of them entirely consisting of Asian begomoviruses, the Far East Asia (sampled from China, Japan, Philippines, Taiwan, Thailand and Vietnam) and Indian subcontinent (for the remainder of this manuscript it will be referred as “Far East Asia and Indian subcontinent”; $N = 524$). Two out of five OW subpopulations were comprised of isolates predominantly collected in Africa: the East and South African cassava mosaic-like viruses (“EACM- and SACM-like viruses”; sampled from Cameroon, Kenia, Malawi, Uganda and Tanzania; $N = 504$) and the African cassava mosaic-like viruses (“ACM-like viruses”; sampled from 16 African countries and Pakistan; $N = 308$). Another subpopulation consisted of isolates collected in “Asia and Africa” (sampled from 13 and five Asian and African countries, respectively; $N = 1,886$). The last one consisted of the widespread OW begomoviruses collectively named Tomato yellow leaf curl-like viruses (“TYLC-like

viruses”) which were sampled from several OW and some NW countries ($N = 838$) (ASCENCIO-IBÁÑEZ et al., 1999; DUFFY; HOLMES, 2007; IDRIS; GUERRERO; BROWN, 2007; ISAKEIT et al., 2007; LEFEUVRE et al., 2010; MCGLASHAN, 1994; MORIONES; NAVAS-CASTILLO, 2000; NAKHLA, 1994; POLSTON, 1994; POLSTON; MCGOVERN; BROWN, 1999; ZAMBRANO et al., 2007).

The NW begomoviruses were placed into two distinct subpopulations, one of them was the “Meso- and Latin Americas” consisting of isolates ($N = 942$) collected in countries from North to South America (sampled from Mexico, Southeastern United States, Costa Rica, Guatemala, Jamaica, Puerto Rico, Brazil and Peru). Isolates of *Corchorus yellow vein virus* (CoYVV) and *Corchorus golden mosaic virus* (CoGMV), two NW-like begomoviruses native from OW (Vietnam) were also clustered in this subpopulation (HA et al., 2006, 2008). The second NW subpopulation ($N = 503$) was composed of isolates predominantly collected from “America and Middle East” and some Brazilian begomoviruses (*Euphorbia yellow mosaic virus*, EuYMV, and *Tomato common mosaic virus*, ToCmMV).

The recombination process tends to be intraspecific

For the occurrence of recombination, two or more viruses must co-infect the same cell. In this context, viruses sharing at the same time a common niche (e.g. overlapping host ranges) show higher probability of recombining than those separated temporally and/or spatially. To partially test this hypothesis, we conducted recombination analyses for genetically cohesive subpopulations and as a result, almost all recombination events detected in this study had major and/or minor parental and their recombinants belonging to the same subpopulation (Supplementary Table S2).

To confirm the results found in the RDP, we constructed a phylogenetic network, capable of accounting for alternative evolutionary stories. Only one representative isolate for each begomovirus species was chosen to make the tree easier to visualize. In agreement with RDP results, the reticulation in the networks (Figure 2) mostly connected branches led to isolates sharing very close sampling locations; in other words, the reticulated pattern suggestive of recombination tended to interconnect viruses from same subpopulations. In addition, this phylogenetic approach corroborated the RDP results reinforcing the recombination-prone nature of begomovirus genomes.

Four recombination patterns observed in the meta-population of begomoviruses

Our results demonstrate that recombination tends to occur intra-population and not inter-population (Supplementary Table S2). In addition, due to the geographic isolation that segregates the major subpopulations, it is possible that recombination occurs differently in each of them. Thus, we assumed that each of them could exhibit a distinct recombination pattern in terms of breakpoint distribution along the viral genome. The number of recombination breakpoint were counted in 200 nucleotide-sliding windows that spanned the whole length of the DNA-A genomes (Figure 3).

Four distinct recombination patterns were shared by two major subpopulations each. The first recombination pattern was shared by “Far East Asia and Indian subcontinent” and “Asia and Africa” subpopulations in which three recombination hotspots were detected, two of them in the 5’ portion of the intergenic region (IR) and a third one in the central portion of the Rep coding sequence (Figures 3a and 3g). The second recombination pattern was observed in the “Sweepoviruses” and “Meso- and Latin Americas” subpopulations in which recombination hotspots were detected exclusively in the 5’ and 3’ portions of the IR (Figures 3c and 3d). The third pattern refers to that of

“EACM- and SACM-like viruses” and “TYLC-like viruses” subpopulations in which a single recombination hotspot was detected in the 5’ portion of the IR (Figures 3e and 3f). The last recombination pattern comprised the “America and Middle East” and “ACM-like viruses” subpopulations in which no recombination hotspot was detected (Figures 3b and 3h); *i.e.*, the recombination breakpoints were evenly distributed throughout their DNA-A components.

Due to the well-established recombination prone-nature of begomovirus (DE BRUYN et al., 2016; LEFEUVRE et al., 2009; LIMA et al., 2017; MARTIN et al., 2011; MONCI et al., 2002; PADIDAM; SAWYER; FAUQUET, 1999), the absence of hotspots in two subpopulations was an unexpected result from this work. To validate these findings, we compared the sample sizes of these populations with those in which at least one hotspot was detected. In addition, we also checked if the degree of genetic variability negatively affected the recombination detection methods of RDP. Recombination analyses based on data sets containing very similar sequences (low degree of genetic variability) tend to underestimate the number of recombination events that occurred in the history of the samples. In contrast, when the degree of genetic variability is excessively high, the alignment accuracy is strongly reduced which also leads to a poor performance of recombination detection (POSADA; CRANDALL, 2001).

The “America and Middle East” subpopulation had a sample size (Table 1, $N = 503$) very similar to those of “Far East Asia and Indian subcontinent” ($N = 524$) and “EACM- and SACM-like viruses” subpopulations ($N = 504$) in which recombination hotspots were detected. The sample size of “ACM-like viruses” subpopulation ($N = 308$) was larger than that of “Sweepoviruses” ($N = 179$) in which two recombination hotspots were detected in the IR. Therefore, the sample sizes do not explain the absence of

recombination hotspots in “America and Middle East” and “ACM-like viruses” subpopulations.

The nucleotide diversity calculated for the “America and Middle East” subpopulation (Table 1, $\pi = 0.14790$) was similar to those of “Sweepoviruses” and “EACM- and SACM-like viruses” subpopulations ($\pi = 0.11661$ and 0.12340 , respectively) in which recombination hotspots were detected. The predominantly intraspecific “ACM-like viruses” subpopulation was one of the least variable subpopulations ($\pi = 0.04252$). However, another one with a very similar degree of genetic variability (“TYLC-like viruses”, $\pi = 0.04385$) showed a hotspot in the 5’ portion of the IR. Together, neither sample size nor degree of genetic variability seem to invalidate the absence of recombination hotspots in the “America and Middle East” and “ACM-like viruses” subpopulations. It is important to emphasize that these results also do not invalidate previous studies that describe begomoviruses as highly recombinant (DE BRUYN et al., 2016; LEFEUVRE et al., 2009; LIMA et al., 2017; ROCHA et al., 2013) but only indicate that in both subpopulations the recombination breakpoints were not clustered in a specific genomic region. Our results demonstrate that the recombination dynamics of the begomovirus meta-population based on DNA-A exhibits at least four distinct recombination profiles.

Discussion

The geographical subdivision of begomoviruses into two large clusters (OW and NW) and their further subdivision into “Asia and Africa” and “Mesoamerica and Latin America”, respectively, as well as the segregation of sweepoviruses into a divergent subpopulation has been shown in previous phylogenetic and population genetic studies (BROWN, 2000; PAXIMADIS et al., 1999; ROJAS et al., 2005b; RYBICKI, 1994).

Among OW subpopulations, the begomoviruses causing the cassava mosaic disease (CMD) remained genetically different from other begomoviruses from Asia and Africa. However, some results contrast with what has been found previously (PRASANNA et al., 2010). Here, several African and Asian begomoviruses have been placed in the same subpopulation, probably influenced by the larger sample size.

The segregation between the DNA-A-based “Far East Asia and Indian Subcontinent” and the other subpopulation containing Asian isolates (“Asia and Africa” subpopulations) might be a consequence of the geographical barrier imposed by the Himalayan Mountain range which separates both regions. Such hypothesis might also explain the closer relationship between Asian and African begomoviruses in “Asia and Africa” subpopulations.

The few instances involving mixtures between Mesoamerican and Latin American isolates are corroborated by other studies (ROCHA et al., 2013; SILVA et al., 2012) similar to those occurring in Africa (BULL et al., 2006; LEFEUVRE et al., 2007a). Assuming the Amazon Forest as a natural barrier for whitefly migration, the movement of infected plant material and recombination events involving exotic and native begomoviruses might favor such mixtures [*e.g.* the recombination event detected for EuYMV isolates, (ROCHA et al., 2013)].

Although mutation is the evolutionary mechanism that most contributes to the genetic variability of begomovirus populations (LIMA et al., 2017), recombination plays an important role in randomizing the mutations into new genomic combinations (MARTIN et al., 2011). Therefore, recombination can accelerate the evolutionary dynamics of these viruses and might alter their ecological aspects compared to their parental viruses (MONCI et al., 2002). However, for recombination to occur, parental viruses need to spatially and temporally co-exist. Therefore, the recombination is strongly

impacted by the geographical structure. In contrast, the recombination patterns from each virus subpopulation might be driven by intrinsic factors in the DNA genome of begomoviruses and/or be a by-product of the evolutionary mechanism of selection acting against recombinant viruses in which the intra-genome interactions network has been disrupted (LEFEUVRE et al., 2007a, 2007b, 2009).

Previous studies focused on DNA-A sequences showed a close phylogenetic relationship between isolates of EuYMV and ToCmMV with Mesoamerican begomoviruses from the *Squash leaf curl virus* (SqLCV) clade (CASTILLO-URQUIZA et al., 2008; FERNANDES et al., 2011). Recombination analyses conducted subsequently in another study indicated that isolates of both species are recombinants between Meso- and Latin American parental begomoviruses (ROCHA et al., 2013).

Although the biochemical mechanisms involved in the ssDNA virus recombination are poorly known, the recombination that occurs in IR, which contains the origin of replication (*v*-ori), has been explained by the recombination-dependent replication (RDR) (JESKE; LÜTGEMEIER; PREISS, 2001). However, the absence of recombination hotspots in the “America and Middle East” and “ACM-like viruses” subpopulations suggest that additional factors might be involved in the predisposition of the IR as a preferential target of recombination breakpoints in specific virus subpopulations.

In contrast, all subpopulations in which at least a single recombination hotspot was detected, tended to target them at the 5' portion of the IR. In other words, although the hotspot at the 5' portion of the IR is not a conserved feature in all major begomovirus subpopulations, it seems to be the most recombination-prone region in the DNA-A molecule.

It is important to emphasize that our results do not contradict those that demonstrate a widely conserved pattern for all ssDNA viruses, but rather demonstrate that different recombination patterns might coexist in genetically cohesive subpopulations. Our results demonstrate that there are at least 8 genetically distinct subpopulations and four recombination patterns in the begomovirus metapopulation around the world. Therefore, control measures for these viruses, such as those used in development programs for resistant cultivars need to be determined at a regional rather than a global level.

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Table 1. Genetic variability and recombination events detected in DNA-A of global begomovirus subpopulations.

Subpopulation	<i>N</i>	π	URE	NS
ACM-like viruses	308	0.04252	2	2
America and Middle East	503	0.14790	27	30
Asia and Africa	1886	0.20261	262	219
EACM- and SACM-like viruses	504	0.12340	25	8
Far East Asia and Indian subcontinent	524	0.18676	146	81
Meso- and Latin Americas	942	0.18067	141	148
Sweepoviruses	179	0.11661	79	20
TYLC-like viruses	838	0.04385	38	10
Total	5684	0.22306	720	488

N = sample size

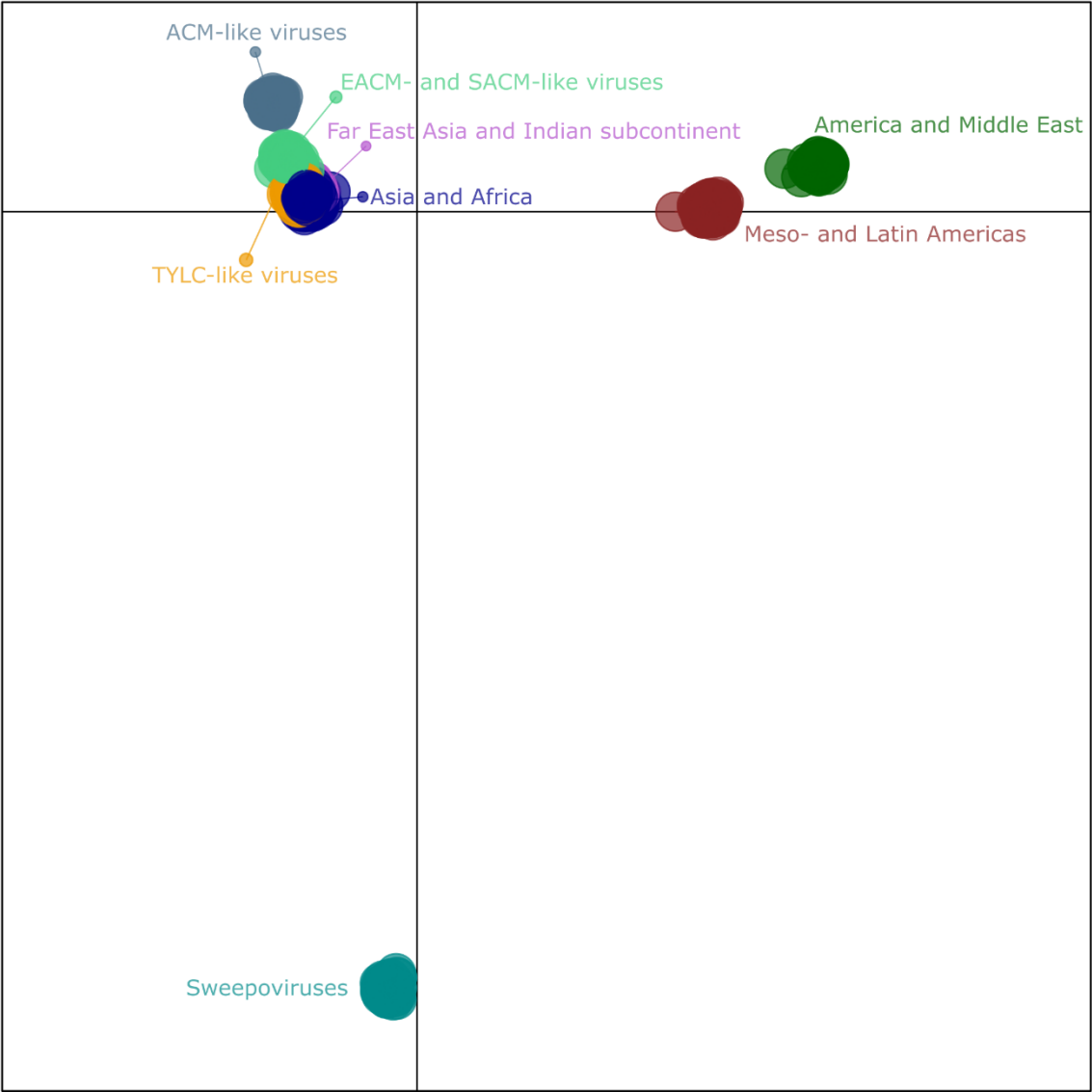
NS = number of different species or putative species

π = nucleotide diversity

URE = number of unique recombination events detected in Recombination Detection Program

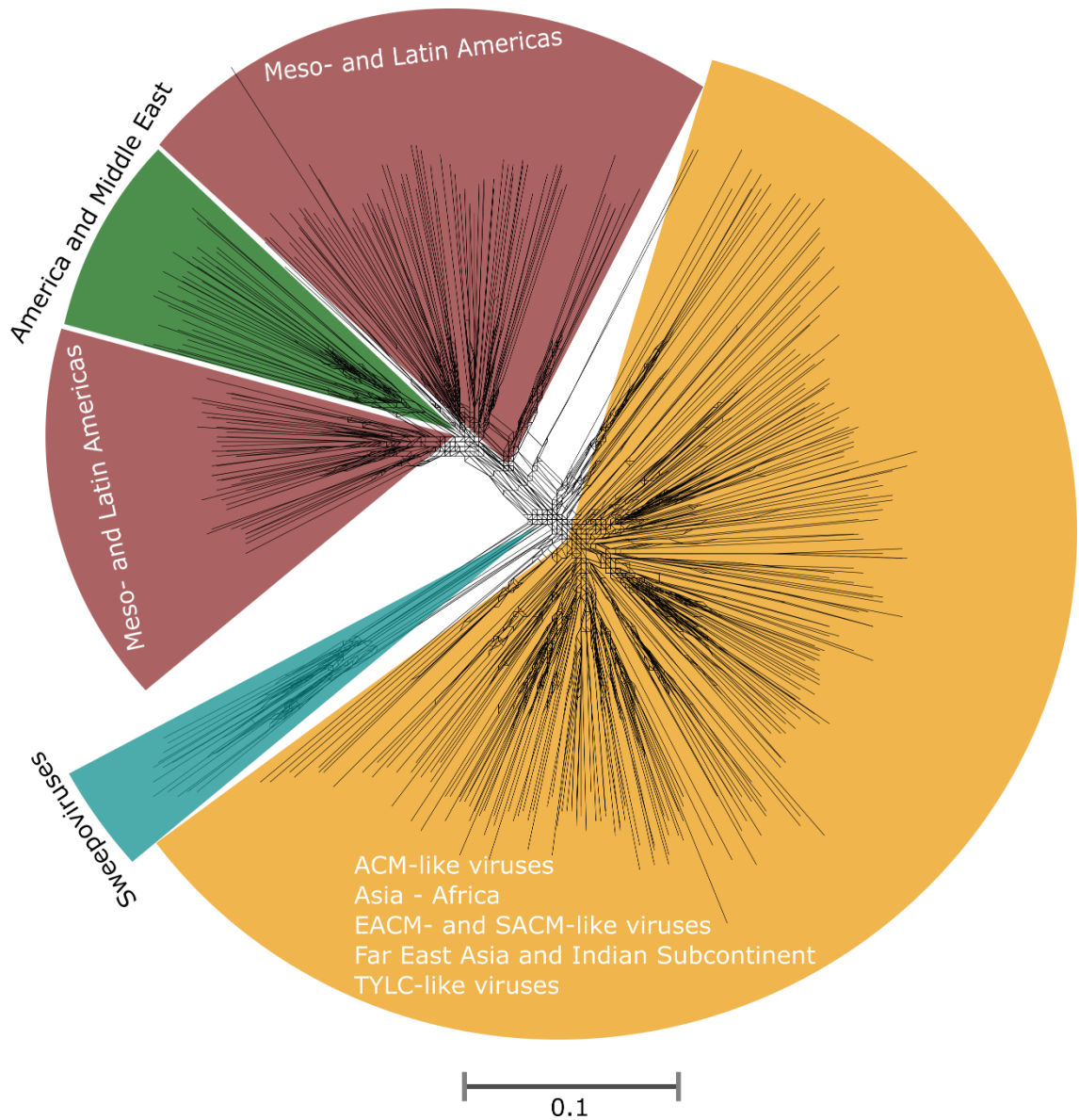
Fonte: O autor.

Figure 1 - Multivariate statistical clustering analyses of population subdivision based on full-length DNA-A or DNA-A-like sequences of begomovirus isolates collected from around the world. Each dot represents a single begomovirus isolate. Sets of dots of the same colour indicate an individual begomovirus subpopulation. The distances between all possible subpopulation pairs in the plot are proportional to the genetic distance between subpopulations.



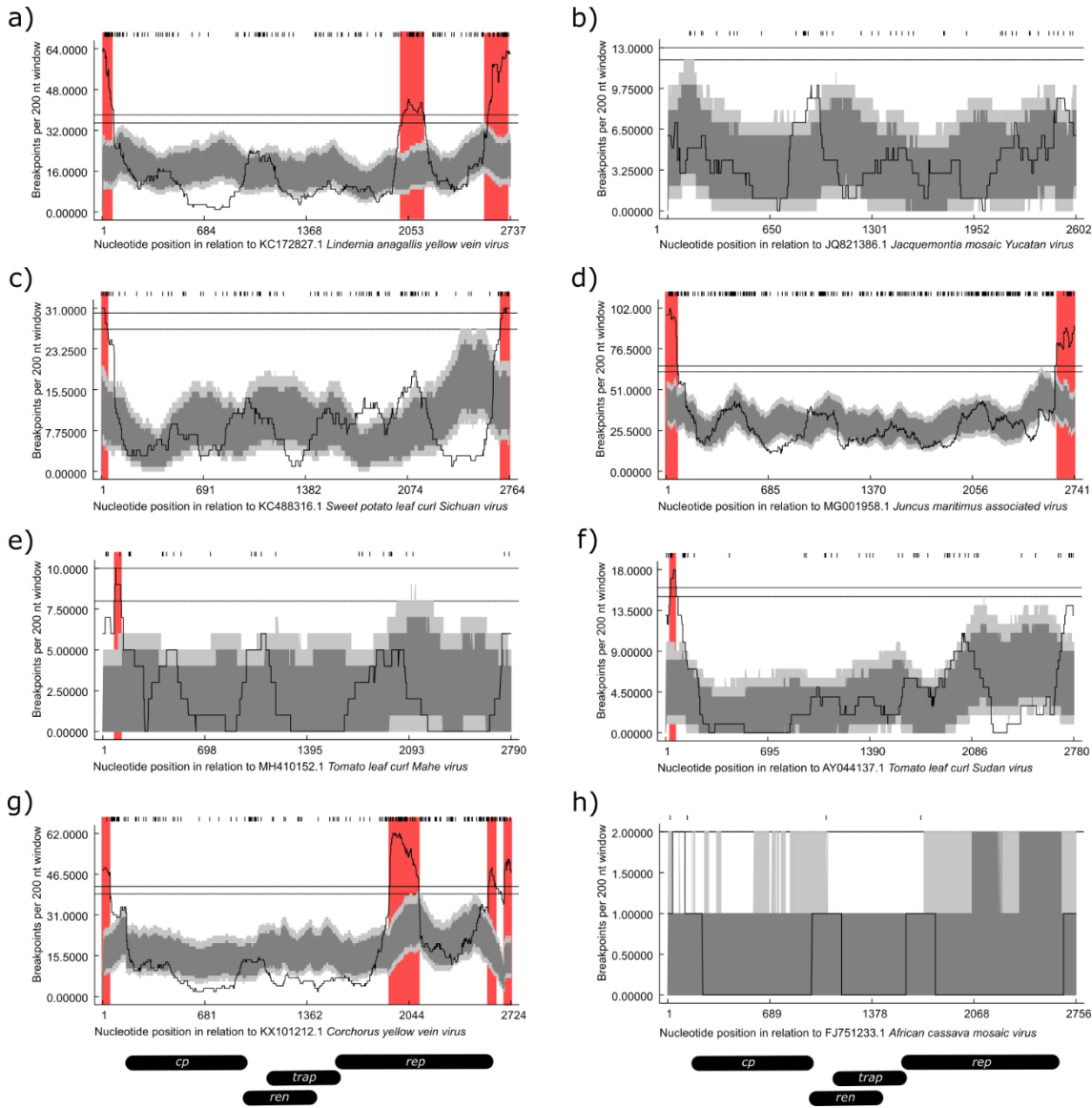
Fonte: O autor.

Figure 2 - Network phylogenetic trees based on DNA-A data sets containing a single representative sequence of each begomovirus species. The formation of a reticular network rather than a single bifurcated tree is indicative of alternative evolutionary histories possibly due to the occurrence of recombination events among begomovirus isolates.



Fonte: O autor.

Figure - Breakpoints density across full-length DNA-A or DNA-A-like sequences of begomoviruses subdivided into eight genetically different subpopulations. (a) Far East Asia and Indian subcontinent, (b) America and Middle East, (c) Sweepoviruses, (d) Meso- and Latin Americas, (e) EACM- and SACM-like viruses, (f) TYLC-like viruses, (g) Asia and Africa, (h) ACM-like viruses. A 200-nucleotide window was moved along the alignment, one nucleotide at a time, and the breakpoints detected within the window length were counted and plotted (solid line). The upper and lower broken lines, respectively, indicate 99% and 95% confidence thresholds for globally significant breakpoint clusters. The light- and dark-gray areas, respectively, indicate local 99% and 95% breakpoint-clustering thresholds, taking into account local regional differences in sequence diversity that influence the abilities of different methods to detect recombination breakpoints.



Fonte: O autor.

706 **Supplementary Table S1.** Full-length DNA-A sequences of begomoviruses used in this study and their associated DAPC-inferred subpopulations.

707 Redundant sequences representing a same haplotype are listed in **red** and a single representative was kept in the population genomic analyses

GenBank Acession	Virus name	Host	Geographical Origin	Subpopulation
FN434438	<i>Abutilon Brazil virus</i>	<i>Abutilon</i> sp.	Brazil	Meso- and Latin Americas
KC430935	<i>Abutilon golden mosaic Yucatan virus</i>	<i>Abutilon permolle</i>	Mexico	America and Middle East
HM585445	<i>Abutilon mosaic Bolivia virus</i>	<i>Abutilon</i> sp.	Bolivia	Meso- and Latin Americas
JF694480	<i>Abutilon mosaic Brazil virus</i>	<i>Sida rhomboidea</i>	Brazil	Meso- and Latin Americas
JF694481	<i>Abutilon mosaic Brazil virus</i>	<i>Sida rhomboidea</i>	Brazil	Meso- and Latin Americas
JF694482	<i>Abutilon mosaic Brazil virus</i>	<i>Sida rhomboidea</i>	Brazil	Meso- and Latin Americas
HQ588899	<i>Abutilon mosaic virus</i>	<i>Abutilon</i> sp.	India	Meso- and Latin Americas
LN611622	<i>Abutilon mosaic virus</i>	<i>Abutilon megapotamicum</i>	Germany	Meso- and Latin Americas
LN611623	<i>Abutilon mosaic virus</i>	<i>Abutilon megapotamicum</i>	France	Meso- and Latin Americas
U51137	<i>Abutilon mosaic virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
X15983	<i>Abutilon mosaic virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
HQ588900	<i>Abutilon mosaic virus</i>	<i>Abutilon</i> sp.	India	Meso- and Latin Americas
HQ588901	<i>Abutilon mosaic virus</i>	<i>Abutilon</i> sp.	India	Meso- and Latin Americas
HE616777	<i>African cassava mosaic Burkina Faso virus</i>	<i>Manihot esculenta</i>	Burkina Faso	ACM-like viruses
HE616779	<i>African cassava mosaic Burkina Faso virus</i>	<i>Manihot esculenta</i>	Burkina Faso	ACM-like viruses
HE616780	<i>African cassava mosaic Burkina Faso virus</i>	<i>Manihot esculenta</i>	Burkina Faso	ACM-like viruses
HE616781	<i>African cassava mosaic Burkina Faso virus</i>	<i>Manihot esculenta</i>	Burkina Faso	ACM-like viruses
AF112352	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Cameroon	ACM-like viruses
AF126800	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
AF126802	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
AF259894	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Cote d'Ivoire	ACM-like viruses
AJ427910	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Nigeria	ACM-like viruses
AM502338	<i>African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Uganda	ACM-like viruses
AM502339	<i>African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Uganda	ACM-like viruses
AM502340	<i>African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Uganda	ACM-like viruses
AY211885	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Cameroon	ACM-like viruses

AY795982	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Tanzania	ACM-like viruses
EU685318	<i>African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Nigeria	ACM-like viruses
EU685322	<i>African cassava mosaic virus</i>	<i>Senna occidentalis</i>	Nigeria	ACM-like viruses
EU685324	<i>African cassava mosaic virus</i>	<i>Ricinus communis</i>	Nigeria	ACM-like viruses
EU685325	<i>African cassava mosaic virus</i>	<i>Glycine max</i>	Nigeria	ACM-like viruses
FJ751233	<i>African cassava mosaic virus</i>	<i>Gossypium punctatum</i>	Pakistan	ACM-like viruses
FJ751234	<i>African cassava mosaic virus</i>	<i>Gossypium lobatum</i>	Pakistan	ACM-like viruses
FJ751235	<i>African cassava mosaic virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	ACM-like viruses
FJ807631	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Angola	ACM-like viruses
FM877473	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Burkina Faso	ACM-like viruses
FN435271	<i>African cassava mosaic virus</i>	<i>Pueraria javanica</i>	Democratic Republic of the Congo	ACM-like viruses
FN435272	<i>African cassava mosaic virus</i>	<i>Pueraria javanica</i>	Democratic Republic of the Congo	ACM-like viruses
FN435273	<i>African cassava mosaic virus</i>	<i>Pueraria javanica</i>	Democratic Republic of the Congo	ACM-like viruses
FN435275	<i>African cassava mosaic virus</i>	<i>Centrosema pubescens</i>	Democratic Republic of the Congo	ACM-like viruses
FN435276	<i>African cassava mosaic virus</i>	<i>Centrosema pubescens</i>	Democratic Republic of the Congo	ACM-like viruses
FN435277	<i>African cassava mosaic virus</i>	<i>Centrosema pubescens</i>	Democratic Republic of the Congo	ACM-like viruses
FN668378	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Democratic Republic of the Congo	ACM-like viruses
GQ169505	<i>African cassava mosaic virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	ACM-like viruses
GQ204106	<i>African cassava mosaic virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	ACM-like viruses
GQ204107	<i>African cassava mosaic virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	ACM-like viruses
GQ204108	<i>African cassava mosaic virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	ACM-like viruses
GQ204109	<i>African cassava mosaic virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	ACM-like viruses
GU580897	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Angola	ACM-like viruses
HE979758	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979759	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979760	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979761	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979762	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979763	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979764	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979765	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979766	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses

HE979767	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HE979768	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	ACM-like viruses
HG530110	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	ACM-like viruses
HG530111	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	ACM-like viruses
HM468428	<i>African cassava mosaic virus</i>	<i>Gossypium tomentosum</i>	Pakistan	ACM-like viruses
J02057	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Not specified	ACM-like viruses
JN053421	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053422	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053423	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053424	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053425	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053426	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053427	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053428	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053429	<i>African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	ACM-like viruses
JN053430	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	ACM-like viruses
JN053431	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	ACM-like viruses
JN165088	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
KJ887754	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887755	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887756	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887757	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887758	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887759	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887760	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887761	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887762	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887763	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887764	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887765	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887766	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses
KJ887767	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	ACM-like viruses

KJ887980	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ887995	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ887997	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888008	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888059	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888062	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888067	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888070	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888075	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888080	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888082	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888086	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888088	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888096	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	ACM-like viruses
KJ888098	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Chad	ACM-like viruses
KJ888099	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Chad	ACM-like viruses
KJ888100	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Chad	ACM-like viruses
KR476371	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Benin	ACM-like viruses
KT869127	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	ACM-like viruses
KT869128	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	ACM-like viruses
KT869129	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	ACM-like viruses
KT869131	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	ACM-like viruses
MG250084	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250085	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250086	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250087	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250088	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250089	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250090	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250091	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250092	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
MG250093	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses

MG250160	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	ACM-like viruses
X17095	<i>African cassava mosaic virus</i>	<i>Abutilon selloianum</i>	Nigeria	ACM-like viruses
KJ887820	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	EACM- and SACM-like viruses
FN435274	<i>African cassava mosaic virus</i>	<i>Pueraria javanica</i>	Democratic Republic of the Congo	
KJ887753	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	
KJ887814	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	
KJ887816	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Central African Republic	
KJ887956	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	
KR476372	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Togo	
KT869130	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	
MG250132	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	
MG250134	<i>African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	
AY211884	<i>African cassava mosaic virus</i>	<i>Manihot</i> sp.	Cameroon	ACM-like viruses
AF366902	<i>African cassava mosaic virus</i>	Not specified	Cameroon	ACM-like viruses
HE814062	<i>African cassava mosaic virus</i>	<i>Sida</i> sp.	Central African Republic	ACM-like viruses
HE814065	<i>African cassava mosaic virus</i>	<i>Sida</i> sp.	Chad	ACM-like viruses
EU685320	<i>African cassava mosaic virus</i>	<i>Leucaena leucocephala</i>	Nigeria	ACM-like viruses
AJ437618	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	Nepal	Asia and Africa
AM261836	<i>Ageratum enation virus</i>	<i>Sonchus oleraceus</i>	Pakistan	Asia and Africa
AM698011	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	Pakistan	Asia and Africa
AM701770	<i>Ageratum enation virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
EU867513	<i>Ageratum enation virus</i>	<i>Amaranthus cruentus</i>	India	Asia and Africa
FJ177031	<i>Ageratum enation virus</i>	<i>Cleome gynandra</i>	India	Asia and Africa
FN794201	<i>Ageratum enation virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
GQ268327	<i>Ageratum enation virus</i>	<i>Trichosanthes dioica</i>	India	Asia and Africa
HE861940	<i>Ageratum enation virus</i>	<i>Glycine max</i>	India	Asia and Africa
HM149260	<i>Ageratum enation virus</i>	<i>Papaver somniferum</i>	India	Asia and Africa
JF682242	<i>Ageratum enation virus</i>	<i>Amaranthus hypochondriacus</i>	India	Asia and Africa
JF728861	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	India	Asia and Africa
JF728862	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	India	Asia and Africa
JF728863	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	India	Asia and Africa
JF728864	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	India	Asia and Africa

JF728865	<i>Ageratum enation virus</i>	<i>Daucus carota</i>	India	Asia and Africa
JF728866	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	India	Asia and Africa
JF728867	<i>Ageratum enation virus</i>	<i>Daucus carota</i>	India	Asia and Africa
JQ911765	<i>Ageratum enation virus</i>	<i>Papaver somniferum</i>	India	Asia and Africa
FN794198	<i>Ageratum enation virus</i>	<i>Ageratum</i> sp.	India	Asia and Africa
JX436472	<i>Ageratum enation virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JX436473	<i>Ageratum enation virus</i>	<i>Trigonella foenum-graecum</i>	India	Asia and Africa
KC589699	<i>Ageratum enation virus</i>	<i>Tagetes patula</i>	India	Asia and Africa
JQ911767	<i>Ageratum enation virus</i>	<i>Ageratum</i> sp.	India	Asia and Africa
KJ488990	<i>Ageratum enation virus</i>	<i>Ageratum houstonianum</i>	India	Asia and Africa
KJ488991	<i>Ageratum enation virus</i>	<i>Ageratum houstonianum</i>	India	Asia and Africa
KM066975	<i>Ageratum enation virus</i>	<i>Calendula officinalis</i>	India	Asia and Africa
KM262822	<i>Ageratum enation virus</i>	<i>Calendula officinalis</i>	India	Asia and Africa
KM262823	<i>Ageratum enation virus</i>	<i>Calendula officinalis</i>	India	Asia and Africa
KM383735	<i>Ageratum enation virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KP195264	<i>Ageratum enation virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP725057	<i>Ageratum enation virus</i>	<i>Carica papaya</i>	India	Asia and Africa
LT716984	<i>Ageratum enation virus</i>	<i>Morus alba</i>	Pakistan	Asia and Africa
LT716985	<i>Ageratum enation virus</i>	<i>Morus alba</i>	Pakistan	Asia and Africa
JF728860	<i>Ageratum enation virus</i>	<i>Ageratum conyzoides</i>	India	
KY089033	<i>Ageratum enation virus</i>	<i>Helianthus</i> sp.	India	Asia and Africa
KC818421	<i>Ageratum enation virus</i>	<i>Solanum</i> sp.	India	Asia and Africa
KC795968	<i>Ageratum enation virus</i>	<i>Solanum</i> sp.	India	
MG686551	<i>Ageratum enation virus</i>	<i>Synedrella</i> sp.	India	Asia and Africa
FN543099	<i>Ageratum enation virus</i>	<i>Zinnia</i> sp.	India	Asia and Africa
FR717144	<i>Ageratum leaf curl Cameroon virus</i>	<i>Ageratum conyzoides</i>	Cameroon	Asia and Africa
FR873228	<i>Ageratum leaf curl Cameroon virus</i>	<i>Ageratum conyzoides</i>	Cameroon	Asia and Africa
FR873230	<i>Ageratum leaf curl Cameroon virus</i>	<i>Ageratum conyzoides</i>	Cameroon	Asia and Africa
FR873229	<i>Ageratum leaf curl Cameroon virus</i>	<i>Ageratum conyzoides</i>	Cameroon	
MG917697	<i>Ageratum leaf curl Sichuan virus</i>	<i>Ageratum conyzoides</i>	China	Asia and Africa
MG917698	<i>Ageratum leaf curl Sichuan virus</i>	<i>Ageratum conyzoides</i>	China	Asia and Africa
AJ851005	<i>Ageratum leaf curl virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent

KU376491	<i>Ageratum leaf curl virus</i>	<i>Calotropis procera</i>	India	Far East Asia and Indian subcontinent
AJ495813	<i>Ageratum yellow vein China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
AJ558120	<i>Ageratum yellow vein china virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ849916	<i>Ageratum yellow vein China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
JX911332	<i>Ageratum yellow vein China virus</i>	<i>Zinnia violacea</i>	Vietnam	Far East Asia and Indian subcontinent
JX972141	<i>Ageratum Yellow vein China virus</i>	<i>Oxalis corniculata</i>	China	Far East Asia and Indian subcontinent
KC577539	<i>Ageratum yellow vein China virus</i>	<i>Synedrella nodiflora</i>	Philippines	Far East Asia and Indian subcontinent
KC878475	<i>Ageratum yellow vein China virus</i>	<i>Ageratum conyzoides</i>	Vietnam	Far East Asia and Indian subcontinent
KF785751	<i>Ageratum yellow vein China virus</i>	<i>Synedrella nodiflora</i>	Philippines	Far East Asia and Indian subcontinent
KF999980	<i>Ageratum yellow vein China virus</i>	<i>Synedrella nodiflora</i>	China	Far East Asia and Indian subcontinent
KF999981	<i>Ageratum yellow vein China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
KJ016239	<i>Ageratum yellow vein China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
KU601622	<i>Ageratum yellow vein China virus</i>	<i>Amaranthus blitum</i>	China	Far East Asia and Indian subcontinent
KU933257	<i>Ageratum yellow vein China virus</i>	<i>Amaranthus blitum</i>	China	Far East Asia and Indian subcontinent
KU954377	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954378	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954379	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954380	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954381	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954382	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954384	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954385	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954386	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954387	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954388	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954389	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU954390	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU975392	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU975393	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KX759646	<i>Ageratum yellow vein China virus</i>	<i>Sonchus arvensis</i>	China	Far East Asia and Indian subcontinent
KX759647	<i>Ageratum yellow vein China virus</i>	<i>Sonchus arvensis</i>	China	Far East Asia and Indian subcontinent
MH101419	<i>Ageratum yellow vein China virus</i>	<i>Petunia hybrida</i>	Thailand	Far East Asia and Indian subcontinent

KU954383	<i>Ageratum yellow vein China virus</i>	<i>Solanum lycopersicum</i>	China	
HG003652	<i>Ageratum yellow vein China virus</i>	<i>Petunia</i> sp.	China	Far East Asia and Indian subcontinent
AJ564744	<i>Ageratum yellow vein China virus</i>	<i>Stachytarpheta</i> sp.	China	Far East Asia and Indian subcontinent
DQ866132	<i>Ageratum yellow vein Hualian virus</i>	<i>Ageratum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
DQ866133	<i>Ageratum yellow vein Hualian virus</i>	<i>Ageratum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
DQ866124	<i>Ageratum yellow vein Hualian virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
AF314144	<i>Ageratum yellow vein Sri Lanka virus</i>	Not specified	Sri Lanka	Asia and Africa
AF327902	<i>Ageratum yellow vein Taiwan virus</i>	Not specified	Taiwan	Far East Asia and Indian subcontinent
EF544600	<i>Ageratum yellow vein Taiwan virus</i>	Not specified	China	Far East Asia and Indian subcontinent
DQ866134	<i>Ageratum yellow vein virus</i>	<i>Ageratum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
AB050781	<i>Ageratum yellow vein virus</i>	<i>Glycine max</i>	Thailand	Far East Asia and Indian subcontinent
AB100305	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Far East Asia and Indian subcontinent
AB306314	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	Japan	Far East Asia and Indian subcontinent
AF307861	<i>Ageratum yellow vein virus</i>	<i>Ageratum conyzoides</i>	Taiwan	Far East Asia and Indian subcontinent
AM940137	<i>Ageratum yellow vein virus</i>	<i>Sonchus oleraceus</i>	China	Far East Asia and Indian subcontinent
EF458639	<i>Ageratum yellow vein virus</i>	<i>Ageratum conyzoides</i>	Taiwan	Far East Asia and Indian subcontinent
EF527823	<i>Ageratum yellow vein virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
EU487045	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
FJ495183	<i>Ageratum yellow vein virus</i>	<i>Euphorbia pulcherrima</i>	China	Far East Asia and Indian subcontinent
JN809811	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809812	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809813	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809815	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809816	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809817	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809818	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809820	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809821	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809823	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809824	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809826	<i>Ageratum yellow vein virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
KC172826	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent

KC282641	<i>Ageratum yellow vein virus</i>	<i>Carica papaya</i>	Nepal	Far East Asia and Indian subcontinent
KC677733	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	japan	Far East Asia and Indian subcontinent
KC810890	<i>Ageratum yellow vein virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
KJ016235	<i>Ageratum yellow vein virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
KJ744212	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	USA	Far East Asia and Indian subcontinent
KM051527	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	Malaysia	Far East Asia and Indian subcontinent
KM051844	<i>Ageratum yellow vein virus</i>	<i>Carica papaya</i>	China	Far East Asia and Indian subcontinent
KR094066	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	USA	Far East Asia and Indian subcontinent
KR094067	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	USA	Far East Asia and Indian subcontinent
KY780619	<i>Ageratum yellow vein virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
LC051117	<i>Ageratum yellow vein virus</i>	<i>Capsicum annuum</i>	Indonesia	Far East Asia and Indian subcontinent
LC051118	<i>Ageratum yellow vein virus</i>	<i>Capsicum annuum</i>	Indonesia	Far East Asia and Indian subcontinent
LC051119	<i>Ageratum yellow vein virus</i>	<i>Capsicum annuum</i>	Indonesia	Far East Asia and Indian subcontinent
LC051120	<i>Ageratum yellow vein virus</i>	<i>Capsicum annuum</i>	Indonesia	Far East Asia and Indian subcontinent
MH101420	<i>Ageratum yellow vein virus</i>	<i>Petunia hybrida</i>	Thailand	Far East Asia and Indian subcontinent
X74516	<i>Ageratum yellow vein virus</i>	<i>Abutilon sellovianum</i>	India	Far East Asia and Indian subcontinent
JQ804985	<i>Ageratum yellow vein virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
EF602306	<i>Allamanda leaf curl virus</i>	<i>Allamanda cathartica</i>	China	Far East Asia and Indian subcontinent
KC202818	<i>Allamanda leaf mottle distortion virus</i>	<i>Allamanda cathartica</i>	India	Asia and Africa
AJ965540	<i>Alternanthera yellow vein virus</i>	<i>Ludwigia hyssopifolia</i>	China	Asia and Africa
AM050736	<i>Alternanthera yellow vein virus</i>	<i>Alternanthera philoxeroides</i>	China	Asia and Africa
DQ375456	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
DQ641703	<i>Alternanthera yellow vein virus</i>	<i>Zinnia elegans</i>	Vietnam	Asia and Africa
DQ641704	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	Vietnam	Asia and Africa
EU286797	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
EU286798	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
FJ015062	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
FJ712190	<i>Alternanthera yellow vein virus</i>	<i>Alternanthera philoxeroides</i>	China	Asia and Africa
FN432361	<i>Alternanthera yellow vein virus</i>	<i>Sonchus arvensis</i>	Pakistan	Asia and Africa
KT717678	<i>Alternanthera yellow vein virus</i>	<i>Picrorhiza kurrooa</i>	India	Asia and Africa
KX710155	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	Pakistan	Asia and Africa
KX885031	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa

KX906694	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	Pakistan	Asia and Africa
KX906695	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	Pakistan	Asia and Africa
KX906696	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	Pakistan	Asia and Africa
KX906697	<i>Alternanthera yellow vein virus</i>	<i>Eclipta prostrata</i>	Pakistan	Asia and Africa
LC316182	<i>Alternanthera yellow vein virus</i>	<i>Alternanthera sessilis</i>	India	Asia and Africa
LC316183	<i>Alternanthera yellow vein virus</i>	<i>Alternanthera sessilis</i>	India	Asia and Africa
LN795903	<i>Alternanthera yellow vein virus</i>	<i>Rumex nepalensis</i>	India	Asia and Africa
EF544601	<i>Alternanthera yellow vein virus</i>	Not specified	China	Asia and Africa
EF544602	<i>Alternanthera yellow vein virus</i>	Not specified	China	Asia and Africa
EF544603	<i>Alternanthera yellow vein virus</i>	Not specified	China	Asia and Africa
EF544604	<i>Alternanthera yellow vein virus</i>	Not specified	China	Asia and Africa
MG686552	<i>Alternanthera yellow vein virus</i>	<i>Synedrella</i> sp.	India	Asia and Africa
KM359406	<i>Andrographis yellow vein leaf curl virus</i>	<i>Andrographis paniculata</i>	India	Asia and Africa
JF694484	<i>Asystasia begomovirus 1</i>	<i>Asystasia gangetica</i>	West Africa	Asia and Africa
JF694486	<i>Asystasia begomovirus 2</i>	<i>Asystasia gangetica</i>	West Africa	Asia and Africa
KP663483	<i>Asystasia mosaic Madagascar virus</i>	<i>Asystasia gangetica</i>	Madagascar	Asia and Africa
KP663485	<i>Asystasia mosaic Madagascar virus</i>	<i>Asystasia gangetica</i>	Madagascar	Asia and Africa
AF110189	<i>Bean calico mosaic virus</i>	<i>Phaseolus vulgaris</i>	Mexico	America and Middle East
JN848770	<i>Bean chlorosis virus</i>	<i>Phaseolus vulgaris</i>	Venezuela	Meso- and Latin Americas
M88179	<i>Bean dwarf mosaic virus</i>	<i>Phaseolus vulgaris</i>	Pakistan	Meso- and Latin Americas
FJ665283	<i>Bean golden mosaic virus</i>	<i>Glycine max</i>	Brazil	Meso- and Latin Americas
JN419003	<i>Bean golden mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419004	<i>Bean golden mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419006	<i>Bean golden mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939707	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939708	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939709	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939710	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939711	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939712	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939713	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
KJ939714	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas

KJ939848	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939849	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939850	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939851	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939852	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939853	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
M88686	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Pakistan	Meso- and Latin Americas
MG334552	<i>Bean golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939728	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	
KJ939730	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	
KJ939762	<i>Bean golden mosaic virus</i>	<i>Phaseolus lunatus</i>	Brazil	
KJ939767	<i>Bean golden mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939778	<i>Bean golden mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
JF694449	<i>Bean golden mosaic virus</i>	<i>Phaseolus</i> sp.	Brazil	Meso- and Latin Americas
JF694450	<i>Bean golden mosaic virus</i>	<i>Phaseolus</i> sp.	Brazil	Meso- and Latin Americas
JF694451	<i>Bean golden mosaic virus</i>	<i>Phaseolus</i> sp.	Brazil	Meso- and Latin Americas
JF694452	<i>Bean golden mosaic virus</i>	<i>Phaseolus</i> sp.	Brazil	Meso- and Latin Americas
JF694453	<i>Bean golden mosaic virus</i>	<i>Phaseolus</i> sp.	Brazil	Meso- and Latin Americas
JF694454	<i>Bean golden mosaic virus</i>	<i>Phaseolus</i> sp.	Brazil	Meso- and Latin Americas
AJ544531	<i>Bean golden yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KU160634	<i>Bean golden yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KX185517	<i>Bean golden yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KX185518	<i>Bean golden yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
M10070	<i>Bean golden yellow mosaic virus</i>	<i>Brassica rapa</i>	Pakistan	Meso- and Latin Americas
M91604	<i>Bean golden yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Pakistan	Meso- and Latin Americas
AF173555	<i>Bean golden yellow mosaic virus</i>	Not specified	Mexico	Meso- and Latin Americas
D00201	<i>Bean golden yellow mosaic virus</i>	Not specified	Not specified	Meso- and Latin Americas
DQ119824	<i>Bean golden yellow mosaic virus</i>	Not specified	USA	Meso- and Latin Americas
L01635	<i>Bean golden yellow mosaic virus</i>	Not specified	Guatemala	Meso- and Latin Americas
MG659315	<i>Bean golden yellow mosaic virus</i>	<i>Phaseolus</i> sp.	Mexico	Meso- and Latin Americas
KX857725	<i>Bean leaf crumple virus</i>	<i>Phaseolus vulgaris</i>	Colombia	America and Middle East
AM701757	<i>Bean leaf curl Madagascar virus</i>	<i>Phaseolus vulgaris</i>	Madagascar	Asia and Africa

FJ944023	<i>Bean yellow mosaic Mexico virus</i>	<i>Phaseolus vulgaris</i>	Mexico	Meso- and Latin Americas
FJ589571	<i>Bhendi yellow vein Bhubhaneswar virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
FJ515747	<i>Bhendi yellow vein Delhi virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
FJ561298	<i>Bhendi yellow vein Haryana virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KJ628309	<i>Bhendi yellow vein Haryana virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112008	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112009	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112011	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112012	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112013	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112014	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112015	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112016	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112017	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112018	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112019	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112020	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112021	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112022	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112023	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112024	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112025	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112027	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112028	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112029	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112030	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112031	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112032	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112033	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112034	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112035	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112036	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa

GU112037	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112038	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112041	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112042	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112043	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112044	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112045	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112046	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112047	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112048	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112049	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112050	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112051	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112052	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112053	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112054	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326265	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326266	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326267	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ359503	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390461	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112026	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	
GU112039	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	
GU112040	<i>Bhendi yellow vein India virus</i>	<i>Abelmoschus esculentus</i>	India	
HM590503	<i>Bhendi yellow vein mosaic Maharashtra virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
HM590505	<i>Bhendi yellow vein mosaic Maharashtra virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
AF241479	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
AJ002453	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
FJ176235	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
FJ176236	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
FJ179370	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
FJ179371	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa

JQ326263	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326264	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326268	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326269	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ326270	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ359504	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JQ359505	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JX181785	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
JX678966	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Thailand	Asia and Africa
JX678967	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Thailand	Asia and Africa
KC501919	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KC501920	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KC501921	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KC501922	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KC501923	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF471062	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF471063	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF471064	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KJ462081	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KJ462082	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390321	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390323	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390324	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390325	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390451	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus manihot</i>	India	Asia and Africa
KT390453	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus manihot</i>	India	Asia and Africa
KU500807	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KX698089	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
MH252996	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
MH455209	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
MH455210	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
MH455211	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa

MH455212	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
GU112057	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	
GU112062	<i>Bhendi yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	
EU482411	<i>Bhendi yellow vein mosaic virus</i>	Not specified	India	Asia and Africa
EU589392	<i>Bhendi yellow vein mosaic virus</i>	Not specified	India	Asia and Africa
MH481856	<i>Bitter gourd yellow mosaic virus</i>	<i>Momordica charantia</i>	India	Asia and Africa
AM491590	<i>Bitter gourd yellow vein Virus</i>	<i>Momordica charantia</i>	Pakistan	Asia and Africa
KJ862841	<i>Bitter gourd yellow vein virus</i>	<i>Momordica charantia</i>	Bangladesh	Asia and Africa
KM190927	<i>Bitter gourd yellow vein virus</i>	<i>Lens culinaris</i>	India	Asia and Africa
EU710756	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JF694468	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JF694476	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JX871389	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JX871391	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JX871392	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JX871394	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
KC706516	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
KC706517	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
KC706518	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
KC706519	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
KC706520	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
KC706521	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	Meso- and Latin Americas
JX871390	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	
JX871393	<i>Blainvillea yellow spot virus</i>	<i>Blainvillea rhomboidea</i>	Brazil	
KC706522	<i>Blainvillea yellow spot virus</i>	<i>Physalis sp.</i>	Brazil	Meso- and Latin Americas
JX827487	<i>Blechum interveinal chlorosis virus</i>	<i>Blechum pyramidatum</i>	Mexico	Meso- and Latin Americas
KY971533	<i>Boerhavia golden mosaic virus</i>	<i>Boerhavia sp.</i>	Dominican Republic	Meso- and Latin Americas
KY971535	<i>Boerhavia golden mosaic virus</i>	<i>Boerhavia sp.</i>	Dominican Republic	Meso- and Latin Americas
KY971537	<i>Boerhavia golden mosaic virus</i>	<i>Boerhavia sp.</i>	Dominican Republic	Meso- and Latin Americas
KY971539	<i>Boerhavia golden mosaic virus</i>	<i>Boerhavia sp.</i>	Dominican Republic	Meso- and Latin Americas
EF121755	<i>Boerhavia yellow spot virus</i>	<i>Boerhavia coccinea</i>	Mexico	Meso- and Latin Americas
DQ178608	<i>Cabbage leaf curl Jamaica virus</i>	<i>Brassica oleracea</i>	Jamaica	Meso- and Latin Americas

DQ178610	<i>Cabbage leaf curl Jamaica virus</i>	<i>Brassica oleracea</i>	Jamaica	Meso- and Latin Americas
DQ178614	<i>Cabbage leaf curl Jamaica virus</i>	Not specified	Jamaica	Meso- and Latin Americas
MH248136	<i>Cabbage leaf curl virus</i>	<i>Cucumis melo</i>	Ecuador	America and Middle East
MH359390	<i>Cabbage leaf curl virus</i>	<i>Phaseolus vulgaris</i>	Ecuador	America and Middle East
MH359392	<i>Cabbage leaf curl virus</i>	<i>Rhynchosia minima</i>	Ecuador	America and Middle East
MH359394	<i>Cabbage leaf curl virus</i>	<i>Rhynchosia minima</i>	Ecuador	America and Middle East
MH359396	<i>Cabbage leaf curl virus</i>	<i>Glycine max</i>	Ecuador	America and Middle East
U65529	<i>Cabbage leaf curl virus</i>	<i>Abutilon sellovianum</i>	India	America and Middle East
DQ178612	<i>Cabbage leaf curl virus</i>	<i>Brassica oleracea</i>	Jamaica	America and Middle East
KC426927	<i>Capraria yellow spot Yucatan virus</i>	<i>Capraria biflora</i>	Mexico	America and Middle East
HE617299	<i>Cassava mosaic Madagascar virus</i>	<i>Manihot esculenta</i>	Madagascar	Asia and Africa
HE580234	<i>Catharanthus yellow mosaic virus</i>	<i>Sida santaremensis</i>	Pakistan	Asia and Africa
LK028570	<i>Catharanthus yellow mosaic virus</i>	<i>Duranta repens</i>	Pakistan	Asia and Africa
LK028573	<i>Catharanthus yellow mosaic virus</i>	<i>Carica papaya</i>	Pakistan	Asia and Africa
HE580235	<i>Catharanthus yellow mosaic virus</i>	<i>Sida santaremensis</i>	Pakistan	
LN864815	<i>Catharanthus yellow vein mosaic virus</i>	<i>Carica papaya</i>	Pakistan	
JN419002	<i>Centrosema yellow spot virus</i>	<i>Centrosema brasilianum</i>	Brazil	Meso- and Latin Americas
LN717037	<i>Cestrum leaf curl Islamabad virus</i>	<i>Cestrum</i> sp.	Pakistan	Asia and Africa
LM645010	<i>Cestrum yellow leaf curling virus</i>	<i>Cestrum nocturnum</i>	Pakistan	Asia and Africa
KX259336	<i>Chayote enation yellow mosaic virus</i>	<i>Sechium edule</i>	India	Asia and Africa
KX259339	<i>Chayote enation yellow mosaic virus</i>	<i>Sechium edule</i>	India	Asia and Africa
KT454821	<i>Chayote yellow mosaic virus</i>	<i>Ageratum</i> sp.	Cameroon	Asia and Africa
AJ223191	<i>Chayote yellow mosaic virus</i>	<i>Sechium edule</i>	Nigeria	Asia and Africa
KT454822	<i>Chayote yellow mosaic virus</i>	<i>Carica papaya</i>	Cameroon	Asia and Africa
KT454823	<i>Chayote yellow mosaic virus</i>	<i>Telfairia occidentalis</i>	Cameroon	Asia and Africa
KT454826	<i>Chayote yellow mosaic virus</i>	<i>Sida acuta</i>	Nigeria	Asia and Africa
KT454827	<i>Chayote yellow mosaic virus</i>	<i>Manihot esculenta</i>	Nigeria	Asia and Africa
KT454820	<i>Chayote yellow mosaic virus</i>	<i>Momordica</i> sp.	Togo	Asia and Africa
KT454825	<i>Chayote yellow mosaic virus</i>	<i>Momordica</i> sp.	Nigeria	Asia and Africa
KT454819	<i>Chayote yellow mosaic virus</i>	<i>Momordica</i> sp.	Benin	
KT454824	<i>Chayote yellow mosaic virus</i>	<i>Urtica</i> sp.	Cameroon	Asia and Africa
HM626515	<i>Chenopodium leaf curl virus</i>	<i>Chenopodium ambrosioides</i>	USA	America and Middle East

HM626516	<i>Chenopodium leaf curl virus</i>	<i>Bemisia tabaci</i>	USA	America and Middle East
KX665545	<i>Cherry tomato leaf curl virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
LN906593	<i>Cherry tomato leaf curl virus</i>	<i>Parthenium hysterophorus</i>	Pakistan	Asia and Africa
LN906594	<i>Cherry tomato leaf curl virus</i>	<i>Parthenium hysterophorus</i>	Pakistan	Asia and Africa
KM880103	<i>Chilli leaf curl Ahmedabad virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KC465466	<i>Chilli leaf curl Bijour virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
FM877858	<i>Chilli leaf curl India virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KJ649706	<i>Chilli leaf curl India virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KT948070	<i>Chilli leaf curl India virus</i>	<i>Duranta repens</i>	Pakistan	Asia and Africa
MF574143	<i>Chilli leaf curl India virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
HM007106	<i>Chilli leaf curl Kanpur virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007100	<i>Chilli leaf curl Multan virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
FM179613	<i>Chilli leaf curl Multan virus</i>	<i>Solanum tuberosum</i>	Pakistan	Asia and Africa
HG932561	<i>Chilli leaf curl Multan virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JN663865	<i>Chilli leaf curl Multan virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
KP195266	<i>Chilli leaf curl Multan virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HG941643	<i>Chilli leaf curl Oman virus</i>	<i>Ocimum basilicum</i>	Oman	Asia and Africa
HG941644	<i>Chilli leaf curl Oman virus</i>	<i>Nicotiana</i> sp.	Oman	Asia and Africa
DQ116877	<i>Chilli leaf curl Pakistan virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
HM587709	<i>Chilli leaf curl Pakistan virus</i>	<i>Capsicum annuum</i>	China	Asia and Africa
DQ116879	<i>Chilli leaf curl Pakistan virus</i>	Not specified	Pakistan	Asia and Africa
HM007119	<i>Chilli leaf curl Salem virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007121	<i>Chilli leaf curl Velland virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KF471061	<i>Chilli leaf curl Virus</i>	<i>Amaranthus</i> sp.	India	Asia and Africa
AF336806	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
DQ114477	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
DQ673859	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007104	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007114	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007116	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM992939	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KR957353	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa

KU376495	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KX499526	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KX533940	<i>Chilli leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
DQ989326	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
EU939533	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
FJ345402	<i>Chilli leaf curl virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
GU136803	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HE806437	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969200	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969255	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969257	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969263	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969264	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969265	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HM140364	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HM140365	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HM140366	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HM140370	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HM140371	<i>Chilli leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
JN555600	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Sri Lanka	Asia and Africa
JN555601	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Sri Lanka	Asia and Africa
JN604489	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Oman	Asia and Africa
JN604490	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Oman	Asia and Africa
JN604491	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Oman	Asia and Africa
JN604493	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604494	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604495	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604496	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604497	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604498	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604499	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN604500	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa

JN663846	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
JN663852	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
JN663866	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
KF312364	<i>Chilli leaf curl virus</i>	<i>Mentha spicata</i>	India	Asia and Africa
KJ700653	<i>Chilli leaf curl virus</i>	<i>Petunia hybrida</i>	India	Asia and Africa
KJ700656	<i>Chilli leaf curl virus</i>	<i>Petunia hybrida</i>	India	Asia and Africa
KM023147	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
KM023148	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
KP868762	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KR779820	<i>Chilli leaf curl virus</i>	<i>Mentha arvensis</i>	India	Asia and Africa
KX787939	<i>Chilli leaf curl virus</i>	<i>Citrullus lanatus</i>	Oman	Asia and Africa
KX951415	<i>Chilli leaf curl virus</i>	<i>Nicotiana glutinosa</i>	India	Asia and Africa
KY420137	<i>Chilli leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420138	<i>Chilli leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN650708	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
LN845958	<i>Chilli leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN886648	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886649	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886650	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886652	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886653	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886655	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886657	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886659	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
LN886660	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
MF737343	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
MH346125	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
MH355641	<i>Chilli leaf curl virus</i>	<i>Osteospermum fruticosum</i>	India	Asia and Africa
HG969197	<i>Chilli leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	
LN845957	<i>Chilli leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
LN886651	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	
LN886654	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	

LN886656	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	
LN886658	<i>Chilli leaf curl virus</i>	<i>Capsicum annuum</i>	Pakistan	
HF968755	<i>Chilli leaf curl virus</i>	<i>Petunia</i> sp.	Oman	Asia and Africa
HF968756	<i>Chilli leaf curl virus</i>	<i>Petunia</i> sp.	Oman	Asia and Africa
LN680624	<i>Chilli leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	Asia and Africa
LN680626	<i>Chilli leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	Asia and Africa
LN680633	<i>Chilli leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	Asia and Africa
LN680625	<i>Chilli leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	
KF229718	<i>Chilli leaf curl virus</i>	<i>Solanum</i> sp.	Oman	Asia and Africa
KF515609	<i>Chilli leaf curl virus</i>	<i>Solanum</i> sp.	India	Asia and Africa
HM357461	<i>Chino del tomate Amazonas virus</i>	<i>Lycopersicon esculentum</i>	Brazil	Meso- and Latin Americas
AF226664	<i>Chino del tomate virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
AF226665	<i>Chino del tomate virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
AY751753	<i>Chino del tomate virus</i>	<i>Abelmoschus esculentus</i>	Mexico	Meso- and Latin Americas
DQ347945	<i>Chino del tomate virus</i>	<i>Glycine max</i>	Mexico	Meso- and Latin Americas
AF101476	<i>Chino del tomate virus</i>	Not specified	Not specified	Meso- and Latin Americas
DQ885456	<i>Chino del tomate virus</i>	Not specified	Mexico	Meso- and Latin Americas
HQ396465	<i>Cleome golden mosaic virus</i>	<i>Cleome</i> sp.	Brazil	Meso- and Latin Americas
FN435999	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
HM195184	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JF694461	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103427	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103428	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103429	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103430	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103431	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103432	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103433	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103434	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103435	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103436	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103437	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas

JN103438	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
JN103439	<i>Cleome leaf crumple virus</i>	<i>Cleome affinis</i>	Brazil	Meso- and Latin Americas
MF072686	<i>Cleome leaf crumple virus</i>	<i>Cleome</i> sp.	Brazil	Meso- and Latin Americas
HQ317134	<i>Clerodendron golden mosaic virus</i>	<i>Clerodendrum</i> sp.	China	Asia and Africa
KF704391	<i>Clerodendron yellow mosaic virus</i>	<i>Bougainvillea peruviana</i>	India	Asia and Africa
KR869857	<i>Clerodendron yellow mosaic virus</i>	<i>Duranta erecta</i>	India	Asia and Africa
EF408037	<i>Clerodendron yellow mosaic virus</i>	<i>Clerodendron</i> sp.	India	Asia and Africa
HE863667	<i>Clerodendron yellow mosaic virus</i>	<i>Croton</i> sp.	Pakistan	Asia and Africa
FJ011668	<i>Clerodendrum golden mosaic China virus</i>	<i>Clerodendrum cyrtophyllum</i>	China	Asia and Africa
FN396962	<i>Clerodendrum golden mosaic China virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JQ305797	<i>Clerodendrum golden mosaic China virus</i>	<i>Salvia splendens</i>	USA	Asia and Africa
KY427012	<i>Clerodendrum golden mosaic China virus</i>	<i>Clerodendrum cyrtophyllum</i>	China	Asia and Africa
KY427014	<i>Clerodendrum golden mosaic China virus</i>	<i>Clerodendrum cyrtophyllum</i>	China	Asia and Africa
FN396966	<i>Clerodendrum golden mosaic Jiangsu virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
DQ641692	<i>Clerodendrum golden mosaic virus</i>	<i>Clerodendrum philippinum</i>	Vietnam	Asia and Africa
KT966771	<i>Cnidoscolus mosaic leaf deformation virus</i>	<i>Cnidoscolus urens</i>	Brazil	Meso- and Latin Americas
KM244719	<i>Coccinia mosaic Tamil Nadu virus</i>	<i>Coccinia grandis</i>	India	Asia and Africa
KY860899	<i>Coccinia mosaic Virudhunagar virus</i>	<i>Momordica charantia</i>	India	Asia and Africa
KX011473	<i>Common bean mottle virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KX011475	<i>Common bean severe mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KX011476	<i>Common bean severe mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KX011477	<i>Common bean severe mosaic virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
AB849288	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB849290	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB849292	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971842	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971844	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971846	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971848	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971850	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971852	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971854	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas

AB971856	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971858	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971860	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
AB971862	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Bangladesh	Meso- and Latin Americas
DQ641688	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	Vietnam	Meso- and Latin Americas
EU636712	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	India	Meso- and Latin Americas
FJ463902	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	India	Meso- and Latin Americas
FJ790326	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	India	Meso- and Latin Americas
KF962542	<i>Corchorus golden mosaic virus</i>	<i>Boehmeria nivea</i>	India	Meso- and Latin Americas
GQ183863	<i>Corchorus golden mosaic virus</i>	<i>Corchorus capsularis</i>	India	Meso- and Latin Americas
JQ805781	<i>Corchorus mottle virus</i>	<i>Corchorus hirtus</i>	Brazil	Meso- and Latin Americas
DQ875868	<i>Corchorus yellow spot virus</i>	<i>Corchorus siliquosus</i>	Mexico	Meso- and Latin Americas
KC196077	<i>Corchorus yellow vein mosaic virus</i>	<i>Corchorus olitorius</i>	India	Asia and Africa
KC223600	<i>Corchorus yellow vein mosaic virus</i>	<i>Corchorus olitorius</i>	India	Asia and Africa
KX513862	<i>Corchorus yellow vein mosaic virus</i>	<i>Datura sp.</i>	India	Asia and Africa
AY727903	<i>Corchorus yellow vein Vietnam virus</i>	<i>Corchorus capsularis</i>	Vietnam	
KU245930	<i>Corchorus yellow vein Vietnam virus</i>	<i>Corchorus olitorius</i>	China	
KX101212	<i>Corchorus yellow vein virus</i>	<i>Corchorus olitorius</i>	China	Meso- and Latin Americas
KF358470	<i>Cotton chlorotic spot virus</i>	<i>Gossypium hirsutum</i>	Brazil	Meso- and Latin Americas
AF480940	<i>Cotton leaf crumple virus</i>	<i>Gossypium hirsutum</i>	Mexico	America and Middle East
AY083350	<i>Cotton leaf crumple virus</i>	<i>Gossypium hirsutum</i>	USA	America and Middle East
AY083351	<i>Cotton leaf crumple virus</i>	<i>Gossypium hirsutum</i>	USA	America and Middle East
AY742220	<i>Cotton leaf crumple virus</i>	Not specified	USA	America and Middle East
AJ002452	<i>Cotton leaf curl Alabad virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
AJ002455	<i>Cotton leaf curl Alabad virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
EU384575	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium punctatum</i>	Pakistan	Asia and Africa
FJ210467	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium lobatum</i>	Pakistan	Asia and Africa
KX656789	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656790	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656791	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656792	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656793	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa

KX656794	<i>Cotton leaf curl Alabad virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
GU112004	<i>Cotton leaf curl Allahabad virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112081	<i>Cotton leaf curl Allahabad virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
AY705380	<i>Cotton leaf curl Bangalore virus</i>	<i>Gossypium barbadense</i>	India	Asia and Africa
GU112003	<i>Cotton leaf curl Bangalore virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
LC316185	<i>Cotton leaf curl Bangalore virus</i>	<i>Malvastrum coromandelianum</i>	India	Asia and Africa
KY825244	<i>Cotton leaf curl Burewala virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
AM421522	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
EU365618	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
EU365619	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
EU384571	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
EU384572	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FN645929	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
FN645932	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
FR750318	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR750319	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR750320	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR750321	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR750322	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR750323	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR750324	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR819707	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR837932	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR837933	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR837934	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
GQ247893	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
HE985227	<i>Cotton leaf curl Burewala virus</i>	<i>Ricinus communis</i>	Pakistan	Asia and Africa
HE995543	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HE995544	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HE995545	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HE995546	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HE995547	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa

HF549180	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HF549181	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HF549182	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HF549183	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HF567942	<i>Cotton leaf curl Burewala virus</i>	<i>Luffa cylindrica</i>	Pakistan	Asia and Africa
HF569046	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium arboreum</i>	Pakistan	Asia and Africa
HF952154	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HF952155	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG003876	<i>Cotton leaf curl Burewala virus</i>	<i>Hibiscus rosa-sinensis</i>	Pakistan	Asia and Africa
HG422567	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG422570	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG422571	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG422572	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG422573	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG428698	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium arboreum</i>	Pakistan	Asia and Africa
HG428704	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG428705	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG428706	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG428709	<i>Cotton leaf curl Burewala virus</i>	<i>Solanum melongena</i>	Pakistan	Asia and Africa
HM461862	<i>Cotton leaf curl Burewala virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM461863	<i>Cotton leaf curl Burewala virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM461866	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
HM461867	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF416947	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
JF502353	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502354	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502355	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502356	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502357	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502360	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502365	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502366	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa

JF502367	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502368	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502370	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502371	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502372	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502373	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF509747	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF510458	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF510459	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF510460	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF510461	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JN678802	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KF767352	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KJ939341	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KT228328	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX302707	<i>Cotton leaf curl Burewala virus</i>	<i>Carica papaya</i>	India	Asia and Africa
LK995396	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN713267	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN713268	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN713271	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN811060	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN845932	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN845933	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN852667	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HF569171	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
KM070821	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	India	
LK995397	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
LN845931	<i>Cotton leaf curl Burewala virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
JN678805	<i>Cotton leaf curl Burewala virus</i>	Not specified	India	Asia and Africa
HG937517	<i>Cotton leaf curl Burewala virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
HG937518	<i>Cotton leaf curl Burewala virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
HG937519	<i>Cotton leaf curl Burewala virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa

HG937520	<i>Cotton leaf curl Burewala virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
LN713477	<i>Cotton leaf curl Burewala virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN713478	<i>Cotton leaf curl Burewala virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN713479	<i>Cotton leaf curl Burewala virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN713480	<i>Cotton leaf curl Burewala virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN713481	<i>Cotton leaf curl Burewala virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
GU945265	<i>Cotton leaf curl Gezira virus</i>	<i>Alcea</i> sp.	Jordan	Asia and Africa
AF014881	<i>Cotton leaf curl Gezira virus</i>	<i>Althea rosea</i>	Egypt	Asia and Africa
AF155064	<i>Cotton leaf curl Gezira virus</i>	<i>Althea rosea</i>	Egypt	Asia and Africa
AF260241	<i>Cotton leaf curl Gezira virus</i>	<i>Gossypium hirsutum</i>	Sudan	Asia and Africa
AY036006	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Sudan	Asia and Africa
AY036008	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Sudan	Asia and Africa
AY036010	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Egypt	Asia and Africa
EU432373	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Nigeria	Asia and Africa
EU432374	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Nigeria	Asia and Africa
FJ469626	<i>Cotton leaf curl Gezira virus</i>	<i>Solanum lycopersicum</i>	Nigeria	Asia and Africa
FJ469627	<i>Cotton leaf curl Gezira virus</i>	<i>Solanum lycopersicum</i>	Nigeria	Asia and Africa
FJ868828	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Sudan	Asia and Africa
FM210276	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
FN554519	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554521	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554522	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554523	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554524	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554526	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554527	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554528	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554529	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554530	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554531	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554532	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554537	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa

FN554539	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554540	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FN554541	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	Asia and Africa
FR751142	<i>Cotton leaf curl Gezira virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR751143	<i>Cotton leaf curl Gezira virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR751144	<i>Cotton leaf curl Gezira virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR751145	<i>Cotton leaf curl Gezira virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FR751146	<i>Cotton leaf curl Gezira virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HE793429	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
HG530540	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Saudi Arabia	Asia and Africa
HG969199	<i>Cotton leaf curl Gezira virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969201	<i>Cotton leaf curl Gezira virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969202	<i>Cotton leaf curl Gezira virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG969203	<i>Cotton leaf curl Gezira virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
KJ939446	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	United Arab Emirates	Asia and Africa
KT454831	<i>Cotton leaf curl Gezira virus</i>	<i>Manihot esculenta</i>	Nigeria	Asia and Africa
KX100570	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Cote d'Ivoire	Asia and Africa
FN554520	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
FN554525	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
FN554533	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
FN554534	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
FN554535	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
FN554536	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
FN554538	<i>Cotton leaf curl Gezira virus</i>	<i>Abelmoschus esculentus</i>	Burkina Faso	
KT099132	<i>Cotton leaf curl Gezira virus</i>	Not specified	Israel	Asia and Africa
AY036007	<i>Cotton leaf curl Gezira virus</i>	<i>Sida</i> sp.	Sudan	Asia and Africa
AJ002448	<i>Cotton leaf curl Kokhran virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
AJ002449	<i>Cotton leaf curl Kokhran virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
AJ496286	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FN552006	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
GU385879	<i>Cotton leaf curl Kokhran virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
HM468427	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium stocksii</i>	Pakistan	Asia and Africa

HQ257374	<i>Cotton leaf curl Kokhran virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KR815998	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KR815999	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KR816000	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KR816001	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KR816002	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420145	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420146	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420147	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420148	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420151	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420152	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420153	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420154	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY420155	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY797661	<i>Cotton leaf curl Kokhran virus</i>	<i>Jasminum sambac</i>	Pakistan	Asia and Africa
KY797662	<i>Cotton leaf curl Kokhran virus</i>	<i>Jasminum sambac</i>	Pakistan	Asia and Africa
KY797663	<i>Cotton leaf curl Kokhran virus</i>	<i>Jasminum sambac</i>	Pakistan	Asia and Africa
LN886550	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN886551	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
MF774563	<i>Cotton leaf curl Kokhran virus</i>	<i>Vigna mungo</i>	Pakistan	Asia and Africa
MF774564	<i>Cotton leaf curl Kokhran virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
LN908967	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
LN908968	<i>Cotton leaf curl Kokhran virus</i>	<i>Gossypium herbaceum</i>	Pakistan	
AY456683	<i>Cotton leaf curl Kokhran virus</i>	Not specified	India	Asia and Africa
AJ002447	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
AJ002458	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
AJ002459	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
AJ132430	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AJ496287	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AJ496461	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
DQ191160	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa

EF465535	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
EU365616	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium davidsonii</i>	Pakistan	Asia and Africa
EU384573	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FJ218486	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FJ218487	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FJ770370	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus esculentus</i>	China	Asia and Africa
GQ503175	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
GQ924756	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	China	Asia and Africa
GU574208	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus esculentus</i>	China	Asia and Africa
JN558352	<i>Cotton leaf curl Multan virus</i>	<i>Carica papaya</i>	India	Asia and Africa
JN968573	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JQ317603	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	China	Asia and Africa
JQ424826	<i>Cotton leaf curl Multan virus</i>	<i>Malvaviscus penduliflorus</i>	China	Asia and Africa
JQ943408	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JQ963625	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JQ963627	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JQ963629	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JQ963631	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JX286656	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JX286658	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JX286660	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JX286662	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JX286664	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus esculentus</i>	China	Asia and Africa
JX861210	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
JX914662	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KC171654	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	China	Asia and Africa
KF413616	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	Philippines	Asia and Africa
KF413618	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	Philippines	Asia and Africa
KF444948	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus cannabinus</i>	China	Asia and Africa
KF766945	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KF766947	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KF766949	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa

KF766951	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KF766953	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KF766955	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KJ868820	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KM096466	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KM096469	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KM096471	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KR135370	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	India	Asia and Africa
KT390455	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
KU245932	<i>Cotton leaf curl Multan virus</i>	<i>Abelmoschus manihot</i>	China	Asia and Africa
KX068709	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	Philippines	Asia and Africa
KX603682	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX603683	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656786	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656787	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656788	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656795	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656796	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656797	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656800	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX951460	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX951461	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY373212	<i>Cotton leaf curl Multan virus</i>	<i>Emilia sonchifolia</i>	Thailand	Asia and Africa
KY420140	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY432574	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KY432576	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus rosa-sinensis</i>	China	Asia and Africa
KY561820	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY888163	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY992859	<i>Cotton leaf curl Multan virus</i>	<i>Hibiscus sabdariffa</i>	China	Asia and Africa
MF184923	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
MF344538	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
MF344539	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa

MF344540	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
MF344541	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
MG373551	<i>Cotton leaf curl Multan virus</i>	<i>Alcea rosea</i>	India	Asia and Africa
MG373556	<i>Cotton leaf curl Multan virus</i>	<i>Alcea rosea</i>	India	Asia and Africa
KX656798	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
KX656799	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
KX656801	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
KP762786	<i>Cotton leaf curl Multan virus</i>	<i>Gossypium</i> sp.	China	Asia and Africa
AY765253	<i>Cotton leaf curl Multan virus</i>	Not specified	India	Asia and Africa
AY765256	<i>Cotton leaf curl Multan virus</i>	Not specified	India	Asia and Africa
AY765257	<i>Cotton leaf curl Multan virus</i>	Not specified	India	Asia and Africa
JN678803	<i>Cotton leaf curl Multan virus</i>	Not specified	India	Asia and Africa
JN678804	<i>Cotton leaf curl Multan virus</i>	Not specified	India	Asia and Africa
JN678806	<i>Cotton leaf curl Multan virus</i>	Not specified	India	Asia and Africa
AM501481	<i>Cotton leaf curl Rajasthan virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
EU384574	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium mustelinum</i>	Pakistan	Asia and Africa
FM202328	<i>Cotton leaf curl Rajasthan virus</i>	<i>Digera arvensis</i>	Pakistan	Asia and Africa
FN645912	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
GQ220850	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502358	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502359	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502361	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502362	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502363	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502364	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF502369	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF509746	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF509748	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
JF509749	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KJ959628	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KJ959629	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KJ959630	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa

KM065514	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KM096467	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KM096468	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KM096470	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX656805	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656806	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656807	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656808	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656809	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656810	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656811	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656812	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656813	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656814	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KT228327	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	India	
KX656815	<i>Cotton leaf curl Rajasthan virus</i>	<i>Gossypium hirsutum</i>	Pakistan	
AY765254	<i>Cotton leaf curl Rajasthan virus</i>	Not specified	India	Asia and Africa
AY795605	<i>Cotton leaf curl Rajasthan virus</i>	Not specified	India	Asia and Africa
AY795606	<i>Cotton leaf curl Rajasthan virus</i>	Not specified	India	Asia and Africa
AY795607	<i>Cotton leaf curl Rajasthan virus</i>	Not specified	India	Asia and Africa
HG937521	<i>Cotton leaf curl Rajasthan virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
FN552001	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FN552002	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FN552003	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FN552004	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
FN552005	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656802	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656803	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KX656804	<i>Cotton leaf curl Shahdadpur virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774294	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774295	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774296	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa

AM774297	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774298	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774299	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774300	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774301	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774302	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774303	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774304	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
AM774305	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HM037920	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
HM037923	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
HM235774	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
HQ158010	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
HQ158011	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KC412251	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX831888	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX831889	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX831890	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KX831891	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY120359	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY120360	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY120361	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
KY120362	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Asia and Africa
MF737345	<i>Cotton leaf curl virus</i>	<i>Capsicum annum</i>	India	Asia and Africa
GU440580	<i>Cotton leaf curl virus</i>	<i>Gossypium hirsutum</i>	India	Far East Asia and Indian subcontinent
KU683747	<i>Cotton yellow mosaic virus</i>	<i>Gossypium raimondii</i>	Benin	Asia and Africa
KU683748	<i>Cotton yellow mosaic virus</i>	<i>Gossypium raimondii</i>	Benin	Asia and Africa
KT454834	<i>Cotton yellow mosaic virus</i>	<i>Gossypium</i> sp.	Benin	Asia and Africa
AY618902	<i>Cowpea golden mosaic virus</i>	<i>Vigna unguiculata</i>	India	Asia and Africa
AF029217	<i>Cowpea golden mosaic virus</i>	Not specified	Nigeria	Asia and Africa
FN401520	<i>Crassocephalum yellow vein virus</i>	<i>Crassocephalum crepidioides</i>	China	Asia and Africa
EF165536	<i>Crassocephalum yellow vein virus</i>	<i>Crassocephalum crepidioides</i>	China	Far East Asia and Indian subcontinent

KX156613	<i>Croton golden mosaic virus</i>	<i>Croton hirtus</i>	Colombia	Meso- and Latin Americas
FN645898	<i>Croton yellow vein mosaic virus</i>	<i>Acalypha</i> sp.	India	Asia and Africa
FN645901	<i>Croton yellow vein mosaic virus</i>	<i>Acalypha</i> sp.	India	Asia and Africa
FN645902	<i>Croton yellow vein mosaic virus</i>	<i>Acalypha</i> sp.	India	Asia and Africa
FN645926	<i>Croton yellow vein mosaic virus</i>	<i>Acalypha</i> sp.	India	Asia and Africa
AJ507777	<i>Croton yellow vein mosaic virus</i>	<i>Croton bonplandianum</i>	India	Asia and Africa
EU727086	<i>Croton yellow vein mosaic virus</i>	<i>Atropa gossypifolia</i>	India	Asia and Africa
FN645915	<i>Croton yellow vein mosaic virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
FN678906	<i>Croton yellow vein mosaic virus</i>	<i>Alcea rosea</i>	Pakistan	Asia and Africa
JN663850	<i>Croton yellow vein mosaic virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
JN817516	<i>Croton yellow vein mosaic virus</i>	<i>Croton bonplandianus</i>	India	Asia and Africa
JN831446	<i>Croton yellow vein mosaic virus</i>	<i>Croton bonplandianus</i>	India	Asia and Africa
JX270684	<i>Croton yellow vein mosaic virus</i>	<i>Brassica rapa</i>	India	Asia and Africa
KF888655	<i>Croton yellow vein mosaic virus</i>	<i>Brassica rapa</i>	India	Asia and Africa
KJ747958	<i>Croton yellow vein mosaic virus</i>	<i>Crambe abyssinica</i>	India	Asia and Africa
KX671964	<i>Croton yellow vein mosaic virus</i>	<i>Croton bonplandianus</i>	Pakistan	Asia and Africa
KY612431	<i>Croton yellow vein mosaic virus</i>	<i>Sidastrum micranthum</i>	India	Asia and Africa
LN871569	<i>Croton yellow vein mosaic virus</i>	<i>Croton sparsiflorus</i>	Pakistan	Asia and Africa
LN878119	<i>Croton yellow vein mosaic virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN878120	<i>Croton yellow vein mosaic virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN886525	<i>Croton yellow vein mosaic virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN886647	<i>Croton yellow vein mosaic virus</i>	<i>Croton sparsiflorus</i>	Pakistan	Asia and Africa
MH359168	<i>Croton yellow vein mosaic virus</i>	<i>Helianthus annuus</i>	India	Asia and Africa
HG937524	<i>Croton yellow vein mosaic virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
FN543112	<i>Croton yellow vein virus</i>	<i>Croton glandulosus</i>	Pakistan	Asia and Africa
AF256200	<i>Cucurbit leaf crumple virus</i>	Not specified	Not specified	America and Middle East
AF224760	<i>Cucurbit leaf curl virus</i>	<i>Citrullus lanatus</i>	USA	America and Middle East
JN848777	<i>Dalechampia chlorotic mosaic virus</i>	<i>Boerhavia diffusa</i>	Venezuela	Meso- and Latin Americas
JN848775	<i>Dalechampia chlorotic mosaic virus</i>	<i>Dalechampia</i> sp.	Venezuela	Meso- and Latin Americas
MF402918	<i>Datura leaf curl virus</i>	<i>Datura inoxia</i>	Sudan	Asia and Africa
MF402919	<i>Datura leaf curl virus</i>	<i>Datura inoxia</i>	Sudan	Asia and Africa
JN848773	<i>Datura leaf distortion virus</i>	<i>Datura stramonium</i>	Venezuela	Meso- and Latin Americas

KT878824	<i>Deinbollia mosaic virus</i>	<i>Deinbollia borbonica</i>	Tanzania	Asia and Africa
KT878826	<i>Deinbollia mosaic virus</i>	<i>Deinbollia borbonica</i>	Tanzania	Asia and Africa
KT878829	<i>Deinbollia mosaic virus</i>	<i>Deinbollia borbonica</i>	Tanzania	Asia and Africa
KT878831	<i>Deinbollia mosaic virus</i>	<i>Deinbollia borbonica</i>	Kenya	Asia and Africa
KT799138	<i>Deinbollia mosaic virus</i>	Not specified	Tanzania	Asia and Africa
DQ875870	<i>Desmodium leaf distortion virus</i>	<i>Desmodium glabrum</i>	Mexico	America and Middle East
KY294724	<i>Desmodium mottle virus</i>	<i>Desmodium</i> sp.	Uganda	Asia and Africa
KY294725	<i>Desmodium mottle virus</i>	<i>Desmodium</i> sp.	Uganda	Asia and Africa
AF139168	<i>Dicliptera yellow mottle virus</i>	<i>Dicliptera sexangularis</i>	USA	Meso- and Latin Americas
AJ549960	<i>Dicliptera yellow mottle virus</i>	<i>Dicliptera vahliana</i>	Cuba	Meso- and Latin Americas
AJ968370	<i>Dolichos yellow mosaic virus</i>	<i>Lablab purpureus</i>	India	Asia and Africa
KJ481204	<i>Dolichos yellow mosaic virus</i>	<i>Dolichos purpureus</i>	India	Asia and Africa
KP784661	<i>Dolichos yellow mosaic virus</i>	<i>Lablab purpureus</i>	India	Asia and Africa
MH795972	<i>Dolichos yellow mosaic virus</i>	<i>Lablab purpureus</i>	India	Asia and Africa
AM157412	<i>Dolichos yellow mosaic virus</i>	<i>Dolichos</i> sp.	India	Asia and Africa
JX315325	<i>Dolichos yellow mosaic virus</i>	<i>Dolichos</i> sp.	India	Asia and Africa
AY309241	<i>Dolichos yellow mosaic virus</i>	Not specified	India	Asia and Africa
KT948069	<i>Duranta leaf curl virus</i>	<i>Duranta repens</i>	Pakistan	Asia and Africa
AF259896	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Cote d'Ivoire	EACM- and SACM-like viruses
AJ867444	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Nigeria	EACM- and SACM-like viruses
AY795984	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
EU685319	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot glaziovii</i>	Nigeria	EACM- and SACM-like viruses
EU685321	<i>East African cassava mosaic Cameroon virus</i>	<i>Leucaena leucocephala</i>	Nigeria	EACM- and SACM-like viruses
EU685323	<i>East African cassava mosaic Cameroon virus</i>	<i>Senna occidentalis</i>	Nigeria	EACM- and SACM-like viruses
EU685326	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Nigeria	EACM- and SACM-like viruses
JF909094	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses
JF909117	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses
JN165089	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Ghana	EACM- and SACM-like viruses
KJ887825	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887930	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887938	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887944	<i>East African cassava mosaic Cameroon virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses

KJ888055	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888058	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888066	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888068	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888069	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888071	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888072	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888073	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888074	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888076	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888079	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888081	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888083	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888084	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888085	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888087	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
JF909108	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909130	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909134	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909142	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909143	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909144	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Comoros	
KJ887581	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	
KJ888061	<i>East African cassava mosaic Kenya virus</i>	<i>Manihot esculenta</i>	Madagascar	
AJ006459	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Malawi	EACM- and SACM-like viruses
AJ006460	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Malawi	EACM- and SACM-like viruses
JX658694	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Malawi	EACM- and SACM-like viruses
KP890349	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KP890350	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KP890351	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KP890352	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KP890353	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses

KP890354	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KT869119	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KT869122	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KY885004	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Malawi	EACM- and SACM-like viruses
KY885005	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Malawi	EACM- and SACM-like viruses
KT869120	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	
KT869121	<i>East African cassava mosaic Malawi virus</i>	<i>Manihot esculenta</i>	Zambia	
AF112354	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Cameroon	EACM- and SACM-like viruses
AF126804	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
AF126806	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
AJ006458	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ618956	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
AJ618957	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
AJ618958	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
AJ618959	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
AJ717516	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717517	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717518	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717519	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717520	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717521	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717522	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717523	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717524	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717525	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717526	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717527	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717528	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717529	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717530	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717531	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717532	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses

AM502335	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Uganda	EACM- and SACM-like viruses
AM502336	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Uganda	EACM- and SACM-like viruses
AM502337	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Uganda	EACM- and SACM-like viruses
AY211887	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Cameroon	EACM- and SACM-like viruses
AY795983	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
AY795985	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
AY795986	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
AY795987	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
AY795988	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
FM877474	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Burkina Faso	EACM- and SACM-like viruses
FN435278	<i>East African cassava mosaic virus</i>	<i>Pueraria javanica</i>	Democratic Republic of the Congo	EACM- and SACM-like viruses
FN435279	<i>East African cassava mosaic virus</i>	<i>Pueraria javanica</i>	Democratic Republic of the Congo	EACM- and SACM-like viruses
FN435280	<i>East African cassava mosaic virus</i>	<i>Centrosema pubescens</i>	Democratic Republic of the Congo	EACM- and SACM-like viruses
FN435281	<i>East African cassava mosaic virus</i>	<i>Centrosema pubescens</i>	Democratic Republic of the Congo	EACM- and SACM-like viruses
FN668377	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
HE979769	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HE979770	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HE979771	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HE979772	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HE979773	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HE979774	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HE979775	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Uganda	EACM- and SACM-like viruses
HG530112	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
HG530113	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
HG530114	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
HG530115	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
HG530116	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
JF909063	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses
JF909064	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses
JF909065	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses
JF909066	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses
JF909067	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	EACM- and SACM-like viruses

JN053459	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
JN941177	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Angola	EACM- and SACM-like viruses
JX910240	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Republic of the Congo	EACM- and SACM-like viruses
KJ887964	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KT780440	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Equatorial Guinea	EACM- and SACM-like viruses
KT869123	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KT869124	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KT869125	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
KT869126	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	EACM- and SACM-like viruses
MF067253	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067254	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067255	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067259	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067260	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067261	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067262	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067263	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067264	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF067265	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	EACM- and SACM-like viruses
MF974568	<i>East African cassava mosaic virus</i>	<i>Markhamia zanzibarica</i>	Kenya	EACM- and SACM-like viruses
MG250161	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	EACM- and SACM-like viruses
MG250162	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	EACM- and SACM-like viruses
MG250163	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	EACM- and SACM-like viruses
MG250164	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Ghana	EACM- and SACM-like viruses
Z83256	<i>East African cassava mosaic virus</i>	<i>Abutilon sellovianum</i>	India	EACM- and SACM-like viruses
Z83257	<i>East African cassava mosaic virus</i>	<i>Abutilon sellovianum</i>	India	EACM- and SACM-like viruses
AJ717547	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	
AJ717548	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	
AJ717549	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Kenya	
JF909070	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909071	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909072	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	

JF909099	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Comoros	
JF909158	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Seychelles	
JF909194	<i>East African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Mayotte	
JN053438	<i>East African cassava mosaic virus</i>	<i>Jatropha curcas</i>	Kenya	
MF067256	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	
MF067257	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	
MF067258	<i>East African cassava mosaic virus</i>	<i>Manihot glaziovii</i>	Tanzania	
JX473582	<i>East African cassava mosaic virus</i>	Not specified	Malawi	EACM- and SACM-like viruses
HE814063	<i>East African cassava mosaic virus</i>	<i>Sida</i> sp.	Central African Republic	EACM- and SACM-like viruses
HE814064	<i>East African cassava mosaic virus</i>	<i>Sida</i> sp.	Chad	EACM- and SACM-like viruses
AF422174	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Tanzania	EACM- and SACM-like viruses
AJ516003	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717559	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717560	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717561	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717562	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717563	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717564	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717565	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717566	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717567	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717568	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
AJ717583	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Kenya	EACM- and SACM-like viruses
HE806427	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Oman	EACM- and SACM-like viruses
HE806428	<i>East African cassava mosaic Zanzibar virus</i>	<i>Manihot esculenta</i>	Oman	EACM- and SACM-like viruses
HG937525	<i>Eclipta yellow vein mosaic virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
GQ478343	<i>Eclipta yellow vein virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	Asia and Africa
KC476655	<i>Eclipta yellow vein virus</i>	<i>Andrographis paniculata</i>	India	Asia and Africa
KT390456	<i>Eclipta yellow vein virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
KU569586	<i>Eggplant golden mosaic virus</i>	<i>Solanum melongena</i>	Thailand	Far East Asia and Indian subcontinent
KU569598	<i>Eggplant golden mosaic virus</i>	<i>Solanum melongena</i>	Thailand	Far East Asia and Indian subcontinent
KU569601	<i>Eggplant golden mosaic virus</i>	<i>Solanum melongena</i>	Thailand	Far East Asia and Indian subcontinent

KY373213	<i>Emilia sonchifolia</i> yellow vein Thailand virus	<i>Emilia sonchifolia</i>	Thailand	Far East Asia and Indian subcontinent
MH035670	<i>Emilia</i> yellow vein Fujian virus	<i>Emilia sonchifolia</i>	China	Far East Asia and Indian subcontinent
EU377539	<i>Emilia</i> yellow vein virus	<i>Emilia sonchifolia</i>	China	Far East Asia and Indian subcontinent
JQ247188	<i>Emilia</i> yellow vein virus	<i>Crassocephalum crepidioides</i>	China	Far East Asia and Indian subcontinent
KC878472	<i>Emilia</i> yellow vein virus	<i>Emilia sonchifolia</i>	Vietnam	Far East Asia and Indian subcontinent
KJ016240	<i>Emilia</i> yellow vein virus	<i>Emilia sonchifolia</i>	China	Far East Asia and Indian subcontinent
DQ641698	<i>Erectites</i> yellow mosaic virus	<i>Erectites valerianifolia</i>	Vietnam	Far East Asia and Indian subcontinent
AB007990	<i>Eupatorium</i> yellow vein virus	<i>Eupatorium makinoi</i>	Japan	Far East Asia and Indian subcontinent
AB079766	<i>Eupatorium</i> yellow vein virus	<i>Eupatorium makinoi</i>	Japan	Far East Asia and Indian subcontinent
AB300463	<i>Eupatorium</i> yellow vein virus	<i>Eupatorium makinoi</i>	Japan	Far East Asia and Indian subcontinent
AB433979	<i>Eupatorium</i> yellow vein virus	<i>Solanum lycopersicum</i>	Japan	Far East Asia and Indian subcontinent
AJ438936	<i>Eupatorium</i> yellow vein virus	<i>Eupatorium makinoi</i>	Japan	Far East Asia and Indian subcontinent
AJ438937	<i>Eupatorium</i> yellow vein virus	<i>Eupatorium makinoi</i>	Japan	Far East Asia and Indian subcontinent
AM411424	<i>Euphorbia</i> leaf curl Guangxi virus	<i>Euphorbia pulcherrima</i>	China	Far East Asia and Indian subcontinent
AJ558121	<i>Euphorbia</i> leaf curl virus	<i>Euphorbia pulcherrima</i>	China	Asia and Africa
FJ487911	<i>Euphorbia</i> leaf curl virus	<i>Euphorbia pulcherrima</i>	China	Asia and Africa
KC161185	<i>Euphorbia</i> leaf curl virus	<i>Passiflora edulis</i>	Taiwan	Asia and Africa
KC852148	<i>Euphorbia</i> leaf curl virus	<i>Euphorbia pulcherrima</i>	China	Asia and Africa
KT259282	<i>Euphorbia</i> leaf curl virus	<i>Passiflora edulis</i>	South Korea	Asia and Africa
JN368145	<i>Euphorbia</i> mosaic Venezuela virus	<i>Euphorbia heterophylla</i>	Venezuela	America and Middle East
AF068642	<i>Euphorbia</i> mosaic virus	<i>Euphorbia heterophylla</i>	Puerto Rico	America and Middle East
DQ318937	<i>Euphorbia</i> mosaic virus	<i>Euphorbia heterophylla</i>	Mexico	America and Middle East
DQ395342	<i>Euphorbia</i> mosaic virus	<i>Wissadula amplissima</i>	Jamaica	America and Middle East
DQ520942	<i>Euphorbia</i> mosaic virus	<i>Capsicum annuum</i>	Mexico	America and Middle East
FJ407052	<i>Euphorbia</i> mosaic virus	<i>Euphorbia heterophylla</i>	Jamaica	America and Middle East
FJ807782	<i>Euphorbia</i> mosaic virus	<i>Nicotiana benthamiana</i>	Cuba	America and Middle East
HQ896201	<i>Euphorbia</i> mosaic virus	<i>Euphorbia heterophylla</i>	Cuba	America and Middle East
JQ963887	<i>Euphorbia</i> mosaic virus	<i>Euphorbia heterophylla</i>	USA	America and Middle East
KU165788	<i>Euphorbia</i> mosaic virus	<i>Glycine max</i>	Cuba	America and Middle East
KJ647290	<i>Euphorbia</i> mosaic virus	<i>Passiflora</i> sp.	USA	America and Middle East
KM978186	<i>Euphorbia</i> yellow leaf curl virus	<i>Euphorbia pulcherrima</i>	Pakistan	Asia and Africa
KP780424	<i>Euphorbia</i> yellow leaf curl virus	<i>Hibiscus syriacus</i>	Pakistan	Asia and Africa

KT159766	<i>Euphorbia yellow leaf curl virus</i>	<i>Euphorbia pulcherrima</i>	Pakistan	Asia and Africa
JX415184	<i>Euphorbia yellow mosaic virus</i>	<i>Crotalaria</i> sp.	Brazil	America and Middle East
JX415185	<i>Euphorbia yellow mosaic virus</i>	<i>Crotalaria</i> sp.	Brazil	America and Middle East
JX415186	<i>Euphorbia yellow mosaic virus</i>	<i>Crotalaria</i> sp.	Brazil	America and Middle East
FJ619507	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756669	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756670	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756671	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756672	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756673	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756674	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756675	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JF756676	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JN419000	<i>Euphorbia yellow mosaic virus</i>	<i>Macroptilium atropurpureum</i>	Brazil	America and Middle East
JX415189	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JX415191	<i>Euphorbia yellow mosaic virus</i>	<i>Crotalaria juncea</i>	Brazil	America and Middle East
JX415200	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
JX871379	<i>Euphorbia yellow mosaic virus</i>	<i>Sida santaremensis</i>	Brazil	America and Middle East
KX348182	<i>Euphorbia yellow mosaic virus</i>	<i>Leonurus sibiricus</i>	Brazil	America and Middle East
KX691395	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559430	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559431	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559432	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559433	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559434	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559435	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559436	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559437	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559438	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559439	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559440	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559441	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East

KY559575	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559576	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559577	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559578	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY559579	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	America and Middle East
KY905705	<i>Euphorbia yellow mosaic virus</i>	<i>Manihot esculenta</i>	Brazil	America and Middle East
JX415192	<i>Euphorbia yellow mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	
KY559525	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	
KY559543	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	
KY559550	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	
KY559568	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	
KY559572	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia heterophylla</i>	Brazil	
FN435995	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia</i> sp.	Brazil	America and Middle East
FN435997	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia</i> sp.	Brazil	America and Middle East
KC706530	<i>Euphorbia yellow mosaic virus</i>	<i>Euphorbia</i> sp.	Brazil	America and Middle East
KX348180	<i>Euphorbia yellow mosaic virus</i>	<i>Sida</i> sp.	Brazil	America and Middle East
KX348181	<i>Euphorbia yellow mosaic virus</i>	<i>Sida</i> sp.	Brazil	America and Middle East
JQ866297	<i>French bean leaf curl virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KC699544	<i>French bean severe leaf curl virus</i>	<i>Cassia tora</i>	India	Asia and Africa
EU365613	<i>Gossypium darwinii</i> symptomless virus	<i>Gossypium darwinii</i>	Pakistan	Asia and Africa
EU365614	<i>Gossypium darwinii</i> symptomless virus	<i>Gossypium darwinii</i>	Pakistan	Asia and Africa
EU365615	<i>Gossypium darwinii</i> symptomless virus	<i>Gossypium darwinii</i>	Pakistan	Asia and Africa
EU365617	<i>Gossypium punctatum</i> mild leaf curl virus	<i>Gossypium davidsonii</i>	Pakistan	Asia and Africa
FJ218485	<i>Gossypium punctatum</i> mild leaf curl virus	<i>Gossypium gossypoides</i>	Pakistan	Asia and Africa
KC898544	<i>Hemidesmus yellow mosaic virus</i>	<i>Hemidesmus indicus</i>	India	Asia and Africa
KC898543	<i>Hemidesmus yellow mosaic virus</i>	<i>Hemidesmus indicus</i>	India	
MF140452	<i>Hibiscus vein enation virus</i>	<i>Hibiscus rosa-sinensis</i>	Taiwan	Asia and Africa
MF140454	<i>Hibiscus vein enation virus</i>	<i>Hibiscus rosa-sinensis</i>	Taiwan	Asia and Africa
MF140455	<i>Hibiscus vein enation virus</i>	<i>Hibiscus rosa-sinensis</i>	Taiwan	Asia and Africa
MF140451	<i>Hibiscus vein enation virus</i>	<i>Hibiscus rosa-sinensis</i>	Taiwan	
MF140453	<i>Hibiscus vein enation virus</i>	<i>Hibiscus rosa-sinensis</i>	Taiwan	
AJ542539	<i>Hollyhock leaf crumple virus</i>	<i>Althea rosea</i>	Egypt	Asia and Africa

AY036009	<i>Hollyhock leaf crumple virus</i>	<i>Alcea rosea</i>	Egypt	Asia and Africa
FR772082	<i>Hollyhock leaf curl virus</i>	<i>Alcea rosea</i>	Pakistan	Asia and Africa
LT716980	<i>Hollyhock leaf curl virus</i>	<i>Malva parviflora</i>	Pakistan	Asia and Africa
MF409174	<i>Hollyhock leaf curl virus</i>	<i>Malvastrum coromandelianum</i>	Pakistan	Asia and Africa
LK028571	<i>Hollyhock yellow vein mosaic Islamabad virus</i>	<i>Alcea</i> sp.	Pakistan	Asia and Africa
LM645009	<i>Hollyhock yellow vein mosaic Islamabad virus</i>	<i>Alcea</i> sp.	Pakistan	Asia and Africa
FR772081	<i>Hollyhock yellow vein mosaic virus</i>	<i>Alcea rosea</i>	Pakistan	Asia and Africa
JQ911766	<i>Hollyhock yellow vein mosaic virus</i>	<i>Alcea rosea</i>	India	Asia and Africa
KT390462	<i>Hollyhock yellow vein mosaic virus</i>	<i>Abelmoschus manihot</i>	India	Asia and Africa
MG373552	<i>Hollyhock yellow vein virus</i>	<i>Alcea rosea</i>	India	Asia and Africa
AB178949	<i>Honeysuckle yellow vein Kagoshima virus</i>	Not specified	Japan	Far East Asia and Indian subcontinent
AB236323	<i>Honeysuckle yellow vein mosaic virus</i>	<i>Solanum lycopersicum</i>	Japan	Far East Asia and Indian subcontinent
AJ421523	<i>Honeysuckle yellow vein mosaic virus</i>	<i>Lonicera japonica</i>	United Kingdom	
AB020781	<i>Honeysuckle yellow vein mosaic virus</i>	Not specified	Not specified	Far East Asia and Indian subcontinent
AB178947	<i>Honeysuckle yellow vein mosaic virus</i>	Not specified	Japan	Far East Asia and Indian subcontinent
AB178948	<i>Honeysuckle yellow vein mosaic virus</i>	Not specified	Japan	Far East Asia and Indian subcontinent
AB055009	<i>Honeysuckle yellow vein virus</i>	<i>Lycopersicon esculentum</i>	Japan	Far East Asia and Indian subcontinent
AB079689	<i>Honeysuckle yellow vein virus</i>	<i>Lycopersicon esculentum</i>	Japan	Far East Asia and Indian subcontinent
AB079765	<i>Honeysuckle yellow vein virus</i>	<i>Lycopersicon esculentum</i>	Japan	Far East Asia and Indian subcontinent
AB236321	<i>Honeysuckle yellow vein virus</i>	<i>Solanum lycopersicum</i>	Japan	Far East Asia and Indian subcontinent
AB236325	<i>Honeysuckle yellow vein virus</i>	<i>Solanum lycopersicum</i>	Japan	Far East Asia and Indian subcontinent
AB287439	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	Japan	Far East Asia and Indian subcontinent
AB287440	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	Japan	Far East Asia and Indian subcontinent
AB287441	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	Japan	Far East Asia and Indian subcontinent
AJ542540	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	United Kingdom	Far East Asia and Indian subcontinent
AJ543429	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	United Kingdom	Far East Asia and Indian subcontinent
FJ434943	<i>Honeysuckle yellow vein virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
FJ817425	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	New Zealand	Far East Asia and Indian subcontinent
GQ477135	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	South Korea	Far East Asia and Indian subcontinent
HM164545	<i>Honeysuckle yellow vein virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
HM164547	<i>Honeysuckle yellow vein virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
JX416174	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera japonica</i>	Australia	Far East Asia and Indian subcontinent

AB182261	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera</i> sp.	Japan	Far East Asia and Indian subcontinent
HQ189431	<i>Honeysuckle yellow vein virus</i>	<i>Lonicera</i> sp.	South Korea	Far East Asia and Indian subcontinent
AB178945	<i>Honeysuckle yellow vein virus</i>	Not specified	Japan	Far East Asia and Indian subcontinent
AB178946	<i>Honeysuckle yellow vein virus</i>	Not specified	Japan	Far East Asia and Indian subcontinent
AJ627904	<i>Horsegram yellow mosaic virus</i>	<i>Macrotyloma uniflorum</i>	India	Asia and Africa
AM932425	<i>Horsegram yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
AM932427	<i>Horsegram yellow mosaic virus</i>	<i>Vigna unguiculata</i>	India	Asia and Africa
AM932429	<i>Horsegram yellow mosaic virus</i>	<i>Phaseolus lunatus</i>	India	Asia and Africa
GU323321	<i>Horsegram yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Sri Lanka	Asia and Africa
KC019306	<i>Horsegram yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KP752088	<i>Horsegram yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
AY271891	<i>Hyacinth bean yellow mosaic Bangladesh virus</i>	Not specified	Bangladesh	Asia and Africa
AJ314739	<i>Indian cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ575819	<i>Indian cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AY730035	<i>Indian cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KU308385	<i>Indian cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KU550960	<i>Indian cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
Z24758	<i>Indian cassava mosaic virus</i>	<i>Abutilon sellovianum</i>	India	Asia and Africa
AJ132548	<i>Ipomoea yellow vein virus</i>	<i>Ipomoea indica</i>	Spain	Sweepoviruses
AJ586885	<i>Ipomoea yellow vein virus</i>	<i>Ipomoea indica</i>	Italy	Sweepoviruses
EU839576	<i>Ipomoea yellow vein virus</i>	<i>Ipomoea indica</i>	Spain	Sweepoviruses
EU839577	<i>Ipomoea yellow vein virus</i>	<i>Ipomoea indica</i>	Spain	Sweepoviruses
EU839578	<i>Ipomoea yellow vein virus</i>	<i>Ipomoea indica</i>	Spain	Sweepoviruses
JQ821386	<i>Jacquemontia mosaic Yucatan virus</i>	<i>Jacquemontia pentantha</i>	Mexico	America and Middle East
KY617094	<i>Jacquemontia yellow vein virus</i>	<i>Jacquemontia tamnifolia</i>	Venezuela	America and Middle East
KY624376	<i>Jacquemontia yellow vein virus</i>	<i>Jacquemontia tamnifolia</i>	Venezuela	America and Middle East
GQ924760	<i>Jatropha curcas mosaic virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
JF496657	<i>Jatropha curcas mosaic virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
JN692494	<i>Jatropha curcas mosaic virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
JX518289	<i>Jatropha curcas mosaic virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
KM189818	<i>Jatropha leaf crumple India virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
KM189819	<i>Jatropha leaf crumple India virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa

KM023146	<i>Jatropha leaf crumple virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
KM411359	<i>Jatropha leaf curl Gujarat virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
GU451249	<i>Jatropha leaf curl virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
KM023145	<i>Jatropha leaf curl virus</i>	<i>Jatropha gossypifolia</i>	India	Asia and Africa
KU667096	<i>Jatropha leaf curl virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
LC080676	<i>Jatropha leaf curl virus</i>	<i>Ludwigia parviflora</i>	India	Asia and Africa
EU798996	<i>Jatropha leaf curl virus</i>	<i>Jatropha</i> sp.	India	Asia and Africa
JN135236	<i>Jatropha leaf yellow mosaic Katarniaghat virus</i>	<i>Jatropha curcas</i>	India	Asia and Africa
HM230683	<i>Jatropha mosaic India virus</i>	<i>Nicotiana tabacum</i>	India	Asia and Africa
KC513823	<i>Jatropha mosaic Lucknow virus</i>	<i>Jatropha integerrima</i>	India	Asia and Africa
KF652077	<i>Jatropha mosaic Lucknow virus</i>	<i>Jatropha multifida</i>	India	Asia and Africa
KF652078	<i>Jatropha mosaic Lucknow virus</i>	<i>Jatropha podagrica</i>	India	Asia and Africa
JX025358	<i>Jatropha mosaic Nigerian virus</i>	<i>Jatropha curcas</i>	Nigeria	Asia and Africa
JX025359	<i>Jatropha mosaic Nigerian virus</i>	<i>Jatropha curcas</i>	Nigeria	Asia and Africa
JX025360	<i>Jatropha mosaic Nigerian virus</i>	<i>Jatropha curcas</i>	Nigeria	Asia and Africa
KF723258	<i>Jatropha mosaic virus</i>	<i>Jatropha gossypifolia</i>	Jamaica	Meso- and Latin Americas
KF723259	<i>Jatropha mosaic virus</i>	<i>Jatropha gossypifolia</i>	Jamaica	Meso- and Latin Americas
KF723260	<i>Jatropha mosaic virus</i>	<i>Jatropha gossypifolia</i>	Jamaica	Meso- and Latin Americas
KF998097	<i>Jatropha mosaic virus</i>	<i>Jatropha multifida</i>	USA	Meso- and Latin Americas
KJ174330	<i>Jatropha mosaic virus</i>	<i>Jatropha</i> sp.	Dominican Republic	Meso- and Latin Americas
KJ174331	<i>Jatropha mosaic virus</i>	<i>Jatropha</i> sp.	Dominican Republic	Meso- and Latin Americas
KJ174332	<i>Jatropha mosaic virus</i>	<i>Jatropha</i> sp.	Dominican Republic	Meso- and Latin Americas
KJ174333	<i>Jatropha mosaic virus</i>	<i>Jatropha</i> sp.	Dominican Republic	Meso- and Latin Americas
FJ177030	<i>Jatropha yellow mosaic virus</i>	<i>Nicotiana tabacum</i>	India	Asia and Africa
MG001958	<i>Juncus maritimus associated virus</i>	<i>Juncus maritimus</i>	France	Asia and Africa
EU366903	<i>Kenaf leaf curl virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
EU822322	<i>Kenaf leaf curl virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FN806777	<i>Kenaf leaf curl virus</i>	<i>Phaseolus vulgaris</i>	China	Asia and Africa
FN806778	<i>Kenaf leaf curl virus</i>	<i>Phaseolus vulgaris</i>	China	Asia and Africa
HM448898	<i>Kenaf leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	Asia and Africa
DQ641690	<i>Kudzu mosaic virus</i>	<i>Pueraria montana</i>	Vietnam	Asia and Africa
FJ539014	<i>Kudzu mosaic virus</i>	<i>Pueraria montana</i>	China	Asia and Africa

HQ162271	<i>Kudzu mosaic virus</i>	<i>Glycine max</i>	Vietnam	Asia and Africa
AJ512495	<i>Legume yellow mosaic virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
AJ512496	<i>Legume yellow mosaic virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
AJ512497	<i>Legume yellow mosaic virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
AJ512498	<i>Legume yellow mosaic virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
JQ429791	<i>Leonurus mosaic virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
JX863081	<i>Leonurus mosaic virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
JX863082	<i>Leonurus mosaic virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KC683374	<i>Leonurus mosaic virus</i>	<i>Leonurus sibiricus</i>	Paraguay	Meso- and Latin Americas
AY795900	<i>Lindernia anagallis yellow vein virus</i>	<i>Lindernia anagallis</i>	China	Far East Asia and Indian subcontinent
DQ641701	<i>Lindernia anagallis yellow vein virus</i>	<i>Lindernia procumbens</i>	Vietnam	Far East Asia and Indian subcontinent
KC172827	<i>Lindernia anagallis yellow vein virus</i>	<i>Lindernia anagallis</i>	China	Far East Asia and Indian subcontinent
LC091538	<i>Lisianthus enation leaf curl virus</i>	<i>Eustoma grandiflorum</i>	Taiwan	Far East Asia and Indian subcontinent
LC091539	<i>Lisianthus enation leaf curl virus</i>	<i>Eustoma grandiflorum</i>	Taiwan	Far East Asia and Indian subcontinent
AF509739	<i>Loofa yellow mosaic virus</i>	<i>Luffa acutangula</i>	Vietnam	Asia and Africa
DQ641699	<i>Ludwigia yellow vein Vietnam virus</i>	<i>Ludwigia octovalvis</i>	Vietnam	Far East Asia and Indian subcontinent
AJ965539	<i>Ludwigia yellow vein virus</i>	<i>Ludwigia hyssopifolia</i>	China	Far East Asia and Indian subcontinent
DQ641708	<i>Ludwigia yellow vein virus</i>	<i>Ludwigia octovalvis</i>	Vietnam	Far East Asia and Indian subcontinent
KT582302	<i>Lycianthes yellow mosaic virus</i>	<i>Lycianthes biflora</i>	China	Asia and Africa
KX691399	<i>Macroptilium bright mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KX691400	<i>Macroptilium bright mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KX691396	<i>Macroptilium common mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KX691397	<i>Macroptilium common mosaic virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
EF645647	<i>Macroptilium golden mosaic virus</i>	<i>Wissadula amplissima</i>	Jamaica	Meso- and Latin Americas
EU158096	<i>Macroptilium golden mosaic virus</i>	<i>Wissadula amplissima</i>	Jamaica	Meso- and Latin Americas
KY196219	<i>Macroptilium golden yellow mosaic virus</i>	<i>Macroptilium</i> sp.	Dominican Republic	Meso- and Latin Americas
AF449192	<i>Macroptilium mosaic Puerto Rico virus</i>	<i>Phaseolus vulgaris</i>	Puerto Rico	Meso- and Latin Americas
AY044133	<i>Macroptilium mosaic Puerto Rico virus</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099141	<i>Macroptilium mosaic Puerto Rico virus</i>	Not specified	Puerto Rico	Meso- and Latin Americas
AY044135	<i>Macroptilium yellow mosaic Florida virus</i>	Not specified	USA	Meso- and Latin Americas
AJ344452	<i>Macroptilium yellow mosaic virus</i>	<i>Macroptilium lathyroides</i>	Cuba	Meso- and Latin Americas
EF582840	<i>Macroptilium yellow mosaic virus</i>	<i>Macroptilium lathyroides</i>	Jamaica	Meso- and Latin Americas

EF585288	<i>Macropodium yellow mosaic virus</i>	<i>Macropodium lathyroides</i>	Jamaica	Meso- and Latin Americas
EF585290	<i>Macropodium yellow mosaic virus</i>	<i>Macropodium lathyroides</i>	Jamaica	Meso- and Latin Americas
JN418998	<i>Macropodium yellow net virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419019	<i>Macropodium yellow spot virus</i>	<i>Canavalia</i> sp.	Brazil	Meso- and Latin Americas
JN419005	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419007	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419009	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419012	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419013	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419014	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419015	<i>Macropodium yellow spot virus</i>	<i>Calopogonium mucunoides</i>	Brazil	Meso- and Latin Americas
JN419016	<i>Macropodium yellow spot virus</i>	<i>Calopogonium mucunoides</i>	Brazil	Meso- and Latin Americas
JN419018	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419020	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
JN419022	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
KC004091	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004092	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004093	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004094	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004095	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004096	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004097	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004098	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004099	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004100	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004101	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004102	<i>Macropodium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KC004103	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
KC004104	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
KC004105	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
KC004106	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas
KC004107	<i>Macropodium yellow spot virus</i>	<i>Macropodium lathyroides</i>	Brazil	Meso- and Latin Americas

KJ939892	<i>Macroptilium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939893	<i>Macroptilium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939894	<i>Macroptilium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
KJ939895	<i>Macroptilium yellow spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939896	<i>Macroptilium yellow spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939897	<i>Macroptilium yellow spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KT779562	<i>Macroptilium yellow spot virus</i>	<i>Desmodium glabrum</i>	Brazil	Meso- and Latin Americas
KT779564	<i>Macroptilium yellow spot virus</i>	<i>Desmodium glabrum</i>	Brazil	Meso- and Latin Americas
KT779565	<i>Macroptilium yellow spot virus</i>	<i>Desmodium glabrum</i>	Brazil	Meso- and Latin Americas
KX691398	<i>Macroptilium yellow spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939891	<i>Macroptilium yellow spot virus</i>	<i>Phaseolus vulgaris</i>	Brazil	
KT779561	<i>Macroptilium yellow spot virus</i>	<i>Desmodium glabrum</i>	Brazil	
KJ939898	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939899	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939900	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939901	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939902	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939903	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939904	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939907	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939908	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939913	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939915	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939905	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939906	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939909	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939910	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939911	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939912	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
KJ939914	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
JN419021	<i>Macroptilium yellow vein virus</i>	<i>Macroptilium sp.</i>	Brazil	Meso- and Latin Americas
LC080677	<i>Malachra yellow mosaic virus</i>	<i>Malachra capitata</i>	India	Asia and Africa

LC376013	<i>Malachra yellow mosaic virus</i>	<i>Neolamarckia cadamba</i>	India	Asia and Africa
KU058851	<i>Malvastrum bright yellow mosaic virus</i>	<i>Malvastrum</i> sp.	USA	Meso- and Latin Americas
KU058852	<i>Malvastrum bright yellow mosaic virus</i>	<i>Malvastrum</i> sp.	USA	Meso- and Latin Americas
KU058853	<i>Malvastrum bright yellow mosaic virus</i>	<i>Malvastrum</i> sp.	USA	Meso- and Latin Americas
KU058854	<i>Malvastrum bright yellow mosaic virus</i>	<i>Malvastrum</i> sp.	USA	Meso- and Latin Americas
KU058855	<i>Malvastrum bright yellow mosaic virus</i>	<i>Malvastrum</i> sp.	USA	Meso- and Latin Americas
KU058856	<i>Malvastrum bright yellow mosaic virus</i>	<i>Malvastrum</i> sp.	USA	Meso- and Latin Americas
AM236779	<i>Malvastrum leaf curl Guangdong virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
AM236780	<i>Malvastrum leaf curl Guangdong virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
AM503104	<i>Malvastrum leaf curl Guangdong virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KF912950	<i>Malvastrum leaf curl Guangdong virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KJ016236	<i>Malvastrum leaf curl Guangdong virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KC577540	<i>Malvastrum leaf curl Philippines virus</i>	<i>Malvastrum coromandelianum</i>	Philippines	Far East Asia and Indian subcontinent
AJ971263	<i>Malvastrum leaf curl virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
AM260699	<i>Malvastrum leaf curl virus</i>	<i>Carica papaya</i>	China	Far East Asia and Indian subcontinent
EF554783	<i>Malvastrum leaf curl virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
FJ712189	<i>Malvastrum leaf curl virus</i>	<i>Malvastrum americanum</i>	China	Far East Asia and Indian subcontinent
FJ600483	<i>Malvastrum yellow mosaic Helshire virus</i>	<i>Malvastrum americanum</i>	Jamaica	Meso- and Latin Americas
FJ600482	<i>Malvastrum yellow mosaic Jamaica virus</i>	<i>Malvastrum americanum</i>	Jamaica	Meso- and Latin Americas
FJ601917	<i>Malvastrum yellow mosaic Jamaica virus</i>	<i>Malvastrum americanum</i>	Jamaica	Meso- and Latin Americas
AM236755	<i>Malvastrum yellow mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
AM236756	<i>Malvastrum yellow mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
KF999982	<i>Malvastrum yellow mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
KJ016233	<i>Malvastrum yellow mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
KJ016237	<i>Malvastrum yellow mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
FN386459	<i>Malvastrum yellow vein Baoshan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
FN386460	<i>Malvastrum yellow vein Baoshan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
FN806779	<i>Malvastrum yellow vein Baoshan virus</i>	<i>Phaseolus vulgaris</i>	China	Asia and Africa
KP188831	<i>Malvastrum yellow vein Cambodia virus</i>	<i>Malvastrum coromandelianum</i>	Cambodia	Far East Asia and Indian subcontinent
FR715681	<i>Malvastrum yellow vein Changa Manga virus</i>	<i>Malvastrum coromandelianum</i>	Pakistan	Asia and Africa
FN552749	<i>Malvastrum yellow vein Honghe virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
KU601620	<i>Malvastrum yellow vein Honghe virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa

MF683828	<i>Malvastrum yellow vein Lahore virus</i>	<i>Malvastrum coromandelianum</i>	USA	Asia and Africa
AJ457824	<i>Malvastrum yellow vein virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
AJ744881	<i>Malvastrum yellow vein virus</i>	<i>Ageratum conyzoides</i>	China	Asia and Africa
JN082236	<i>Malvastrum yellow vein virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JN082239	<i>Malvastrum yellow vein virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
MF372751	<i>Malvastrum yellow vein virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JN082235	<i>Malvastrum yellow vein virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
AJ786711	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
AJ971501	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JN082234	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JX679249	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malva parviflora</i>	China	Asia and Africa
JX679256	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malva parviflora</i>	China	Asia and Africa
KC189891	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
KC189892	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
KU975394	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
MF372752	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JN082238	<i>Malvastrum yellow vein Yunnan virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
JX679250	<i>Malvastrum yellow vein Yunnan virus</i>	Not specified	Not specified	Asia and Africa
KT201151	<i>Melochia mosaic virus</i>	<i>Melochia</i> sp.	Brazil	Meso- and Latin Americas
KT201153	<i>Melochia yellow mosaic virus</i>	<i>Melochia</i> sp.	Brazil	Meso- and Latin Americas
AY064391	<i>Melon chlorotic leaf curl virus</i>	<i>Cucurbita</i> sp.	Costa Rica	America and Middle East
KC153490	<i>Melon chlorotic leaf curl virus</i>	<i>Cucurbita</i> sp.	Costa Rica	America and Middle East
AF325497	<i>Melon chlorotic leaf curl virus</i>	<i>Ucumis melo</i>	Guatemala	America and Middle East
KT099118	<i>Melon chlorotic leaf curl virus</i>	Not specified	Guatemala	America and Middle East
HM163576	<i>Melon chlorotic mosaic virus</i>	<i>Citrullus lanatus</i>	Venezuela	America and Middle East
KF670608	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670610	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670612	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis anguria</i>	Venezuela	America and Middle East
KF670616	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670618	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis dipsaceus</i>	Venezuela	America and Middle East
KF670620	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis anguria</i>	Venezuela	America and Middle East
KF670622	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East

KF670624	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670626	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis sativus</i>	Venezuela	America and Middle East
KF670628	<i>Melon chlorotic mosaic virus</i>	<i>Cucurbita moschata</i>	Venezuela	America and Middle East
KF670630	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670632	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670634	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670636	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis anguria</i>	Venezuela	America and Middle East
KF670638	<i>Melon chlorotic mosaic virus</i>	<i>Citrullus lanatus</i>	Venezuela	America and Middle East
KF670640	<i>Melon chlorotic mosaic virus</i>	<i>Citrullus lanatus</i>	Venezuela	America and Middle East
KF670642	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670644	<i>Melon chlorotic mosaic virus</i>	<i>Cucumis melo</i>	Venezuela	America and Middle East
KF670646	<i>Melon chlorotic mosaic virus</i>	<i>Citrullus lanatus</i>	Venezuela	America and Middle East
AM494976	<i>Melon leaf curl virus</i>	<i>Cucumis melo</i>	Pakistan	Asia and Africa
DQ644561	<i>Merremia leaf curl virus</i>	Not specified	Puerto Rico	Sweepoviruses
AF068636	<i>Merremia mosaic virus</i>	<i>Merremia quinquefolia</i>	Puerto Rico	Meso- and Latin Americas
FJ944021	<i>Merremia mosaic Puerto Rico virus</i>	<i>Merremia quinquefolia</i>	Puerto Rico	Meso- and Latin Americas
AY508991	<i>Merremia mosaic virus</i>	<i>Solanum lycopersicum</i>	Venezuela	Meso- and Latin Americas
DQ644557	<i>Merremia mosaic virus</i>	Not specified	Puerto Rico	Meso- and Latin Americas
DQ644558	<i>Merremia mosaic virus</i>	Not specified	Puerto Rico	Meso- and Latin Americas
EU360303	<i>Mesta yellow vein mosaic Bahraich virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159267	<i>Mesta yellow vein mosaic Bahraich virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159268	<i>Mesta yellow vein mosaic Bahraich virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
EF373060	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
EF428256	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
EF432372	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159262	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159263	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159264	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159265	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159266	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ159269	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus sabdariffa</i>	India	Asia and Africa
FJ159270	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus sabdariffa</i>	India	Asia and Africa

FJ159271	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus sabdariffa</i>	India	Asia and Africa
FJ345398	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ345399	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FJ345400	<i>Mesta yellow vein mosaic virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
FN645922	<i>Mesta yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
HE578897	<i>Mesta yellow vein mosaic virus</i>	<i>Sida santaremensis</i>	Pakistan	Asia and Africa
JX181786	<i>Mesta yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KJ462074	<i>Mesta yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KJ462083	<i>Mesta yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KR013745	<i>Mesta yellow vein mosaic virus</i>	<i>Malvastrum coromandelianum</i>	Pakistan	Asia and Africa
KT948076	<i>Mesta yellow vein mosaic virus</i>	<i>Malvastrum coromandelianum</i>	Pakistan	Asia and Africa
DQ641695	<i>Mimosa yellow leaf curl virus</i>	<i>Mimosa</i> sp.	Vietnam	Far East Asia and Indian subcontinent
LK054801	<i>Mirabilis leaf curl virus</i>	<i>Mirabilis jalapa</i>	India	Asia and Africa
AF416742	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	India	Asia and Africa
AJ416349	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
AM950268	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
AM992618	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
AY049772	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
AY269990	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Pakistan	Asia and Africa
AY269992	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
AY271893	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	India	Asia and Africa
AY271895	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Nepal	Asia and Africa
DQ389154	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	India	Asia and Africa
DQ400847	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
EU523045	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
FM208833	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
FM208834	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
FM208835	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	Pakistan	Asia and Africa
FM208836	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM208837	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM208838	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM208839	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa

FM208840	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Pakistan	Asia and Africa
FM208841	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	Pakistan	Asia and Africa
FM208842	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM208843	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM208844	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	Pakistan	Asia and Africa
FM208845	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	Pakistan	Asia and Africa
FM208846	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM955598	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM955599	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FM955600	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	Pakistan	Asia and Africa
FN794200	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
FR837935	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Pakistan	Asia and Africa
HF922628	<i>Mungbean yellow mosaic India virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JN368432	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Indonesia	Asia and Africa
JN368433	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Indonesia	Asia and Africa
JN368434	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Indonesia	Asia and Africa
JN368435	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Indonesia	Asia and Africa
JN368436	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Indonesia	Asia and Africa
JN368437	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna unguiculata</i>	Indonesia	Asia and Africa
JN368438	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Indonesia	Asia and Africa
JN368439	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Indonesia	Asia and Africa
JN543395	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	Nepal	Asia and Africa
JX110618	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KC019303	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KC019304	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KC852204	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
KC911719	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KC911720	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KP313758	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	India	Asia and Africa
KP779630	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KP779633	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KP779635	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa

KR052025	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
KU950430	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna radiata</i>	India	Asia and Africa
KX363947	<i>Mungbean yellow mosaic India virus</i>	<i>Cajanus cajan</i>	India	Asia and Africa
KX452226	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	Oman	Asia and Africa
KX452227	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	Oman	Asia and Africa
KX452228	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus vulgaris</i>	Oman	Asia and Africa
KX671565	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX671566	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX671567	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX671568	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX697338	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX711618	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX711619	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX711620	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX711621	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
LC271790	<i>Mungbean yellow mosaic India virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
LC271792	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
LC271794	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
MF683072	<i>Mungbean yellow mosaic India virus</i>	<i>Solanum lycopersicum</i>	USA	Asia and Africa
MH181823	<i>Mungbean yellow mosaic India virus</i>	<i>Glycine max</i>	India	Asia and Africa
JQ327845	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus lunatus</i>	Nepal	
JQ327846	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus lunatus</i>	Nepal	
JQ327847	<i>Mungbean yellow mosaic India virus</i>	<i>Phaseolus lunatus</i>	Nepal	
AY547317	<i>Mungbean yellow mosaic India virus</i>	<i>Dolichos sp.</i>	India	Asia and Africa
AF126406	<i>Mungbean yellow mosaic India virus</i>	Not specified	India	Asia and Africa
AF314145	<i>Mungbean yellow mosaic India virus</i>	Not specified	Bangladesh	Asia and Africa
AY937195	<i>Mungbean yellow mosaic India virus</i>	Not specified	India	Asia and Africa
AF314530	<i>Mungbean yellow mosaic virus</i>	<i>Glycine max</i>	India	Asia and Africa
AJ132575	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
AJ421642	<i>Mungbean yellow mosaic virus</i>	<i>Glycine max</i>	India	Asia and Africa
AY269991	<i>Mungbean yellow mosaic virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
AY271892	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	Cambodia	Asia and Africa

AY271896	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	India	Asia and Africa
D14703	<i>Mungbean yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	Not specified	Asia and Africa
DQ400848	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
DQ865201	<i>Mungbean yellow mosaic virus</i>	<i>Vigna aconitifolia</i>	India	Asia and Africa
FM242701	<i>Mungbean yellow mosaic virus</i>	<i>Rhynchosia capitata</i>	Pakistan	Asia and Africa
JQ398669	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
JX244172	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	Vietnam	Asia and Africa
JX244173	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	Vietnam	Asia and Africa
JX244174	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	Vietnam	Asia and Africa
JX244175	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	Vietnam	Asia and Africa
JX244176	<i>Mungbean yellow mosaic virus</i>	<i>Vigna radiata</i>	Vietnam	Asia and Africa
KC911717	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KC911718	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KC911721	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KC911722	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KC911723	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
KP455992	<i>Mungbean yellow mosaic virus</i>	<i>Vigna mungo</i>	India	Asia and Africa
AB017341	<i>Mungbean yellow mosaic virus</i>	Not specified	Thailand	Asia and Africa
AF481865	<i>Mungbean yellow mosaic virus</i>	Not specified	India	Asia and Africa
GU111996	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU111997	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU111998	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU111999	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112000	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112001	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112002	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
HF567945	<i>Okra enation leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
HG938361	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
HG938362	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
KC019308	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KC019309	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KC342220	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa

KT390329	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390330	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390331	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390332	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390333	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390334	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390335	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390336	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390337	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390338	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390339	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390340	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390341	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390342	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390343	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390344	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390345	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390346	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390450	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390452	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus manihot</i>	India	Asia and Africa
KT390454	<i>Okra enation leaf curl virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
KT390457	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus manihot</i>	India	Asia and Africa
KT390458	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus angulosus</i>	India	Asia and Africa
KT390459	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus moschatus</i>	India	Asia and Africa
KT390460	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KT390463	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus manihot</i>	India	Asia and Africa
KX553923	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KX698087	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
KX698088	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
KX698090	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
KX698091	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
KX698092	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa

KX698093	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
KX710156	<i>Okra enation leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
MH455207	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
MH455208	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Sri Lanka	Asia and Africa
HG518793	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	
HG938358	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	
HG938359	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	
HG938360	<i>Okra enation leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	
FR717137	<i>Okra leaf curl Cameroon virus</i>	<i>Malvastrum coromandelianum</i>	Cameroon	Asia and Africa
HE793426	<i>Okra leaf curl Cameroon virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
HE793428	<i>Okra leaf curl Cameroon virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
GU112010	<i>Okra leaf curl India virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
EU024120	<i>Okra leaf curl Mali virus</i>	<i>Abelmoschus esculentus</i>	Mali	Asia and Africa
HE862273	<i>Okra leaf curl Oman virus</i>	<i>Abelmoschus esculentus</i>	Oman	Asia and Africa
HF536716	<i>Okra leaf curl Oman virus</i>	<i>Abelmoschus esculentus</i>	Oman	Asia and Africa
FM164726	<i>Okra leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
GQ245760	<i>Okra leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF515620	<i>Okra leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF515621	<i>Okra leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF515622	<i>Okra leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
EU914817	<i>Okra mottle virus</i>	<i>Abelmoschus esculentus</i>	Brazil	Meso- and Latin Americas
EU914819	<i>Okra mottle virus</i>	<i>Abelmoschus esculentus</i>	Brazil	Meso- and Latin Americas
FJ686695	<i>Okra mottle virus</i>	<i>Glycine max</i>	Brazil	Meso- and Latin Americas
DQ875879	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Mali	Asia and Africa
DQ902715	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Mali	Asia and Africa
EU024118	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Mali	Asia and Africa
FM164724	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
FM210275	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
HE793424	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
HE793425	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
KX100571	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cote d'Ivoire	Asia and Africa
KX100572	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cote d'Ivoire	Asia and Africa

KX100573	<i>Okra yellow crinkle virus</i>	<i>Abelmoschus esculentus</i>	Cote d'Ivoire	Asia and Africa
DQ022611	<i>Okra yellow mosaic Mexico virus</i>	<i>Abelmoschus esculentus</i>	Mexico	Meso- and Latin Americas
HM035059	<i>Okra yellow mosaic Mexico virus</i>	<i>Abelmoschus esculentus</i>	USA	Meso- and Latin Americas
HQ020409	<i>Okra yellow mosaic Mexico virus</i>	<i>Abelmoschus esculentus</i>	Mexico	Meso- and Latin Americas
HQ116414	<i>Okra yellow mosaic Mexico virus</i>	<i>Abelmoschus esculentus</i>	Mexico	Meso- and Latin Americas
GU990614	<i>Okra yellow mosaic Mexico virus</i>	<i>Herissantia</i> sp.	Mexico	Meso- and Latin Americas
GU990612	<i>Okra yellow mosaic Mexico virus</i>	<i>Sida</i> sp.	Mexico	Meso- and Latin Americas
GU990613	<i>Okra yellow mosaic Mexico virus</i>	<i>Sida</i> sp.	Mexico	Meso- and Latin Americas
AJ002451	<i>Okra yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	Pakistan	Asia and Africa
GU181356	<i>Okra yellow vein mosaic virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KM887907	<i>Oxalis yellow vein virus</i>	<i>Oxalis debilis</i>	USA	Meso- and Latin Americas
HE580236	<i>Papaya leaf crumple virus</i>	<i>Sida santaremensis</i>	Pakistan	Asia and Africa
HM140367	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HM140368	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
HM140369	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KJ028210	<i>Papaya leaf crumple virus</i>	<i>Solanum nigrum</i>	India	Asia and Africa
KM359408	<i>Papaya leaf crumple virus</i>	<i>Andrographis paniculata</i>	India	Asia and Africa
KP698312	<i>Papaya leaf crumple virus</i>	<i>Catharanthus roseus</i>	India	Asia and Africa
KP698313	<i>Papaya leaf crumple virus</i>	<i>Catharanthus roseus</i>	India	Asia and Africa
KR052159	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KR071789	<i>Papaya leaf crumple virus</i>	<i>Glycine max</i>	India	Asia and Africa
KU500804	<i>Papaya leaf crumple virus</i>	<i>Vigna unguiculata</i>	India	Asia and Africa
KX302708	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KX302709	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KX302710	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KX302711	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KX302712	<i>Papaya leaf crumple virus</i>	<i>Carica papaya</i>	India	Asia and Africa
AJ558116	<i>Papaya leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ558117	<i>Papaya leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ558123	<i>Papaya leaf curl China virus</i>	<i>Carica papaya</i>	China	Far East Asia and Indian subcontinent
AJ558124	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
AJ558125	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent

AJ704604	<i>Papaya leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ811914	<i>Papaya leaf curl China virus</i>	<i>Carica papaya</i>	China	Far East Asia and Indian subcontinent
AJ876548	<i>Papaya leaf curl China virus</i>	<i>Corchoropsis timentosa</i>	China	Far East Asia and Indian subcontinent
AM691552	<i>Papaya leaf curl China virus</i>	<i>Eclipta prostrata</i>	China	Far East Asia and Indian subcontinent
AM691553	<i>Papaya leaf curl China virus</i>	<i>Eclipta prostrata</i>	China	Far East Asia and Indian subcontinent
AM691554	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
DQ641700	<i>Papaya leaf curl China virus</i>	<i>Nicotiana tabacum</i>	Vietnam	Far East Asia and Indian subcontinent
EU874386	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
FN256260	<i>Papaya leaf curl China virus</i>	<i>Rhynchosia capitata</i>	China	Far East Asia and Indian subcontinent
FN297834	<i>Papaya leaf curl China virus</i>	<i>Rhynchosia capitata</i>	China	Far East Asia and Indian subcontinent
GQ373254	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
JF682837	<i>Papaya leaf curl China virus</i>	<i>Siegesbeckia orientalis</i>	China	Far East Asia and Indian subcontinent
JX128101	<i>Papaya leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX128102	<i>Papaya leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX294075	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
JX555979	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC878474	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	Vietnam	Far East Asia and Indian subcontinent
KJ016234	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
KJ016238	<i>Papaya leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KP195721	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KP685599	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
KU892657	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892658	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892659	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892660	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892661	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892662	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892663	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892664	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892666	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892667	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892669	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent

KU892670	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892671	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892672	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892673	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892674	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892675	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892676	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU892677	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KX273342	<i>Papaya leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
KX273343	<i>Papaya leaf curl China virus</i>	<i>Acalypha australis</i>	China	Far East Asia and Indian subcontinent
MF417764	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
MF417765	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
MF417766	<i>Papaya leaf curl China virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
KU892665	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	
KU892668	<i>Papaya leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	
AY650283	<i>Papaya leaf curl China virus</i>	Not specified	China	Far East Asia and Indian subcontinent
HG003651	<i>Papaya leaf curl China virus</i>	<i>Petunia</i> sp.	China	Far East Asia and Indian subcontinent
LK028574	<i>Papaya leaf curl Faisalabad virus</i>	<i>Carica papaya</i>	Pakistan	Asia and Africa
LN864816	<i>Papaya leaf curl Faisalabad virus</i>	<i>Carica papaya</i>	Pakistan	
AJ558122	<i>Papaya leaf curl Guandong virus</i>	<i>Carica papaya</i>	China	Far East Asia and Indian subcontinent
FJ869907	<i>Papaya leaf curl Guandong virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
KF446659	<i>Papaya leaf curl Guandong virus</i>	<i>Blechum pyramidatum</i>	Philippines	Far East Asia and Indian subcontinent
KF446660	<i>Papaya leaf curl Guandong virus</i>	<i>Blechum pyramidatum</i>	Philippines	Far East Asia and Indian subcontinent
LC089013	<i>Papaya leaf curl Guandong virus</i>	<i>Eustoma grandiflorum</i>	Taiwan	Far East Asia and Indian subcontinent
LC089014	<i>Papaya leaf curl Guandong virus</i>	<i>Eustoma grandiflorum</i>	Taiwan	Far East Asia and Indian subcontinent
LC089766	<i>Papaya leaf curl Guandong virus</i>	<i>Eustoma grandiflorum</i>	Taiwan	Far East Asia and Indian subcontinent
KP876482	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	Taiwan	Far East Asia and Indian subcontinent
KY884675	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	South Korea	Far East Asia and Indian subcontinent
MG257883	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	South Korea	Far East Asia and Indian subcontinent
MG257884	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	South Korea	Far East Asia and Indian subcontinent
MG257885	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	South Korea	Far East Asia and Indian subcontinent
MG257886	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	South Korea	Far East Asia and Indian subcontinent

MG257887	<i>Papaya leaf curl Guandong virus</i>	<i>Passiflora</i> sp.	South Korea	Far East Asia and Indian subcontinent
FJ495184	<i>Papaya leaf curl Guangdong virus</i>	<i>Euphorbia pulcherrima</i>	China	Far East Asia and Indian subcontinent
KY978407	<i>Papaya leaf curl virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
AJ436992	<i>Papaya leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
DQ629102	<i>Papaya leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
DQ629103	<i>Papaya leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
FJ593629	<i>Papaya leaf curl virus</i>	<i>Raphanus sativus</i>	India	Asia and Africa
FM955601	<i>Papaya leaf curl virus</i>	<i>Rhynchosia capitata</i>	Pakistan	Asia and Africa
FM955602	<i>Papaya leaf curl virus</i>	<i>Rhynchosia capitata</i>	Pakistan	Asia and Africa
GQ200446	<i>Papaya leaf curl virus</i>	<i>Crotalaria juncea</i>	India	Asia and Africa
GQ200448	<i>Papaya leaf curl virus</i>	<i>Crotalaria juncea</i>	India	Asia and Africa
HM143914	<i>Papaya leaf curl virus</i>	<i>Nicotiana glutinosa</i>	India	Asia and Africa
JN135233	<i>Papaya leaf curl virus</i>	<i>Amaranthus cruentus</i>	India	Asia and Africa
JN807765	<i>Papaya leaf curl virus</i>	<i>Glycine max</i>	India	Asia and Africa
JN817517	<i>Papaya leaf curl virus</i>	<i>Croton bonplandianus</i>	India	Asia and Africa
JQ954859	<i>Papaya leaf curl virus</i>	<i>Aster alpinus</i>	India	Asia and Africa
KF307208	<i>Papaya leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KM525657	<i>Papaya leaf curl virus</i>	<i>Croton bonplandianus</i>	India	Asia and Africa
KT253639	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253640	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253641	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253642	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253643	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253644	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253645	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253646	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KT253647	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
KU376493	<i>Papaya leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KU514411	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
KX302713	<i>Papaya leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KX353619	<i>Papaya leaf curl virus</i>	<i>Catharanthus roseus</i>	India	Asia and Africa
KY026597	<i>Papaya leaf curl virus</i>	<i>Nicotiana benthamiana</i>	India	Asia and Africa

KY026598	<i>Papaya leaf curl virus</i>	<i>Nicotiana benthamiana</i>	India	Asia and Africa
KY800906	<i>Papaya leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
LN845913	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LN845914	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LN845915	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LN845916	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LN845917	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LN845919	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LN845920	<i>Papaya leaf curl virus</i>	<i>Physalis peruviana</i>	Pakistan	Asia and Africa
LN878129	<i>Papaya leaf curl virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LT009395	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LT009396	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LT009397	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LT009398	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LT009399	<i>Papaya leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	Asia and Africa
LT009400	<i>Papaya leaf curl virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
Y15934	<i>Papaya leaf curl virus</i>	<i>Abutilon selloianum</i>	India	Asia and Africa
JN703795	<i>Papaya leaf curl virus</i>	<i>Euphorbia pulcherrima</i>	Taiwan	Far East Asia and Indian subcontinent
KC161184	<i>Papaya leaf curl virus</i>	<i>Passiflora edulis</i>	Taiwan	Far East Asia and Indian subcontinent
KT266873	<i>Papaya leaf curl virus</i>	<i>Carica papaya</i>	South Korea	Far East Asia and Indian subcontinent
GQ200447	<i>Papaya leaf curl virus</i>	<i>Crotalaria juncea</i>	India	
KX353622	<i>Papaya yellow leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KT899302	<i>Passionfruit leaf distortion virus</i>	<i>Passiflora edulis</i>	Colombia	Meso- and Latin Americas
FJ972767	<i>Passionfruit severe leaf distortion virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
MF401390	<i>Passionfruit severe leaf distortion virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
MF401391	<i>Passionfruit severe leaf distortion virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
KT948785	<i>Pavonia mosaic virus</i>	<i>Pavonia</i> sp.	Brazil	Meso- and Latin Americas
KT948787	<i>Pavonia yellow mosaic virus</i>	<i>Pavonia</i> sp.	Brazil	Meso- and Latin Americas
JQ327840	<i>Pea leaf distortion virus</i>	<i>Phaseolus lunatus</i>	Nepal	Asia and Africa
KY001635	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa
KY001636	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa
KY001637	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa

KY001638	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa
KY001639	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa
KY001640	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa
KY001641	<i>Pea leaf distortion virus</i>	<i>Pisum sativum</i>	Nepal	Asia and Africa
KY978406	<i>Pedilanthus leaf curl virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
AM948961	<i>Pedilanthus leaf curl virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
DQ116884	<i>Pedilanthus leaf curl virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
HF568781	<i>Pedilanthus leaf curl virus</i>	<i>Spinacia oleracea</i>	Pakistan	Asia and Africa
JN807764	<i>Pedilanthus leaf curl virus</i>	<i>Tabernaemontana coronaria</i>	India	Asia and Africa
JQ012790	<i>Pedilanthus leaf curl virus</i>	<i>Cestrum nocturnum</i>	India	Asia and Africa
KX168427	<i>Pedilanthus leaf curl virus</i>	<i>Daucus carota</i>	India	Asia and Africa
KX671561	<i>Pedilanthus leaf curl virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX671562	<i>Pedilanthus leaf curl virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX671563	<i>Pedilanthus leaf curl virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX711622	<i>Pedilanthus leaf curl virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
LT600729	<i>Pedilanthus leaf curl virus</i>	<i>Raphanus sativus</i>	Pakistan	Asia and Africa
LT795118	<i>Pedilanthus leaf curl virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
MF135486	<i>Pedilanthus leaf curl virus</i>	<i>Ptunia atkinsiana</i>	Pakistan	Asia and Africa
AM712436	<i>Pedilanthus leaf curl virus</i>	<i>Pedilanthus tithymaloides</i>	Pakistan	
LT795117	<i>Pedilanthus leaf curl virus</i>	<i>Brassica rapa</i>	Pakistan	
KX710160	<i>Pedilanthus leaf curl virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN678638	<i>Pedilanthus leaf curl virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN713272	<i>Pedilanthus leaf curl virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
LN713273	<i>Pedilanthus leaf curl virus</i>	<i>Sesbania</i> sp.	Pakistan	Asia and Africa
AF149227	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	Costa Rica	America and Middle East
AY928512	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	USA	America and Middle East
AY928514	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	USA	America and Middle East
AY928516	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	USA	America and Middle East
GU128149	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	Mexico	America and Middle East
KY064011	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	Costa Rica	America and Middle East
KY064012	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	Costa Rica	America and Middle East
KY064017	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	Costa Rica	America and Middle East

KY064018	<i>Pepper golden mosaic virus</i>	<i>Capsicum</i> sp.	Costa Rica	America and Middle East
GU128148	<i>Pepper golden mosaic virus</i>	<i>Solanum lycopersicum</i>	Mexico	America and Middle East
GU564594	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
JQ743486	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Costa Rica	America and Middle East
LN848751	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848752	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848753	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848754	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848755	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848756	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848757	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848758	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848759	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848760	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848761	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848762	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848763	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848764	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848765	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848766	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848767	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848768	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848769	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848770	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848771	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848772	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848773	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848774	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848775	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848776	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848777	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848778	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East

LN848779	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848780	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848781	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848782	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848783	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848785	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848786	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848787	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848788	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848789	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848790	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848791	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848792	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848793	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848794	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848795	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848796	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
LN848797	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
MF109819	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
MF109820	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	America and Middle East
U57457	<i>Pepper golden mosaic virus</i>	<i>Abutilon sellovianum</i>	India	America and Middle East
LN848784	<i>Pepper golden mosaic virus</i>	<i>Capsicum annuum</i>	Mexico	
EF210556	<i>Pepper golden mosaic virus</i>	Not specified	Not specified	America and Middle East
JN688724	<i>Pepper golden mosaic virus</i>	Not specified	Costa Rica	America and Middle East
JN688725	<i>Pepper golden mosaic virus</i>	Not specified	Costa Rica	America and Middle East
JN688726	<i>Pepper golden mosaic virus</i>	Not specified	Costa Rica	America and Middle East
JN688727	<i>Pepper golden mosaic virus</i>	Not specified	Costa Rica	America and Middle East
GU128150	<i>Pepper huasteco yellow vein virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
JQ303122	<i>Pepper huasteco yellow vein virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
KP890827	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
KY247179	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848845	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas

LN848878	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848879	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848880	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848881	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848882	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848883	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848884	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848885	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
LN848886	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
MG582068	<i>Pepper huasteco yellow vein virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
X70418	<i>Pepper huasteco yellow vein virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
AY044162	<i>Pepper huasteco yellow vein virus</i>	Not specified	Not specified	Meso- and Latin Americas
AF314531	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum</i> sp.	Bangladesh	Asia and Africa
DQ116881	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
HM007096	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007097	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007101	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007111	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
JN663853	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
KY420149	<i>Pepper leaf curl Bangladesh virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
AM404179	<i>Pepper leaf curl Lahore virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
AM691745	<i>Pepper leaf curl Lahore virus</i>	<i>Capsicum annuum</i>	Pakistan	Asia and Africa
JN663864	<i>Pepper leaf curl Lahore virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
DQ116878	<i>Pepper leaf curl Pakistan virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
JN663861	<i>Pepper leaf curl Varanasi virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
EF190217	<i>Pepper leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KJ957157	<i>Pepper leaf curl virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
AF414287	<i>Pepper leaf curl virus</i>	<i>Capsicum</i> sp.	Malaysia	Far East Asia and Indian subcontinent
JN663870	<i>Pepper leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
AF134484	<i>Pepper leaf curl virus</i>	Not specified	Not specified	Far East Asia and Indian subcontinent
EU585781	<i>Pepper leaf curl Yunnan virus</i>	<i>Capsicum annuum</i>	China	Far East Asia and Indian subcontinent
KU601621	<i>Pepper leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent

KU975395	<i>Pepper leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC769819	<i>Pepper leafroll virus</i>	<i>Capsicum baccatum</i>	Peru	Meso- and Latin Americas
MH481901	<i>Pepper leafroll virus</i>	<i>Phaseolus vulgaris</i>	Ecuador	Meso- and Latin Americas
KC149939	<i>Pepper yellow leaf curl China virus</i>	<i>Capsicum annuum</i>	China	Asia and Africa
KC149940	<i>Pepper yellow leaf curl China virus</i>	<i>Capsicum annuum</i>	China	Asia and Africa
DQ083764	<i>Pepper yellow leaf curl Indonesia virus</i>	<i>Capsicum sp.</i>	Indonesia	Asia and Africa
DQ083765	<i>Pepper yellow leaf curl Indonesia virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Asia and Africa
LC051112	<i>Pepper yellow leaf curl Indonesia virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
LC051113	<i>Pepper yellow leaf curl Indonesia virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
LC051114	<i>Pepper yellow leaf curl Indonesia virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
LC051115	<i>Pepper yellow leaf curl Indonesia virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
AB267834	<i>Pepper yellow leaf curl Indonesia virus</i>	Not specified	Indonesia	Asia and Africa
AB267836	<i>Pepper yellow leaf curl Indonesia virus</i>	Not specified	Indonesia	Asia and Africa
AB267838	<i>Pepper yellow leaf curl Indonesia virus</i>	Not specified	Indonesia	Asia and Africa
KT322142	<i>Pepper yellow leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Thailand	Far East Asia and Indian subcontinent
KT322143	<i>Pepper yellow leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Thailand	Far East Asia and Indian subcontinent
KT322145	<i>Pepper yellow leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Thailand	Far East Asia and Indian subcontinent
KT322146	<i>Pepper yellow leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Thailand	Far East Asia and Indian subcontinent
KX943290	<i>Pepper yellow leaf curl Thailand virus</i>	<i>Bemisia tabaci</i>	Thailand	Far East Asia and Indian subcontinent
KT322141	<i>Pepper yellow leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Thailand	
KC149938	<i>Pepper yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	Asia and Africa
KT809345	<i>Pepper yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
KT809346	<i>Pepper yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
AM691549	<i>Pepper yellow vein Mali virus</i>	<i>Bougainvillea sp.</i>	China	Asia and Africa
AM691548	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum sp.</i>	China	Asia and Africa
KY271075	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum sp.</i>	Cote d'Ivoire	Asia and Africa
KY271076	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum sp.</i>	Cote d'Ivoire	Asia and Africa
KY271077	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum sp.</i>	Cote d'Ivoire	Asia and Africa
AM691547	<i>Pepper yellow vein Mali virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
AM691550	<i>Pepper yellow vein Mali virus</i>	<i>Phyllanthus urinaria</i>	China	Asia and Africa
AM691555	<i>Pepper yellow vein Mali virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
FM876847	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum annuum</i>	Burkina Faso	Asia and Africa

FM876848	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
FM876849	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum annum</i>	Burkina Faso	Asia and Africa
FM876850	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
FM876851	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum annum</i>	Burkina Faso	Asia and Africa
FM876852	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
FN555171	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
FN555172	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
FN555173	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
FN555174	<i>Pepper yellow vein Mali virus</i>	<i>Capsicum frutescens</i>	Burkina Faso	Asia and Africa
AY502935	<i>Pepper yellow vein Mali virus</i>	Not specified	Mali	Asia and Africa
HE806446	<i>Peristrophe mosaic virus</i>	<i>Peristrophe</i> sp.	Cuba	Meso- and Latin Americas
MG001959	<i>Polygala garcinii associated virus</i>	<i>Polygala garcinii</i>	South Africa	Asia and Africa
Y15034	<i>Potato yellow mosaic Panama virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
AF039031	<i>Potato yellow mosaic virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	Meso- and Latin Americas
AY120882	<i>Potato yellow mosaic virus</i>	<i>Solanum lycopersicum</i>	Caribbean	Meso- and Latin Americas
AY965897	<i>Potato yellow mosaic virus</i>	<i>Solanum lycopersicum</i>	Puerto Rico	Meso- and Latin Americas
D00940	<i>Potato yellow mosaic virus</i>	<i>Nicotiana benthamiana</i>	Venezuela	Meso- and Latin Americas
EU518935	<i>Potato yellow mosaic virus</i>	<i>Solanum lycopersicum</i>	Colombia	Meso- and Latin Americas
FR851299	<i>Potato yellow mosaic virus</i>	<i>Vigna unguiculata</i>	Grenada	Meso- and Latin Americas
FR851300	<i>Potato yellow mosaic virus</i>	<i>Vigna unguiculata</i>	Grenada	Meso- and Latin Americas
JQ045705	<i>Potato yellow mosaic virus</i>	<i>Solanum lycopersicum</i>	Colombia	Meso- and Latin Americas
KU665804	<i>Potato yellow mosaic virus</i>	<i>Solanum americanum</i>	Venezuela	Meso- and Latin Americas
KX389269	<i>Potato yellow mosaic virus</i>	<i>Solanum americanum</i>	Venezuela	Meso- and Latin Americas
JX183732	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	China	Far East Asia and Indian subcontinent
JX183733	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	China	Far East Asia and Indian subcontinent
KC857508	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	Vietnam	Far East Asia and Indian subcontinent
KF927128	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	Taiwan	Far East Asia and Indian subcontinent
KU358527	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	Taiwan	Far East Asia and Indian subcontinent
KU358528	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	Taiwan	Far East Asia and Indian subcontinent
KU358529	<i>Pouzolzia golden mosaic virus</i>	<i>Pouzolzia zeylanica</i>	Taiwan	Far East Asia and Indian subcontinent
KF414123	<i>Pouzolzia mosaic Guangdong virus</i>	<i>Pouzolzia zeylanica</i>	China	Far East Asia and Indian subcontinent
JQ793786	<i>Premna leaf curl virus</i>	<i>Premna serratifolia</i>	Vietnam	Far East Asia and Indian subcontinent

EF197941	<i>Pumpkin yellow mosaic Malaysia virus</i>	<i>Cucurbita</i> sp.	Malaysia	Asia and Africa
EF175733	<i>Radish leaf curl virus</i>	<i>Raphanus raphanistrum</i>	India	Asia and Africa
EU194914	<i>Radish leaf curl virus</i>	<i>Nicotiana tabacum</i>	India	Asia and Africa
GU732203	<i>Radish leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
HQ257375	<i>Radish leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
HQ682190	<i>Radish leaf curl virus</i>	<i>Capsicum annuum</i>	Not specified	Asia and Africa
HQ698591	<i>Radish leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
JQ411026	<i>Radish leaf curl virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
KF218188	<i>Radish leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	India	Asia and Africa
GU732204	<i>Radish leaf curl virus</i>	<i>Nicotiana</i> sp.	India	Asia and Africa
EF125190	<i>Ramie mosaic virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
EU596959	<i>Ramie mosaic virus</i>	<i>Boehmeria nivea</i>	China	Far East Asia and Indian subcontinent
FN396969	<i>Ramie mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
FN396971	<i>Ramie mosaic virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KC171650	<i>Ramie mosaic virus</i>	<i>Boehmeria nivea</i>	China	Far East Asia and Indian subcontinent
KC171652	<i>Ramie mosaic virus</i>	<i>Boehmeria nivea</i>	China	Far East Asia and Indian subcontinent
KX885030	<i>Ramie mosaic virus</i>	<i>Boehmeria nivea</i>	China	Far East Asia and Indian subcontinent
KU522485	<i>Ramie mosaic Yunnan virus</i>	<i>Boehmeria caudata</i>	China	Far East Asia and Indian subcontinent
KU522486	<i>Ramie yellow mosaic virus</i>	<i>Boehmeria caudata</i>	China	Far East Asia and Indian subcontinent
KU522487	<i>Ramie yellow mosaic virus</i>	<i>Boehmeria caudata</i>	China	Far East Asia and Indian subcontinent
MG825412	<i>Ramie yellow mosaic virus</i>	<i>Boehmeria leiophylla</i>	China	Far East Asia and Indian subcontinent
MG825413	<i>Ramie yellow mosaic virus</i>	<i>Boehmeria leiophylla</i>	China	Far East Asia and Indian subcontinent
HM236368	<i>Rhynchosia golden mosaic Havana virus</i>	<i>Rhynchosia minima</i>	Cuba	Meso- and Latin Americas
DQ406672	<i>Rhynchosia golden mosaic Sinaloa virus</i>	<i>Rhynchosia minima</i>	Mexico	America and Middle East
EU339939	<i>Rhynchosia golden mosaic virus</i>	<i>Asteraceae</i> sp.	Mexico	Meso- and Latin Americas
AF239671	<i>Rhynchosia golden mosaic virus</i>	<i>Rhynchosia minima</i>	Honduras	Meso- and Latin Americas
AF408199	<i>Rhynchosia golden mosaic virus</i>	<i>Nicotiana tabacum</i>	Mexico	Meso- and Latin Americas
EU339936	<i>Rhynchosia golden mosaic virus</i>	<i>Glycine max</i>	Mexico	Meso- and Latin Americas
EU339938	<i>Rhynchosia golden mosaic virus</i>	<i>Glycine max</i>	Mexico	Meso- and Latin Americas
DQ347950	<i>Rhynchosia golden mosaic virus</i>	Not specified	Mexico	Meso- and Latin Americas
EU021216	<i>Rhynchosia golden mosaic Yucatan virus</i>	<i>Rhynchosia minima</i>	Mexico	America and Middle East
KT192632	<i>Rhynchosia golden mosaic Yucatan virus</i>	<i>Glycine max</i>	Cuba	America and Middle East

KT381193	<i>Rhynchosia golden mosaic Yucatan virus</i>	<i>Glycine max</i>	Cuba	America and Middle East
GQ352453	<i>Rhynchosia golden mosaic Yucatan virus</i>	<i>Desmodium sp.</i>	Mexico	America and Middle East
KP641347	<i>Rhynchosia golden mosaic Yucatan virus</i>	<i>Rhynchosia sp.</i>	Jamaica	America and Middle East
KP641349	<i>Rhynchosia golden mosaic Yucatan virus</i>	<i>Rhynchosia sp.</i>	Jamaica	America and Middle East
FJ944019	<i>Rhynchosia mild mosaic virus</i>	<i>Rhynchosia minima</i>	Puerto Rico	Meso- and Latin Americas
HM236370	<i>Rhynchosia rugose golden mosaic virus</i>	<i>Rhynchosia minima</i>	Cuba	Meso- and Latin Americas
HM777508	<i>Rhynchosia yellow mosaic India virus</i>	<i>Rhynchosia sp.</i>	India	Asia and Africa
HM777509	<i>Rhynchosia yellow mosaic India virus</i>	<i>Rhynchosia sp.</i>	India	Asia and Africa
AM999981	<i>Rhynchosia yellow mosaic virus</i>	<i>Rhynchosia minima</i>	Pakistan	Asia and Africa
FM208847	<i>Rhynchosia yellow mosaic virus</i>	<i>Rhynchosia minima</i>	Pakistan	Asia and Africa
KP752090	<i>Rhynchosia yellow mosaic virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
GQ478342	<i>Rose leaf curl virus</i>	<i>Nicotiana benthamiana</i>	Pakistan	Asia and Africa
KF584008	<i>Rose leaf curl virus</i>	<i>Rosaceae sp.</i>	India	Asia and Africa
KJ739692	<i>Rose leaf curl virus</i>	<i>Rosaceae sp.</i>	India	Asia and Africa
JN809822	<i>Sauropus leaf curl virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809825	<i>Sauropus leaf curl virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
JN809827	<i>Sauropus leaf curl virus</i>	<i>Sauropus androgynus</i>	Thailand	Far East Asia and Indian subcontinent
AJ876550	<i>Senecio yellow mosaic virus</i>	<i>Senecio scandens</i>	China	Far East Asia and Indian subcontinent
KU852742	<i>Senna leaf curl virus</i>	<i>Senna occidentalis</i>	India	Asia and Africa
KX691403	<i>Sida angular mosaic virus</i>	<i>Sida spinosa</i>	Brazil	Meso- and Latin Americas
KX691404	<i>Sida angular mosaic virus</i>	<i>Sida acuta</i>	Brazil	Meso- and Latin Americas
KX691407	<i>Sida angular mosaic virus</i>	<i>Sida acuta</i>	Brazil	Meso- and Latin Americas
KX691408	<i>Sida angular mosaic virus</i>	<i>Sida acuta</i>	Brazil	Meso- and Latin Americas
KX691406	<i>Sida angular mosaic virus</i>	<i>Sida sp.</i>	Brazil	Meso- and Latin Americas
KY555798	<i>Sida Brazil virus</i>	<i>Phaseolus vulgaris</i>	Argentina	Meso- and Latin Americas
KX348184	<i>Sida bright yellow mosaic virus</i>	<i>Sida sp.</i>	Brazil	Meso- and Latin Americas
KX348183	<i>Sida chlorotic mottle virus</i>	<i>Sida sp.</i>	Brazil	Meso- and Latin Americas
KX691402	<i>Sida chlorotic vein virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
KX691405	<i>Sida chlorotic vein virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
JX857691	<i>Sida ciliaris golden mosaic virus</i>	<i>Sida ciliaris</i>	Venezuela	Meso- and Latin Americas
EU710751	<i>Sida common mosaic virus</i>	<i>Sida rhombifolia</i>	Brazil	Meso- and Latin Americas
JX871370	<i>Sida common mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas

JX871371	<i>Sida common mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
JX871372	<i>Sida common mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
JX871373	<i>Sida common mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
KC706531	<i>Sida common mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
HQ009521	<i>Sida golden mosaic Braco virus</i>	<i>Sida sp.</i>	Jamaica	Meso- and Latin Americas
JX162594	<i>Sida golden mosaic Braco virus</i>	<i>Sida sp.</i>	Jamaica	Meso- and Latin Americas
JX162595	<i>Sida golden mosaic Braco virus</i>	<i>Sida sp.</i>	Jamaica	Meso- and Latin Americas
FN436001	<i>Sida golden mosaic Brazil virus</i>	<i>Sida sp.</i>	Brazil	Meso- and Latin Americas
HQ008338	<i>Sida golden mosaic Backup virus</i>	<i>Capsicum sp.</i>	Jamaica	Meso- and Latin Americas
JX162591	<i>Sida golden mosaic Backup virus</i>	<i>Sida sp.</i>	Jamaica	Meso- and Latin Americas
X99550	<i>Sida golden mosaic Costa Rica virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
HM003779	<i>Sida golden mosaic Florida virus</i>	<i>Malvastrum coromandelianum</i>	Cuba	Meso- and Latin Americas
HM359015	<i>Sida golden mosaic Florida virus</i>	<i>Malvastrum coromandelianum</i>	Cuba	Meso- and Latin Americas
HE806442	<i>Sida golden mosaic Florida virus</i>	<i>Sida sp.</i>	Cuba	Meso- and Latin Americas
Y11097	<i>Sida golden mosaic Honduras virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
KT099120	<i>Sida golden mosaic Honduras virus</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099121	<i>Sida golden mosaic Honduras virus</i>	Not specified	Guatemala	Meso- and Latin Americas
HE806444	<i>Sida golden mosaic Liguanea virus</i>	<i>Sida rhombifolia</i>	Cuba	Meso- and Latin Americas
HQ009522	<i>Sida golden mosaic Liguanea virus</i>	<i>Sida sp.</i>	Jamaica	Meso- and Latin Americas
AF049336	<i>Sida golden mosaic virus</i>	<i>Sida santaremensis</i>	USA	Meso- and Latin Americas
GQ357649	<i>Sida golden mosaic virus</i>	<i>Phaseolus vulgaris</i>	USA	Meso- and Latin Americas
GU997691	<i>Sida golden mottle virus</i>	<i>Sida santaremensis</i>	USA	Meso- and Latin Americas
KX348185	<i>Sida golden yellow spot virus</i>	<i>Sida sp.</i>	Brazil	Meso- and Latin Americas
HQ896203	<i>Sida golden yellow vein virus</i>	<i>Malvastrum coromandelianum</i>	Cuba	Meso- and Latin Americas
KT879814	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879816	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879817	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879819	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879820	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879822	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879823	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879825	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas

KT879826	<i>Sida golden yellow vein virus</i>	<i>Sida acuta</i>	USA	Meso- and Latin Americas
KT879828	<i>Sida golden yellow vein virus</i>	<i>Passiflora edulis</i>	Colombia	Meso- and Latin Americas
HQ009519	<i>Sida golden yellow vein virus</i>	<i>Sida</i> sp.	Jamaica	Meso- and Latin Americas
AM050730	<i>Sida leaf curl virus</i>	<i>Sida cordifolia</i>	China	Asia and Africa
DQ641706	<i>Sida leaf curl virus</i>	<i>Abutilon indicum</i>	Vietnam	Asia and Africa
DQ641707	<i>Sida leaf curl virus</i>	<i>Abutilon indicum</i>	Vietnam	Asia and Africa
AJ557450	<i>Sida micrantha mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
AJ557451	<i>Sida micrantha mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
EU908733	<i>Sida micrantha mosaic virus</i>	<i>Abelmoschus esculentus</i>	Brazil	Meso- and Latin Americas
FJ686693	<i>Sida micrantha mosaic virus</i>	<i>Glycine max</i>	Brazil	Meso- and Latin Americas
FN436003	<i>Sida micrantha mosaic virus</i>	<i>Sida rhombifolia</i>	Brazil	Meso- and Latin Americas
FN436005	<i>Sida micrantha mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
FN557522	<i>Sida micrantha mosaic virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
HM357459	<i>Sida micrantha mosaic virus</i>	<i>Phaseolus vulgaris</i>	Brazil	Meso- and Latin Americas
HM585431	<i>Sida micrantha mosaic virus</i>	<i>Sida rhombifolia</i>	Bolivia	Meso- and Latin Americas
HM585433	<i>Sida micrantha mosaic virus</i>	<i>Sidastrum micranthum</i>	Bolivia	Meso- and Latin Americas
HM585437	<i>Sida micrantha mosaic virus</i>	<i>Sida rhombifolia</i>	Bolivia	Meso- and Latin Americas
HM585439	<i>Sida micrantha mosaic virus</i>	<i>Sida rhombifolia</i>	Bolivia	Meso- and Latin Americas
JX415194	<i>Sida micrantha mosaic virus</i>	<i>Sida santaremensis</i>	Brazil	Meso- and Latin Americas
KC706535	<i>Sida micrantha mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706536	<i>Sida micrantha mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706537	<i>Sida micrantha mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KU852503	<i>Sida micrantha mosaic virus</i>	<i>Glycine max</i>	Brazil	Meso- and Latin Americas
KX691401	<i>Sida micrantha mosaic virus</i>	<i>Sida spinosa</i>	Brazil	Meso- and Latin Americas
MF957204	<i>Sida micrantha mosaic virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
JX415195	<i>Sida micrantha mosaic virus</i>	<i>Sida santaremensis</i>	Brazil	Meso- and Latin Americas
KY650717	<i>Sida micrantha mosaic virus</i>	<i>Oxalis</i> sp.	Brazil	Meso- and Latin Americas
KY650722	<i>Sida micrantha mosaic virus</i>	<i>Oxalis</i> sp.	Brazil	Meso- and Latin Americas
JX415187	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348155	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348156	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348157	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas

KX348158	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348159	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348160	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348161	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348162	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348163	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX348164	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX691410	<i>Sida micrantha mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
JF694471	<i>Sida mosaic Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
JF694472	<i>Sida mosaic Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KJ742421	<i>Sida mosaic Bolivia virus</i>	<i>Salvia hispanica</i>	Argentina	Meso- and Latin Americas
HM585441	<i>Sida mosaic Bolivia virus 1</i>	<i>Sida micrantha</i>	Bolivia	Meso- and Latin Americas
HM585443	<i>Sida mosaic Bolivia virus 2</i>	<i>Sida micrantha</i>	Bolivia	Meso- and Latin Americas
KX440613	<i>Sida mosaic Sinaloa virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
KX440612	<i>Sida mosaic Sinaloa virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
DQ520944	<i>Sida mosaic Sinaloa virus</i>	<i>Sida</i> sp.	Mexico	Meso- and Latin Americas
JX871384	<i>Sida mottle Alagoas virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
JX871385	<i>Sida mottle Alagoas virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
MH371469	<i>Sida mottle Alagoas virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
JX871386	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
JX871387	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896415	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896416	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896417	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896418	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896419	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896420	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896421	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896422	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896423	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896424	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896425	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas

KX896426	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KX896427	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
JX871388	<i>Sida mottle Alagoas virus</i>	<i>Sida</i> sp.	Brazil	
JX871377	<i>Sida mottle virus</i>	<i>Sida santaremensis</i>	Brazil	Meso- and Latin Americas
JX871378	<i>Sida mottle virus</i>	<i>Sida santaremensis</i>	Brazil	Meso- and Latin Americas
AY090555	<i>Sida mottle virus</i>	Not specified	Brazil	Meso- and Latin Americas
JX871380	<i>Sida yellow blotch virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
JX871381	<i>Sida yellow blotch virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
JX871382	<i>Sida yellow blotch virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
KX640991	<i>Sida yellow blotch virus</i>	<i>Phaseolus lunatus</i>	Brazil	Meso- and Latin Americas
MF163258	<i>Sida yellow golden mosaic virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KC706538	<i>Sida yellow leaf curl virus</i>	<i>Sida rhombifolia</i>	Brazil	America and Middle East
KC706539	<i>Sida yellow leaf curl virus</i>	<i>Sida rhombifolia</i>	Brazil	America and Middle East
JX871383	<i>Sida yellow mosaic Alagoas virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
AJ810096	<i>Sida yellow mosaic China virus</i>	<i>Sida acuta</i>	China	Far East Asia and Indian subcontinent
AM048837	<i>Sida yellow mosaic China virus</i>	<i>Sida acuta</i>	China	Far East Asia and Indian subcontinent
JX871369	<i>Sida yellow mosaic virus</i>	<i>Sida santaremensis</i>	Brazil	Meso- and Latin Americas
AY090558	<i>Sida yellow mosaic virus</i>	Not specified	Brazil	Meso- and Latin Americas
KX513859	<i>Sida yellow mosaic virus</i>	<i>Sida</i> sp.	India	Asia and Africa
DQ875872	<i>Sida yellow mosaic Yucatan virus</i>	<i>Sida acuta</i>	Mexico	Meso- and Latin Americas
HE806448	<i>Sida yellow mottle virus</i>	<i>Sida micrantha</i>	Cuba	Meso- and Latin Americas
HQ822123	<i>Sida yellow mottle virus</i>	<i>Sida rhombifolia</i>	Cuba	Meso- and Latin Americas
JN411687	<i>Sida yellow mottle virus</i>	<i>Sida rhombifolia</i>	Cuba	Meso- and Latin Americas
JX871376	<i>Sida yellow net virus</i>	<i>Sida micrantha</i>	Brazil	Meso- and Latin Americas
KT957957	<i>Sida yellow net virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KU996355	<i>Sida yellow net virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KU996356	<i>Sida yellow net virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KU996357	<i>Sida yellow net virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
MF957205	<i>Sida yellow net virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
MF957206	<i>Sida yellow net virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
MF957207	<i>Sida yellow net virus</i>	<i>Passiflora edulis</i>	Brazil	Meso- and Latin Americas
AM259382	<i>Sida yellow vein Madurai virus</i>	<i>Sida cardifolia</i>	India	Asia and Africa

DQ641696	<i>Sida yellow vein Vietnam virus</i>	<i>Sida rhombifolia</i>	Vietnam	Far East Asia and Indian subcontinent
KF990601	<i>Sida yellow vein Vietnam virus</i>	<i>Sida acuta</i>	China	Far East Asia and Indian subcontinent
Y11099	<i>Sida yellow vein virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
HM357458	<i>Sidastrum golden leaf spot virus</i>	<i>Sidastrum</i> sp.	Brazil	Meso- and Latin Americas
AM238692	<i>Siegesbeckia yellow vein Guangxi virus</i>	<i>Siegesbeckia glabrescens</i>	China	Far East Asia and Indian subcontinent
AM183224	<i>Siegesbeckia yellow vein virus</i>	<i>Sigesbeckia glabrescens</i>	China	Far East Asia and Indian subcontinent
AM230634	<i>Siegesbeckia yellow vein virus</i>	<i>Sigesbeckia glabrescens</i>	China	Far East Asia and Indian subcontinent
AM230635	<i>Siegesbeckia yellow vein virus</i>	<i>Sigesbeckia glabrescens</i>	China	Far East Asia and Indian subcontinent
JF682838	<i>Siegesbeckia yellow vein virus</i>	<i>Siegesbeckia orientalis</i>	China	Far East Asia and Indian subcontinent
JX294076	<i>Siegesbeckia yellow vein virus</i>	<i>Sigesbeckia glabrescens</i>	China	Far East Asia and Indian subcontinent
KF499589	<i>Siegesbeckia yellow vein virus</i>	<i>Sigesbeckia glabrescens</i>	China	Far East Asia and Indian subcontinent
AJ608286	<i>Sinaloa tomato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Nicaragua	Meso- and Latin Americas
KJ592721	<i>Solanum mosaic Bolivia virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
HM585435	<i>Solanum mosaic Bolivia virus</i>	<i>Solanum</i> sp.	Bolivia	Meso- and Latin Americas
AF155806	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	South Africa	EACM- and SACM-like viruses
AJ422132	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
AJ575560	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zimbabwe	EACM- and SACM-like viruses
KJ887826	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887827	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887839	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887840	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887841	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887845	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887848	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887851	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887853	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887855	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887857	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887859	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887862	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887864	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ887868	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses

KJ888042	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888043	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888044	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888045	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888046	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888052	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888054	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888056	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888057	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888063	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888089	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888093	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888094	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888095	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888097	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888004	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
KJ888090	<i>South African cassava mosaic virus</i>	<i>Manihot esculenta</i>	Madagascar	EACM- and SACM-like viruses
EF016486	<i>Soybean blistering mosaic virus</i>	<i>Glycine max</i>	Argentina	Meso- and Latin Americas
GQ472985	<i>Soybean chlorotic blotch virus</i>	<i>Glycine max</i>	Nigeria	Asia and Africa
GQ472987	<i>Soybean chlorotic blotch virus</i>	<i>Centrosema pubescens</i>	Nigeria	Asia and Africa
KC508642	<i>Soybean chlorotic blotch virus</i>	<i>Phaseolus lunatus</i>	Nigeria	Asia and Africa
KC508643	<i>Soybean chlorotic blotch virus</i>	<i>Phaseolus lunatus</i>	Nigeria	Asia and Africa
KT444611	<i>Soybean chlorotic blotch virus</i>	<i>Sida acuta</i>	Nigeria	Asia and Africa
KT444613	<i>Soybean chlorotic blotch virus</i>	<i>Manihot esculenta</i>	Cameroon	Asia and Africa
KT444615	<i>Soybean chlorotic blotch virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
KT444617	<i>Soybean chlorotic blotch virus</i>	<i>Centrosema pubescens</i>	Cameroon	Asia and Africa
KT454809	<i>Soybean chlorotic blotch virus</i>	<i>Centrosema pubescens</i>	Nigeria	Asia and Africa
KT454811	<i>Soybean chlorotic blotch virus</i>	<i>Sida cordifolia</i>	Togo	Asia and Africa
KT454813	<i>Soybean chlorotic blotch virus</i>	<i>Manihot esculenta</i>	Togo	Asia and Africa
KT454815	<i>Soybean chlorotic blotch virus</i>	<i>Manihot esculenta</i>	Togo	Asia and Africa
KT454817	<i>Soybean chlorotic blotch virus</i>	<i>Asystasia</i>	Benin	Asia and Africa
JX122965	<i>Soybean chlorotic spot virus</i>	<i>Glycine max</i>	Brazil	Meso- and Latin Americas

KJ939917	<i>Soybean chlorotic spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939918	<i>Soybean chlorotic spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	Meso- and Latin Americas
KJ939916	<i>Soybean chlorotic spot virus</i>	<i>Macroptilium lathyroides</i>	Brazil	
GQ472984	<i>Soybean mild mottle virus</i>	<i>Glycine max</i>	Nigeria	Asia and Africa
DQ641694	<i>Spilanthes yellow vein virus</i>	<i>Spilanthes paniculata</i>	Vietnam	Asia and Africa
KF660223	<i>Spinach yellow vein Sikar virus</i>	<i>Spinacia oleracea</i>	India	Asia and Africa
AM260205	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	China	Asia and Africa
AM260206	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	China	Asia and Africa
AY184487	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
DQ026296	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
EU573715	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
JN587811	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
KF999983	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	China	Asia and Africa
MF062251	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	China	Asia and Africa
MF102264	<i>Squash leaf curl China virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
AB330078	<i>Squash leaf curl China virus</i>	<i>Solanum lycopersicum</i>	Thailand	Asia and Africa
AM286794	<i>Squash leaf curl China virus</i>	<i>Cucurbita pepo</i>	Pakistan	Asia and Africa
EF197940	<i>Squash leaf curl China virus</i>	<i>Cucumis sativus</i>	Malaysia	Asia and Africa
EU487031	<i>Squash leaf curl China virus</i>	<i>Sechium edule</i>	Philippines	Asia and Africa
EU543562	<i>Squash leaf curl China virus</i>	<i>Benincasa hispida</i>	Thailand	Asia and Africa
GU967381	<i>Squash leaf curl China virus</i>	<i>Cucurbita pepo</i>	India	Asia and Africa
HM566112	<i>Squash leaf curl China virus</i>	<i>Cucumis melo</i>	China	Asia and Africa
KC171648	<i>Squash leaf curl China virus</i>	<i>Cucurbita moschata</i>	China	Asia and Africa
KC857509	<i>Squash leaf curl China virus</i>	<i>Cucurbita moschata</i>	Vietnam	Asia and Africa
KF184992	<i>Squash leaf curl China virus</i>	<i>Cucumis melo</i>	China	Asia and Africa
KF184993	<i>Squash leaf curl China virus</i>	<i>Cucumis melo</i>	China	Asia and Africa
KF188433	<i>Squash leaf curl China virus</i>	<i>Benincasa hispida</i>	India	Asia and Africa
MG525551	<i>Squash leaf curl China virus</i>	<i>Cucurbita moschata</i>	China	Asia and Africa
AB027465	<i>Squash leaf curl China virus</i>	Not specified	China	Asia and Africa
AF509741	<i>Squash leaf curl China virus</i>	Not specified	Vietnam	Asia and Africa
AF509743	<i>Squash leaf curl China virus</i>	Not specified	Vietnam	Asia and Africa
DQ866135	<i>Squash leaf curl Philippines virus</i>	<i>Cucurbita</i> sp.	Taiwan	Asia and Africa

EU487033	<i>Squash leaf curl Philippines virus</i>	<i>Cucurbita</i> sp.	Philippines	Asia and Africa
EU487041	<i>Squash leaf curl Philippines virus</i>	<i>Cucurbita</i> sp.	Philippines	Asia and Africa
AB085793	<i>Squash leaf curl Philippines virus</i>	<i>Cucurbita moschata</i>	Philippines	Asia and Africa
EF199774	<i>Squash leaf curl Philippines virus</i>	<i>Cucurbita moschata</i>	Taiwan	Asia and Africa
EU310406	<i>Squash leaf curl Philippines virus</i>	<i>Benincasa hispida</i>	Taiwan	Asia and Africa
JF746195	<i>Squash leaf curl Philippines virus</i>	<i>Sechium edule</i>	Taiwan	Asia and Africa
MH665365	<i>Squash leaf curl Thailand virus</i>	<i>Cucumis melo</i>	Thailand	Asia and Africa
HQ184436	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KC441465	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KC895398	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Egypt	America and Middle East
KM595092	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595093	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595094	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595095	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595096	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595097	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595098	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595099	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595100	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595101	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595102	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595103	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595104	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595105	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595106	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595107	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595108	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595109	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595110	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595111	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595112	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East
KM595113	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Israel	America and Middle East

KM595219	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595224	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595227	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595228	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595229	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595230	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595231	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595234	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595235	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595236	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595237	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KM595238	<i>Squash leaf curl virus</i>	<i>Cucurbita</i> sp.	Palestine	America and Middle East
KY652743	<i>Squash leaf curl virus</i>	<i>Cucurbita pepo</i>	East Timor	Asia and Africa
AF256203	<i>Squash leaf curl virus</i>	<i>Citrullus lanatus</i>	USA	America and Middle East
DQ285019	<i>Squash leaf curl virus</i>	<i>Cucurbita pepo</i>	Egypt	America and Middle East
EF532620	<i>Squash leaf curl virus</i>	<i>Malva parviflora</i>	Jordan	America and Middle East
HG969273	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	America and Middle East
HG969274	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	America and Middle East
HG969275	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	America and Middle East
HG969276	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	America and Middle East
HG969277	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	America and Middle East
HM368373	<i>Squash leaf curl virus</i>	<i>Cucurbita pepo</i>	Lebanon	America and Middle East
JX444577	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Jordan	America and Middle East
EU479710	<i>Squash leaf curl virus</i>	Not specified	Taiwan	Asia and Africa
DQ285016	<i>Squash leaf curl virus</i>	Not specified	USA	America and Middle East
JX131281	<i>Squash leaf curl virus</i>	Not specified	Jordan	America and Middle East
KT099117	<i>Squash leaf curl virus</i>	Not specified	USA	America and Middle East
KT099131	<i>Squash leaf curl virus</i>	Not specified	Israel	America and Middle East
KP795975	<i>Squash leaf curl virus</i>	<i>Cucurbita pepo</i>	Egypt	America and Middle East
M38183	<i>Squash leaf curl virus</i>	<i>Cucurbita pepo</i>	Pakistan	America and Middle East
MF187211	<i>Squash leaf curl virus</i>	<i>Cucurbita pepo</i>	Mexico	America and Middle East
MF504010	<i>Squash leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	America and Middle East

MG763920	<i>Squash leaf curl virus</i>	<i>Solanum lycopersicum</i>	Egypt	America and Middle East
MH346454	<i>Squash leaf curl virus</i>	<i>Capsicum annuum</i>	Egypt	America and Middle East
AJ420319	<i>Squash leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KX388157	<i>Squash leaf curl Yunnan virus</i>	<i>Cucurbita pepo</i>	Thailand	Far East Asia and Indian subcontinent
AF421552	<i>Squash mild leaf curl virus</i>	Not specified	USA	America and Middle East
DQ285014	<i>Squash mild leaf curl virus</i>	Not specified	USA	America and Middle East
AJ314737	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	Sri Lanka	Asia and Africa
AJ579307	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ607394	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ890224	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ890225	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ890226	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ890227	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ890228	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
AJ890229	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KC424490	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KF898349	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KP455484	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KP455486	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KR611577	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KR611579	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
KT861468	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	Zambia	Asia and Africa
KU550961	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	India	Asia and Africa
LC312131	<i>Sri Lankan cassava mosaic virus</i>	<i>Glycine max</i>	Vietnam	Asia and Africa
MH891840	<i>Sri Lankan cassava mosaic virus</i>	<i>Manihot esculenta</i>	China	Asia and Africa
AJ810156	<i>Stachytarpheta leaf curl virus</i>	<i>Stachytarpheta</i> sp.	China	Far East Asia and Indian subcontinent
AJ810157	<i>Stachytarpheta leaf curl virus</i>	<i>Stachytarpheta</i> sp.	China	Far East Asia and Indian subcontinent
AJ495814	<i>Stachytarpheta leaf curl virus</i>	<i>Stachytarpheta jamaicensis</i>	China	Far East Asia and Indian subcontinent
AJ564742	<i>Stachytarpheta leaf curl virus</i>	<i>Stachytarpheta</i> sp.	China	Far East Asia and Indian subcontinent
AJ564743	<i>Stachytarpheta leaf curl virus</i>	<i>Stachytarpheta</i> sp.	China	Far East Asia and Indian subcontinent
JX678965	<i>Sunflower leaf curl virus</i>	<i>Helianthus annuus</i>	India	Asia and Africa
FJ455449	<i>Sunn hemp leaf distortion virus</i>	<i>Crotalaria juncea</i>	India	Asia and Africa

GQ183867	<i>Sunn hemp leaf distortion virus</i>	<i>Crotalaria juncea</i>	India	Asia and Africa
HQ333143	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ393444	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393452	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393454	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393457	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393459	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
KF803170	<i>Sweet potato golden vein associated virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992056	<i>Sweet potato golden vein Korea virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
FN432356	<i>Sweet potato leaf curl Bengal virus</i>	<i>Ipomoea batatas</i>	India	Sweepoviruses
EF456742	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
EF456745	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
EU856365	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
FJ529203	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
KU992909	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KX033430	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KX033435	<i>Sweet potato leaf curl Canary virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
DQ512731	<i>Sweet potato leaf curl China virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
JF736657	<i>Sweet potato leaf curl China virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KX611145	<i>Sweet potato leaf curl Georgia virus</i>	<i>Ipomoea sp.</i>	Argentina	Sweepoviruses
AF326775	<i>Sweet potato leaf curl Georgia virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
JX448368	<i>Sweet potato leaf curl Georgia virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KC253236	<i>Sweet potato leaf curl Georgia virus</i>	<i>Ipomoea batatas</i>	Cuba	Sweepoviruses
KF769447	<i>Sweet potato leaf curl Georgia virus</i>	<i>Ipomoea purpurea</i>	China	Sweepoviruses
KJ476510	<i>Sweet potato leaf curl Guangxi virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KC907406	<i>Sweet potato leaf curl Henan virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KJ476507	<i>Sweet potato leaf curl Henan virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KJ476509	<i>Sweet potato leaf curl Henan virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
MH577011	<i>Sweet potato leaf curl Hubei virus</i>	<i>Ipomoea batatas</i>	China	Asia and Africa
FJ560719	<i>Sweet potato leaf curl Korean virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
EF456746	<i>Sweet potato leaf curl Lanzarote virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
EU839579	<i>Sweet potato leaf curl Lanzarote virus</i>	<i>Ipomoea indica</i>	Spain	Sweepoviruses

HQ393477	<i>Sweet potato leaf curl Sao Paulo virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
JQ621844	<i>Sweet potato leaf curl Sao Paulo virus</i>	<i>Ipomoea batatas</i>	South Africa	Sweepoviruses
KF836891	<i>Sweet potato leaf curl Sao Paulo virus</i>	<i>Ipomoea batatas</i>	Tanzania	Sweepoviruses
KX859238	<i>Sweet potato leaf curl Sao Paulo virus</i>	<i>Ipomoea batatas</i>	South Africa	Sweepoviruses
KF040467	<i>Sweet potato leaf curl Shanghai virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KF040468	<i>Sweet potato leaf curl Shanghai virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KJ013581	<i>Sweet potato leaf curl Shanghai virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KC488316	<i>Sweet potato leaf curl Sichuan virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KF156759	<i>Sweet potato leaf curl Sichuan virus</i>	<i>Lycopersicon esculentum</i>	China	Sweepoviruses
HQ333144	<i>Sweet potato leaf curl South Carolina virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
EF456741	<i>Sweet potato leaf curl Spain virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
EF456743	<i>Sweet potato leaf curl Spain virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
FJ151200	<i>Sweet potato leaf curl Spain virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
HQ393448	<i>Sweet potato leaf curl Spain virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393458	<i>Sweet potato leaf curl Spain virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FR751068	<i>Sweet potato leaf curl Uganda virus</i>	<i>Ipomoea setosa</i>	Uganda	Sweepoviruses
KY270781	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea</i> sp.	Sudan	Sweepoviruses
KY270782	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea</i> sp.	Sudan	Sweepoviruses
KY783941	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea</i> sp.	China	Sweepoviruses
AB433786	<i>Sweet potato leaf curl virus</i>	Not specified	Japan	Sweepoviruses
AB433787	<i>Sweet potato leaf curl virus</i>	Not specified	Japan	Sweepoviruses
AB433788	<i>Sweet potato leaf curl virus</i>	Not specified	Japan	Sweepoviruses
AF104036	<i>Sweet potato leaf curl virus</i>	Not specified	USA	Sweepoviruses
DQ644562	<i>Sweet potato leaf curl virus</i>	Not specified	Puerto Rico	Sweepoviruses
DQ644563	<i>Sweet potato leaf curl virus</i>	Not specified	Puerto Rico	Sweepoviruses
EU309693	<i>Sweet potato leaf curl virus</i>	Not specified	China	Sweepoviruses
KT099133	<i>Sweet potato leaf curl virus</i>	Not specified	Puerto Rico	Sweepoviruses
KT099140	<i>Sweet potato leaf curl virus</i>	Not specified	Puerto Rico	Sweepoviruses
KT099143	<i>Sweet potato leaf curl virus</i>	Not specified	Puerto Rico	Sweepoviruses
KT099144	<i>Sweet potato leaf curl virus</i>	Not specified	Spain	Sweepoviruses
KT099145	<i>Sweet potato leaf curl virus</i>	Not specified	Spain	Sweepoviruses
EF456744	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses

EU253456	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	China	Sweepoviruses
EU267799	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	China	Sweepoviruses
EU856364	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
EU856366	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Spain	Sweepoviruses
FJ176701	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
FJ515896	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	China	Sweepoviruses
FJ515898	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	China	Sweepoviruses
FJ969829	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969830	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969832	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969833	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969834	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969835	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969836	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FJ969837	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
FN806776	<i>Sweet potato leaf curl virus</i>	<i>Phaseolus vulgaris</i>	China	Sweepoviruses
HM754634	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754635	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754636	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754637	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754638	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754639	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754640	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HM754641	<i>Sweet potato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	Sweepoviruses
HQ333135	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ333136	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ333137	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ333138	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ333139	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ333140	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	USA	Sweepoviruses
HQ333141	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea setosa</i>	USA	Sweepoviruses
HQ333142	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea setosa</i>	USA	Sweepoviruses

HQ393442	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393443	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393445	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393446	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393447	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393449	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393450	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393451	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393453	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393455	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393456	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393460	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393461	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393462	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393463	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393464	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393465	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393466	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393467	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393468	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393469	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393470	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393471	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393472	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393473	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393474	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393475	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
HQ393476	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
JF768740	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea indica</i>	China	Sweepoviruses
JQ349087	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Argentina	Sweepoviruses
JX050195	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	India	Sweepoviruses
JX050196	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	India	Sweepoviruses

JX050197	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	India	Sweepoviruses
JX286653	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
JX286654	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
JX286655	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
JX961670	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
JX961671	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
JX961672	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
JX961673	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
JX961674	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KC253233	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Peru	Sweepoviruses
KC253234	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Peru	Sweepoviruses
KC253235	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Peru	Sweepoviruses
KC253237	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Mexico	Sweepoviruses
KC253238	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	Saint Vincent and the Grenadines	Sweepoviruses
KF040464	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KF040465	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KF040466	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KF697069	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea indica</i>	Greece	Sweepoviruses
KF697070	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea indica</i>	Greece	Sweepoviruses
KF697071	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea indica</i>	Greece	Sweepoviruses
KF716172	<i>Sweet potato leaf curl virus</i>	<i>Merremia dissecta</i>	Venezuela	Sweepoviruses
KM050768	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	India	Sweepoviruses
KT202303	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
KT992048	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992049	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992050	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992051	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992052	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992053	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992055	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992057	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992058	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses

KT992059	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992060	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992061	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992062	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992063	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992064	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992065	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992066	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KT992067	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	Sweepoviruses
KU323597	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	China	Sweepoviruses
MG254542	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea indica</i>	Portugal	Sweepoviruses
MG254543	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea indica</i>	Portugal	Sweepoviruses
FJ515897	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea purpurea</i>	China	
KT992054	<i>Sweet potato leaf curl virus</i>	<i>Ipomoea batatas</i>	South Korea	
FJ969831	<i>Sweet potato mosaic virus</i>	<i>Ipomoea batatas</i>	Brazil	Sweepoviruses
JQ621843	<i>Sweet potato mosaic virus</i>	<i>Ipomoea batatas</i>	South Africa	Sweepoviruses
KX859239	<i>Sweet potato mosaic virus</i>	<i>Ipomoea batatas</i>	South Africa	Sweepoviruses
KJ939345	<i>Synedrella leaf curl virus</i>	<i>Synedrella nodiflora</i>	India	Asia and Africa
KU933258	<i>Synedrella leaf curl virus</i>	<i>Eclipta prostrata</i>	China	Asia and Africa
KT454832	<i>Telfairia golden mosaic virus</i>	<i>Telfairia occidentalis</i>	Cameroon	Asia and Africa
KU683743	<i>Telfairia mosaic virus</i>	<i>Telfairia occidentalis</i>	Cameroon	Asia and Africa
KU683744	<i>Telfairia mosaic virus</i>	<i>Telfairia occidentalis</i>	Cameroon	Asia and Africa
GU001879	<i>Tobacco curly shoot virus</i>	<i>Capsicum</i> sp.	China	Asia and Africa
AJ420318	<i>Tobacco curly shoot virus</i>	Not specified	China	Asia and Africa
AF240675	<i>Tobacco curly shoot virus</i>	<i>Nicotiana tabacum</i>	China	Asia and Africa
AJ457986	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
AJ971266	<i>Tobacco curly shoot virus</i>	<i>Ageratum conyzoides</i>	China	Asia and Africa
GU199583	<i>Tobacco curly shoot virus</i>	<i>Alternanthera philoxeroides</i>	China	Asia and Africa
GU199584	<i>Tobacco curly shoot virus</i>	<i>Mirabilis jalapa</i>	China	Asia and Africa
HQ407395	<i>Tobacco curly shoot virus</i>	<i>Helianthus annuus</i>	India	Asia and Africa
JN387045	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JQ733557	<i>Tobacco curly shoot virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa

JX457341	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JX457342	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JX467692	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JX467693	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551584	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KM383752	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383753	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383754	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383755	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383756	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383757	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KU198364	<i>Tobacco curly shoot virus</i>	<i>Citrullus lanatus</i>	China	Asia and Africa
KU934094	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
KU934095	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
KU934096	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
KU934097	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
KU934098	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
KX290924	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
KX290925	<i>Tobacco curly shoot virus</i>	<i>Solanum lycopersicum</i>	China	Asia and Africa
LC316184	<i>Tobacco curly shoot virus</i>	<i>Sida acuta</i>	India	Asia and Africa
MF977704	<i>Tobacco curly shoot virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
MF977705	<i>Tobacco curly shoot virus</i>	<i>Malvastrum coromandelianum</i>	China	Asia and Africa
MH165181	<i>Tobacco curly shoot virus</i>	<i>Phaseolus vulgaris</i>	China	Asia and Africa
HG003650	<i>Tobacco curly shoot virus</i>	<i>Petunia</i> sp.	China	Asia and Africa
AM701760	<i>Tobacco leaf curl Comoros virus</i>	<i>Nicotiana tabacum</i>	Comoros	Asia and Africa
AM701762	<i>Tobacco leaf curl Comoros virus</i>	<i>Nicotiana tabacum</i>	Comoros	Asia and Africa
AM050143	<i>Tobacco leaf curl Cuba virus</i>	<i>Nicotiana tabacum</i>	Cuba	Meso- and Latin Americas
KU562963	<i>Tobacco leaf curl Cuba virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
KX011471	<i>Tobacco leaf curl Cuba virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
AB028604	<i>Tobacco leaf curl Japan virus</i>	<i>Solanum lycopersicum</i>	Japan	Far East Asia and Indian subcontinent
AB055008	<i>Tobacco leaf curl Japan virus</i>	<i>Lycopersicon esculentum</i>	Japan	Far East Asia and Indian subcontinent
EF620536	<i>Tobacco leaf curl Japan virus</i>	<i>Lonicera japonica</i>	Japan	Far East Asia and Indian subcontinent

HQ180391	<i>Tobacco leaf curl Pusa virus</i>	<i>Nicotiana tabacum</i>	India	Far East Asia and Indian subcontinent
KM383734	<i>Tobacco leaf curl Pusa virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Far East Asia and Indian subcontinent
KT322140	<i>Tobacco leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Thailand	Asia and Africa
DQ871221	<i>Tobacco leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
HM164541	<i>Tobacco leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
HM164549	<i>Tobacco leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
KT992046	<i>Tobacco leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
KT992047	<i>Tobacco leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	Far East Asia and Indian subcontinent
AF240674	<i>Tobacco leaf curl Yunnan virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AJ512761	<i>Tobacco leaf curl Yunnan virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AJ512762	<i>Tobacco leaf curl Yunnan virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AJ566744	<i>Tobacco leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
AJ971267	<i>Tobacco leaf curl Yunnan virus</i>	<i>Ageratum conyzoides</i>	China	Far East Asia and Indian subcontinent
AF350330	<i>Tobacco leaf curl Zimbabwe virus</i>	Not specified	Zimbabwe	Asia and Africa
AM701756	<i>Tobacco leaf curl Zimbabwe virus</i>	<i>Nicotiana tabacum</i>	Comoros	Asia and Africa
AJ488768	<i>Tobacco leaf rugose virus</i>	<i>Nicotiana tabacum</i>	Cuba	Meso- and Latin Americas
FM160943	<i>Tobacco mottle leaf curl virus</i>	<i>Passiflora edulis</i>	Cuba	Meso- and Latin Americas
FJ213931	<i>Tobacco yellow crinkle virus</i>	<i>Phaseolus vulgaris</i>	Cuba	Meso- and Latin Americas
FJ222587	<i>Tobacco yellow crinkle virus</i>	<i>Nicotiana benthamiana</i>	Cuba	Meso- and Latin Americas
KU562964	<i>Tobacco yellow crinkle virus</i>	<i>Glycine max</i>	Cuba	Meso- and Latin Americas
KP641345	<i>Tobacco yellow crinkle virus</i>	<i>Rhynchosia</i> sp.	Jamaica	Meso- and Latin Americas
KC791690	<i>Tomato bright yellow mosaic virus</i>	<i>Solanum</i> sp.	Brazil	Meso- and Latin Americas
AY339619	<i>Tomato chino La Paz virus</i>	Not specified	Mexico	Meso- and Latin Americas
AY339618	<i>Tomato chino La Paz virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
DQ347948	<i>Tomato chino La Paz virus</i>	<i>Solanum rostratum</i>	Mexico	Meso- and Latin Americas
DQ347949	<i>Tomato chino La Paz virus</i>	<i>Solanum rostratum</i>	Mexico	Meso- and Latin Americas
HM459852	<i>Tomato chino La Paz virus</i>	<i>Capsicum annuum</i>	Mexico	Meso- and Latin Americas
JN676150	<i>Tomato Chino La Paz virus</i>	<i>Solanum lycopersicum</i>	Mexico	Meso- and Latin Americas
KY449277	<i>Tomato chlorotic leaf curl virus</i>	<i>Solanum lycopersicum</i>	Venezuela	Meso- and Latin Americas
JN241632	<i>Tomato chlorotic leaf distortion virus</i>	<i>Capsicum</i> sp.	Venezuela	Meso- and Latin Americas
HQ201952	<i>Tomato chlorotic leaf distortion virus</i>	<i>Solanum lycopersicum</i>	Venezuela	Meso- and Latin Americas
KR263179	<i>Tomato chlorotic mottle Guyane virus</i>	<i>Solanum lycopersicum</i>	French Guiana	Meso- and Latin Americas

KR263180	<i>Tomato chlorotic mottle Guyane virus</i>	<i>Solanum lycopersicum</i>	French Guiana	Meso- and Latin Americas
KR263181	<i>Tomato chlorotic mottle Guyane virus</i>	<i>Solanum lycopersicum</i>	French Guiana	Meso- and Latin Americas
AY090557	<i>Tomato chlorotic mottle virus</i>	Not specified	Brazil	Meso- and Latin Americas
AF490004	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
DQ336353	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706540	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706541	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706542	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706543	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706546	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706547	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706548	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706549	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706550	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706551	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706552	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706553	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706554	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706555	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706556	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706557	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706558	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706559	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706560	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706561	<i>Tomato chlorotic mottle virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706544	<i>Tomato chlorotic mottle virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KC706545	<i>Tomato chlorotic mottle virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
EU710754	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706568	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706569	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706570	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706572	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East

KC706573	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706574	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706575	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706576	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706577	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706578	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706579	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706581	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706582	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706583	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706584	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706585	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706586	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706587	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706588	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706589	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KT203558	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KC706571	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	
KC706580	<i>Tomato common mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	
AF261885	<i>Tomato curly stunt virus</i>	<i>Solanum lycopersicum</i>	South Africa	Asia and Africa
JN564749	<i>Tomato dwarf leaf virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KP195260	<i>Tomato enation leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
K02029	<i>Tomato golden mosaic virus</i>	Not specified	Not specified	Meso- and Latin Americas
JF694488	<i>Tomato golden mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF694490	<i>Tomato golden mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
EF501976	<i>Tomato golden mottle virus</i>	Not specified	Mexico	Meso- and Latin Americas
AF132852	<i>Tomato golden mottle virus</i>	<i>Solanum lycopersicum</i>	Guatemala	Meso- and Latin Americas
DQ520943	<i>Tomato golden mottle virus</i>	<i>Lycopersicon esculentum</i>	Mexico	Meso- and Latin Americas
JF803254	<i>Tomato golden vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803255	<i>Tomato golden vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803256	<i>Tomato golden vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803257	<i>Tomato golden vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas

JF803258	<i>Tomato golden vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803259	<i>Tomato golden vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803252	<i>Tomato interveinal chlorosis virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803253	<i>Tomato interveinal chlorosis virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KM926623	<i>Tomato latent virus</i>	<i>Solanum lycopersicum</i>	Cuba	Meso- and Latin Americas
AM701758	<i>Tomato leaf curl Anjouan virus</i>	<i>Lycopersicum esculentum</i>	Comoros	Asia and Africa
AM701766	<i>Tomato leaf curl Antsiranana virus</i>	<i>Lycopersicum esculentum</i>	Madagascar	Asia and Africa
AM701767	<i>Tomato leaf curl Antsiranana virus</i>	<i>Lycopersicum esculentum</i>	Madagascar	Asia and Africa
DQ519575	<i>Tomato leaf curl Arusha virus</i>	<i>Solanum lycopersicum</i>	Tanzania	Asia and Africa
EF194760	<i>Tomato leaf curl Arusha virus</i>	<i>Solanum lycopersicum</i>	Tanzania	Asia and Africa
AF295401	<i>Tomato leaf curl Bangalore virus</i>	Not specified	India	Asia and Africa
AF428255	<i>Tomato leaf curl Bangalore virus</i>	Not specified	India	Asia and Africa
AY428770	<i>Tomato leaf curl Bangalore virus</i>	Not specified	India	Asia and Africa
AY456684	<i>Tomato leaf curl Bangalore virus</i>	Not specified	India	Asia and Africa
DQ852623	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
DQ887537	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
GU474418	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551588	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF663697	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF663698	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164855	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164856	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164857	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164858	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164859	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164860	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164861	<i>Tomato leaf curl Bangalore virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
Z48182	<i>Tomato leaf curl Bangalore virus</i>	<i>Abutilon sellovianum</i>	India	Asia and Africa
JQ765395	<i>Tomato leaf curl Bangladesh virus</i>	<i>Gaillardia</i> sp.	India	Asia and Africa
AF188481	<i>Tomato leaf curl Bangladesh virus</i>	Not specified	Bangladesh	Asia and Africa
KM383758	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383759	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa

KM383760	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383761	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383762	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383763	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383764	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383765	<i>Tomato leaf curl Bangladesh virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
LN680627	<i>Tomato leaf curl Barka virus</i>	<i>Sesbania</i> sp.	Oman	TYLC-like viruses
KF260965	<i>Tomato leaf curl Barka virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF260966	<i>Tomato leaf curl Barka virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF260967	<i>Tomato leaf curl Barka virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF260969	<i>Tomato leaf curl Barka virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KX853168	<i>Tomato leaf curl Burkina Faso virus</i>	<i>Solanum lycopersicum</i>	Burkina Faso	Asia and Africa
FM210278	<i>Tomato leaf curl Cameroon virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
HE659516	<i>Tomato leaf curl Cameroon virus</i>	<i>Solanum lycopersicum</i>	Cameroon	Asia and Africa
KT382327	<i>Tomato leaf curl Cameroon virus</i>	<i>Solanum lycopersicum</i>	Ghana	Asia and Africa
EU487025	<i>Tomato leaf curl Cebu virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487042	<i>Tomato leaf curl Cebu virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487043	<i>Tomato leaf curl Cebu virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487044	<i>Tomato leaf curl Cebu virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
KU946997	<i>Tomato leaf curl Cebu virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AJ558118	<i>Tomato leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ558119	<i>Tomato leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ704602	<i>Tomato leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AJ704603	<i>Tomato leaf curl China virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JF681158	<i>Tomato leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
JX972142	<i>Tomato leaf curl China virus</i>	<i>Oxalis corniculata</i>	China	Far East Asia and Indian subcontinent
KU980916	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980917	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980918	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980919	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980920	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980921	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent

KU980922	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980923	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980924	<i>Tomato leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
AJ865341	<i>Tomato leaf curl Comoros virus</i>	<i>Lycopersicon esculentum</i>	Mayotte	Asia and Africa
AM701759	<i>Tomato leaf curl Comoros virus</i>	<i>Lycopersicum esculentum</i>	Comoros	Asia and Africa
EU487047	<i>Tomato leaf curl Cotabato virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487048	<i>Tomato leaf curl Cotabato virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AM701765	<i>Tomato leaf curl Diana virus</i>	<i>Lycopersicum esculentum</i>	Madagascar	Asia and Africa
KC952005	<i>Tomato leaf curl Gandhinagar virus</i>	<i>Solanum</i> sp.	India	Asia and Africa
KT382326	<i>Tomato leaf curl Ghana virus</i>	<i>Solanum lycopersicum</i>	Ghana	Asia and Africa
AY602165	<i>Tomato leaf curl Guangdong virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AM236784	<i>Tomato leaf curl Guangxi virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
AM236785	<i>Tomato leaf curl Guangxi virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
AM236786	<i>Tomato leaf curl Guangxi virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KJ524905	<i>Tomato leaf curl Guangxi virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KY799159	<i>Tomato leaf curl Gujarat virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
AF413671	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
AF449999	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
AY190290	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
AY234383	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	Nepal	Asia and Africa
EU573714	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
FR819708	<i>Tomato leaf curl Gujarat virus</i>	<i>Xanthium strumarium</i>	Pakistan	Asia and Africa
GQ994098	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM625838	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF440686	<i>Tomato leaf curl Gujarat virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
KP164862	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP164863	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP178726	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KR092195	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
LN794214	<i>Tomato leaf curl Gujarat virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN794215	<i>Tomato leaf curl Gujarat virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN878127	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa

LN878128	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN886661	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
MG757245	<i>Tomato leaf curl Gujarat virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KF515619	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum sp.</i>	India	Asia and Africa
KF515618	<i>Tomato leaf curl Gujarat virus</i>	<i>Solanum sp.</i>	India	Asia and Africa
FN256261	<i>Tomato leaf curl Hainan virus</i>	<i>Rhynchosia capitata</i>	China	Far East Asia and Indian subcontinent
FN434083	<i>Tomato leaf curl Hainan virus</i>	<i>Sonchus arvensis</i>	China	Far East Asia and Indian subcontinent
HQ162268	<i>Tomato leaf curl Hainan virus</i>	<i>Carica papaya</i>	Vietnam	Far East Asia and Indian subcontinent
HQ162269	<i>Tomato leaf curl Hainan virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
KF150142	<i>Tomato leaf curl Hainan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
HQ162270	<i>Tomato leaf curl Hanoi virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
DQ866131	<i>Tomato leaf curl Hsinchu virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
AY297924	<i>Tomato leaf curl Iran virus</i>	Not specified	Iran	Asia and Africa
AB100304	<i>Tomato leaf curl Java virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Far East Asia and Indian subcontinent
AB162141	<i>Tomato leaf curl Java virus</i>	<i>Ageratum conyzoides</i>	Indonesia	Far East Asia and Indian subcontinent
EF194765	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
HM007095	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
HM007098	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
HM007102	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
HM007108	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
HM007109	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
HM007117	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
KY010624	<i>Tomato leaf curl Joydebpur virus</i>	<i>Capsicum sp.</i>	India	Asia and Africa
AJ875159	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
EU431116	<i>Tomato leaf curl Joydebpur virus</i>	<i>Hibiscus cannabinus</i>	India	Asia and Africa
JN176565	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JQ654460	<i>Tomato leaf curl Joydebpur virus</i>	<i>Phaseolus aureus</i>	India	Asia and Africa
JQ654461	<i>Tomato leaf curl Joydebpur virus</i>	<i>Phaseolus aureus</i>	India	Asia and Africa
JQ654462	<i>Tomato leaf curl Joydebpur virus</i>	<i>Phaseolus aureus</i>	India	Asia and Africa
JQ654463	<i>Tomato leaf curl Joydebpur virus</i>	<i>Amaranthus viridis</i>	India	Asia and Africa
JX311468	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum melongena</i>	India	Asia and Africa
KF551583	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa

KF551591	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KJ028211	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum nigrum</i>	India	Asia and Africa
KM383747	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383748	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383749	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383750	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383751	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
MG544284	<i>Tomato leaf curl Joydebpur virus</i>	<i>Phaseolus vulgaris</i>	India	Asia and Africa
MG649329	<i>Tomato leaf curl Joydebpur virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM007094	<i>Tomato leaf curl Karnataka virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM803118	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM851186	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JX987088	<i>Tomato leaf curl Karnataka virus</i>	<i>Zinnia elegans</i>	India	Asia and Africa
KF551578	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551579	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551581	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551585	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551586	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF663699	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP178730	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP178731	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP195261	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP195263	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KX219744	<i>Tomato leaf curl Karnataka virus</i>	<i>Helianthus annuus</i>	India	Asia and Africa
KX246859	<i>Tomato leaf curl Karnataka virus</i>	<i>Cajanus cajan</i>	India	Asia and Africa
KX665544	<i>Tomato leaf curl Karnataka virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
LN878103	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN878104	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN878121	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN878122	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN878123	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN878125	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa

LN887903	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN887904	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN887907	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LT556079	<i>Tomato leaf curl Karnataka virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
LT556080	<i>Tomato leaf curl Karnataka virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
LT556083	<i>Tomato leaf curl Karnataka virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
MG758148	<i>Tomato leaf curl Karnataka virus</i>	<i>Alcea rosea</i>	India	Asia and Africa
U38239	<i>Tomato leaf curl Karnataka virus</i>	<i>Lycopersicon esculentum</i>	India	Asia and Africa
LN887906	<i>Tomato leaf curl Karnataka virus</i>	<i>Solanum lycopersicum</i>	Pakistan	
LT556073	<i>Tomato leaf curl Karnataka virus</i>	<i>Cape gooseberry</i>	Pakistan	
EU910140	<i>Tomato leaf curl Kerala virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
EU910141	<i>Tomato leaf curl Kerala virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551575	<i>Tomato leaf curl Kerala virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KX665540	<i>Tomato leaf curl Kerala virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
KX665541	<i>Tomato leaf curl Kerala virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
KX665543	<i>Tomato leaf curl Kerala virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
KX671564	<i>Tomato leaf curl Kerala virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX671962	<i>Tomato leaf curl Kerala virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
KX671963	<i>Tomato leaf curl Kerala virus</i>	<i>Brassica rapa</i>	Pakistan	Asia and Africa
KX827601	<i>Tomato leaf curl Kerala virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
LN886521	<i>Tomato leaf curl Kerala virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LT556075	<i>Tomato leaf curl Kerala virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
KX665542	<i>Tomato leaf curl Kerala virus</i>	<i>Brassica rapa</i>	Pakistan	
EU847739	<i>Tomato leaf curl Kumasi virus</i>	<i>Solanum lycopersicum</i>	Ghana	Asia and Africa
KT382325	<i>Tomato leaf curl Kumasi virus</i>	<i>Solanum lycopersicum</i>	Ghana	Asia and Africa
AF195782	<i>Tomato leaf curl Laos virus</i>	Not specified	Laos	Far East Asia and Indian subcontinent
HF912280	<i>Tomato leaf curl Liwa virus</i>	<i>Solanum lycopersicum</i>	Oman	
LN680629	<i>Tomato leaf curl Liwa virus</i>	<i>Sesbania</i> sp.	Oman	Asia and Africa
KF111684	<i>Tomato leaf curl Liwa virus</i>	<i>Solanum</i> sp.	Oman	Asia and Africa
KF111685	<i>Tomato leaf curl Liwa virus</i>	<i>Solanum</i> sp.	Oman	Asia and Africa
KF111686	<i>Tomato leaf curl Liwa virus</i>	<i>Solanum</i> sp.	Oman	Asia and Africa
AJ865338	<i>Tomato leaf curl Madagascar virus</i>	<i>Lycopersicon esculentum</i>	Madagascar	Asia and Africa

AJ865339	<i>Tomato leaf curl Madagascar virus</i>	<i>Lycopersicon esculentum</i>	Madagascar	Asia and Africa
MH410160	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	Asia and Africa
MH410152	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	EACM- and SACM-like viruses
MH410153	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	EACM- and SACM-like viruses
MH410154	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	EACM- and SACM-like viruses
MH410155	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	EACM- and SACM-like viruses
MH410156	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	EACM- and SACM-like viruses
MH410157	<i>Tomato leaf curl Mahe virus</i>	<i>Solanum lycopersicum</i>	Seychelles	EACM- and SACM-like viruses
AF327436	<i>Tomato leaf curl Malaysia virus</i>	<i>Solanum lycopersicum</i>	Malaysia	Far East Asia and Indian subcontinent
AY502936	<i>Tomato leaf curl Mali virus</i>	Not specified	Mali	Asia and Africa
LM651404	<i>Tomato leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Burkina Faso	Asia and Africa
AJ865340	<i>Tomato leaf curl Mayotte virus</i>	<i>Lycopersicon esculentum</i>	Mayotte	Asia and Africa
EU487046	<i>Tomato leaf curl Mindanao virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AM701763	<i>Tomato leaf curl Moheli virus</i>	<i>Lycopersicon esculentum</i>	Comoros	Asia and Africa
AM701761	<i>Tomato leaf curl Namakely virus</i>	<i>Lycopersicon esculentum</i>	Comoros	Asia and Africa
AM701764	<i>Tomato leaf curl Namakely virus</i>	<i>Lycopersicon esculentum</i>	Madagascar	Asia and Africa
FN600540	<i>Tomato leaf curl Namakely virus</i>	<i>Nicotiana tabacum</i>	Comoros	Asia and Africa
KX513856	<i>Tomato leaf curl New Delhi virus</i>	<i>Calotropis</i> sp.	India	Asia and Africa
DQ116880	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
HM007113	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
HM007120	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KP235540	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KP235542	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
KU196750	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum</i> sp.	India	Asia and Africa
MG758145	<i>Tomato leaf curl New Delhi virus</i>	<i>Chrysanthemum</i> sp.	India	Asia and Africa
KP641675	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis</i> sp.	Iran	Asia and Africa
AM286433	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
AM286434	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
JN129254	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucurbita</i> sp.	India	Asia and Africa
KT426903	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa</i> sp.	India	Asia and Africa
KT426904	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa</i> sp.	India	Asia and Africa
KT426905	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa</i> sp.	India	Asia and Africa

KT426906	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa</i> sp.	India	Asia and Africa
KT426907	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa</i> sp.	India	Asia and Africa
LC431619	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa</i> sp.	Indonesia	Asia and Africa
AF102276	<i>Tomato leaf curl New Delhi virus</i>	Not specified	Thailand	Asia and Africa
AM850115	<i>Tomato leaf curl New Delhi virus</i>	Not specified	India	Asia and Africa
AY286316	<i>Tomato leaf curl New Delhi virus</i>	Not specified	India	Asia and Africa
AY428769	<i>Tomato leaf curl New Delhi virus</i>	Not specified	India	Asia and Africa
AB330079	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis sativus</i>	Thailand	Asia and Africa
AB368447	<i>Tomato leaf curl New Delhi virus</i>	<i>Lagenaria siceraria</i>	Thailand	Asia and Africa
AB368448	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis melo</i>	Thailand	Asia and Africa
AB613825	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis sativus</i>	Indonesia	Asia and Africa
AF448058	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
AF448059	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
AJ620187	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum nigrum</i>	Pakistan	Asia and Africa
AJ875157	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
AM258977	<i>Tomato leaf curl New Delhi virus</i>	<i>Lycopersicon esculentum</i>	Pakistan	Asia and Africa
AM292302	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa cylindrica</i>	Pakistan	Asia and Africa
AM747291	<i>Tomato leaf curl New Delhi virus</i>	<i>Momordica charantia</i>	Pakistan	Asia and Africa
AM849548	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum nigrum</i>	Pakistan	Asia and Africa
AM947506	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Not specified	Asia and Africa
AY939926	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa cylindrica</i>	India	Asia and Africa
DQ116883	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
DQ116885	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
DQ169056	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
DQ989325	<i>Tomato leaf curl New Delhi virus</i>	<i>Carica papaya</i>	India	Asia and Africa
EF035482	<i>Tomato leaf curl New Delhi virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
EF043230	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
EF043231	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
EF068246	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Not specified	Asia and Africa
EF450316	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis sativus</i>	Bangladesh	Asia and Africa
EF620534	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa acutangula</i>	Pakistan	Asia and Africa
EU309045	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum annum</i>	India	Asia and Africa

FJ468356	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
FN435310	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
FN645905	<i>Tomato leaf curl New Delhi virus</i>	<i>Lagenaria siceraria</i>	India	Asia and Africa
GQ865546	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
GU112082	<i>Tomato leaf curl New Delhi virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112084	<i>Tomato leaf curl New Delhi virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112086	<i>Tomato leaf curl New Delhi virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU112088	<i>Tomato leaf curl New Delhi virus</i>	<i>Abelmoschus esculentus</i>	India	Asia and Africa
GU180095	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis melo</i>	Taiwan	Asia and Africa
HG316125	<i>Tomato leaf curl New Delhi virus</i>	<i>Rumex dentatus</i>	Pakistan	Asia and Africa
HG932559	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM159454	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM345979	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HM989845	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa acutangula</i>	India	Asia and Africa
HQ141673	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
HQ264185	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum melongena</i>	India	Asia and Africa
JN208136	<i>Tomato leaf curl New Delhi virus</i>	<i>Benincasa hispida</i>	India	Asia and Africa
JN809814	<i>Tomato leaf curl New Delhi virus</i>	<i>Sauropus androgynus</i>	Thailand	Asia and Africa
JX460805	<i>Tomato leaf curl New Delhi Virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KC513822	<i>Tomato leaf curl New Delhi virus</i>	<i>Papaver somniferum</i>	India	Asia and Africa
KC545812	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis sativus</i>	India	Asia and Africa
KC874502	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874503	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874504	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874505	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874506	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874507	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874508	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KC874509	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KF537780	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551576	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551577	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa

KF551580	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551582	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551587	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551589	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551590	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF551592	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF571461	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF749223	<i>Tomato leaf curl New Delhi virus</i>	<i>Curcubita pepo</i>	Spain	Asia and Africa
KF749224	<i>Tomato leaf curl New Delhi virus</i>	<i>Curcubita pepo</i>	Spain	Asia and Africa
KF749225	<i>Tomato leaf curl New Delhi virus</i>	<i>Curcubita pepo</i>	Spain	Asia and Africa
KF891468	<i>Tomato leaf curl New Delhi virus</i>	<i>Curcubita pepo</i>	Spain	Asia and Africa
KJ000564	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KJ778692	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum melongena</i>	Iran	Asia and Africa
KM383736	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383737	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383738	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383739	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383740	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383741	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383742	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383743	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM383744	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Asia and Africa
KM977733	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Spain	Asia and Africa
KP178727	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP178728	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP178729	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP191047	<i>Tomato leaf curl New Delhi virus</i>	<i>Sechium edule</i>	India	Asia and Africa
KP195259	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP195262	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP195265	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP641673	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis melo</i>	Iran	Asia and Africa
KP641677	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Iran	Asia and Africa

KP793719	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis melo</i>	Iran	Asia and Africa
KP868764	<i>Tomato leaf curl New Delhi virus</i>	<i>Momordica charantia</i>	India	Asia and Africa
KT175406	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Spain	Asia and Africa
KT948072	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucurbita pepo</i>	Pakistan	Asia and Africa
KU992383	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis sativus</i>	Thailand	Asia and Africa
KX467567	<i>Tomato leaf curl New Delhi virus</i>	<i>Sechium edule</i>	India	Asia and Africa
KX827599	<i>Tomato leaf curl New Delhi virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX827602	<i>Tomato leaf curl New Delhi virus</i>	<i>Glycine max</i>	Pakistan	Asia and Africa
KX951455	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	India	Asia and Africa
KY420139	<i>Tomato leaf curl New Delhi virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
KY780199	<i>Tomato leaf curl New Delhi virus</i>	<i>Trichosanthes cucumerina</i>	India	Asia and Africa
KY780201	<i>Tomato leaf curl New Delhi virus</i>	<i>Coccinia grandis</i>	India	Asia and Africa
KY780202	<i>Tomato leaf curl New Delhi virus</i>	<i>Coccinia grandis</i>	India	Asia and Africa
KY780205	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis sativus</i>	India	Asia and Africa
KY780207	<i>Tomato leaf curl New Delhi virus</i>	<i>Momordica charantia</i>	India	Asia and Africa
KY780209	<i>Tomato leaf curl New Delhi virus</i>	<i>Daucus carota</i>	India	Asia and Africa
KY780210	<i>Tomato leaf curl New Delhi virus</i>	<i>Daucus carota</i>	India	Asia and Africa
KY780213	<i>Tomato leaf curl New Delhi virus</i>	<i>Momordica dioica</i>	India	Asia and Africa
KY860898	<i>Tomato leaf curl New Delhi virus</i>	<i>Momordica charantia</i>	India	Asia and Africa
KY933708	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa cylindrica</i>	Pakistan	Asia and Africa
KY933709	<i>Tomato leaf curl New Delhi virus</i>	<i>Luffa cylindrica</i>	Pakistan	Asia and Africa
KY979591	<i>Tomato leaf curl New Delhi virus</i>	<i>Crossandra infundibuliformis</i>	India	Asia and Africa
LC335722	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucumis melo</i>	Indonesia	Asia and Africa
LN845962	<i>Tomato leaf curl New Delhi virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN845964	<i>Tomato leaf curl New Delhi virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
LN849710	<i>Tomato leaf curl New Delhi virus</i>	<i>Lens culinaris</i>	Pakistan	Asia and Africa
LN878118	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN886522	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN886523	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN886524	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN887902	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN887905	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa

LN887908	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Pakistan	Asia and Africa
LN908935	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	Pakistan	Asia and Africa
LN908936	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum tuberosum</i>	Pakistan	Asia and Africa
LT556070	<i>Tomato leaf curl New Delhi virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
LT556071	<i>Tomato leaf curl New Delhi virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
LT556074	<i>Tomato leaf curl New Delhi virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
MF688670	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucurbita moschata</i>	Italy	Asia and Africa
MF807949	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
MG098230	<i>Tomato leaf curl New Delhi virus</i>	<i>Cucurbita moschata</i>	Morocco	Asia and Africa
MG649330	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
MG686553	<i>Tomato leaf curl New Delhi virus</i>	<i>Calyptocarpus vialis</i>	India	Asia and Africa
MH465599	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum nigrum</i>	India	Asia and Africa
MH511991	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum lycopersicum</i>	Seychelles	Asia and Africa
U15015	<i>Tomato leaf curl New Delhi virus</i>	<i>Lycopersicon esculentum</i>	India	Asia and Africa
U15016	<i>Tomato leaf curl New Delhi virus</i>	<i>Lycopersicon esculentum</i>	India	Asia and Africa
MK069591	<i>Tomato leaf curl New Delhi virus</i>	<i>Capsicum annuum</i>	India	Far East Asia and Indian subcontinent
LT556076	<i>Tomato leaf curl New Delhi virus</i>	<i>Cape gooseberry</i>	Pakistan	
LT556081	<i>Tomato leaf curl New Delhi virus</i>	<i>Cape gooseberry</i>	Pakistan	
LT556082	<i>Tomato leaf curl New Delhi virus</i>	<i>Cape gooseberry</i>	Pakistan	
HG937523	<i>Tomato leaf curl New Delhi virus</i>	<i>Rumex</i> sp.	Pakistan	Asia and Africa
KF515616	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum</i> sp.	India	Asia and Africa
KF515617	<i>Tomato leaf curl New Delhi virus</i>	<i>Solanum</i> sp.	India	Asia and Africa
KC960492	<i>Tomato leaf curl New Delhi virus</i>	<i>Convolvulus arvensis</i>	Pakistan	Asia and Africa
FJ685621	<i>Tomato leaf curl Nigeria virus</i>	<i>Solanum lycopersicum</i>	Nigeria	Asia and Africa
HE819239	<i>Tomato leaf curl Oman virus</i>	<i>Capsicum</i> sp.	Oman	TYLC-like viruses
FJ956700	<i>Tomato leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969205	<i>Tomato leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969204	<i>Tomato leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	
HG969206	<i>Tomato leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	
FM164938	<i>Tomato leaf curl Pakistan virus</i>	<i>Euphorbia pulcherrima</i>	Pakistan	Asia and Africa
KC904968	<i>Tomato leaf curl Palampur virus</i>	<i>Capsicum</i> sp.	Pakistan	Asia and Africa
AM884015	<i>Tomato leaf curl Palampur virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa

EU547682	<i>Tomato leaf curl Palampur virus</i>	<i>Solanum lycopersicum</i>	Iran	Asia and Africa
EU547683	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis melo</i>	Iran	Asia and Africa
FJ660431	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660432	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660433	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660434	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660436	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660437	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660438	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660439	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660440	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660441	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ660444	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
FJ931537	<i>Tomato leaf curl Palampur virus</i>	<i>Nicotiana tabacum</i>	India	Asia and Africa
GU253914	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis callosus</i>	India	Asia and Africa
HQ848383	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis melo</i>	India	Asia and Africa
JF501719	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis melo</i>	Iran	Asia and Africa
JF501720	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
JF501721	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
JF501722	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
JF501723	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
JF501724	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
JF501725	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis melo</i>	Iran	Asia and Africa
JF501726	<i>Tomato leaf curl Palampur virus</i>	<i>Phaseolus vulgaris</i>	Iran	Asia and Africa
JF501727	<i>Tomato leaf curl Palampur virus</i>	<i>Cucurbita pepo</i>	Iran	Asia and Africa
JF501728	<i>Tomato leaf curl Palampur virus</i>	<i>Citrullus lanatus</i>	Iran	Asia and Africa
JQ825226	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	Iran	Asia and Africa
KC501924	<i>Tomato leaf curl Palampur virus</i>	<i>Solanum melongena</i>	India	Asia and Africa
KF663700	<i>Tomato leaf curl Palampur virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KY564204	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis melo</i>	India	Asia and Africa
KY564205	<i>Tomato leaf curl Palampur virus</i>	<i>Cucumis sativus</i>	India	Asia and Africa
LN864817	<i>Tomato leaf curl Palampur virus</i>	<i>Carica papaya</i>	Pakistan	Asia and Africa

LT556077	<i>Tomato leaf curl Palampur virus</i>	<i>Cape gooseberry</i>	Pakistan	Asia and Africa
MG252783	<i>Tomato leaf curl Palampur virus</i>	<i>Manihot esculenta</i>	Pakistan	Asia and Africa
KC456161	<i>Tomato leaf curl Palampur virus</i>	<i>Solanum lycopersicum</i>	India	
LT556072	<i>Tomato leaf curl Palampur virus</i>	<i>Cape gooseberry</i>	Pakistan	
LT556078	<i>Tomato leaf curl Palampur virus</i>	<i>Cape gooseberry</i>	Pakistan	
HG934859	<i>Tomato leaf curl Palampur virus</i>	<i>Rumex sp.</i>	India	Asia and Africa
EU862323	<i>Tomato leaf curl Patna virus</i>	<i>Solanum lycopersicum</i>	India	Far East Asia and Indian subcontinent
GU253915	<i>Tomato leaf curl Patna virus</i>	<i>Nicotiana tabacum</i>	India	Far East Asia and Indian subcontinent
KM383745	<i>Tomato leaf curl Patna virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Far East Asia and Indian subcontinent
KM383746	<i>Tomato leaf curl Patna virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Far East Asia and Indian subcontinent
KT944082	<i>Tomato leaf curl Patna virus</i>	<i>Cassia tora</i>	India	Far East Asia and Indian subcontinent
KU902456	<i>Tomato leaf curl Patna virus</i>	<i>Mentha piperita</i>	India	Far East Asia and Indian subcontinent
KU933675	<i>Tomato leaf Curl Patna virus</i>	<i>Solanum lycopersicum</i>	Bangladesh	Far East Asia and Indian subcontinent
KY612435	<i>Tomato leaf curl Patna virus</i>	<i>Xanthium strumarium</i>	India	Far East Asia and Indian subcontinent
AB050597	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AB307731	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AB377111	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AB377112	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AB377113	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AF136222	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
DQ092867	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487026	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487027	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487028	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487029	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487030	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487032	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487034	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487035	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487036	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487037	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487038	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent

EU487039	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
EU487040	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
KU946995	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
KU946996	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
KX063715	<i>Tomato leaf curl Philippines virus</i>	<i>Solanum lycopersicum</i>	Philippines	Far East Asia and Indian subcontinent
AY754814	<i>Tomato leaf curl Pune virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP178732	<i>Tomato leaf curl Pune virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KY196216	<i>Tomato leaf curl purple vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KY196217	<i>Tomato leaf curl purple vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KY196221	<i>Tomato leaf curl purple vein virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
DQ339117	<i>Tomato leaf curl Rajasthan virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
GQ994095	<i>Tomato leaf curl Ranchi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JN676053	<i>Tomato leaf curl Ranchi virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
AM491778	<i>Tomato leaf curl Seychelles virus</i>	<i>Solanum lycopersicum</i>	Seychelles	Asia and Africa
KY064013	<i>Tomato leaf curl Sinaloa virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
KY064014	<i>Tomato leaf curl Sinaloa virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
MH019225	<i>Tomato leaf curl Sinaloa virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
AF274349	<i>Tomato leaf curl Sri Lanka virus</i>	<i>Solanum lycopersicum</i>	Sri Lanka	Asia and Africa
KT033710	<i>Tomato leaf curl Sudan virus</i>	<i>Amaranthus</i> sp.	Saudi Arabia	Asia and Africa
KT033714	<i>Tomato leaf curl Sudan virus</i>	<i>Chorchorus</i> sp.	Saudi Arabia	Asia and Africa
KT728741	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT728742	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT728748	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT728749	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT728750	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT728751	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT760555	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
KT033712	<i>Tomato leaf curl Sudan virus</i>	<i>Cucurbita</i> sp.	Saudi Arabia	Asia and Africa
HG941648	<i>Tomato leaf curl Sudan virus</i>	<i>Nicotiana</i> sp.	Oman	Asia and Africa
JX483704	<i>Tomato leaf curl Sudan virus</i>	Not specified	Sudan	TYLC-like viruses
JX483707	<i>Tomato leaf curl Sudan virus</i>	Not specified	Sudan	TYLC-like viruses
JX483708	<i>Tomato leaf curl Sudan virus</i>	Not specified	Sudan	TYLC-like viruses

AY044139	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Sudan	Asia and Africa
EF110891	<i>Tomato leaf curl Sudan virus</i>	<i>Lycopersicon esculentum</i>	Yemen	Asia and Africa
HE819244	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HG530539	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
JF919728	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Yemen	Asia and Africa
JF919730	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Yemen	Asia and Africa
JF919731	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Yemen	Asia and Africa
JF919733	<i>Tomato leaf curl Sudan virus</i>	<i>Nicotiana tabacum</i>	Yemen	Asia and Africa
JF919734	<i>Tomato leaf curl Sudan virus</i>	<i>Nicotiana tabacum</i>	Yemen	Asia and Africa
JN591385	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
JN591386	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
KC763630	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Sudan	Asia and Africa
KF444467	<i>Tomato leaf curl Sudan virus</i>	<i>Phaseolus vulgaris</i>	Saudi Arabia	Asia and Africa
KT033708	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
KT760556	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
MG868938	<i>Tomato leaf curl Sudan virus</i>	<i>Datura stramonium</i>	Sudan	Asia and Africa
AY044137	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Sudan	TYLC-like viruses
GU180085	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Sudan	TYLC-like viruses
HG530541	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Sudan	TYLC-like viruses
KT728747	<i>Tomato leaf curl Sudan virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	
FJ237618	<i>Tomato leaf curl Sulawesi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
FJ237619	<i>Tomato leaf curl Sulawesi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
FJ237620	<i>Tomato leaf curl Sulawesi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
FJ237614	<i>Tomato leaf curl Sulawesi virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Asia and Africa
FJ237615	<i>Tomato leaf curl Sulawesi virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Asia and Africa
FJ237616	<i>Tomato leaf curl Sulawesi virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Asia and Africa
FJ237617	<i>Tomato leaf curl Sulawesi virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Asia and Africa
AM698111	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AM698112	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
DQ237918	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
DQ866122	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
DQ866123	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent

JQ867094	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX128094	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX128095	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX128096	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX128097	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX128098	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
JX982137	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
KC810891	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
KC810893	<i>Tomato leaf curl Taiwan virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
KF990603	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KJ850342	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KJ850343	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KP195718	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KP195719	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KP195720	<i>Tomato leaf curl Taiwan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
U88692	<i>Tomato leaf curl Taiwan virus</i>	<i>Abutilon sellovianum</i>	India	Far East Asia and Indian subcontinent
FJ685620	<i>Tomato leaf curl Togo virus</i>	<i>Solanum lycopersicum</i>	Togo	Asia and Africa
HE659517	<i>Tomato leaf curl Togo virus</i>	<i>Solanum lycopersicum</i>	Cameroon	Asia and Africa
AM701768	<i>Tomato leaf curl Toliara virus</i>	<i>Lycopersicon esculentum</i>	Madagascar	Asia and Africa
DQ127170	<i>Tomato leaf curl Uganda virus</i>	<i>Solanum lycopersicum</i>	Uganda	Asia and Africa
DQ641705	<i>Tomato leaf curl Vietnam virus</i>	<i>Lycopersicon esculentum</i>	Vietnam	Far East Asia and Indian subcontinent
EU189149	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
EU368372	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ246940	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ246941	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ338765	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ338766	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ338767	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ338768	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
GQ870288	<i>Tomato leaf curl Vietnam virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Far East Asia and Indian subcontinent
KC857511	<i>Tomato leaf curl Vietnam virus</i>	<i>Lycopersicon esculentum</i>	Vietnam	Far East Asia and Indian subcontinent
KC878473	<i>Tomato leaf curl Vietnam virus</i>	<i>Ageratum conyzoides</i>	Vietnam	Far East Asia and Indian subcontinent

FJ514798	<i>Tomato leaf curl virus</i>	<i>Mentha</i> sp.	India	Asia and Africa
AF084006	<i>Tomato leaf curl virus</i>	Not specified	Not specified	Far East Asia and Indian subcontinent
AF084007	<i>Tomato leaf curl virus</i>	Not specified	Australia	Far East Asia and Indian subcontinent
AF264063	<i>Tomato leaf curl virus</i>	Not specified	Vietnam	Far East Asia and Indian subcontinent
EU487008	<i>Tomato leaf curl virus</i>	Not specified	Philippines	Far East Asia and Indian subcontinent
EU487009	<i>Tomato leaf curl virus</i>	Not specified	Philippines	Far East Asia and Indian subcontinent
KP698314	<i>Tomato leaf curl virus</i>	<i>Ocimum</i> sp.	India	Asia and Africa
KP698316	<i>Tomato leaf curl virus</i>	<i>Ocimum</i> sp.	India	Asia and Africa
KP698315	<i>Tomato leaf curl virus</i>	<i>Ocimum</i> sp.	India	Asia and Africa
AF165098	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
AY754812	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
DQ629101	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
FM210277	<i>Tomato leaf curl virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	Asia and Africa
GU170806	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
JX232220	<i>Tomato leaf curl virus</i>	<i>Lycopersicon esculentum</i>	India	Asia and Africa
JX416177	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	Asia and Africa
JX524172	<i>Tomato leaf curl virus</i>	<i>Parthenium hysterophorus</i>	India	Asia and Africa
JX547015	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KC713784	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF612317	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KF612318	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KP725055	<i>Tomato leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
KU500805	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
KX831454	<i>Tomato leaf curl virus</i>	<i>Ocimum basilicum</i>	India	Asia and Africa
KY420142	<i>Tomato leaf curl virus</i>	<i>Gossypium hirsutum</i>	Pakistan	Asia and Africa
MF683832	<i>Tomato leaf curl virus</i>	<i>Parthenium hysterophorus</i>	USA	Asia and Africa
MF683833	<i>Tomato leaf curl virus</i>	<i>Parthenium hysterophorus</i>	USA	Asia and Africa
MF737344	<i>Tomato leaf curl virus</i>	<i>Capsicum annuum</i>	India	Asia and Africa
MH105055	<i>Tomato leaf curl virus</i>	<i>Carica papaya</i>	India	Asia and Africa
JX416176	<i>Tomato leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	Far East Asia and Indian subcontinent
S53251	<i>Tomato leaf curl virus</i>	<i>Capsicum annuum</i>	India	Far East Asia and Indian subcontinent
EU350585	<i>Tomato leaf curl virus Ghana virus</i>	<i>Solanum lycopersicum</i>	Ghana	Asia and Africa

HF674920	<i>Tomato leaf curl Yunnan virus</i>	<i>Gossypium hirsutum</i>	China	Far East Asia and Indian subcontinent
HF674921	<i>Tomato leaf curl Yunnan virus</i>	<i>Gossypium hirsutum</i>	China	Far East Asia and Indian subcontinent
GQ334472	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501502	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501503	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501504	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501505	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501506	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501507	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501508	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501509	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Peru	Meso- and Latin Americas
JX501510	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Ecuador	Meso- and Latin Americas
KC620461	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Chile	Meso- and Latin Americas
KC620462	<i>Tomato leaf deformation virus</i>	<i>Solanum lycopersicum</i>	Chile	Meso- and Latin Americas
EU710749	<i>Tomato leaf distortion virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706605	<i>Tomato leaf distortion virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
EU710752	<i>Tomato mild mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JX871374	<i>Tomato mild mosaic virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
JX871375	<i>Tomato mild mosaic virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
KC706606	<i>Tomato mild mosaic virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
KC706607	<i>Tomato mild mosaic virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
KC706608	<i>Tomato mild mosaic virus</i>	<i>Sida urens</i>	Brazil	Meso- and Latin Americas
KC706610	<i>Tomato mild mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706611	<i>Tomato mild mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
AY927277	<i>Tomato mild yellow leaf curl Aragua virus</i>	<i>Lycopersicon esculentum</i>	Venezuela	America and Middle East
KY353797	<i>Tomato mild yellow leaf curl Aragua virus</i>	<i>Solanum lycopersicum</i>	Venezuela	America and Middle East
KT099130	<i>Tomato mosaic Havana virus</i>	Not specified	Guatemala	Meso- and Latin Americas
Y14874	<i>Tomato mosaic Havana virus</i>	<i>Abutilon sellovianum</i>	India	Meso- and Latin Americas
KY449275	<i>Tomato mosaic Trujillo virus</i>	<i>Solanum lycopersicum</i>	Venezuela	Meso- and Latin Americas
JF803246	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803247	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803248	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas

JF803249	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803250	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803251	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706615	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706616	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896398	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896399	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896400	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896401	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896402	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896403	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896404	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896405	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896406	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896407	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896408	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896409	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896410	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896411	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896412	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896413	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX896414	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KY196218	<i>Tomato mottle leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
HQ171986	<i>Tomato mottle leaf curl Zulia virus</i>	<i>Solanum lycopersicum</i>	Venezuela	
AF012300	<i>Tomato mottle Taino virus</i>	<i>Solanum lycopersicum</i>	Cuba	Meso- and Latin Americas
AY965900	<i>Tomato mottle virus</i>	<i>Solanum lycopersicum</i>	Puerto Rico	Meso- and Latin Americas
L14460	<i>Tomato mottle virus</i>	<i>Solanum lycopersicum</i>	USA	Meso- and Latin Americas
JQ714137	<i>Tomato mottle wrinkle virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KM243018	<i>Tomato mottle wrinkle virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KM243019	<i>Tomato mottle wrinkle virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KM243020	<i>Tomato mottle wrinkle virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KY555800	<i>Tomato mottle wrinkle virus</i>	<i>Phaseolus vulgaris</i>	Argentina	Meso- and Latin Americas

AF291705	<i>Tomato rugose mosaic virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC132844	<i>Tomato rugose yellow leaf curl virus</i>	Not specified	Argentina	America and Middle East
JN381813	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
JN381815	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
JN381819	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
JN381821	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
JN381823	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
JN381825	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
JN381827	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Uruguay	America and Middle East
KU682839	<i>Tomato rugose yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Brazil	America and Middle East
KT099119	<i>Tomato severe leaf curl virus</i>	Not specified	Guatemala	America and Middle East
KT099129	<i>Tomato severe leaf curl virus</i>	Not specified	Guatemala	America and Middle East
KP195267	<i>Tomato severe leaf curl virus</i>	<i>Solanum lycopersicum</i>	India	Asia and Africa
AF130415	<i>Tomato severe leaf curl virus</i>	<i>Solanum lycopersicum</i>	Guatemala	America and Middle East
AJ508784	<i>Tomato severe leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Nicaragua	America and Middle East
AJ508785	<i>Tomato severe leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Nicaragua	America and Middle East
DQ347946	<i>Tomato severe leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	America and Middle East
DQ347947	<i>Tomato severe leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	America and Middle East
JN676151	<i>Tomato severe leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	America and Middle East
JN680352	<i>Tomato severe leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	America and Middle East
DQ207749	<i>Tomato severe rugose virus</i>	<i>Capsicum</i> sp.	Brazil	Meso- and Latin Americas
AY029750	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
EU086591	<i>Tomato severe rugose virus</i>	<i>Nicandra physalodes</i>	Brazil	Meso- and Latin Americas
FJ824808	<i>Tomato severe rugose virus</i>	<i>Capsicum annum</i>	Brazil	Meso- and Latin Americas
HQ606467	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803260	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803261	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803262	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JF803263	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JX415188	<i>Tomato severe rugose virus</i>	<i>Nicandra physalodes</i>	Brazil	Meso- and Latin Americas
JX415190	<i>Tomato severe rugose virus</i>	<i>Crotalaria juncea</i>	Brazil	Meso- and Latin Americas
JX415193	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas

KC706620	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KX828624	<i>Tomato severe rugose virus</i>	<i>Glycine max</i>	Brazil	Meso- and Latin Americas
KY524458	<i>Tomato severe rugose virus</i>	<i>Solanum betaceum</i>	Brazil	Meso- and Latin Americas
MG837738	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
JX415198	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	
JX865640	<i>Tomato severe rugose virus</i>	<i>Solanum lycopersicum</i>	Brazil	
KX458238	<i>Tomato severe rugose virus</i>	<i>Phaseolus vulgaris</i>	Brazil	
KC004082	<i>Tomato severe rugose virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
KC004090	<i>Tomato severe rugose virus</i>	<i>Sida</i> sp.	Brazil	Meso- and Latin Americas
HE806438	<i>Tomato yellow distortion leaf virus</i>	<i>Sida</i> sp.	Cuba	Meso- and Latin Americas
HE806440	<i>Tomato yellow distortion leaf virus</i>	<i>Sida</i> sp.	Cuba	Meso- and Latin Americas
HE806450	<i>Tomato yellow distortion leaf virus</i>	<i>Sida</i> sp.	Cuba	Meso- and Latin Americas
HG941641	<i>Tomato yellow leaf curl Al-Batinah virus</i>	<i>Ocimum basilicum</i>	Oman	TYLC-like viruses
HG969258	<i>Tomato yellow leaf curl Al-Batinah virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969260	<i>Tomato yellow leaf curl Al-Batinah virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969259	<i>Tomato yellow leaf curl Al-Batinah virus</i>	<i>Solanum lycopersicum</i>	Oman	
AY227892	<i>Tomato yellow leaf curl Axarquía virus</i>	Not specified	Not specified	TYLC-like viruses
JN859138	<i>Tomato yellow leaf curl Axarquía virus</i>	<i>Solanum nigrum</i>	Portugal	TYLC-like viruses
KM215610	<i>Tomato yellow leaf curl Axarquía virus</i>	<i>Solanum lycopersicum</i>	Jordan	TYLC-like viruses
KU934105	<i>Tomato yellow leaf curl China virus</i>	<i>Malva</i> sp.	China	Far East Asia and Indian subcontinent
AJ319675	<i>Tomato yellow leaf curl China virus</i>	Not specified	China	Far East Asia and Indian subcontinent
AJ420316	<i>Tomato yellow leaf curl China virus</i>	Not specified	China	Far East Asia and Indian subcontinent
AJ420317	<i>Tomato yellow leaf curl China virus</i>	Not specified	China	Far East Asia and Indian subcontinent
AJ781302	<i>Tomato yellow leaf curl China virus</i>	Not specified	China	Far East Asia and Indian subcontinent
AF311734	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
AJ319674	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AJ319676	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AJ319677	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AJ457823	<i>Tomato yellow leaf curl China virus</i>	<i>Siegesbeckia orientalis</i>	China	Far East Asia and Indian subcontinent
AJ457985	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
AJ971265	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
AJ971524	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent

AM050555	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	Cuba	Far East Asia and Indian subcontinent
AM181683	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum aculeatissimum</i>	China	Far East Asia and Indian subcontinent
AM260701	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AM260702	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AM260703	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
AM261326	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana tabacum</i>	China	Far East Asia and Indian subcontinent
DQ256460	<i>Tomato yellow leaf curl China virus</i>	<i>Phaseolus vulgaris</i>	China	Far East Asia and Indian subcontinent
EF011559	<i>Tomato yellow leaf curl China virus</i>	<i>Datura stramonium</i>	China	Far East Asia and Indian subcontinent
EU365686	<i>Tomato yellow leaf curl China virus</i>	<i>Artemisia carvifolia</i>	China	Far East Asia and Indian subcontinent
FN985163	<i>Tomato yellow leaf curl China virus</i>	<i>Phaseolus vulgaris</i>	China	Far East Asia and Indian subcontinent
GU199588	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
JN082233	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
JX679251	<i>Tomato yellow leaf curl China virus</i>	<i>Malva parviflora</i>	China	Far East Asia and Indian subcontinent
JX679252	<i>Tomato yellow leaf curl China virus</i>	<i>Malva parviflora</i>	China	Far East Asia and Indian subcontinent
KC189893	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KC189894	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	Far East Asia and Indian subcontinent
KF640689	<i>Tomato yellow leaf curl China virus</i>	<i>Nicotiana benthamiana</i>	India	Far East Asia and Indian subcontinent
KJ477327	<i>Tomato yellow leaf curl China virus</i>	<i>Panax notoginseng</i>	China	Far East Asia and Indian subcontinent
KU934099	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU934100	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU934101	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU934102	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU934106	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980913	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980914	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU980915	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU990875	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU934104	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
AM980509	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	
JN082237	<i>Tomato yellow leaf curl China virus</i>	<i>Malvastrum coromandelianum</i>	China	
KU934103	<i>Tomato yellow leaf curl China virus</i>	<i>Solanum lycopersicum</i>	China	
AY602166	<i>Tomato yellow leaf curl Guangdong virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent

GQ169042	<i>Tomato yellow leaf curl Guangdong virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AF189018	<i>Tomato yellow leaf curl Indonesia virus</i>	<i>Solanum lycopersicum</i>	Indonesia	Asia and Africa
KF446669	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
KF446671	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
KF446673	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
KF446675	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Capsicum</i> sp.	Indonesia	Asia and Africa
AF511529	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum lycopersicum</i>	Thailand	Asia and Africa
AF511530	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum lycopersicum</i>	Thailand	Asia and Africa
DQ169054	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum lycopersicum</i>	Vietnam	Asia and Africa
DQ641702	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Vietnam	Asia and Africa
KF218820	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Laos	Asia and Africa
KF446663	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Indonesia	Asia and Africa
KF446665	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Indonesia	Asia and Africa
KF446667	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Indonesia	Asia and Africa
KR073086	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Cambodia	Asia and Africa
KR073087	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Cambodia	Asia and Africa
KR073093	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum lycopersicum</i>	Cambodia	Asia and Africa
KR073094	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum lycopersicum</i>	Cambodia	Asia and Africa
KU569584	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569588	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569590	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569592	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569594	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569596	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569600	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569603	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569604	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Thailand	Asia and Africa
KU569608	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Vietnam	Asia and Africa
LC051116	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Capsicum annuum</i>	Indonesia	Asia and Africa
MF327262	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	China	Asia and Africa
KF446661	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Indonesia	
KU569606	<i>Tomato yellow leaf curl Kanchanaburi virus</i>	<i>Solanum melongena</i>	Laos	

AF271234	<i>Tomato yellow leaf curl Malaga virus</i>	Not specified	Spain	TYLC-like viruses
JN859135	<i>Tomato yellow leaf curl Malaga virus</i>	<i>Solanum lycopersicum</i>	Portugal	TYLC-like viruses
JN859137	<i>Tomato yellow leaf curl Malaga virus</i>	<i>Solanum lycopersicum</i>	Portugal	TYLC-like viruses
LN846611	<i>Tomato yellow leaf curl Malaga virus</i>	<i>Phaseolus vulgaris</i>	Morocco	TYLC-like viruses
LN846612	<i>Tomato yellow leaf curl Malaga virus</i>	<i>Phaseolus vulgaris</i>	Morocco	TYLC-like viruses
AY502934	<i>Tomato yellow leaf curl Mali virus</i>	Not specified	Mali	TYLC-like viruses
DQ358913	<i>Tomato yellow leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Ethiopia	TYLC-like viruses
EU847740	<i>Tomato yellow leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Ghana	TYLC-like viruses
FM212660	<i>Tomato yellow leaf curl Mali virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	TYLC-like viruses
FM212661	<i>Tomato yellow leaf curl Mali virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	TYLC-like viruses
FM212662	<i>Tomato yellow leaf curl Mali virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	TYLC-like viruses
FM212663	<i>Tomato yellow leaf curl Mali virus</i>	<i>Abelmoschus esculentus</i>	Cameroon	TYLC-like viruses
LM651400	<i>Tomato yellow leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Burkina Faso	TYLC-like viruses
LM651401	<i>Tomato yellow leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Burkina Faso	TYLC-like viruses
LM651402	<i>Tomato yellow leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Burkina Faso	TYLC-like viruses
LM651403	<i>Tomato yellow leaf curl Mali virus</i>	<i>Solanum lycopersicum</i>	Burkina Faso	TYLC-like viruses
HG941640	<i>Tomato yellow leaf curl Oman virus</i>	<i>Cucurbita</i> sp.	Oman	TYLC-like viruses
HG941645	<i>Tomato yellow leaf curl Oman virus</i>	<i>Nicotiana</i> sp.	Oman	TYLC-like viruses
HG941647	<i>Tomato yellow leaf curl Oman virus</i>	<i>Nicotiana</i> sp.	Oman	TYLC-like viruses
HG941646	<i>Tomato yellow leaf curl Oman virus</i>	<i>Nicotiana</i> sp.	Oman	TYLC-like viruses
HG941642	<i>Tomato yellow leaf curl Oman virus</i>	<i>Ocimum basilicum</i>	Oman	TYLC-like viruses
HG941649	<i>Tomato yellow leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG941650	<i>Tomato yellow leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG941651	<i>Tomato yellow leaf curl Oman virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
AY702650	<i>Tomato yellow leaf curl Sardinia virus</i>	Not specified	Morocco	Asia and Africa
DQ845787	<i>Tomato yellow leaf curl Sardinia virus</i>	Not specified	Israel	Asia and Africa
JX131285	<i>Tomato yellow leaf curl Sardinia virus</i>	Not specified	Jordan	Asia and Africa
AY736854	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Tunisia	Asia and Africa
GU951759	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Italy	Asia and Africa
JN859134	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Portugal	Asia and Africa
JN859136	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Portugal	Asia and Africa
KC953603	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Capsicum annuum</i>	Spain	Asia and Africa

KC953604	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Spain	Asia and Africa
L27708	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Spain	Asia and Africa
LN846595	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Morocco	Asia and Africa
LN846596	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Morocco	Asia and Africa
LN846597	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum nigrum</i>	Morocco	Asia and Africa
LN846598	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Solanum lycopersicum</i>	Morocco	Asia and Africa
X61153	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Abutilon sellovianum</i>	India	Asia and Africa
Z25751	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Abutilon sellovianum</i>	India	Asia and Africa
Z28390	<i>Tomato yellow leaf curl Sardinia virus</i>	<i>Abutilon sellovianum</i>	India	Asia and Africa
KF040453	<i>Tomato yellow leaf curl Saudi virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
KT962229	<i>Tomato yellow leaf curl Shuangbai virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
GU208515	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Capsicum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
GU208516	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Capsicum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
GU208517	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Capsicum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
GU208518	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Capsicum</i> sp.	Taiwan	Far East Asia and Indian subcontinent
AF141922	<i>Tomato yellow leaf curl Thailand virus</i>	Not specified	Thailand	Far East Asia and Indian subcontinent
AF206674	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Myanmar	Far East Asia and Indian subcontinent
AJ495812	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Lycopersicon esculentum</i>	China	Far East Asia and Indian subcontinent
AY514630	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
AY514631	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
AY514632	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
DQ871222	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
EF577264	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
EF577266	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
EU249457	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Capsicum annuum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723731	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723732	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723733	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723734	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723735	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723736	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723737	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent

GU723738	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723739	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723740	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723741	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723742	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723743	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723744	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723745	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723746	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723747	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723748	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723749	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
GU723750	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Taiwan	Far East Asia and Indian subcontinent
KT322144	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
KX290922	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KX943292	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Bemisia tabaci</i>	Thailand	Far East Asia and Indian subcontinent
KX943294	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Solanum lycopersicum</i>	Thailand	Far East Asia and Indian subcontinent
MF040760	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Nicandra physalodes</i>	China	Far East Asia and Indian subcontinent
X63015	<i>Tomato yellow leaf curl Thailand virus</i>	<i>Abutilon sellovianum</i>	India	Far East Asia and Indian subcontinent
DQ641697	<i>Tomato yellow leaf curl Vietnam virus</i>	<i>Lycopersicon esculentum</i>	Vietnam	Far East Asia and Indian subcontinent
JX997802	<i>Tomato yellow leaf curl virus</i>	<i>Alcea</i> sp.	China	TYLC-like viruses
KC999851	<i>Tomato yellow leaf curl virus</i>	<i>Amaranthus</i> sp.	China	TYLC-like viruses
HE819240	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum</i> sp.	Oman	TYLC-like viruses
KC999849	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum</i> sp.	China	TYLC-like viruses
KC999850	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum</i> sp.	China	TYLC-like viruses
KT355023	<i>Tomato yellow leaf curl virus</i>	<i>Corchorus</i> sp.	Saudi Arabia	Asia and Africa
EF433426	<i>Tomato yellow leaf curl virus</i>	<i>Cucurbita</i> sp.	Jordan	TYLC-like viruses
JX456644	<i>Tomato yellow leaf curl virus</i>	<i>Datura</i> sp.	China	TYLC-like viruses
GQ352537	<i>Tomato yellow leaf curl virus</i>	<i>Desmodium</i> sp.	China	TYLC-like viruses
GQ352538	<i>Tomato yellow leaf curl virus</i>	<i>Desmodium</i> sp.	China	TYLC-like viruses
KU248482	<i>Tomato yellow leaf curl virus</i>	<i>Luffa</i> sp.	Saudi Arabia	Asia and Africa
KY640456	<i>Tomato yellow leaf curl virus</i>	<i>Nicotiana</i> sp.	China	TYLC-like viruses

AB110217	<i>Tomato yellow leaf curl virus</i>	Not specified	Japan	TYLC-like viruses
AB110218	<i>Tomato yellow leaf curl virus</i>	Not specified	Japan	TYLC-like viruses
AF105975	<i>Tomato yellow leaf curl virus</i>	Not specified	Not specified	TYLC-like viruses
AJ223505	<i>Tomato yellow leaf curl virus</i>	Not specified	Cuba	TYLC-like viruses
AY594174	<i>Tomato yellow leaf curl virus</i>	Not specified	Egypt	TYLC-like viruses
AY594175	<i>Tomato yellow leaf curl virus</i>	Not specified	Jordan	TYLC-like viruses
EF051116	<i>Tomato yellow leaf curl virus</i>	Not specified	Lebanon	TYLC-like viruses
EF054893	<i>Tomato yellow leaf curl virus</i>	Not specified	Jordan	TYLC-like viruses
EF060196	<i>Tomato yellow leaf curl virus</i>	Not specified	Morocco	TYLC-like viruses
EF101929	<i>Tomato yellow leaf curl virus</i>	Not specified	Tunisia	TYLC-like viruses
EF185318	<i>Tomato yellow leaf curl virus</i>	Not specified	Lebanon	TYLC-like viruses
EF523478	<i>Tomato yellow leaf curl virus</i>	Not specified	Mexico	TYLC-like viruses
EF539831	<i>Tomato yellow leaf curl virus</i>	Not specified	USA	TYLC-like viruses
KT099157	<i>Tomato yellow leaf curl virus</i>	Not specified	Spain	TYLC-like viruses
KT099158	<i>Tomato yellow leaf curl virus</i>	Not specified	Spain	TYLC-like viruses
LN680630	<i>Tomato yellow leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	TYLC-like viruses
LN680631	<i>Tomato yellow leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	TYLC-like viruses
LN680632	<i>Tomato yellow leaf curl virus</i>	<i>Sesbania</i> sp.	Oman	TYLC-like viruses
AJ519675	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	Asia and Africa
KF561125	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
KT033706	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
KT033709	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
KT033713	<i>Tomato yellow leaf curl virus</i>	<i>Cucumis sativus</i>	Saudi Arabia	Asia and Africa
KT033715	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
KT728743	<i>Tomato yellow leaf curl virus</i>	<i>Cucumis sativus</i>	Saudi Arabia	Asia and Africa
KT728744	<i>Tomato yellow leaf curl virus</i>	<i>Cucumis sativus</i>	Saudi Arabia	Asia and Africa
KT728745	<i>Tomato yellow leaf curl virus</i>	<i>Cucumis sativus</i>	Saudi Arabia	Asia and Africa
KT728746	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	Asia and Africa
MG571546	<i>Tomato yellow leaf curl virus</i>	<i>Mentha longifolia</i>	Saudi Arabia	Asia and Africa
AB014346	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
AB014347	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
AB116629	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses

AB116631	<i>Tomato yellow leaf curl virus</i>	<i>Stellaria aquatica</i>	Japan	TYLC-like viruses
AB116632	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses
AB116633	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses
AB116634	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses
AB116635	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses
AB116636	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses
AB192965	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Japan	TYLC-like viruses
AB363566	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
AB439841	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
AB439842	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
AB613208	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
AB613209	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
AB636264	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
AB636409	<i>Tomato yellow leaf curl virus</i>	<i>Solanum esculentum</i>	South Korea	TYLC-like viruses
AB636410	<i>Tomato yellow leaf curl virus</i>	<i>Solanum esculentum</i>	South Korea	TYLC-like viruses
AB636411	<i>Tomato yellow leaf curl virus</i>	<i>Solanum esculentum</i>	South Korea	TYLC-like viruses
AB636412	<i>Tomato yellow leaf curl virus</i>	<i>Solanum esculentum</i>	South Korea	TYLC-like viruses
AB669434	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
AB921568	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
AF024715	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Dominican Republic	TYLC-like viruses
AF071228	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
AJ132711	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Iran	TYLC-like viruses
AJ489258	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Spain	TYLC-like viruses
AJ519441	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Spain	TYLC-like viruses
AJ812277	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Turkey	TYLC-like viruses
AJ865337	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Reunion	TYLC-like viruses
AM282874	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
AM409201	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Reunion	TYLC-like viruses
AM698117	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
AM698118	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
AM698119	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
AY044138	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Sudan	TYLC-like viruses

AY134494	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Puerto Rico	TYLC-like viruses
AY530931	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
DQ144621	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Italy	TYLC-like viruses
DQ631892	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
DQ644565	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
EF054894	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Jordan	TYLC-like viruses
EF110890	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	USA	TYLC-like viruses
EF158044	<i>Tomato yellow leaf curl virus</i>	<i>Cucumis sativus</i>	Jordan	TYLC-like viruses
EF210554	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
EF210555	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
EU031444	<i>Tomato yellow leaf curl virus</i>	<i>Solanum aculeatissimum</i>	China	TYLC-like viruses
EU085423	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
EU143745	<i>Tomato yellow leaf curl virus</i>	<i>Cucumis sativus</i>	Jordan	TYLC-like viruses
EU635776	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
EU734831	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Italy	TYLC-like viruses
EU734832	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Italy	TYLC-like viruses
FJ012358	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
FJ355946	<i>Tomato yellow leaf curl virus</i>	<i>Hibiscus cannabinus</i>	Iran	TYLC-like viruses
FJ439569	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Netherlands	TYLC-like viruses
FJ646611	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
FJ956701	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
FJ956702	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
FJ956703	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
FJ956704	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
FJ956705	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
FN252890	<i>Tomato yellow leaf curl virus</i>	<i>Rhynchosia capitata</i>	China	TYLC-like viruses
FN256256	<i>Tomato yellow leaf curl virus</i>	<i>Rhynchosia capitata</i>	China	TYLC-like viruses
FN256257	<i>Tomato yellow leaf curl virus</i>	<i>Rhynchosia capitata</i>	China	TYLC-like viruses
FN256258	<i>Tomato yellow leaf curl virus</i>	<i>Rhynchosia capitata</i>	China	TYLC-like viruses
FN256259	<i>Tomato yellow leaf curl virus</i>	<i>Rhynchosia capitata</i>	China	TYLC-like viruses
FN650808	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
FR851297	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Grenada	TYLC-like viruses

GQ141873	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
GQ861426	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Jordan	TYLC-like viruses
GQ861427	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Jordan	TYLC-like viruses
GU076440	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076441	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076442	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076443	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076444	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076445	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076446	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076447	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076448	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076449	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076450	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076451	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076452	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076453	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU076454	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
GU111505	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
GU178813	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178814	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178815	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178816	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178817	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178818	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178819	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU178820	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
GU199587	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
GU322423	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	USA	TYLC-like viruses
GU322424	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	USA	TYLC-like viruses
GU325632	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
GU325633	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses

GU325634	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
GU348995	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
GU355941	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Guatemala	TYLC-like viruses
GU434141	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
GU434142	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
GU434144	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
GU563330	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
GU951436	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
GU951437	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
GU983859	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
HE603241	<i>Tomato yellow leaf curl virus</i>	<i>Sida santaremensis</i>	New Caledonia	TYLC-like viruses
HE603242	<i>Tomato yellow leaf curl virus</i>	<i>Sida santaremensis</i>	New Caledonia	TYLC-like viruses
HE603243	<i>Tomato yellow leaf curl virus</i>	<i>Sida santaremensis</i>	New Caledonia	TYLC-like viruses
HE603244	<i>Tomato yellow leaf curl virus</i>	<i>Sida santaremensis</i>	New Caledonia	TYLC-like viruses
HE603245	<i>Tomato yellow leaf curl virus</i>	<i>Sida santaremensis</i>	New Caledonia	TYLC-like viruses
HE603246	<i>Tomato yellow leaf curl virus</i>	<i>Sida santaremensis</i>	New Caledonia	TYLC-like viruses
HE819241	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HE819242	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HE819243	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HE819245	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HF548825	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Sweden	TYLC-like viruses
HF548826	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Estonia	TYLC-like viruses
HG969207	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969208	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969254	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969256	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969266	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969268	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969270	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969271	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969272	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969279	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses

HG969280	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969283	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HG969285	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
HM043732	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM130912	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
HM130913	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
HM130914	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
HM208334	<i>Tomato yellow leaf curl virus</i>	<i>Cleome affinis</i>	China	TYLC-like viruses
HM358879	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM448447	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
HM459851	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
HM627881	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM627882	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM627883	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM627884	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM627885	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HM856873	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856909	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856910	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856911	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856912	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856913	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856914	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856915	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856916	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856917	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856918	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM856919	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses
HM988987	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
HQ260984	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
HQ702861	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
HQ702862	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses

HQ702863	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JF301667	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JF301668	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JF414236	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JF414237	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JF451352	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Kuwait	TYLC-like viruses
JF727878	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JF817218	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JF833036	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JF964959	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JN183872	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183873	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183874	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183875	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183876	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183877	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183878	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN183879	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN412854	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN604484	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
JN604486	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
JN604487	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
JN604488	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	TYLC-like viruses
JN680149	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JN680353	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
JN990922	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN990923	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN990924	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN990925	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN990926	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN990927	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JN990928	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses

JQ004028	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JQ004045	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004046	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004047	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004048	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004049	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004050	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004051	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ004052	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ013089	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JQ013090	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JQ013091	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JQ034613	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JQ038232	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038233	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038234	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038235	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038236	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038237	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038238	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038239	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ038240	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ231214	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
JQ303121	<i>Tomato yellow leaf curl virus</i>	<i>Solanum pimpinellifolium</i>	Mexico	TYLC-like viruses
JQ326957	<i>Tomato yellow leaf curl virus</i>	<i>Phaseolus vulgaris</i>	China	TYLC-like viruses
JQ354991	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iraq	TYLC-like viruses
JQ411237	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
JQ414025	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
JQ807735	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JQ867092	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JQ928346	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
JQ928347	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses

JQ928348	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
JX070042	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX070043	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX070044	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX070045	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX128099	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX128100	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX131286	<i>Tomato yellow leaf curl virus</i>	<i>Sinapis arvensis</i>	Jordan	TYLC-like viruses
JX444575	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Jordan	TYLC-like viruses
JX456637	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX456638	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX456639	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX456640	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX456641	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
JX456642	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
JX456643	<i>Tomato yellow leaf curl virus</i>	<i>Solanum melongena</i>	China	TYLC-like viruses
JX669541	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX669542	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX669543	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX669544	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX675237	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX856172	<i>Tomato yellow leaf curl virus</i>	<i>Nicotiana tabacum</i>	China	TYLC-like viruses
JX856173	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
JX910534	<i>Tomato yellow leaf curl virus</i>	<i>Acalypha australis</i>	China	TYLC-like viruses
JX961665	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JX961666	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JX961667	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JX961668	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JX961669	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	South Korea	TYLC-like viruses
JX997798	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX997799	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
JX997800	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	China	TYLC-like viruses

JX997801	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	China	TYLC-like viruses
KC106635	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106636	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106637	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106638	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106640	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106641	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106642	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106643	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106644	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106645	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106646	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106647	<i>Tomato yellow leaf curl virus</i>	<i>Datura stramonium</i>	Iran	TYLC-like viruses
KC106648	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KC106649	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KC106650	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KC106651	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KC106652	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KC138543	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC138544	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC138545	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC138546	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC211184	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC312655	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312656	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312657	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312658	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312659	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312660	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312661	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312662	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312663	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses

KC312664	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312665	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312666	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312667	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312668	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312669	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312670	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312671	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312672	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC312673	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KC428753	<i>Tomato yellow leaf curl virus</i>	<i>Solanum laciniatum</i>	China	TYLC-like viruses
KC677732	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	japan	TYLC-like viruses
KC702796	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC702797	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC702798	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC810892	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC852147	<i>Tomato yellow leaf curl virus</i>	<i>Gossypium hirsutum</i>	China	TYLC-like viruses
KC852149	<i>Tomato yellow leaf curl virus</i>	<i>Abutilon theophrasti</i>	China	TYLC-like viruses
KC852150	<i>Tomato yellow leaf curl virus</i>	<i>Acalypha australis</i>	China	TYLC-like viruses
KC852151	<i>Tomato yellow leaf curl virus</i>	<i>Zinnia elegans</i>	China	TYLC-like viruses
KC953602	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Spain	TYLC-like viruses
KC999844	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC999845	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC999846	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC999847	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KC999848	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KF225312	<i>Tomato yellow leaf curl virus</i>	<i>Eustoma russellianum</i>	South Korea	TYLC-like viruses
KF435136	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum frutescens</i>	Saudi Arabia	TYLC-like viruses
KF533855	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	TYLC-like viruses
KF533856	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	TYLC-like viruses
KF533857	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	TYLC-like viruses
KF612971	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses

KF906542	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KF990604	<i>Tomato yellow leaf curl virus</i>	<i>Mikania micrantha</i>	China	TYLC-like viruses
KJ125410	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ125411	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ140787	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ140788	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ466047	<i>Tomato yellow leaf curl virus</i>	<i>Cucurbita maxima</i>	Japan	TYLC-like viruses
KJ466048	<i>Tomato yellow leaf curl virus</i>	<i>Cucurbita maxima</i>	Japan	TYLC-like viruses
KJ546418	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ585666	<i>Tomato yellow leaf curl virus</i>	<i>Phaseolus vulgaris</i>	Japan	TYLC-like viruses
KJ754186	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754187	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754188	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754189	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754190	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754191	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754192	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ754193	<i>Tomato yellow leaf curl virus</i>	<i>Perilla frutescens</i>	China	TYLC-like viruses
KJ754194	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ830841	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Kuwait	TYLC-like viruses
KJ830842	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Kuwait	TYLC-like viruses
KJ850344	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ879948	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ879949	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ879950	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KJ913682	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Dominican Republic	TYLC-like viruses
KJ913683	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Dominican Republic	TYLC-like viruses
KM435319	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435320	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435321	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435322	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435323	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses

KM435324	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435325	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435326	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435327	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM435328	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506947	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506948	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506949	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506950	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506951	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506952	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506953	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506954	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506955	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506956	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506957	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506958	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506959	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506960	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM506961	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KM926625	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Cuba	TYLC-like viruses
KM926626	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Cuba	TYLC-like viruses
KP684146	<i>Tomato yellow leaf curl virus</i>	<i>Viola prionantha</i>	China	TYLC-like viruses
KP685598	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KR108214	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Kuwait	TYLC-like viruses
KT338293	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KT338294	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KT338295	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KT338296	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KT852577	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KT921303	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Egypt	TYLC-like viruses
KT990213	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses

KU517848	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU517849	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU760888	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
KU760889	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
KU760890	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
KU760891	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
KU760892	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	China	TYLC-like viruses
KU836749	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
KU836750	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
KU892717	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU975396	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU975397	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU975398	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU975399	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KU981040	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981041	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981042	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981043	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981044	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981045	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981046	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981047	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KU981049	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	TYLC-like viruses
KX024639	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024640	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024641	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024642	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024644	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024645	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024646	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024648	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX024649	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses

KX024650	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	TYLC-like viruses
KX034538	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034539	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034540	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034541	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034542	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034543	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034544	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KX034545	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KX034546	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034547	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034548	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KX034549	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KX034550	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034551	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034552	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KX034553	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KX347094	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347095	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347096	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347097	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347098	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347100	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347101	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347102	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347103	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347104	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347105	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347106	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347107	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347108	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347109	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses

KX347143	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347144	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347145	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	TYLC-like viruses
KX347155	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347156	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347157	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347158	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347159	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347160	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347161	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347162	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347163	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347164	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347165	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347166	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Iran	TYLC-like viruses
KX347167	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
KX347168	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
KX347169	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
KX347170	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
KX347171	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
KX347172	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mauritius	TYLC-like viruses
KX427166	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
KX440606	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
KX440607	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
KX440608	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
KX440610	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
KX440611	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Mexico	TYLC-like viruses
KX710157	<i>Tomato yellow leaf curl virus</i>	<i>Cyamopsis tetragonoloba</i>	Pakistan	TYLC-like viruses
KX885028	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KX885029	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KY064016	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	TYLC-like viruses
KY111368	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	South Korea	TYLC-like viruses

KY412552	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Azerbaijan	TYLC-like viruses
KY499717	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KY499718	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KY499719	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KY499720	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KY499721	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	TYLC-like viruses
KY656825	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	France	TYLC-like viruses
KY656826	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	France	TYLC-like viruses
KY783940	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
KY810789	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	United Kingdom	TYLC-like viruses
KY825714	<i>Tomato yellow leaf curl virus</i>	<i>Brassica rapa</i>	Iran	TYLC-like viruses
KY965834	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965835	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965836	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965837	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965838	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965839	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965840	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965841	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965842	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965843	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965844	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965845	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965846	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965847	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965849	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965850	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965851	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965852	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965853	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965854	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY965855	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses

KY971361	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971363	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971364	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971366	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971367	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971368	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971369	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971370	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY971371	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
KY996455	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996456	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996457	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996459	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996460	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996461	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996462	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
KY996463	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	TYLC-like viruses
LC099965	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Japan	TYLC-like viruses
LC202091	<i>Tomato yellow leaf curl virus</i>	<i>Eustoma grandiflorum</i>	Japan	TYLC-like viruses
LN812978	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	Morocco	TYLC-like viruses
LN831187	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846599	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846600	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846601	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846602	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846603	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846604	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846605	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846606	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846607	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846608	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846609	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses

LN846610	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846613	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846614	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846615	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846616	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
LN846617	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Morocco	TYLC-like viruses
MF405078	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Italy	TYLC-like viruses
MF536415	<i>Tomato yellow leaf curl virus</i>	<i>Physalis divaricata</i>	Iran	TYLC-like viruses
MF590732	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590733	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590734	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590735	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590736	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590737	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590738	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590739	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590740	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590741	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590742	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF590743	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF668139	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF668140	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF668141	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	China	TYLC-like viruses
MF669088	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669089	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669090	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669091	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669093	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669094	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669096	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669097	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669099	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses

MF669100	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669101	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669103	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669104	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669105	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669106	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669107	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669108	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669110	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669111	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669112	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669113	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669114	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669115	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669116	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669117	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF669118	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF687350	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF687351	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	TYLC-like viruses
MF945598	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
MF945599	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annuum</i>	Mexico	TYLC-like viruses
MG489967	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	France	TYLC-like viruses
MG489968	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Italy	TYLC-like viruses
MG715488	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MG970362	<i>Tomato yellow leaf curl virus</i>	<i>Phaseolus vulgaris</i>	Oman	TYLC-like viruses
MH205950	<i>Tomato yellow leaf curl virus</i>	<i>Phaseolus vulgaris</i>	China	TYLC-like viruses
MH644778	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644779	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644780	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644781	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644782	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644783	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses

MH644784	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644785	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644786	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644787	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH644788	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680947	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680948	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680949	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680950	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680951	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680952	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680953	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680954	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680955	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680956	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680957	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
MH680958	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Spain	TYLC-like viruses
X15656	<i>Tomato yellow leaf curl virus</i>	<i>Abutilon sellovianum</i>	India	TYLC-like viruses
X76319	<i>Tomato yellow leaf curl virus</i>	<i>Abutilon sellovianum</i>	India	TYLC-like viruses
HG969267	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	
HG969269	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	
HG969281	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	
HG969282	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	
HG969286	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Oman	
HM627880	<i>Tomato yellow leaf curl virus</i>	<i>Lycopersicon esculentum</i>	China	
KT728752	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Saudi Arabia	
KU981048	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Trinidad and Tobago	
KX024643	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	
KX024647	<i>Tomato yellow leaf curl virus</i>	<i>Carica papaya</i>	USA	
KX347099	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	
KX347133	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	Australia	
KX440609	<i>Tomato yellow leaf curl virus</i>	<i>Capsicum annum</i>	Mexico	

KY965848	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY965864	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY965893	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY965900	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY965909	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY965918	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY965923	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971335	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971338	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971342	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971353	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971356	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971357	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971358	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971362	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971365	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY971372	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KY996454	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	
KY996458	<i>Tomato yellow leaf curl virus</i>	<i>Vigna unguiculata</i>	Trinidad and Tobago	
MF669092	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
MF669095	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
MF669098	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
MF669102	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
MF669109	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
MF669119	<i>Tomato yellow leaf curl virus</i>	<i>Solanum lycopersicum</i>	USA	
KC845301	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Saudi Arabia	Asia and Africa
KF229721	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF229722	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF229723	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF229724	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF229726	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Oman	TYLC-like viruses
KF356163	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	China	TYLC-like viruses

KF435137	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Saudi Arabia	TYLC-like viruses
KF477277	<i>Tomato yellow leaf curl virus</i>	<i>Solanum</i> sp.	Venezuela	TYLC-like viruses
KC686705	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC686706	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC686707	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC686708	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC686709	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KC686710	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
KU933255	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Amaranthus blitum</i>	China	Far East Asia and Indian subcontinent
KU933256	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Amaranthus blitum</i>	China	Far East Asia and Indian subcontinent
KU975400	<i>Tomato yellow leaf curl Yunnan virus</i>	<i>Solanum lycopersicum</i>	China	Far East Asia and Indian subcontinent
FJ174698	<i>Tomato yellow leaf distortion virus</i>	<i>Nicotiana benthamiana</i>	Cuba	Meso- and Latin Americas
KU232891	<i>Tomato yellow leaf distortion virus</i>	<i>Sidastrum micranthum</i>	Cuba	Meso- and Latin Americas
AY508993	<i>Tomato yellow margin leaf curl virus</i>	<i>Solanum lycopersicum</i>	Venezuela	Meso- and Latin Americas
KC176780	<i>Tomato yellow mottle virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
KY064009	<i>Tomato yellow mottle virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
KY064010	<i>Tomato yellow mottle virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
KY064015	<i>Tomato yellow mottle virus</i>	<i>Solanum lycopersicum</i>	Costa Rica	Meso- and Latin Americas
DQ336350	<i>Tomato yellow spot virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
FJ538207	<i>Tomato yellow spot virus</i>	<i>Ocimum basilicum</i>	Argentina	Meso- and Latin Americas
JX513952	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KC706628	<i>Tomato yellow spot virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KJ742419	<i>Tomato yellow spot virus</i>	<i>Salvia hispanica</i>	Argentina	Meso- and Latin Americas
KX348165	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348166	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348167	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348168	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348169	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348170	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348171	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348172	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348173	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas

KX348174	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348175	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348176	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348177	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348178	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
KX348179	<i>Tomato yellow spot virus</i>	<i>Leonurus sibiricus</i>	Brazil	Meso- and Latin Americas
EF417915	<i>Tomato yellow vein streak virus</i>	<i>Solanum tuberosum</i>	Brazil	Meso- and Latin Americas
EF459696	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
GQ387369	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KC136336	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Chile	Meso- and Latin Americas
KC136337	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Chile	Meso- and Latin Americas
KC136339	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Chile	Meso- and Latin Americas
KC706629	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706630	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706631	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706632	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706633	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706634	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706635	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706636	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706637	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706638	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706639	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706640	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706641	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706642	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706643	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706644	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706645	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706646	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706647	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706648	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas

KC706649	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706650	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706651	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706652	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706653	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KC706654	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Brazil	Meso- and Latin Americas
KJ413253	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Argentina	Meso- and Latin Americas
KR024026	<i>Tomato yellow vein streak virus</i>	<i>Solanum lycopersicum</i>	Uruguay	Meso- and Latin Americas
KY555801	<i>Tomato yellow vein streak virus</i>	<i>Phaseolus vulgaris</i>	Argentina	Meso- and Latin Americas
KU569578	<i>Velvet bean golden mosaic virus</i>	<i>Mucuna pruriens</i>	Taiwan	Asia and Africa
KU569579	<i>Velvet bean golden mosaic virus</i>	<i>Mucuna pruriens</i>	Taiwan	Asia and Africa
KU569580	<i>Velvet bean golden mosaic virus</i>	<i>Mucuna pruriens</i>	Taiwan	Asia and Africa
KU569581	<i>Velvet bean golden mosaic virus</i>	<i>Mucuna pruriens</i>	Taiwan	Asia and Africa
KU569582	<i>Velvet bean golden mosaic virus</i>	<i>Mucuna pruriens</i>	Taiwan	Asia and Africa
KU569583	<i>Velvet bean golden mosaic virus</i>	<i>Mucuna pruriens</i>	Taiwan	Asia and Africa
FN543425	<i>Velvet bean severe mosaic virus</i>	<i>Macuna</i> sp.	India	Asia and Africa
KT099123	<i>VEM begomovirus 1</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099124	<i>VEM begomovirus 1</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099122	<i>VEM begomovirus 1</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099125	<i>VEM begomovirus 2</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099127	<i>VEM begomovirus 3</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099126	<i>VEM begomovirus 3</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099128	<i>VEM begomovirus 4</i>	Not specified	Guatemala	Meso- and Latin Americas
KT099142	<i>VEM begomovirus 5</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099134	<i>VEM begomovirus 5</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099135	<i>VEM begomovirus 5</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099136	<i>VEM begomovirus 5</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099137	<i>VEM begomovirus 5</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099138	<i>VEM begomovirus 5</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099139	<i>VEM begomovirus 6</i>	Not specified	Puerto Rico	Meso- and Latin Americas
KT099146	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099147	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa

KT099148	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099149	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099150	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099151	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099152	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099153	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099154	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099155	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KT099156	<i>VEM begomovirus 7</i>	Not specified	Spain	Asia and Africa
KX831132	<i>Vernonia crinkle virus</i>	<i>Vernonia amygdalina</i>	Uganda	Asia and Africa
KX831133	<i>Vernonia crinkle virus</i>	<i>Vernonia amygdalina</i>	Uganda	Asia and Africa
JF265670	<i>Vernonia yellow vein Fujian virus</i>	<i>Vernonia cinerea</i>	China	Far East Asia and Indian subcontinent
AM182232	<i>Vernonia yellow vein virus</i>	<i>Vernonia cinerea</i>	India	Far East Asia and Indian subcontinent
KC430936	<i>Vigna yellow mosaic virus</i>	<i>Vigna elegans</i>	Mexico	America and Middle East
KR612272	<i>Vinca leaf curl virus</i>	<i>Vinca rosea</i>	India	Asia and Africa
KC462552	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus</i> sp.	Palestine	Asia and Africa
HG941639	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita</i> sp.	Oman	Asia and Africa
JN618981	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita</i> sp.	Oman	Asia and Africa
JN618982	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita</i> sp.	Oman	Asia and Africa
JN618983	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita</i> sp.	Oman	Asia and Africa
JN624386	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita</i> sp.	Oman	Asia and Africa
EF201809	<i>Watermelon chlorotic stunt virus</i>	Not specified	Israel	Asia and Africa
AJ012081	<i>watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Palestine	Asia and Africa
AJ245650	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus vulgaris</i>	Sudan	Asia and Africa
AJ245652	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus vulgaris</i>	Iran	Asia and Africa
EU561237	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Jordan	Asia and Africa
HG969278	<i>Watermelon chlorotic stunt virus</i>	<i>Solanum lycopersicum</i>	Oman	Asia and Africa
HM368371	<i>Watermelon chlorotic stunt virus</i>	<i>Cucumis melo</i>	Lebanon	Asia and Africa
JX131283	<i>Watermelon chlorotic stunt virus</i>	<i>Sinapis arvensis</i>	Jordan	Asia and Africa
KJ854912	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ854913	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ854914	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa

KJ854915	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ854916	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ854917	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ854918	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ854919	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	West bank	Asia and Africa
KJ939448	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Saudi Arabia	Asia and Africa
KJ958911	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Saudi Arabia	Asia and Africa
KJ958912	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita pepo</i>	Saudi Arabia	Asia and Africa
KM066100	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Saudi Arabia	Asia and Africa
KT272765	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Iran	Asia and Africa
KT272767	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Iran	Asia and Africa
KT272769	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Iran	Asia and Africa
KT272771	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Iran	Asia and Africa
KT272773	<i>Watermelon chlorotic stunt virus</i>	<i>Cucurbita pepo</i>	Iran	Asia and Africa
KY124280	<i>Watermelon chlorotic stunt virus</i>	<i>Citrullus lanatus</i>	Mexico	Asia and Africa
KY488568	<i>Watermelon chlorotic stunt virus</i>	<i>Datura inoxia</i>	Sudan	Asia and Africa
KY825715	<i>Watermelon chlorotic stunt virus</i>	<i>Brassica rapa</i>	Iran	Asia and Africa
KT444601	<i>West African Asystasia virus</i>	<i>Asystasia</i> sp.	Nigeria	Asia and Africa
KT444607	<i>West African Asystasia virus</i>	<i>Asystasia</i> sp.	Cameroon	Asia and Africa
KT444609	<i>West African Asystasia virus</i>	<i>Asystasia</i> sp.	Benin	Asia and Africa
HM859902	<i>VEM begomovirus 1</i>	<i>Bemisia tabaci</i>	USA	Meso- and Latin Americas
DQ395343	<i>Wissadula golden mosaic St Thomas virus</i>	<i>Wissadula amplissima</i>	Jamaica	Meso- and Latin Americas
GQ355488	<i>Wissadula golden mosaic St Thomas virus</i>	<i>Wissadula amplissima</i>	Jamaica	Meso- and Latin Americas
KX691409	<i>Wissadula yellow mosaic virus</i>	<i>Sida</i> sp.	Brazil	America and Middle East
KX691411	<i>Wissadula yellow mosaic virus</i>	<i>Wissadula</i> sp.	Brazil	America and Middle East

708 Fonte: O autor.

709 **Supplementary Table S2.** Recombination detected by RDP in the DNA-A of all begomoviruses subpopulations.

Event	Recombinant	Recombination breakpoints		Parents		Methods	P-value
		Initial	Final	Minor	Major		
Subpopulation 1 - Far East Asia and Indian subcontinent							
1	^KU892658	415	2324	KJ524905	KU980917	RGBMCS3	1.53E-105
	KU892676			AJ851005	KU980923		
	KU892677			KU376491	KU980924		
	KU892657			KU954378	JF681158		
	KU892663			KU954379	AJ558118		
	KU892662						
	KU892661						
	JX128102						
	JX128101						
	JX555979						
	KU892659						
	KU892660						
	EU874386						
	AJ558117						
	FN256260						
	AJ704604						
	AJ811914						
	AM691553						
	AM691552						
	AM691554						
	AJ558123						

2	DQ866128	3275	2262	KJ850343	EF554783	RGBMCS ₃	1.46E-100
3	^JN082233	3065	2324	JX679251	Unknown	RGBMCS ₃	2.71E-89
	HF674921			JX679252			
	AJ971524			KF640689			
	AJ971265			AJ457985			
	HF674920			KU990875			
	KC189894			KU934101			
4	AM236785	3274	1262	Unknown	AJ849916	RGBMCS ₃	1.10E-80
	AM236784				EU487045		
	AM236786				JX911332		
5	FN297834	1980	3249(?)	KU980917	AM236785	RGBMCS ₃	1.46E-80
6	AJ851005	3275	2126	Unknown	KU954377	RGBMCS ₃	1.66E-79
	KU376491				JX911332		
	KU954387				KU954389		
	KU954378				AJ849916		
	KU954379				AJ558120		
7	^LC091538	162	2240	Unknown	JN703795	RGBMCS ₃	2.23E-79
	LC091539				FJ495184		
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9	KC878475	1155	294	KP685599	KU933257	RGBMCS ₃	2.08E-78
10	^AJ495813	3234	2340	AM940137	KJ016240	RGBMCS ₃	1.86E-76
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	KU980924			KJ016239			
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11	^JN809812	3244	2328	JN809823	AM261326 RGBMCS ₃	4.34E-76
	JN809815			JN809813	KU934105	
	JN809817			JN809820	KU934102	
12	KU601621	162	2320	KU975392	AM940137 RGBMCS ₃	2.19E-71
	KU975395			KU601622	KU975393	
	EU585781			KX759646	KU954388	
13	KU601621	3151	1945	KU990875	Unknown RGBMCS ₃	1.25E-69
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	EU585781			KU934100		
14	^KJ524905	1474	234	KU954380	KC878473 RGBMCS ₃	1.04E-67
	FN297834			JX911332	KC857511	
15	^AJ420319	3216	2334	KX943294	Unknown RGBMCS ₃	1.15E-64
	KX388157			GU723735		
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17	KT322144	3274	1851	GU208516	Unknown RGBMCS ₃	3.04E-63
18	^KF150142	908	3274	Unknown	KU980918 RGBMCS ₃	6.59E-62
19	KJ016239	658	1490	Unknown	HG003652 RGBMCS ₃	3.74E-61
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	JX972141					

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21	^DQ641699	3186	2306	DQ641708	AF240674	<u>RGBMCS3</u>	5.84E-58
22	DQ866124	3150	2308	DQ866132	Unknown	<u>RGBMCS3</u>	8.54E-58
23	AB028604	442	2211	AB055008	AB287441	<u>RGBMCS3</u>	3.50E-57
24	JN809823 JN809813 JN809820	3240	2350	JN809824 AB050781 KR094067	Unknown	<u>RGBMCS3</u>	1.00E-53
25	^AF240674 AJ971267 AJ512761 AJ512762 AJ566744	274	1665	DQ871221	AF327436	<u>RGBMCS3</u>	1.39E-53
26	^HQ162268	3248	2084	HQ162269	Unknown	<u>RGBMCS3</u>	1.16E-57
27	JN809811	244	2337	X74516	AJ558118	<u>RGBMCS3</u>	1.72E-49
28	^AJ438937	3201	2329	AJ438936	Unknown	<u>RGBMCS3</u>	1.07E-45
29	^AJ558118 KU980917	580	2780	AJ704602	HQ162269 KC857511	<u>RGBMCS3</u>	3.40E-45
30	^JN809822 JN809825	3150	2498	AJ965539 DQ641708	AF195782	<u>RGBMCS3</u>	2.64E-44

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	AM691552				AM236785		
	AM691554				MH101419		
	AJ558123				AJ851005		
	KU892666				KU376491		
32	KU892671	98 (?)	1474	FN434083	JX911332	RGBMCS ₃	3.92E-51
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	KU892666			GQ870288	KU954388		
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35	KC577540	390	1224	KU933257	AB307731	R _{GBMCS3}	6.31E-43
36	^AJ971263	2316	102	Unknown	KU980916	R _{GBMCS3}	8.34E-43
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37	^AY650283	203	2348	MG257884	KU946996	RGBMCS ₃	3.64E-47
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	FJ869907			MG257883	EU487027		
	JN703795			LC089014	EU487032		
38	^AM503104	76	2342	EF554783	AM236780	RGBMCS ₃	4.60E-41
39	AB307731	262	2523	AB377112	KF785751	RGBMCS ₃	1.15E-42
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40	^EU368372	3247 (?)	2564	GQ246941	GQ338766	RGBMCS ₃	2.72E-40

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					GQ373254		
41	^AB162141	1310	167	AB100305	Unknown	RGBMCS <u>3</u>	1.05E-39
42	FJ495184	3100	2341	MG257884	EU487032	RGBMCS <u>3</u>	1.86E-43
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43	^KT962229	3230	1355	Unknown	KU954380	RGBMCS <u>3</u>	6.45E-38
44	^KU933257	3275	1768	AJ558120	Unknown	RGBMCS <u>3</u>	4.43E-37
45	^GQ246941	3248 (?)	1970	^GQ246941	KU980920	RGBMCS <u>3</u>	2.72E-34
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	GQ338765			GQ338765	KU980919		
46	KX759647	3246 (?)	2306	AM236785	Unknown	RGBMCS <u>3</u>	4.48E-32
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47	^AB178946	540	1987	GQ477135	AB287440	RGBMCS <u>3</u>	4.49E-32
48	^KU980919	1254	1688	Unknown	AM260699	R <u>G</u> BMCS3	1.52E-30
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KU980920						
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50	^MH101420	619	1253 (?)	AJ495814	KU980922	R <u>GB</u> MCS3 4.70E-27
51	KY373213	641	1253 (?)	AM940137	KU980922	R <u>GB</u> MCS3 5.89E-26
52	^AM236780	3314	2306	LC089013	Unknown	RGBMCS <u>3</u> 2.17E-36
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53	KF414123	78	2316	KU358527	AY602165	RGBMCS <u>3</u> 1.51E-25
54	^MK069591	793	1660	Unknown	DQ866131	RGBM <u>C</u> S3 1.65E-25
55	KT322144	2390	2900	LC051118	MH101420	RGBMCS <u>3</u> 1.09E-24
56	^HQ162270	1293	3085	EF011559	FJ712189	RGBMCS <u>3</u> 5.34E-30
57	DQ871221	1902	3122 (?)	KU934102	AM236784	RGBMCS <u>3</u> 2.52E-23
58	DQ871221	456	1260	Unknown	HG003652	RGBMCS <u>3</u> 7.36E-34
59	^MH101420	1700	3100	Unknown	JN809824	RGBMCS <u>3</u> 4.45E-23
60	HG003652	250	640 (?)	KY373213	AJ849916	R <u>GB</u> MCS3 7.53E-23
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62	AJ564743	1280 (?)	2031	Unknown	AM940137 <u>R</u> GBMCS3	1.69E-22
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63	^AM940137	2823	3248	Unknown	HG003652	R <u>G</u> BMCS3	2.94E-22
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64	^AF134484	1282	3189	AF206674	DQ641695	R <u>G</u> BMCS <u>3</u>	9.02E-22
	AF414287			AJ495812			
65	KU933257	1769 (?)	2350	JF265670	Unknown	R <u>G</u> BMCS <u>3</u>	4.09E-21
66	^KU946995	2536 (?)	3274	Unknown	KX063715		7.65E-21
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67	^KU980922	663	1253 (?)	Unknown	AF134484	R <u>G</u> BMCS <u>3</u>	8.09E-21
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70	^KC686706	288	630 (?)	KY373213	AF136222	<u>R</u> GBMCS3 7.23E-20
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72	^KU902456	288	624 (?)	KY373213	AF136222	R <u>G</u> BMCS3	3.12E-20
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73	^MH101419	182	540	Unknown	KC810890	R <u>G</u> BMCS <u>3</u>	2.86E-19
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75	^JF265670	640	2320	Unknown	DQ866129	RGBMCS <u>3</u>	3.18E-20
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77	^MH035670	2368	2824	Unknown	KU358528	<u>R</u> GBMCS3	7.35E-23
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78	AB377113	264 (?)	2530	EU487032	Unknown	RGBMCS <u>3</u>	1.67E-19
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79	^S53251	2825 (?)	3200	Unknown	JX416176	<u>R</u> GBMCS3	5.77E-19
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81	GU253915	2342	2994	Unknown	JX982137	R <u>G</u> BMCS3	1.22E-18
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82	^AB287440	132 (?)	1228	AB020781	AB079689	R <u>G</u> BMCS <u>3</u>	1.32E-19
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83	^AM238692	2324	3086	GQ169042	Unknown	R <u>G</u> BMCS <u>3</u>	8.01E-17
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84	EF011559	152 (?)	700	Unknown	AJ781302	<u>R</u> GBMCS3	1.91E-16
85	AM260703	2523	3099	Unknown	JX679251	RGBMCS <u>3</u>	5.40E-17
86	^KJ016240	2306	78	EU624503	Unknown	<u>R</u> GBMCS3	3.56E-16
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88	^FJ434943	2824	3139	Unknown	HM164545	<u>R</u> GBMCS3	8.37E-16
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91	^AB079766	1770	3272	AJ438936	AB433979	R <u>G</u> BMCS3 1.41E-18
92	^DQ641696	560	1236 (?)	Unknown	KC810890	R <u>G</u> BMCS <u>3</u> 7.15E-16
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94	^KM051844	162	540	AJ810096	KC577539 RGBMCS <u>3</u>	7.19E-14
	KC810890			AM048837	KF785751	
95	^AB100304	680	1269 (?)	Unknown	KC677733 RGBMCS <u>3</u>	1.39E-20
	AB162141					
96	^AJ965539	2342	2798 (?)	Unknown	JX183732 <u>R</u> GBMCS3	3.70E-13
	DQ641708				JX183733	
97	AY602166	1520 (?)	2328	KC577540	KU934102 RGBMCS <u>3</u>	4.70E-12
	GQ169042				AJ319676	
98	^AJ810157	3246	618	AY602166	AF327436 RGBMCS <u>3</u>	3.25E-12
	AJ495814			GQ169042		
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99	^EU487046	206	632	MG257887	KF785751 RGBMCS <u>3</u>	7.31E-12
	EU487047			EF554783	KC577539	
	EU487048			FJ712189	KU954390	
100	^KC857508	2829	103	KJ016239	KU358528 <u>R</u> GBMCS3	5.13E-10
101	^FN396966	2406	2542	Unknown	AF084006 <u>R</u> GBMCS3	3.10E-11
	EF602306				S53251	
	EF554783				AF084007	
	FJ712189				JX416176	

	MG257887				DQ641699	
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	KT266873				KF990601	
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102	^AB079765	1154	2823 (?)	AB236325	AB178947	RGBMCS3 6.24E-11
103	AB079765	2829 (?)	3086	AJ438936	AB178945	RGBMCS3 4.67E-12
104	KC857511	2372	3007 (?)	AM050555	FN434083	RGBMCS3 5.52E-10
	KC878473			AJ319676		
	GQ870288			KC189893		
	HQ162269			AJ319675		
	GQ338766			FN985163		
	GQ373254			JX679252		
105	KU933256	3046 (?)	3302 (?)	Unknown	KC686706	RGBMCS3 1.83E-10
106	^AF084007	2339	2512	KC857508	Unknown	RGBMCS3 1.72E-09
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	FJ434943					
	HM164545					

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107	^AB300463	2712	3276 (?)	HM164545	AB007990	<u>R</u> GBMCS3	1.11E-15
108	^AB236323	2830	3114	AJ438936	AB178945	<u>R</u> <u>G</u> BMCS3	1.16E-10

109	^EU487046	657 (?)	1279 (?)	AJ495814	EU487029	RGBMCS3	1.13E-21
	EU487047			AJ564742	EU487008		
	EU487048				DQ092867		
	MH101419				EU487032		
	KF785751				EU487035		
	AB050781				EU487038		
	KM051527				EU487026		
	LC051117				EU487040		
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	LC051118				AB050597		
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	JX911332				AB377112		
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	AJ558120						
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110	^AB433979	2412	3078	AB287441	Unknown	RGBMCS <u>3</u> 1.37E-09
111	LC089766	2543 (?)	3190	AF327436	FJ712189	RGBMCS <u>3</u> 1.37E-09
	LC089014					
	LC089013					
112	AJ971263	1254	1667	KU980913	Unknown	<u>R</u> GBMCS3 2.29E-11
	AM260699			KU934099		
113	^EU487047	2830	3150	GQ338765	Unknown	<u>R</u> GBMCS3 1.40E-09
	EU487048			GQ338768		
114	^GQ477135	2678	3217	Unknown	HM164547	RGBMCS <u>3</u> 2.74E-09
	AB236321				HM164541	
	AJ542540				HM164549	
	AJ543429				KT992046	
	FJ817425				HQ189431	
	JX416174				KT992047	
	AB182261					
115	MK069591	2714	3020	Unknown	DQ866131	RGBMCS <u>3</u> 2.74E-09
116	^JQ793786	1392	2744	EU487038	DQ871222	RGBMCS <u>3</u> 2.74E-09
117	^DQ641697	1522 (?)	2116	JX972141	HQ162269	RGBMCS <u>3</u> 3.33E-17
118	AF141922	2628 (?)	191	AY602166	KX943294	RGBM <u>C</u> S3 3.19E-09
	X63015			GQ169042	MF040760	
119	AM048837	1784	2315 (?)	AM260699	DQ641696	RGBMCS <u>3</u> 6.85E-09
	AJ810096			AJ971263	KF990601	
120	^KT992046	2830	3210	EU487039	EF620536	<u>R</u> GBMCS3 8.88E-09

	HM164545			DQ092867	AB287439	
	HM164547			EU487027		
	HQ189431			EU487029		
	KT992047			EU487030		
121	AY514632	2794	3233 (?)	AF206674	KU975392	RGBMCS ₃ 1.23E-08
122	^KF990601	252 (?)	2736	EU487038	KX290922	RGBMCS ₃ 1.77E-13
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	JN809825			EU487040		
	JN809827			EU487028		
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	KU933255					
	KC577540					
123	^KU934102	686 (?)	1382	AJ319675	KU934105	RGBMCS ₃ 5.51E-10
124	AJ566744	1746 (?)	2736	EU487038	GU723750	RGBMCS ₃ 1.32E-15
	DQ641699			EU487042	KX290922	
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	KT962229			EU487043	GU208516	
	DQ871221			DQ092867	GU723735	
	AJ971267			EU487027	EF577264	
	AF240674			EU487032	GU723749	
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	EU487048			EU487037	EF577266		
	AM236784			EU487034	GU723743		
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	JX972141				GU723736		
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	KX759647				DQ871222		
125	^EF620536	2233	2548 (?)	FN434083	Unknown	<u>R</u> GBMCS3	3.82E-08
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	AB287441			JX679251			
	AB178945			GQ338768			
	AB007990			GQ246941			
126	^AJ558118	2824 (?)	3246	Unknown	JX555979	RGBMCS <u>3</u>	7.81E-08
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	KU892657				KU892660	
	KU892663				EU874386	
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	KU892661				FN256260	
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127	^KU934105	1430	2218	FN985163	AM261326	RGBMCS ₃ 3.55E-08
128	^HM164541	2316	2542 (?)	FN434083	Unknown	RGBMCS ₃ 3.04E-16
	AB178949			KU980921		
	AB236323			AJ495812		
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129	^HM164545	3272 (?)	1951	HM164549	AB178948	RGBMCS ₃	8.04E-26
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130	^KU933257	2500	2865	AM236780	KX388157	RGBMCS ₃	1.60E-06
131	^AJ457985	1236	2115 (?)	DQ256460	AJ319677	RGBMCS ₃	3.28E-16
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	JX679251				AM260702		
132	^AM261326	2611	3007 (?)	Unknown	AJ319676	RGBMCS ₃	2.57E-06
133	^AJ564744	2351 (?)	2630	AJ704604	Unknown	RGBMCS ₃	5.07E-12
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	GU723735			KP685599			
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134	^LC089014	2348	2542 (?)	Unknown	AB300463	<u>R</u> GBMCS3	3.34E-06
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135	^GU723715	222	1096	GU723720	DQ866123	R <u>G</u> BMCS3	1.11E-08
	GU723717						
136	^AB055009	410	1154	AB287439	AB178948	RGBMCS <u>3</u>	9.98E-08
137	^DQ866129	1282	2202 (?)	DQ866123	Unknown	RGBMCS <u>3</u>	1.28E-05
138	^JX679252	2328	3007 (?)	AJ319674	Unknown	RGBMCS <u>3</u>	1.77E-08
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	JX679251						
139	^KU933256	1252	1754	KU358528	KU933675	RGBMCS <u>3</u>	4.20E-05
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	KC686708			JX183732	GU440580		
	KC686709			JX183733	KU902456		
	KC686710				KT944082		
140	AB300463	2331	2711 (?)	KU934106	DQ092867	RGBMCS <u>3</u>	5.20E-07
	AB007990			KU934101			
141	GQ870288	1744	2309 (?)	Unknown	DQ866122	RGBMCS <u>3</u>	8.73E-04
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142	^HM164549	418	1190	AB287439	AB178948	RGBMCS <u>3</u>	6.19E-10
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143	^AJ876550	2340 (?)	2828	KU358527	Unknown	RGBMCS <u>3</u>	1.06E-07
144	^EU487043	3113 (?)	287 (?)	Unknown	KT944082	RGBMCS <u>3</u>	4.81E-04
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	EU487042				KU933675		
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	EU487044				KU902456		

145	^KU934106	1403	1743 (?)	KU358527	AB287440	RGBMCS3	2.37E-30
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146 ^GU723730 488 1142 GU723727 DQ866123 RGBMCS3 7.72E-03

Subpopulation 2 – America and Middle East

1	^JN680352	3032	1150	Unknown	JN676151	RGBMCS3	9.21E-33
2	MF504010	310	1296	Unknown	DQ285016	RGBMCS3	9.92E-29
3	^LN848759	1740	2516	Unknown	GU564594	RGBMCS3	3.98E-28
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	LN848761	1740	2516	Unknown	LN848788		
4	^KM595136	1286	1814	Unknown	KM595122	RGBMCS3	6.69E-20
5	^LN848766	1158	2088	LN848796	Unknown	RGBMCS3	1.52E-17
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6	^AJ508785	684	1170	Unknown	DQ347947	<u>R</u> GBMCS3 3.77E-16
	JN680352			Unknown	JN676151	
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7	GU564594	1163	2600	LN848793	LN848789	RGBMCS <u>3</u> 5.68E-16
8	^LN848788	886	1614	Unknown	LN848756	RGBMCS <u>3</u> 6.42E-15
	LN848793					
9	^EF210556	2317 (?)	2886	Unknown	LN848757	RGBMCS <u>3</u> 1.15E-14
	LN848776				LN848763	
	LN848777				LN848752	
	LN848778				LN848786	
10	^LN848773	1654	2532	LN848754	Unknown	RGBMCS <u>3</u> 1.23E-13
11	MG763920	2699	2760	Unknown	MH346454	<u>R</u> GBMCS3 3.81E-11
12	^JQ821386	1888	3073	Unknown	KY624376	RGBMCS <u>3</u> 7.20E-10
13	^KC426927	1776	3033	JN381821	LN848757	RGBMCS <u>3</u> 7.80E-09
14	^KC132844	3073	602	Unknown	JN381823	RGBMCS <u>3</u> 3.37E-09
15	LN848773	1158	1544	Unknown	LN848763	RGBMCS <u>3</u> 1.04E-09
16	^MH346454	2504	2974	Unknown	KC895398	RGBMCS <u>3</u> 1.56E-09
17	^LN848757	1852	3032	Unknown	MH359392	RGBMCS <u>3</u> 2.08E-09
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18	^KC153490	728	1357	Unknown	AF325497 RGBM <u>C</u> S3	1.46E-07
	AY064391				KT099118	
19	^LN848764	126 (?)	710	Unknown	GU128149 RGBM <u>C</u> S <u>3</u>	1.12E-07
20	^KC895398	2577	2855	Unknown	KF670622 RGBM <u>C</u> S3	8.60E-07
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21	^MH359394	1103	2826	EU021216	KY559514	RGBMCS <u>3</u>	7.77E-31
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	MH359392				KY559508		
	MH359396				KY559512		
	MH359390				KY559577		
22	KY559538	509	2085	KY559522	KY559502	RGBMCS <u>3</u>	5.56E-05
23	AF149227	60 (?)	496	Unknown	JN688726	RGBMCS <u>3</u>	6.35E-05
	KY064011				KY064017		
	KY064012						
	KY064018						
	JN688724						
	JQ743486						
	JN688727						
24	^HM626516	1320	2090	DQ875870	Unknown	RGBM <u>C</u> S3	6.04E-04
	HM626515						
25	^LN848780	3018 (?)	439	Unknown	LN848781	RGBM <u>C</u> S3	2.09E-04
	LN848779						
26	^JN381819	2279	2704	Unknown	JN381827	RGBMCS <u>3</u>	2.66E-05
27	^GQ352453	318	1182	Unknown	KT192632	RGBMCS <u>3</u>	1.22E-04
	EU021216			Unknown	KP641349		

Subpopulation 3 - Sweepoviruses

1	^HQ393477	2960	2166	Unknown	HQ393473	RGBMCS <u>3</u>	2.30E-102
2	^HQ393447	2961	1954	HQ393466	Unknown	RGBMCS <u>3</u>	8.01E-85
	EU839577			HQ393456			
	HQ393459			HQ393467			

	HQ393457			HQ393464			
	HQ393454			HQ393465			
	HQ393452			HQ393462			
	KY270782			HQ393463			
	HQ333141			HQ393461			
3	EU839576	2866	2310	EU839578	EF456742	RGBMCS ₃	8.98E-84
4	^FJ969829	2961	2334	FJ969830	JQ621844	RGBMCS ₃	6.21E-83
5	^KJ476510	2954	2204	KU323597	EU309693	RGBMCS ₃	8.24E-79
	^EU839578	2874	2354	Unknown	EF456744	RGBMCS ₃	2.60E-69
	MG254542				KT099144		
	MG254543				KM050768		
	KT099145				EU856364		
	EU839577				EU856366		
	AJ132548				JX286655		
7	EF456742	130	2062	EF456744	Unknown	RGBMCS ₃	1.40E-68
	EF456745			KM050768			
	EU856365			EU856364			
	FJ529203			EU856366			
8	^HQ393458	910	1	Unknown	HQ393455	RGBMCS ₃	6.88E-68
	EU839578				HQ393449		
	EU839576				HQ393445		
	HQ393448						
8	FJ151200						
	EF456741						
	EF456743						
	HQ393445						
	HQ393460						

9	HQ393444	1695	1 (?)	HQ393458	HQ393446	RGBMCS <u>3</u>	4.94E-38
10	KU323597	392	1948	KJ476509	AB433788	<u>R</u> GBMCS3	4.92E-67
11	^HQ393473	2960	2170	HQ393446	Unknown	RGBMCS <u>3</u>	7.37E-67
	HQ393476			KY270781			
12	^HQ333143	32	2282	AF104036	Unknown	RGBMCS <u>3</u>	2.48E-61
	KT992056			AJ586885			
	KF803170			KF697069			
	DQ644561			KF697070			
	KC253234			KF716172			
	KC253235			KT099144			
	JX448368			EU856364			
	KF769447			EF456744			
	KX611145			EU856366			
	AF326775			FJ969833			
	KC253236			KT992055			
13	KJ476507	420	1914	KY783941	KC488316	<u>R</u> GBMCS3	1.02E-60
14	AB433786	2958	2338	AB433787	Unknown	RGBMCS <u>3</u>	3.23E-55
14	FJ969833			KU323597			
14	KT992055						
15	KC907406	1252	2012	JF768740	KC488316	<u>R</u> GBMCS3	1.30E-52
16	EU309693	1599	2964	KJ013581	JF768740	RGBMCS <u>3</u>	1.40E-51
17	^KX859239	1935	1954 (?)	Unknown	EU839577	RGBMCS <u>3</u>	4.16E-51
	FJ969831						
	JQ621843						
	KX611145						
	HQ393477						
	JQ621844						

	KX859238						
18	^KT099133	60	2234	KT099140	Unknown	RGBMCS <u>3</u>	9.69E-49
	KT099143				Unknown		
19	FJ969832	2244	2956	Unknown	KC253233	RGBMCS <u>3</u>	3.77E-46
20	^HQ333144	2236	2910	EU839579	KC907406	RGBMCS <u>3</u>	3.87E-43
21	^KC253238	1604	2961	HQ393469	FJ969830	RGBMCS <u>3</u>	1.71E-42
22	KF697071	319	1583	KF836891	FJ515898	R <u>GB</u> MCS3	5.15E-42
23	^FR751068	2268	2956	EU839579	KC907406	RGBMCS <u>3</u>	4.79E-41
24	^KJ476509	2962	2368	KC488316	KF040465	R <u>GB</u> MCS3	5.27E-37
	KF156759				KF697071		
25	FJ969830	1643	2956	Unknown	DQ644562	RGBMCS <u>3</u>	1.81E-33
	DQ644561				DQ644563		
	FJ969829						
	EF456745						
	EU856365						
	FJ529203						
	KT099143						
	KT099133						
26	^KC488316	2175	2910	Unknown	KT992066	R <u>GB</u> MCS3	1.86E-32
	KC907406				JX961671		
	KJ476507				JX961674		
27	^KF697069	938	1698	Unknown	KF040464	R <u>GB</u> MCS3	2.54E-32
	AJ586885						
	KF697070						
28	^KF040468	1021	1698	KF040464	Unknown	R <u>GB</u> MCS3	3.51E-31
	KF040467			KF040466			
	KT099144						

	HQ333136						
	HQ333138						
	HQ333135						
	HQ333137						
29	^KX033435	2262	2932	Unknown	AB433787	RGBMCS <u>3</u>	4.17E-27
	KU992909				KU323597		
	KX033430				KF697069		
30	AJ132548	1021	1748	KT099145	FJ969833	<u>R</u> GBMCS3	9.24E-36
	EU839577				KX033435		
31	^HQ393455	46	1022	Unknown	HQ393453	RGBMCS <u>3</u>	2.76E-42
	HQ393449						
32	^KC253237	2406	2882 (?)	EU839579	KT992049	<u>R</u> GBMCS3	1.85E-28
33	^FN432356	88	1884	Unknown	AF104036	RGBMCS <u>3</u>	2.69E-27
34	^EU839579	176	2248 (?)	KC253233	Unknown	RGBMCS <u>3</u>	6.33E-26
	MG254542			JX286653			
	MG254543			AB433787			
	AJ132548			KT992058			
	EF456746			HQ333142			
	EU267799			HQ333139			
	EU253456			HQ333140			
	FN806776			AB433788			
35	MG254542	1246	1969	KT099145	EF456746	<u>R</u> GBMCS3	3.31E-27
	MG254543			JQ621844	FJ969832		
36	HQ393444	44 (?)	757	Unknown	HQ393446	RGBMCS <u>3</u>	2.85E-25
37	KF156759	858	1071	AF104036	KJ476509	<u>R</u> GBMCS3	8.27E-22
38	KJ013581	1054	2256 (?)	HM754638	KT992066	RGBMCS <u>3</u>	3.70E-24
	EU309693			JX050197	JX961671		

	KF040467			JX050196	JX961674		
	KF040468			JX050195	JF736657		
39	AB433787	1341	1764	JX448368	KJ013581	R <u>GBMCS</u> 3	5.51E-18
	AB433786				KX033435		
40	^JX286654	2954	1824	JX286653	FJ515898	R <u>GBMCS</u> 3	2.85E-22
41	FJ969830	640	1032	KC907406	HQ393466	R <u>GBMCS</u> 3	4.71E-22
	DQ644561			HQ333144	HQ393456		
	FJ969829			KF836891	HQ393467		
	KF716172				HQ393464		
	KT099143				HQ393465		
	HQ333136				HQ393462		
	HQ333138				HQ393463		
	HQ333135				HQ393461		
	HQ333137				HQ393469		
	KC253238				HQ393468		
	DQ644562				HQ393470		
	DQ644563						
42	HQ393453	46	1642	HQ393475	HQ393456	R <u>GBMCS</u> 3	2.62E-21
	KT992058			JF768740	HQ393467		
	HQ393455			AF104036			
	KY270781			KT992049			
	KT992061			HM754641			
43	KT992056	49 (?)	995	KT992061	Unknown	R <u>GBMCS</u> 3	4.35E-13
44	HQ393442	559	1052	Unknown	HQ393456	R <u>GBMCS</u> 3	7.47E-32
	FR751068			Unknown			
	JQ349087			Unknown			
	KC253235			Unknown			

45	KC253235	1294	2071 (?)	HQ393442	KC253236	RGBMCS ₃	9.88E-17
46	HQ393458	2 (?)	634	HQ393462	HQ393448	RGBMCS ₃	2.16E-19
	FR751068			HQ393463	FJ151200		
	HQ333144			HQ393461	EF456741		
	HQ393444			HQ393466	EF456743		
	KJ013581						
	HQ393442						
	HQ393449						
	HQ393455						
	HQ393445						
	HQ393460						
47	^KM050768	2802	112	Unknown	EF456744	<u>RGBMCS</u> ₃	1.07E-18
48	^KF836891	2202	2936	KX859238	Unknown	RGBMCS ₃	3.35E-28
49	^KT992066	2410	2874	HQ333142		RGBMCS ₃	6.92E-18
	JX961671			KU323597			
	JX961674			KF697071			
	JF736657			FN432356			
	JX961673			AJ586885			
	KT992062			KF697069			
	DQ512731			KF697070			
	KT992048			KF716172			
	KT992057			KT099144			
	KT992052			EU856364			
	KT992063			EF456744			
	KT992060			EU856366			
	KT992065			EU267799			
50	KT992059	655	1822	HQ333142	HQ393474	RGBMCS ₃	2.69E-17

			KT992056	HQ333139	KT992049	
			KF803170	HQ333140	HQ393475	
51	^JX050196	910 (?)	984	Unknown	JX050197	<u>R</u> GBMCS3 3.72E-17
52	^KX859238	2282	2904	Unknown	KX859239	R <u>G</u> BMCS3 8.79E-24
			HQ333143		FJ969831	
			KF803170		JQ621843	
			KC253235			
			JX448368			
			KF769447			
			AF326775			
			KC253236			
			KF836891			
			JQ621844			
53	JX050195	1181	1245	KC253236	EU253456	<u>R</u> GBMCS3 1.53E-12
	JX050197			HQ333144	HQ393444	
	JX050196			KC253237	FJ969830	
54	AF326775	239	634	KF040464	KX611145	R <u>G</u> BMCS3 2.09E-12
	KC488316			EU309693	EF456741	
	KF156759			KX033435	EF456743	
	KJ476509			KU992909	KX859239	
	KC253237			KX033430	KF836891	
	FJ969829			FJ969832	JQ621844	
	HQ333136			AJ586885	KX859238	
	HQ333138			KF697069		
	HQ333135			KF697070		
	HQ333137			JX050197		
	KC253236			JX050196		

55	^HQ333138 KF716172 HQ333136 HQ333135 HQ333137 JX961670 KT992051 KT992067	24 (?)	237 (?)	Unknown	KF697070 AJ586885 KF697069	RGBMCS <u>3</u>	2.81E-13
56	FJ969830 FJ969829	2247	2932 (?)	HQ393458	KF716172 KF040466	RGBMCS <u>3</u>	1.79E-27
57	HQ333144	1735	2014	HQ393467	AF326775	RGBMCS <u>3</u>	3.93E-09
58	^KT992051 KU323597 KC253237 KF697071 EU839578 KT099145 EU839577 HQ393458 HQ393448 EF456743 HQ393459 HQ393457 HQ393454 HQ393447 HQ393452 HQ393444	655 (?)	2191	JX961674	Unknown	RGBMCS <u>3</u>	1.86E-27

FN432356
AJ586885
KF697069
KF697070
KF716172
KT099144
KM050768
EU856364
EF456744
EU856366
FJ969833
KT992055
JX050197
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JX050195
JX286654
JX286653
JX286655
KF040466
FJ515896
FJ515898
KF040464
KT099140
HQ333136
HQ333138
HQ333135
HQ333137

AB433786
AB433787
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DQ644563
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KF040465
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HQ393468
HQ393470
JQ349087
HQ393442
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HQ333139
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KT992059
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HM754641
FJ560719
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KT992053
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JX961672
HM754638
HM754635
HM754636
HM754634
HM754640
HQ393474
HQ393475
HQ393471
HQ393472

FJ969836						
FJ969835						
FJ969837						
FJ969834						
HQ393443						
HQ393446						
HQ393450						
HQ393451						
KT992064						
KT992067						
HQ393453						
KT992061						
FJ969831						
KX859239						
59 EU839576	495	909 (?)	KT099145	EU839577	RGBMCS <u>3</u>	2.22E-15
EU839578			EF456741	EU309693		
FJ151200			EF456743	KX033435		
60 ^HQ393456	1243 (?)	1760 (?)	HQ393445	HQ393469	RGBMCS <u>3</u>	5.01E-08
61 ^KC253237	1863	2091	KF040466	JX448368	R <u>G</u> BMCS3	3.33E-09
KF697071			KX033435			
KT099145			KU992909			
EU839576			KX033430			
HQ393458			FJ969832			
HQ393448						
FJ151200						
EF456741						
EF456743						

62	FN432356	1127	1277	KT992055	KX611145	<u>R</u> GBMCS3	3.28E-10
63	^KJ476509 KF156759	2205	2362 (?)	Unknown	JX961674 JX961671	RGBMCS <u>3</u>	6.80E-18
64	KF040466	41	167 (?)	KF040468	DQ644562	<u>R</u> GBMCS3	7.54E-11
65	^EF456746 EU839579	2954 (?)	167 (?)	EU253456 EU267799	Unknown	<u>R</u> GBMCS3	3.58E-10
66	KJ476510	2079	539	JX286655	JF736657	<u>R</u> GBMCS3	7.08E-13
67	KY270782	2642	2890 (?)	KT992059	KY270781	RGBMCS3	8.00E-09
68	KX033430 KX033435 KU992909 EF456742 KF716172 KM050768 EU856364 EF456744 EU856366	1172	1229 (?)	KC907406 HQ333144	JF768740 FJ969830 EU309693 FJ969832 KC253238	<u>R</u> GBMCS3	1.84E-08
69	^KC253236	1658	2005	KX033435	JX448368	<u>R</u> GBMCS3	4.31E-08
70	^EU253456	2540	2916	KT099140	FN806776	RGBMCS <u>3</u>	2.62E-08
71	KC907406 KJ476507 FR751068	2939 (?)	500	JF736657 JX961671 JX961674	KF836891	RGBMCS <u>3</u>	5.35E-07
72	HQ393460 HQ393445	919 (?)	1058	EU839576	HM754638 KX033435	<u>R</u> GBMCS3	1.47E-06
73	^KF040468 KF040467	20	167 (?)	AJ586885 KF697069	Unknown	<u>R</u> GBMCS3	3.42E-07
74	KT099133	644	772	EU839576	KX033435	RGBMCS <u>3</u>	1.31E-05

	KT099140			HQ393458	EU309693	
75	^AB433787	2624	2879 (?)	HM754639	Unknown	RGBMCS ₃ 3.16E-06
	KU323597			KT992059		
	AB433788			JX961672		
76	^FJ969830	1550	515 (?)	HQ393467	KC253238	RGBMCS ₃ 6.69E-10
	JQ349087					
77	^KF697070	995 (?)	1176	Unknown	KC907406	RGBMCS ₃ 1.61E-08
	AJ586885					
	KF697069					
78	KC253237	2242 (?)	2358 (?)	HQ393442	DQ512731	RGBMCS ₃ 1.68E-04
79	KT202303	1956	722 (?)	KF040465	JX286653	RGBMCS ₃ 5.73E-05

Subpopulation 4 - Meso- and Latin Americas

1	^JF694482	2273	4447	JF694480	JF694471	RGBMCS ₃ 2.84E-92
2	^KC004132	4478	3221	JN419016	JX871381	RGBMCS ₃ 4.57E-55
	KC004093			KX691398	JF694471	
	KC004109			JN419009	JF694472	
	JN419018			JN419005	JX871380	
	KJ939868			KT779564		
	KJ939857			KT779562		
	KJ939888			KT779565		
	KJ939889			KC004107		
	KJ939855			KJ939890		
	KC004117			JN419022		
	KJ939882			KJ939871		
	KC004108			KJ939895		
	KC004104			JN419007		
	KC004120			KJ939896		

KJ939878
KC004124
KJ939861
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KC004118
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JN419015
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KC004096
KJ939894
KJ939880
KC004112
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JN419012
KC004114
KC004119
KJ939869
KJ939892
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KC004105
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KC004099
KJ939863
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KC004103
KC004131
KC004102
KC004127
KC004095
KC004100
KJ939897
JN419013
KJ939859
JN419019
JN419014
KJ939893
KC004106
KJ939873
KJ939886

3	^JX871380 JX871381	386	3330	JX871382	Unknown	RGBMCS <u>3</u>	5.99E-55
4	^JN848773	672	3328	KU665804	HQ201952	RGBMCS <u>3</u>	2.84E-52
5	^JX415187 JX415194	3322	4256	JX865639 AY029750	JF694480 JF694481	R <u>GB</u> MCS3	6.59E-51

HM585433
FN436003
FN436005
KX348155
KX348156
KX348158
KX348159
KX348160
KY650717
KX348164
KX348157
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KX348161
KX348162
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KX828624
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EU086591
HQ606467
KC706619
JF803263
JF803262
FJ824808
MG837738
JF803260
JX415197
JX415188
JX415199
JX415201
JX415193
JX415202
JX415190
JX415196
DQ207749
JF803261
JX865622

KC706535			JX865643			
KC706537			JX865644			
6 ^KU058855	4458	2850	KU058854	KX440613	RGBMCS <u>3</u>	1.00E-50
KU058856						
7 ^KX691404	4308	3339	KX691406	Unknown	RGBMCS <u>3</u>	1.61E-50
8 AF291705	2987	4470	AY029750	KC706548	<u>R</u> GBMCS3	9.20E-49
9 ^KT879819	4460	3173	KT879820	Unknown	RGBMCS <u>3</u>	1.79E-48
10 HE806444	2683	4476	HE806442	HQ009522	RGBMCS <u>3</u>	6.25E-48
11 ^KT879825	430	3350	KT879822	Unknown	RGBMCS <u>3</u>	1.35E-49
12 ^JN103433	4458	2882	JF694461	Unknown	RGBMCS <u>3</u>	1.05E-41
13 ^FN434438	4459	3348	JF694471	Unknown	RGBMCS <u>3</u>	2.89E-41
14 ^KX348185	500	3282	Unknown	JF694472	RGBMCS <u>3</u>	2.02E-46
15 ^MF957206	2708	4459	MF957205	Unknown	RGBMCS <u>3</u>	1.10E-40
16 ^Y15034	510	3322	KU665804	Unknown	RGBMCS <u>3</u>	9.30E-36
17 AY090558	3314	4396	Unknown	JX871377	RGBMCS <u>3</u>	9.75E-36
JX871369			Unknown	AJ557450		
18 ^KY196217	4460	3154	Unknown	KJ939896	RGBMCS <u>3</u>	2.00E-35
KY196221			Unknown	KX691398		
KY196216			Unknown	JN419009		
19 ^JQ805781	4291	3200	KX640991	Unknown	RGBMCS <u>3</u>	4.89E-35
20 ^KM926623	158	2748	Unknown	GU997691	RGBMCS <u>3</u>	5.25E-33
21 ^KX691405	3338	4300	KX691403	Unknown	RGBMCS <u>3</u>	2.07E-33
KX691402			KX691406			
22 ^AF039031	4355	3323	AY965897	Unknown	RGBMCS <u>3</u>	9.13E-34
23 JF694480	3212	4294	Unknown	KX640991	RGBMCS <u>3</u>	4.46E-35
JF694481			Unknown	JX871382		
24 ^KT879823	4478	3173	KT879822	KT879817	RGBMCS <u>3</u>	2.47E-29

25	^FJ600483	4470	3298	KT879816	Unknown	RGBMCS <u>3</u>	2.64E-28
26	^KX896413	2952	4460	JF803251	KX896399	RGBMCS <u>3</u>	1.95E-26
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27	^FR851300	340	3223	AY965897	Unknown	RGBMCS <u>3</u>	9.99E-26
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28	^JX162594	430	3231	KT879816	Unknown	RGBMCS <u>3</u>	1.46E-23
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	HQ009521			KT879828			
29	^HQ116414	4488	3324	DQ022611	X15983	RGBMCS <u>3</u>	1.24E-28
	HQ020409			HM035059	U51137		
30	^HQ822123	3130	3623	Unknown	HM236370	R <u>GBMCS</u> 3	2.04E-21
	JN411687			Unknown			
31	^GU997691	248	3283	JX162591	DQ178608	RGBMCS <u>3</u>	1.44E-30
32	^KT779562	1250	1957	JF803252	KC004127	R <u>GBMCS</u> 3	1.02E-21
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	KT779565				KC004123		
33	KX389269	3194	3304	Unknown	KU665804	R <u>GBMCS</u> 3	7.94E-21
34	^EU914819	506	3480	Unknown	JX513952	RGBMCS <u>3</u>	4.16E-29
	EU914817			Unknown	KX348179		
	FJ686695			Unknown			
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36	^KM243020	3274	570	EF016486	KC136337	RGBMCS <u>3</u>	2.32E-21
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	KM243019				EF417915		

	JQ714137				KC136339		
37	^EU710752	308	2716	Unknown	KC706606	RGBMCS ₃	3.15E-19
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	KC706611						
38	^KY449275	336	3333	GQ357649	DQ178614	RGBMCS ₃	1.14E-18
39	^KY449277	4428	3340	HQ201952	EU158096	RGBMCS ₃	7.65E-23
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	KC004123			JN419018	KC004092		
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	KX348175			JX863082			
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42	^JX122965	3199	4241	KX691399	KC004094	RGBMCS ₃	4.12E-18
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	KJ939918				JN419009		

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44	AY339618	3583	4368	EF121755	HM459852	<u>R</u> GBMCS3	3.78E-17
45	KU562964	490	3305	DQ178610	KT879826	R <u>G</u> BMCS <u>3</u>	2.99E-27
	KP641345			DQ178614	KT099136		
	FJ213931			DQ178608	KT099137		
	FJ222587				KT099138		
46	FJ538207	4316	3676	JX513952	Unknown	R <u>G</u> BMCS <u>3</u>	6.05E-28
47	^HM357459	1088	2972 (?)	Unknown	KC706535	R <u>G</u> BMCS <u>3</u>	1.05E-16
48	^JF694481	4337	580	Unknown	JF694480	<u>R</u> GBMCS3	2.56E-16
49	^KY555798	3348	3719	Unknown	FN436001	<u>R</u> GBMCS3	2.18E-16
50	^KF358470	3362	3906	Unknown	FJ944019	R <u>G</u> BMCS <u>3</u>	9.23E-20
51	^KY555798	3926	4130	Unknown	FN436001	R <u>G</u> BMCS3	1.83E-15
52	^JF803253	3419	3714	JF803251	KT779564	R <u>G</u> BMCS3	1.75E-15
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54	^KT948785	3268	4326 (?)	KJ939790	KT948787 RGBM <u>C</u> S3	1.78E-13
55	^JN419022	3580	3704	Unknown	KT879820 R <u>G</u> BMCS3	2.71E-14
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	JX871392				JX857691	
	JX871389				AY751753	
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56	^JX871382	2396	3330	JF694471	KX896422 RGBMCS <u>3</u>	6.15E-15
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57	^FJ972767	3348	3880	KC706552	Unknown RGBMCS <u>3</u>	1.43E-16
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59	^HQ396465	3334	3530	KJ939819	JN103429	<u>R</u> GBMCS3 3.52E-12
60	^KM926623	4460 (?)	3273	HE806440	DQ178608	RGBMCS <u>3</u> 7.48E-12
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62	^EF645647 EU158096	2020	2410	Unknown	KX389269 R <u>G</u> BMCS3 EU518935	3.34E-11
63	^JX863081 KJ742419	3852	4493 (?)	KT201153	KX348165 R <u>G</u> BMCS3 KX348172	5.45E-11

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64	^EF645647	3250	3737	AY965897	Y14874	<u>R</u> GBMCS3 6.61E-11
	EU158096			JQ045705	KT099130	
65	^JX871378	3694	4411 (?)	Unknown	MF957205	<u>R</u> GBMCS3 7.91E-11
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	FN557522					
	AY090555					
	JX871377					
66	^FJ944019	3340	969	Y11097	AY044133	R <u>G</u> B <u>M</u> C <u>S</u> 3 1.67E-12
67	JQ805781	3384	4108 (?)	Unknown	HE806440	R <u>G</u> B <u>M</u> C <u>S</u> 3 1.08E-13
68	^HE806448	2396	3914	Unknown	AF049336	R <u>G</u> B <u>M</u> C <u>S</u> 3 1.50E-10
69	LN848881	3354	3930	LN848880	LN848884	R <u>G</u> B <u>M</u> C <u>S</u> 3 1.51E-11
70	^KC706605	3272	157	DQ178614	HM357458	R <u>G</u> B <u>M</u> C <u>S</u> 3 4.15E-10
	EU710749			DQ178608		
71	^FN436001	2736	4487 (?)	Unknown	KX896422	R <u>G</u> B <u>M</u> C <u>S</u> 3 6.82E-10
	KY555798				KX896423	
72	^HM357458	3348	3810	Unknown	JF694472	<u>R</u> GBMCS3 7.01E-10
73	JX871371	1624 (?)	2040	KX348161	JX871373	<u>R</u> GBMCS3 9.10E-10
	JX871370			EU710749		
74	^KU232891	1104	3048 (?)	HE806438	JN411687	R <u>G</u> B <u>M</u> C <u>S</u> 3 9.62E-10
75	^EU710752	3878	175	KP890827	JX871374	<u>R</u> GBMCS3 1.26E-09
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76	^KY064015	916	3998	KY064010	Unknown	RGBMCS <u>3</u>	6.11E-10
77	^AY508991	3305 (?)	3709	DQ875872	Unknown	<u>R</u> GBMCS3	3.71E-09
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	DQ178608						
79	^KY971533	3527 (?)	491	DQ178614	Unknown	<u>R</u> GBMCS3	8.92E-13
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	KY971539			DQ178610			
	KY971537						
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	HQ896203			AY751753	KT099137		
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82	^DQ178610	3328 (?)	3906	FM160943	KY064010	RGBMCS <u>3</u>	4.43E-11
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	DQ178608			KJ174331	KY064009		
83	^KX348167	3354	3842 (?)	Unknown	DQ395343	RGBMCS <u>3</u>	5.82E-09

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84 ^JN103438	3926	4307 (?)	KC791690	JN103427	<u>R</u> GBMCS3	6.69E-13
85 ^JF694471	3331 (?)	4488	Unknown	KX640991	<u>R</u> GBMCS3	6.69E-20
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86 ^KX389269	3102 (?)	3586	Unknown	FJ944023	RGBMC <u>S</u> 3	4.73E-09
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87	^KT879822	3358	696	AF239671	JX871370	RGBMCS3	5.23E-09
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	FJ600482			EU339936	JX871373		
	FJ601917			EU339939	JX871371		
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88	^KT099120	3342	4409	AF239671	JX871371	RGBMCS3	5.82E-09
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89	^KT201153	3578	3948	Unknown	KT201151	RGBMCS3	8.90E-25
90	^HM585443	3244	4203	HM195184	JX871373	RGBMCS3	5.82E-09
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	KT099139			JN103429	KC706531		
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	JN103439			JN419006		
	KT899302			KJ939764		

93	^FJ174698	388	2078	Unknown	JN411687	RGBMCS ₃	5.82E-09
94	^HE806440	973 (?)	2167 (?)	Unknown	KT879822	RGBMCS ₃	5.82E-09
	DQ395343				HM859902		
	GQ355488						
	AM050143						
	AF101476						
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	HM236370						
95	^FJ944023	3046	4008	Unknown	AF101476	RGBMCS ₃	2.83E-11
96	JX871377	1293	2032	JX415194	MF957205	RGBMCS ₃	5.82E-09
	JX871378			JX415187	KU996356		
97	^JF803246	895	3349 (?)	JF803247	JF803250	RGBMCS ₃	5.82E-09
	JF803248				KC706615		
	JF803249				KC706616		
98	^KC791690	3825 (?)	4290	JF803252	Unknown	RGBMCS ₃	5.82E-09
99	^HE806450	2387	3296	Unknown	LN848874	RGBMCS ₃	5.82E-09
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	JN676150				LN848848		
	HM585445				LN848853		
	KT948787				MG582068		
	KT948785				KY247179		
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	KT099125				LN848845		

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FJ601917	LN848850
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MH019225	AY044162
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AF012300	LN848885
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Y14874	

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101	^HM585445	2371 (?)	3620	JN676150	Unknown	<u>R</u> GBMCS3	3.55E-09

102	^GU990613	3295 (?)	4460	Unknown	AF226665	RGBMCS <u>3</u>	5.82E-09
103	^KY555800	3326 (?)	4289	KX896421	GQ387369	RGBMCS <u>3</u>	5.82E-09
104	^HE806444	2008	2382 (?)	HE806442	KT879826	RGBMCS <u>3</u>	1.16E-08
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105	^KF998097	3872	386	AF226665	Unknown	R <u>G</u> BMCS3	1.73E-08
106	^KC706555	1122	2030	JF803251	JX865633	RGBMCS <u>3</u>	1.75E-08
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	AF490004			KX896410	KC004072		
	DQ336353			KX896399	KC004073		
	KC706551			KX896411	KC004074		
	KC706560			KX896403	KC004070		
	AY090557			KX896404	KC004071		
	KC706540			KX896405	KX828624		
	KC706541			KX896400	KY524458		
	KC706552			KX896402	EU086591		
	KC706544			KX896407	HQ606467		
	KC706548			KX896398	KC706619		
	KC706559			KX896406	JF803263		
	KC706556			KX896401	FJ824808		
	KC706557			KX896408	MG837738		
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	KC706558			JF803250	JX415196		
	KC706543			KC706615	DQ207749		
	KC706549			KX896413	JF803261		
	KC706554			KX896412	JX865622		
	KC706547			KX896414	JX865645		
	KC706561				JX865650		

	KC706550				JX865637		
	KC706542				JX865624		
	KC706545				JX865631		
	KC706546				JX865632		
107	^EU710751	3340 (?)	3932	MF163258	KX896417	RGBMCS <u>3</u>	4.07E-08
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	KC706531				KX896426		
	JX871373				KX896427		
	JX871370				KX896416		
	JX871371				KX896415		
108	^JX501504	3346	3491	Unknown	KC620462	<u>R</u> GBMCS3	8.04E-08
	JX501505				GQ334472		
	JX501506				JX501510		
109	^KC706607	888	3877 (?)	KC706606	Unknown	<u>R</u> GBMCS3	3.18E-07
110	^KX101212	32	1990	KJ939907	Unknown	RGBMCS <u>3</u>	2.04E-07
	AB971842			JN419021			
	EU636712			KJ939899			
111	^GU128150	2382	3292	AB971842	EF585288	RGBMCS <u>3</u>	5.82E-09
	LN848861			AB849288	D00201		
	LN848848				M10070		
	LN848853				L01635		
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	KY247179						
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112	JN419021 KJ939899 KJ939908 KJ939913 KJ939898 KJ939907 KJ939903 KJ939904 KJ939900 KJ939901 KJ939902 KJ939915	1134	1834	Unknown	KX691396 KX691397	RGBMCS <u>3</u>	3.78E-07
113	^KR263180 KR263179 KR263181	3409	3956	JF694461 FN435999 MF072686	Unknown	RGBMCS <u>3</u>	2.79E-07
114	MF957206	356	1036	MF957207	Unknown	RGBMCS <u>3</u>	6.67E-14
115	^KJ939908 JN419021 KJ939899 KJ939913 KJ939898 KJ939907 KJ939903 KJ939904 KJ939900 KJ939901 KJ939902	3500	4224	Unknown	JF803261 AY029750 KC004072 KC004073 KC004074 KC004070 KC004071 JX865633 KX828624 KY524458 EU086591	RGBMCS <u>3</u>	1.12E-06

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116	JN103433	3538	3860 (?)	JN103438	KC004119	RGBMCS <u>3</u>	1.30E-06
117	^LN848856	3768 (?)	1172	X70418	LN848850	RGBMCS <u>3</u>	8.14E-07
	LN848854				LN848849		
	LN848851						
	LN848865						
118	^JF694468	1626	3404 (?)	JX871394	JX871392	RGBMCS <u>3</u>	3.52E-10

119	^KX691408 KX691406 KX691403 KX691407	490	1268	Unknown	EU908733 JX415187 HM585433 FN436005	RGBMCS <u>3</u>	2.07E-06
120	^JX162591 HQ008338	3344 (?)	3466	Unknown	DQ347945 AY751753	RGBMCS <u>3</u>	5.09E-06
121	KJ742421 HM585443	908	2000	HM585433 JX415194	HM585441	RGBMCS <u>3</u>	2.75E-06
122	^FJ944019 AY044133 AF449192 KT099141 KX011473 FJ944021	862 (?)	2053	M10070 DQ119824 KU160634 KX185518 AJ544531 KX185517	Unknown	RGBMCS <u>3</u>	2.87E-06
123	^KX348183	1124 (?)	2035	KC004074	AY339619	RGBMCS <u>3</u>	6.46E-07
124	^KY064009 KC176780 KY064010	3473	3905	Unknown	AY508993	RGBMCS <u>3</u>	2.15E-06
125	^KT201151 KT201153	3329	3498 (?)	KJ939719 KX691396	Unknown	<u>R</u> GBMCS3	2.27E-05
126	^JN419002	3232	287 (?)	Unknown	GQ387369	RGBMCS <u>3</u>	1.10E-06
127	JX871383	1099	1997	JF694480	HM585441	RGBMCS <u>3</u>	4.53E-05
128	EU710749 KC706605	1252	2175	KY650717 JX415187	KC706531 JX871372	RGBMCS <u>3</u>	7.36E-05
129	^FM160943 KX156613	3114	3844	AJ549960 HE806446	KX691407 KX691408	RGBMCS <u>3</u>	2.93E-06
130	^LN848886	1106	1344	Unknown	LN848866	<u>R</u> GBMCS3	1.22E-04

131	JX501510 JX501503 JX501508 JX501509 JX501507 GQ334472 KC620461 KC620462	3354	3583	K02029 JF694488 JF694490	Unknown	RGBMCS <u>3</u>	8.39E-05
132	^KU058854 KU058852 KU058853 KU058851	1192	1696	AB971844 DQ641688 FJ463902 KF962542	KX389269 EU518935 AY120882 AY965897	RGBMCS <u>3</u>	1.26E-04
133	AY044133 AF449192 KT099141 FJ944019	2552	3116 (?)	KX101212	AF139168 AJ549960	RGBMCS <u>3</u>	5.99E-04
134	^AF132852 DQ520943 EF501976	3274	4327	EF121755	JN848775 JN848777	RGBMCS <u>3</u>	8.75E-10
135	^KC706536	590	2012 (?)	JX415187	Unknown	<u>R</u> GBMCS3	3.92E-04
136	^KX348183	3361 (?)	3840	JX415197	Unknown	RGBMCS <u>3</u>	7.09E-04
137	^KT099126 KT099127 KX691406	3348 (?)	3498 (?)	KJ939738 KJ939719 KJ939731	Unknown	RGBMCS <u>3</u>	9.23E-04
138	^KX348157	4455 (?)	642	Unknown	KX348155	RGBM <u>C</u> S3	5.52E-03
139	^KX348171 KC683374	224	431 (?)	Unknown	KX348175 KX348176	RGBM <u>C</u> S3	9.98E-03

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	KX348166						
140	^KX691407	3358	3822	Unknown	AF049336	RGBMCS <u>3</u>	3.49E-05
	KX691406				JN848770		
	KX691408				KJ174330		
	KX691403						
141	^KJ174333	3363 (?)	3737	MG837738	EU339938	RGBMCS <u>3</u>	4.66E-02
	KU562964			KX828624	EU339936		
	FJ213931			KY524458			
	FJ222587			EU086591			
	JN848770			HQ606467			
	HQ896203			JF803263			
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	KT879823			FJ824808			
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	KU058856			JX865645			
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Subpopulation 5 - EACM- and SACM-like viruses

1	KJ887973	1103	40	KJ888018	JX473582	RGBMCS3	5.61E-102
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	AJ717568			AJ575560	JF909065		
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	HE806428			KJ888046	JF909191		
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	AJ717565			KJ888057	MF067259		
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21	AF259896	800 (?)	1140 (?)	AY795986	AJ717531	RGBMCS ₃ 6.01E-14
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	KJ888078			JF909114	JN053458	
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	KJ888065			JF909101	AJ717520	
	KJ887938			AJ717582	AJ717535	
	KJ887944			AJ717581	AM502331	
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	MG250164			JF909152	AJ717532	
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	EU685326			JF909159	AM502326	
	EU685323			JF909160	AJ618956	
	AJ867444			JF909153	AJ717517	

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	AF112354			KT869124	AM502333		
	AY211887			AJ717558	FN435280		
22	^EU685321	2944	233 (?)	Unknown	JX473582	<u>R</u> GBMCS3	1.07E-08
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	KJ888077				JF909161		
	KJ888078				JF909157		
	KJ888060				JF909162		
	KJ888064				JF909185		
	KJ888065				JF909073		
	KJ887938				JF909074		
	AF259896				JF909063		
	KJ887944				JF909068		
	KJ887945				JF909076		
	JN165089				JF909067		
	MG250164				JF909065		
	EU685326				JF909064		
	EU685323				JF909066		
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	AY211887						
23	HE984147	1970 (?)	2083	KJ888064	Unknown	R <u>G</u> BMCS <u>3</u>	1.27E-07
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24	^AM502329	2932 (?)	1270	Unknown	Z83256	RGBMCS <u>3</u>	8.57E-16
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FN435279

25	^JN053439	91 (?)	1080	Unknown	JF909084	RGBMCS <u>3</u>	9.43E-11
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	JN053448				AJ717558		
	JN053441				AJ717556		
	JN053455				MF067260		
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	JN053454				AJ717555		
	JN053445				AJ717542		
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Subpopulation 6 - TYLC-like viruses

1	AY227892	16	2103	Unknown	LN846617	RGBMCS3	2.63E-109
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2	EU734831 EU734832 MF405078 MG489968	3066	2216	Unknown	DQ144621 KM435319 KJ830841 GU076444	RGBMCS ₃	2.28E-99
3	^AJ519441 LN846611 AY594175 HF548825 KF477277 AB921568 AF105975 AB439842 AB116633 AB116635 AB014347 AB116634 AB116636 AJ865337 AF071228 AB116632 AB014346 AB110218 EF054894 EF158044 EU143745 X76319 EF185318	3062	2120	HF548826 KC106636 KC106637 KC106652 KC106650 KC106651 JQ414025 JQ928347 JQ928348 KY412552 KC106635 KC106638 KC106640 KC106641 KC106643 KC106645 KC106642 KC106644 KC106646 KC106648 KC106649 KC106647 FJ355946	JN859135 JN859137 LN846611 LN846612 AF271234	RGBMCS ₃	2.18E-96

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4	^HG969207	1794	3084	HE819243	LN680627	RGBMCS <u>3</u>	3.68E-77
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	LN680630			KT990213	KF260969		
	HG969208			FJ956701	KF260966		
5	^KM215610	1308	175	JX131286	Unknown	RGBMCS <u>3</u>	5.80E-77
	EU734832			AY502934	Unknown		
6	^HG969260	2280	1228	LN680627	HE819241	RGBMCS <u>3</u>	9.22E-65
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	HG969258			KF260969	JN604487		
	HE819239			KF260966	JN604488		
7	AY044137	552	1268	Unknown	FJ956701	R <u>GB</u> MCS3	2.23E-63
	GU180085			Unknown	DQ358913		
	HG530541			Unknown	FM212660		
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	JX483707				FM212662		
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8	^MF536415	2258	3085	KF260965	HE819241	RGBMCS <u>3</u>	3.47E-59
	KY825714			KF260967	JN604486		
9	^JN604486	1088	3085	HE819243	LN680627	RGBMCS <u>3</u>	1.19E-49
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10	^KX710157	2218	84	LN680627	AJ132711	RGBMCS <u>3</u>	3.27E-46
11	LN680627	172	1580	KX710157	Unknown	RGBMCS <u>3</u>	9.86E-54

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12	GU076443	2322	3088	Unknown	GU076441	RGBMCS ₃	5.75E-42
	EU085423				FJ956701		
	GU076442				FJ956705		
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13	^JN859137	70 (?)	1221	AY227892	KF435137	RGBMCS ₃	7.44E-48
	JN859135				AJ132711		
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	LN846612				FJ956703		
	AF271234				FJ956704		
14	^JN859135	1255 (?)	1601	Unknown	AF271234	RGBMCS ₃	4.80E-33
15	^JN604484	75	1884	GU076444	HG941642	RGBMCS ₃	1.46E-32
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	HG969283			KC106637	FJ956704		

				HG941650	JQ414025	FJ956701	
				HG969279	JQ928347	FJ956705	
				HG941651	JQ928348	DQ644565	
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				HG969280	KC106640	GU076452	
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				HG941649	KC106646	GU076443	
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16	^AJ132711	3002	2333	Unknown	HG941642	RGBMCS <u>3</u>	2.07E-31
17	^GU076454	2334	2976	Unknown	HE819243	RGBMCS <u>3</u>	2.31E-30
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18	^MF405078	4 (?)	200	EU734831	X76319	<u>R</u> GBMCS3	2.82E-24
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	MG489968				GU180085		
19	^HE819243	67	1119 (?)	HG969258	KT990213	<u>R</u> GBMCS3	9.16E-24
20	^JN859138	1919	2026 (?)	KX347167	Unknown	<u>R</u> GBMCS3	5.18E-22
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21	MG489967	200	3068	LN846616	Unknown	RGBMCS <u>3</u>	4.58E-22
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	LN812978			KF229723			

	LN831187				LN680631		
	LN846601				KF229724		
	LN846603				KX347160		
	LN846602				JQ231214		
	LN846599				HE603245		
	LN846605				KC312665		
	LN846600				DQ144621		
	LN846607				EF101929		
	LN846608				GQ861426		
	LN846610				KT921303		
	LN846604				KC312672		
	LN846606				KC312661		
22	AF271234	3068 (?)	2172		KM435322	Unknown	RGBMCS ₃ 9.78E-34
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	GU180085						
	HG530541						
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	JX483707						
	JX483708						
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23	KY825714	1592 (?)	2130 (?)	GU076451	KF260966	RGBMCS <u>3</u>	2.98E-23
	MF536415			KC106636	KF260969		
24	^KM435322	184	2130	Unknown	KJ585666	RGBMCS <u>3</u>	8.07E-21
25	^FJ355946	2316	3020 (?)	JF451352	AF071228	RGBMCS <u>3</u>	3.76E-20
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KC106652			EU734831	JX483707	
KC106650			EU734832	JX483708	
KC106651			KM435319	JN859135	
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KY412552			KX347155	AF271234	
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KC106638			KX347162	HF548825	
KC106640			KX347163	AJ519441	
KC106641			KX347161	KF477277	
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KC106645			KX347165	AF105975	
KC106642			KX347156	AB439842	
KC106644			KX347164	AB116633	
KC106646			KX347159	AB116635	
KC106648			KX347160	AB014347	
KC106649			KM435322	AB116634	
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GU076447			KM435324	AB014346	
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26 ^GU076446	2650	2771	Unknown	KJ913682	RGBMCS ₃ 2.08E-18
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	KC106651				AY594175	
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	KC106648				AB116632	
	KC106649				AB014346	
	KC106647				AB110218	
	GU076445				EF054894	
	FJ355946				EF158044	
	GU076447				EU143745	
	GU076440				X76319	
27	^JQ231214	1908	1988	Unknown	HE603245	RGBMCS3 2.51E-13
28	JF451352	251	1509	GU076442	HE603245	RGBMCS3 1.87E-13
	KJ830841				KM435319	
29	^AY044138	2642 (?)	2766	KC428753	HE819245	RGBMCS3 1.46E-11
	HG530541			AY227892	AJ132711	

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AB110218	EF101929	HG969280
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EF158044	MG489968	HG941645

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	X76319			KT921303	HG969272		
	EF185318			KC312672	HG969270		
	GQ861427			KC312661	HG941649		
	KJ913682			KC312659	LN680632		
	KJ913683			EF051116	HG969285		
	EU085423			JX131286			
	GU076443			KY996460			
30	^KF260969	24 (?)	171 (?)	Unknown	HG969258	<u>R</u> GBMCS3	1.77E-13
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	LN680627						
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31	JN604486	292	1087 (?)	KM435323	Unknown	R <u>G</u> BMCS <u>3</u>	1.14E-12
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32	^AB613209	166 (?)	1077	KC106649	KX347122	R <u>G</u> BMCS <u>3</u>	1.31E-09
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	KJ585666			KC106637			
	AB116629			KC106652			
	AB110217			KC106650			
	AB116631			KC106651			
	AB636411			JQ414025			
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Subpopulation 7 - Asia and Africa

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	MF344541			KX656804			
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	EU365616			FN552003			
	KM096469			MG373551			
	KX656795			KR815998			
	KX656797			KR816000			
	KX656786			KY825244			
	KX656800			JF509747			
	KX951460			HG428709			
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13	^HQ257374	7784	3268	GQ247893	MF774564	RGBMCS <u>3</u>	1.82E-71
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	KY797661			JF502355			
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	AJ496286			JF502368			
	KY797662			JF502372			
	MF774563			KF767352			

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	KX603683			HG003876		
	KX656804			HG422570		
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	FN552005			EU384572		
	FN552004			LN713481		
	KX656803			LN852667		
	FN552001			HG422571		
	FN552002			HF567942		
	FN552003			FR750322		
	JF502364			EU384571		
	KY120359			EU365618		
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	KY120360			LN713267		
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	LC376013			HF569046		
14	KX698091	610	3656	KT390339	FN645917	RGBMCS3 3.03E-69
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			KT390345	KT390333	GU112019	
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16	^KP195266	1652	7740	KP164859	KU376495	RGBMCS ₃ 2.73E-66
17	GU112043	7830	3388	JQ326269	KU975394	RGBMCS ₃ 1.26E-64
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	JQ326267			FJ176235	AJ971501	
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18	HF536716	3232	292	Unknown	KJ939446	RGBMCS ₃ 4.28E-64
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	KT390324			KT390326	GU112077	
	KT390315			KT390327	JQ326263	
	KT390312			KT390302	FJ179372	
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20	EU384575	528	3895	EU365615	Unknown	RGBMCS ₃ 2.51E-62
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	KX656792			JN678806			
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	KX656794						
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	EU365617						
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21	HE793426	843	2240	EU024118	HF536716	RGBMCS ₃	1.11E-61
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22	^AY765257	2270	7626	AY765256	Unknown	RGBMCS ₃	1.26E-61
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	KR135370			AY765253			
	JN558352						
23	^KC149938	812	2929	JN082234	Unknown	R <u>GB</u> MCS3	9.17E-61
	KC149939			KU975394			
24	^KU308385	3469	7830	Unknown	AJ890225	RGBMCS ₃	6.92E-60
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	KU550960				AJ890228		
	JN135236				AJ607394		
25	^JX181785	444	3182	JQ359504	KR013745	RGBMCS ₃	2.39E-61
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	AJ002451			FJ179373			
	FR694925			KC501923			
	KC501921			GU112008			
	JQ326263			GU112077			
	KT390336			KC501919			

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	KT390315			FJ179372		
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26	HE793428	780	2179	HE793425	AY036007	R <u>G</u> BMCS3 2.01E-57
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27	HE862273	392	4020	HG969202	HM803118	R <u>G</u> BMCS <u>3</u> 2.79E-57
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	KT390342			HG530540	KF612317	
	KT390332			EU024120	KF551579	
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28	GU112010	2241 (?)	3613	GU112007	KJ397533	RGBMCS ₃ 4.63E-56
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29	KY979591	6775	3945	KP868764	Unknown	RGBMCS ₃ 2.18E-55
30	DQ191160	2664	4410	EU365614	HQ158011	RGBMCS ₃ 7.00E-55
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	AY765256			FJ218487	KX656809	
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	Z48182				JN604500	
32	^KP195265	2444	7808	DQ116885	Unknown	RGBMCS ₃ 1.56E-52
33	^KT390326	765	3484	KT390311	KT390303	RGBMCS ₃ 3.06E-52

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34	LT600729	2067	446	MF135486	LT556075	RGBMCS ₃ 1.13E-51
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35	EF544602	386	1322	KF999982	LC316183	<u>R</u> GBMCS3	2.49E-51
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36	JX460805	1842	2666	DQ629103	KX467567	<u>R</u> GBMCS3	2.54E-51
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38	^HQ158011	3192	4285	Unknown	KX831888	R <u>G</u> BMCS <u>3</u>	5.44E-51
39	KX656807	1246	2056	LN713477	AY765254	<u>R</u> GBMCS3	1.98E-50

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40	KF551578	650	2190	U15016	KF612317	<u>R</u> GBMCS3	1.72E-49
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42	[^] KM065514	1288	2016	HG422570	AY765254	R <u>G</u> BMCS3	5.49E-52
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46	^KT454823	3096	4888	AJ223191	KT454820	RGBMCS3	6.45E-48
47	^KP178726	1288	2646	EU194914	GQ994098	<u>R</u> GBMCS3	1.49E-47
48	KF551579	865	2457	Unknown	KX246859	RGBMCS <u>3</u>	3.67E-47
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49	^MF737343	1388	2318	HF968756	Unknown	RGBMCS <u>3</u>	2.32E-46
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57	^GU112049 KU569583 KU569578 KU569580 KU569581 KU569582 KU569579 HM777508 HM777509 HE862273 KT390461 GU112050 KT390338 KT390318 KT390334 KT390342 KT390332 KT390329 KT390454 KT390301 KT390452 KT390460 KT390463 KT390336 KT390345	1632	4243	Unknown	GU112051 RGBMCS <u>3</u> GU112052 GU112053	6.89E-44

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58	^HQ257375	1140	3444	Unknown	HQ682190 RGBMCS <u>3</u>	1.46E-43
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	KT948076			MF372751			
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61	^KU500804	2250	3300	KX302710	Unknown	RGBMCS <u>3</u> 7.21E-40
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62	^FJ159271	1391	2234	MG373552	EF373060	<u>R</u> GBMCS3 1.20E-42
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	LT716980				EF432372	
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63	^GU112010	4280	1747	GU111996	AJ002459	<u>R</u> GBMCS3 1.04E-38
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66 ^KP455484	2814	774	AJ890227	AJ314739	RGBMCS <u>3</u>	1.82E-38
67 ^AF261885	3454	7781	AF350330	DQ127170	R <u>GB</u> MCS3	1.94E-37
68 ^KF704391	1904	4278	EF408037	KR869857	RGBMCS <u>3</u>	1.46E-35
69 ^DQ116878	942	3246	Unknown	JN663861	RGBMCS <u>3</u>	3.14E-35
70 KT322140	1246	2612	Unknown	AJ971266	R <u>GB</u> MCS3	6.32E-35
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71 FJ589571	3646	4243	EF373060	KM383755	R <u>GB</u> MCS3	2.30E-39
72 ^KT444617	3112	4856	KC508642	KT444613	RGBMCS <u>3</u>	8.09E-35
73 EF197941	3212	7856	Unknown	EF197940	RGBMCS <u>3</u>	8.28E-34

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75	^AM701760 AM701762	1022	2364	AF350330	JN591386 KC763630	<u>R</u> GBMCS3	2.27E-33
76	^EF194765	7868	3866	HM007095	Unknown	RGBMCS <u>3</u>	3.08E-33
77	EU939533 KY420138	7814	4020	KJ700656 KU376495	Unknown	RGBMCS <u>3</u>	5.84E-33
78	^HE793429 FM210276	959	2310	KT099132 FR751142	FN554519 EU432373	RGBMCS <u>3</u>	1.36E-32
79	^JQ765395	2662	7856	AF188481	KX499526	<u>R</u> GBMCS3	5.51E-32
80	FJ177031 FJ455449 GQ183867 KY089033	1080	4222	JF682242 KC589699 FN794198 JX436472	Unknown	RGBMCS <u>3</u>	1.78E-36
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90	KY420139 KC465466	1415	4208	HM159454 AM258977	Unknown	RGBMCS ₃	1.56E-28
91	^FJ179372 FJ179373 KC501923 FJ176235 GU112054 GU112080 GU112007 GQ245760 GU112064 GU112079 GU112074 GU112068 MH455210 KX698089 KT390320	3632 (?)	4379	EF373060 EF428256 EF432372 FJ159263 FJ159265 FJ159264 FJ159266 LC080677	FJ179370 AJ002453 FJ176235	RGBMCS ₃	2.92E-28

92	^FJ868828	490	3350	AY036006	Unknown	RGBMCS <u>3</u>	3.09E-28
93	^KT454820	1068	2320	AJ223191	KT454823	RGBMCS <u>3</u>	6.54E-28
94	JN663852	2612	7868	LN886652	KM383750	RGBMCS <u>3</u>	1.41E-27
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	KF551583			KY420137	KM383748		
	DQ673859			JN663866	KM383747		
95	KT099152	4104	4596	AM948961	KT099153	<u>R</u> GBMCS3	1.42E-27
	KT099151			AJ002453	KT099154		
96	AF509739	7229	3658	MH665365	KT809345	RGBMCS <u>3</u>	1.95E-32
97	^FJ868828	4238	7059 (?)	HG969202	Unknown	RGBMCS <u>3</u>	6.62E-27
98	^FJ589571	1107	2244	Unknown	KX353622	<u>R</u> GBMCS3	1.17E-26
99	KP868762	1605	2556 (?)	MH355641	KM383750	RGBMCS <u>3</u>	2.72E-26
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102	GQ478342	2331	2984	KX671563	KX302710	R _{GBMCS} 3	1.73E-25
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104	^JN663861	3089	682	EF190217	JN663865	R _{GBMCS} 3	5.50E-42
105	^KF551576	809	2976	HG316125	AM494976	R _{GBMCS} 3	8.23E-25
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107	KP195260	3694 (?)	4452	EU384571	HQ407395	R _{GBMCS} 3	1.44E-16
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166	^Z24758 AJ314739 AY730035	1286	2323 (?)	AJ314737	Unknown	<u>R</u> GBMCS3 9.76E-26
167	^KX665540 KX671962	1147	1758 (?)	Unknown	LN886521 LT556075	RGBMCS <u>3</u> 2.68E-15
168	^AY502936	3936	7922	Unknown	LM651404	RGBM <u>C</u> S3 3.76E-15
169	KC149938 KX831132 KX831133 AJ890226 KR611577 AJ890228 AJ607394 KF898349 KP455486 AJ890227	3900	7068 (?)	Unknown	KY432576 AF014881 JF502369 JF509749 AY795606 KJ959630 KM065514 HF549182 JF510461 JF502356	RGBMCS <u>3</u> 4.15E-15

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171	^KT382326	3906	4195 (?)	Unknown	EU350585	<u>R</u> GBMCS3	8.56E-15
172	^AF274349	524	1299	KP164855	KC196077	RGBMCS <u>3</u>	1.52E-14

173	^KX831888 KM096470 KM096467 KJ959628 KX656805 KX656807	3549 (?)	4413	KX656812	JF502362	RGBMCS <u>3</u>	1.98E-14
174	FJ515747	255 (?)	1598	MF102264	FJ561298	RGBMCS <u>3</u>	2.37E-14
175	^AJ575819	2816	3468 (?)	Unknown	AJ607394	RGBMCS <u>3</u>	3.90E-14
176	^JF502356 JF502355	3838	4074	Unknown	JF502366 HF549182	<u>R</u> GBMCS3	4.67E-14
177	FJ177030	2320	3085	KM023145	FJ011668	RGBMCS <u>3</u>	2.13E-15
178	^FJ177030	3177	3899	KU667096	Unknown	R <u>G</u> BMCS3	3.15E-16
179	EU024120	4049 (?)	5060	Unknown	FN554539	RGBMCS <u>3</u>	6.35E-16
180	^HG530540 EU024120 KT454831 FN554541 EU432373 FJ469626 FN554526 FN554537 FN554539 FN554528 FN554521 EU432374 FJ469627 FN554522	1210	2263	Unknown	KJ939446 HG969202 HG969201 HG969199 HG969203	RGBMCS <u>3</u>	1.38E-13

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182	^AJ314737	112 (?)	1966	Unknown	AJ890226	RGBMCS ₃ 4.62E-13
183	^KT382325	844	3906	EU350585	Unknown	RGBMCS ₃ 2.93E-38

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184	^FN554523	3106	4898	FN554521	Unknown	RGBMCS <u>3</u>	6.71E-13
185	^AM259382	4049	4630 (?)	GU112077	HG969278	R <u>G</u> BMCS3	9.15E-13
186	^HM230683	7831 (?)	1052	JN135236	KU550960	R <u>G</u> BMCS3	1.36E-12
187	^DQ127170	4041	4565	Unknown	AM701764	R <u>G</u> BMCS3	1.38E-12
188	JX311468	508	1696	HM149260	HM007117	RGBMCS <u>3</u>	2.29E-12
189	LK028574	2979	3174	JX518289	LM645010	R <u>G</u> BMCS3	8.52E-12
190	KY420139	1402 (?)	7718	Unknown	KX665541	RGBMCS <u>3</u>	2.92E-12
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191	^LC316183	1366	3572	LC316182	KX906695	RGBMCS <u>3</u>	3.17E-12
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192	^KX906697	3726 (?)	7922	LC316182	KX906696	RGBMCS <u>3</u>	5.63E-15
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193	^KT717678	586 (?)	1771	Unknown	KX906697	RGBMCS <u>3</u>	3.25E-14
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194	MF737344	520 (?)	2090	MG757245	AJ132430	RGBMCS <u>3</u>	6.67E-22
195	KC501924	4267	4743	Unknown	FJ660439	RGBMCS <u>3</u>	3.73E-12
196	KM096471	3676	4088	FR750324	JF502362	RGBMCS <u>3</u>	4.59E-12
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	FN552004			KR815998		
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	KX656810			JF502372		
	MF184923			KF767352		
	KY120360			JF502366		
	KY120361			KY825244		
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	MG373556			HG422570		
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	AM701767			AJ865341	EF110891	
	AM701761			JF919731		
198	^KT355023	740	1326	FN555171	KR073094 RGBMCS <u>3</u>	4.72E-14
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199	JF919733	1844	4319	HE819244	JF919731	RGBMCS <u>3</u>	1.85E-15
200	^AJ865338	4068	7830	AY036009	AJ865339	RGBM <u>C</u> S3	2.19E-11
201	MF737343	709	1363 (?)	DQ629103	HG969255	RGBMCS <u>3</u>	3.21E-11
202	FN555171	4001	4188 (?)	Unknown	AM701766	RGBM <u>C</u> S3	9.81E-09
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203	^FN555171	3094	3792	AF350330	KX853168	<u>R</u> GBMCS3	1.51E-12
204	^FJ237616	3804	4758	Unknown	DQ641702	<u>R</u> GBMCS3	7.95E-14
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205	^MH346125	5076	697	HG969264	Unknown	<u>R</u> GBMCS3	1.32E-10
206	^MH346125	4275 (?)	5075 (?)	KJ700653	KM383747	RGBMCS <u>3</u>	2.79E-11
207	^KT454815	4397	4855 (?)	KC508642	KT444613	RGBMCS <u>3</u>	2.93E-14
208	^HE863667	3996	4666 (?)	Unknown	KM023146	<u>R</u> GBMCS3	2.55E-14
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	EF408037				KM189818		
209	LT716985	7387 (?)	4158	GU112081	KY432576	RGBMCS <u>3</u>	4.31E-10

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210	^HF549182	1226		1664 (?)	LN678638	Unknown	RGBMCS3 7.05E-23
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211	MG649329	892	2048	KM383747	Unknown	RGBMCS <u>3</u>	7.27E-10
212	^KU933258	546	1244 (?)	EU194914	AF314144	RGBMCS <u>3</u>	2.64E-16
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213	HG003650 ^HM851186 KP195261 KF663699 AY754812 KP178730 JX678965 KX219744 KY420142 LN887904 LN887907 LN878103 LN878104 LN878123 LN887903 HM007094 KX246859 HM803118 KP178731 U38239 JX987088 LT556079 LT556080 LT556083 LN878121 LN878122 JX524172	1246 (?)	1462 (?)	JN663865 JN604491 JN604496 JN604497 JN604500 HG941643 JN604490 JN604498 JN604499 HG941644 JN604494 JN604495 HM007100 KY420137	KP164862 JX547015 KF612318 KP698314 KP698316 KR092195 KF515619 KF440686 AF413671 HM625838 KP725055 GQ994098 LN878127 LN878128 AY190290 KP164863 DQ629101 AF449999 EU573714 LN794214 LN794215 LN886661 AY234383 FR819708	RGBMCS3	1.30E-10
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214	KC501924	1358	1778	KM411359	JF501719	<u>R</u> GBMCS3 6.69E-10
215	FN401520	842	1358	KC589699	Unknown	<u>R</u> GBMCS3 7.74E-10
216	AY184487	708	2013 (?)	HM159454	KF184992	RGBMCS <u>3</u> 1.79E-10
	JN587811			AM258977	MG525551	
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	MF102264				AF509741	
217	[^] GU112054	519 (?)	1568	JQ326269	Unknown	RGBMCS <u>3</u> 4.37E-09
	GU112007			GU112052	Unknown	
218	KC911723	1346	1786	Unknown	KP455992	<u>R</u> GBMCS3 5.11E-09
219	[^] KM359408	4246	7852 (?)	KU500804	HE580236	RGBMCS <u>3</u> 1.44E-15
220	[^] EU365615	4327 (?)	7195	EU365613	Unknown	<u>R</u> GBMCS3 1.27E-08
221	[^] KP779630	4434 (?)	7035 (?)	FM208839	AJ416349	RGBMCS <u>3</u> 1.55E-08
222	[^] FR750318	3104 (?)	4619	FR837933	Unknown	RGBMCS <u>3</u> 2.50E-08
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223	^FN794200	5008	938 (?)	LC271790	KR052025	RGBMCS <u>3</u>	7.84E-09
224	KR612272	3275	3415	KX302710	KX671562	<u>R</u> GBMCS3	3.55E-08
225	^AF295401	454 (?)	1308 (?)	HM992939	LK054801	RGBMCS <u>3</u>	5.05E-08
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	AY456684						
226	^FR751146	2888 (?)	4774	FR751144	Unknown	R <u>G</u> BMCS3	6.18E-08
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	AF260241			AY036007			
	GU945265			FR751142			
227	FM208833	2435 (?)	3653 (?)	DQ400847	JN543395	RGBMCS <u>3</u>	8.88E-08
228	KC763630	4265	723	AY036009	KT728741	RGBMCS <u>3</u>	8.88E-08
229	^EF373060	1320	2266	DQ641707	GU112074	RGBMCS <u>3</u>	2.70E-18
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	HG938362				JQ326269		
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	KC713784				GU112063		
	KT382327				JQ359505		
230	MG757245	1257	2240	AM050730	LK054801	<u>R</u> GBMCS3	8.88E-08
	KF612318				LK028571		
	KP698314				LM645009		
	KP698316						
	LN878127						
	LN878128						
231	^HE793424	4237	4665	Unknown	DQ902715	<u>R</u> GBMCS3	7.17E-08
	FM164724				KX100573		
	HE793425				DQ875879		
	FM210275						
232	^AM259382	3212 (?)	6468	MG917697	DQ641707	<u>R</u> GBMCS3	1.17E-07
233	^KT099132	1210	1589	AY036009	KJ939446	<u>R</u> GBMCS3	2.40E-11

	HG969202			AF014881	HF536716		
	HG969201						
	HG969199						
	HG969203						
	FR751142						
	FR751145						
	FR751143						
	FR751144						
	AF155064						
	AY036010						
234	^KT444617	2302	3018 (?)	Unknown	KT444615	R <u>G</u> BMCS3	1.41E-07
235	^LK028574	789	1273	KY420137	KT159766	R <u>G</u> BMCS <u>3</u>	9.71E-08
	FJ514798			JN604491	KP780424		
	DQ673859			JN604493	KM978186		
	HM140368			JN604500	KC161185		
	LM645010			HM007100			
	DQ116884			JN663865			
236	AM701756	4242	7365 (?)	AM701758	KF660223	R <u>G</u> BMCS <u>3</u>	1.57E-10
	AF029217				KC202818		
	JF694486				KT948070		
	KT799138				KR779820		
	KT878826				KX951415		
	KT878831				FM877858		
	KT878824				KF312364		
	KT878829				KX302713		
	KM023146				FM955601		
	KX100571				FM955602		

KX100572
EU024118
AM701757
FR751142
FR751145
KT390322
KT390346
HE861940
AM701768
DQ519575
EF194760
HE659516
FM210277
FM210278
JF919728
AF350330
FM876849
KY271075
KY271076
KY271077
AY502935
FM876847
FN555172
FN555173
FN555174
FM876852
FM876850

GQ200446
GQ200448
KF307208
KX671964
JN817516
KF888655
KJ747958
LN871569
FN645902
LN886647
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FJ593629
JN663850
FN645901
JQ954859
LN878129
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KY026597
KY026598
KU376493
FN543112
FN678906
LT009396
KU514411
LT009400
LN845916
LN845915

	FM876851				LN845917	
	FM876848				LN845914	
	FN555171				LT009397	
	AM691549				LT009398	
	AM691550				LN845913	
	AM691548				LN845919	
	AM691555				DQ629102	
237	^FJ015062	608	2061	Unknown	DQ641704	RGBM <u>C</u> S3 2.66E-07
238	^FJ176236	4668	6492	GU112005	Unknown	R <u>G</u> BMCS3 3.55E-07
	GU112065			KC501919		
239	^AJ512495	4272 (?)	6643	KX671565	Unknown	RGBM <u>C</u> <u>S</u> 3 2.97E-08
	FM208844			AJ512498		
	FM208845			FM208835		
	AJ512497			AY269990		
	FM208843			KX671566		
	FM208846			KX711620		
	FM208842					
	JX110618					
	AF416742					
	AM992618					
	FM208839					
	AJ512498					
	AY271895					
	AY269990					
240	KP780424	3015	3210	JX518289	KM383755	R <u>G</u> <u>B</u> MCS3 9.39E-07
	KM978186			JN692494	LK054801	
	KT159766			JF496657	AY754814	

241	MF737345	2806	3110	KJ957157	GU385879	RGBMCS <u>3</u>	5.33E-07
242	^KT390459	4397	4582	GU111996	KX553923	RGBMCS <u>3</u>	9.77E-07
243	^AJ437618	4462 (?)	7232	AF314144	KP725057	RGBM <u>C</u> S3	5.44E-06
	KY089033				HM149260		
	FJ177031				JQ911765		
244	^JF496657	7784 (?)	1701	Unknown	GQ924760	RGBMCS <u>3</u>	1.51E-06
245	^LN886647	4598	7360 (?)	Unknown	KY026598	RGBMCS <u>3</u>	2.04E-06
	KX671964				KY026597		
	JN817516						
	KF888655						
	KJ747958						
	LN871569						
	FN645902						
	FN543112						
246	^DQ191160	4586	7628	KY001639	AJ002459	R <u>G</u> BMCS3	5.84E-06
247	^KX853168	4307	6812	KT454831	AJ865340	RGBMCS <u>3</u>	1.97E-05
248	^AF155064	1743 (?)	2348	Unknown	HG969202	RGBMCS <u>3</u>	2.56E-05
	KT099132				HG969201		
	FR751142				HG969199		
	FR751145				HG969203		
	FR751143				KJ939446		
	FR751144						
	AY036010						
249	^FJ561298	952	1074 (?)	Unknown	KP195265	R <u>G</u> BMCS3	6.43E-05
250	^MF737344	2438	3052	HG937521	MG757245	RGBMCS <u>3</u>	5.56E-07
251	JN663870	658 (?)	1693	HM007100	KF471061	RGBM <u>C</u> S3	8.21E-05
252	^HM992939	1640	2484	KC196077	Unknown	RGBMCS <u>3</u>	9.42E-04

253	HG422570	3120 (?)	4591	HG003876	Unknown	<u>R</u> GBMCS3	4.76E-09
254	^KT454826	2628	3276	Unknown	KT454822	<u>R</u> GBMCS3	2.36E-12
	KT454823						
	KT454820						
	KT454821						
	KT454825						
255	^KX711618	4996	668 (?)	AY271893	DQ389154	<u>R</u> GBMCS3	6.16E-04
	KC019304				FM955598		
256	^MF683828	4132	4676	FR715681	KT390455	<u>R</u> GBMCS3	1.03E-11
257	^AJ437618	3014	3693 (?)	KP725057	Unknown	<u>R</u> GBMCS3	2.19E-08
	KP195260			LT716984			
258	^EU910140	2771 (?)	3845 (?)	KX827601	Unknown	<u>R</u> GBMCS3	3.46E-05
259	KR092195	4296 (?)	4532	KU500805	KM383738	<u>R</u> GBMCS3	2.87E-04
260	^AY754814	522	1308 (?)	HM992939	JN604499	<u>R</u> GBMCS3	6.02E-06
	KP178732				JN604493		
261	^HF536716	842	1162	KT454831	AY036009	<u>R</u> GBMCS3	3.15E-09
	GU945265			FN554528	AF014881		
262	^HF536716	1165 (?)	2318	KJ939446	Unknown	<u>R</u> GBMCS3	5.17E-17
Subpopulation 8 - ACM-like viruses							
1	^GQ169505	1286	171	HM468428	Unknown	<u>R</u> GBMCS3	4.18E-75
	FJ751233			FN668378			
2	^HE616777	42	1924	MG250156	Unknown	<u>R</u> GBMCS3	4.41E-24
	HE616779			EU685324			
	HE616780			MG250120			
	HE616781			MG250126			

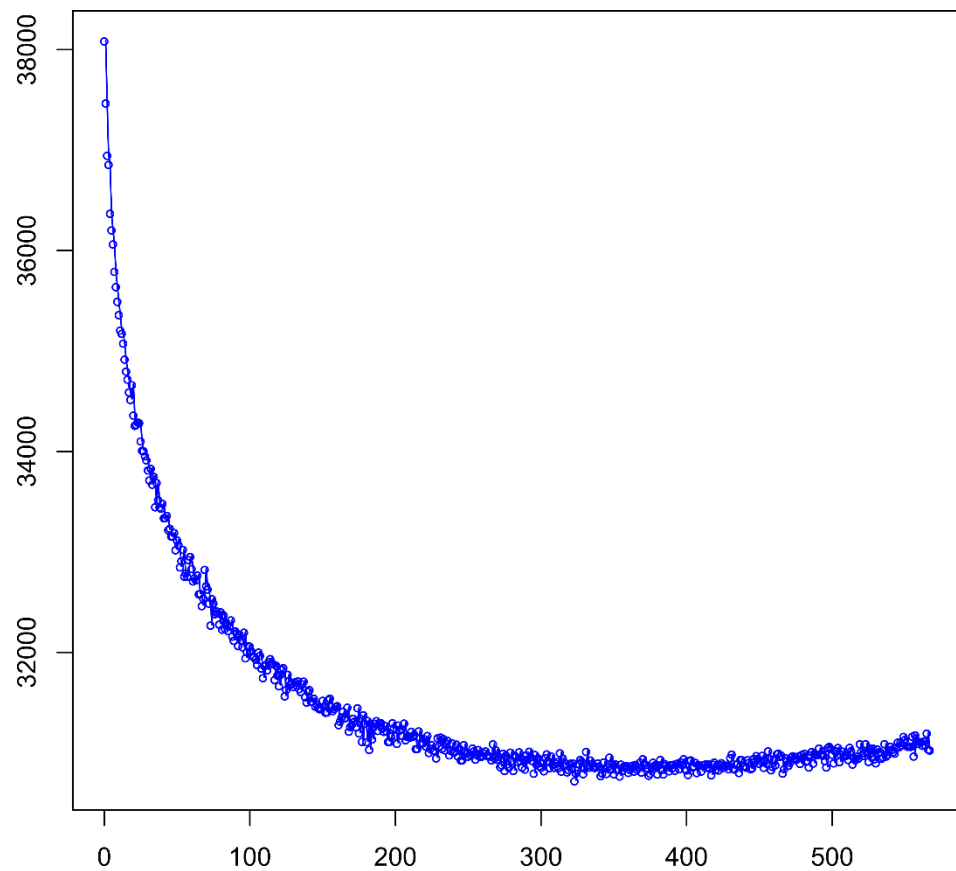
¹Numbering starts at the first nucleotide after the cleavage site at the origin of replication and increases clockwise.

²R, RDP; G, GeneConv; B, Bootscan; M, MaxChi; C, CHIMAERA; S, SisScan; 3, 3SEQ.

³The reported P-value is for the program underlined type and is the lowest P-value calculated for the event in question.

713 (?)The actual breakpoint position is undetermined (it was most likely overprinted by a subsequent recombinant event)
714 ^The recombinant sequence may have been misidentified (one of the identified parents might be the recombinant)
715 Fonte: O autor.

716 **Supplementary Figure S1** - BIC (Bayesian Information Criterion) values versus number of clusters for $K = 8$. The 'x' axis represents the number
717 of clusters that must be retained in the analysis and the 'y' axis, the BIC values.



718
719 Fonte: O autor.