

A list of proposed standard acronyms for plant viruses and viroids

For many years acronyms have been used as abbreviations of the names of plant viruses and, more recently, of viroids. There has however been no clear agreement as to which abbreviation should stand for a given entity, and this has led to inconsistency and, sometimes, confusion. Also there have been no clear rules by which an acronym should be constructed. Under the chairmanship of R. I. Hamilton and later of G. P. Martelli, the Plant Virus Subcommittee of the International Committee on Taxonomy of Viruses (ICTV) appointed a working group (the present authors) to examine the question. Our task was to produce a standardized list with a reasonable chance of gaining the allegiance of the majority of plant virus/viroid workers and editors, and to make recommendations as to how new acronyms should be constructed when the occasion arises.

Lists of acronyms have already been produced [13, 4], the second based on the first, and others [2, 3, 7–9, 11, 14] have also used acronyms that are mostly consistent with these lists. Such acronyms have the merit of wide usage but are not constructed according to any consistent logic, so we have also considered the following two alternative systems.

1. That proposed by Smith [12], based on the Bayer system. This uses a six-letter code made up from the first two letters designating the host, the next 1–3 letters describing the agent (e.g., symptoms) and the last letters specifying the type of agent (virus). The code is padded with X's to make up the six letters. Examples would be TOMVXX (tobacco mosaic virus) or POXVXX (potato virus X). Adoption of this system would mean a complete change of all acronyms; it would be computer-friendly but hardly friendly to users.

2. A new system based on host name (three letters) and symptom (two letters). This would use many existing acronyms but would also mean changing a significant number. Examples are CarMtV (carnation mottle virus), TobMoV (tobacco mosaic virus), and TomMoV (tomato mosaic virus).

We conclude that, although the traditional system has faults, new acronyms constructed to precise rules would be unfamiliar and cumbersome, and it would be unrealistic to expect users to adopt them. Thus we propose an updated list on traditional lines. The only rules we have adopted, and that we recommend to future constructors of new acronyms are (*i*) be as simple as possible, (*ii*) avoid duplication, (*iii*) the word “virus” shall be abbreviated as “V”, and (*iv*) the word “viroid” shall be abbreviated as “Vd” (this follows the ICTV proposal at Edmonton, 1988). We have also used some flexible guidelines such as (a) where similar names contain the terms “mosaic” and “mottle”, e.g., cowpea mosaic, cowpea mottle, we have preferred “M” for mosaic and “Mo” for mottle (i.e., CPMV, CPMoV respectively); (b) “-ring-spot virus” has generally been rendered -RSV even where -RV would have sufficed; (c) the second or third letter, or sometimes the second consonant, of the virus name, in lower case, has served to differentiate certain conflicting acronyms, e.g., HLV for heracleum latent virus, and HpLV for hop latent virus; (d) we have avoided look-alike acronyms where the same letters only differ in being upper or lower case – for example, CoMV stands for cocksfoot mottle virus, so we would avoid the acronym COMV. The only other recommendation we would make is: when coining a new virus or viroid name,

think of something memorable, original, and distinct from previously used names. For example, with the name “digitaria striate (rhabdo) virus” already in existence, it was a pity to come up with the name “digitaria streak (gemini) virus”.

Names of viruses and viroids appear in our list (Tables 1 and 2) if they are in the CMI/AAB (now AAB) Descriptions of Plant Viruses [10] or because they seem to be established and currently used names for well-recognized entities [1–9, 11, 14], or if they appear in the list compiled for the Fifth Report of the ICTV, edited by R. I. B. Francki [15]. However, our main purpose certainly was not to arbitrate as to what is or is not a bona fide virus or viroid, and the list should not be taken as an authoritative taxonomic statement.

If a “standard” list such as this is found to be useful, it will need revision from time to time, under the direction of the ICTV. Meanwhile we hope that authors will use these acronyms in preference to others, and that editors will encourage them to do so.

Table 1. List of standard acronyms proposed for selected plant viruses

Virus name	Acronym	Family/group and subgroup
Abutilon mosaic	AbMV	Gemini II ^a
African cassava mosaic	ACMV	Gemini II
Agropyron mosaic	AgMV	Poty (mite) ^b
Alfalfa cryptic 1	ACV 1	Crypto I
Alfalfa mosaic	AMV	AMV group
Alstroemeria mosaic	AlMV	Poty (aphid)
Amarantus leaf mottle	AmLMV	Poty (aphid)
American hop latent	AHLV	Carla
(s. also, Hop latent)	HpLV	Carla
American plum line pattern	APLPV	Ilar V
American wheat striate mosaic	AWSMV	Rhabdo A ^a (leafhopper)
Andean potato latent	APLV	Tymo
Andean potato mottle	APMV	Como
Anthoxanthum latent blanching	ALBV	Hordei
Anthriscus yellows	AYV	? ^c MCDV group
Apple chlorotic leaf spot	ACLSV	? Clostero
Apple mosaic (= some isolates of rose mosaic)	ApMV	Ilar
Apple stem grooving	ASGV	Capillo
Aquilegia necrotic mosaic	ANMV	? Caulimo
Arabis mosaic	ArMV	Nepo
Araujia mosaic	ArjMV	Poty (aphid)
Arracacha A	AVA	Nepo
Arracacha B	AVB	? Nepo
Artichoke Italian latent	AILV	Nepo
Artichoke latent	ALV	Poty (aphid)
Artichoke mottle crinkle	AMCV	Tombus
Artichoke vein banding	ABV	? Nepo
Artichoke yellow ringspot	AYRSV	Nepo
Asparagus 1	AV1	Poty (aphid)
Asparagus 2	AV2	Ilar II
Asparagus 3	AV3	Potex
Aucuba ringspot	AuRSV	? Badna ^d

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Azuki bean mosaic, s. cowpea aphid-borne mosaic		
Bamboo mosaic	BaMV	Potex
Banana streak	BSV	Badna
Barley stripe mosaic	BSMV	Hordei
Barley yellow dwarf	BYDV	Luteo
Barley yellow mosaic	BaYMV	Poty (fungus)
Barley yellow striate mosaic (= wheat chlorotic streak)	BYSMV	Rhabdo A (planthopper)
Bean common mosaic	BCMV	Poty (aphid)
Bean distortion dwarf	BDDV	? Gemini II
Bean golden mosaic	BGMV	Gemini II
Bean leaf roll, s. pea leaf roll		
Bean mild mosaic	BMMV	? Carmo
Bean pod mottle	BPMV	Como
Bean rugose mosaic	BRMV	Como
Bean yellow mosaic	BYMV	Poty (aphid)
Bean yellow vein banding	BYVBV	"Umbra" ^{re}
Bearded iris mosaic	BIMV	Poty (aphid)
Beet cryptic 1	BCV 1	Crypto I
Beet cryptic 2	BCV 2	Crypto I
Beet cryptic 3	BCV 3	Crypto I
Beet curly top	BCTV	Gemini ? I
Beet leaf curl	BLCV	Rhabdo B (lace bug)
Beet mild yellowing	BMYV	Luteo
Beet mosaic	BtMV	Poty (aphid)
Beet necrotic yellow vein	BNYVV	? Furo
Beet pseudo-yellows	BPYV	? Clostero
Beet soil-borne	BSBV	? Furo
Beet western yellows (= barley yellow dwarf, RPV isolate)	BWYV	Luteo
Beet yellow net	BYNV	? Luteo
Beet yellows (= sugarbeet yellows)	BYV	Clostero
Beet yellow stunt	BYSV	Clostero
Belladonna mottle	BeMV	Tymo
Bermudagrass etched-line	BELV	Marafi
Bidens mottle	BiMoV	Poty (aphid)
Blackeye cowpea mosaic	B1CMV	Poty (aphid)
Blackgram mottle	BMoV	? Carmo
Black raspberry latent	BRLV	Ilar
Black raspberry necrosis	BRNV	unclassif. isometric
Blueberry leaf mottle	BLMV	Nepo
Blueberry red ringspot	BRRV	Caulimo
Blueberry scorch	BBScV	Ilar III
Blueberry shoestring	BSSV	Sobemo
Broad bean mottle	BBMV	Bromo
Broad bean necrosis	BBNV	? Furo

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Broad bean stain	BBSV	Como
Broad bean true mosaic	BBTMV	Como
Broad bean wilt (serotypes and II)	BBWV	Faba
Broccoli necrotic yellows	BNYV	Rhabdo A (aphid)
Brome mosaic	BMV	Bromo
Brome streak	BStV	Poty (mite)
Burdock yellows	BuYV	Clostero
Cacao necrosis	CNV	Nepo
Cacao swollen shoot	CSSV	Badna
Cacao yellow mosaic	CYMV	Tymo
Cactus 2	CV2	Carla
Cactus X	CVX	Potex
Canna yellow mottle	CaYMV	Badna
Caper latent	CapLV	Carla
Cardamine latent	CaLV	Carla
Cardamom mosaic	CdMV	Poty (aphid)
Carnation cryptic 1	CCV1	Crypto I
Carnation cryptic 2	CCV2	? Crypto I
Carnation etched ring	CERV	Caulimo
Carnation Italian ringspot	CIRSV	Tombus
Carnation latent	CLV	Carla
Carnation mottle	CarMV	Carmo
Carnation necrotic fleck	CNFV	Clostero
Carnation ringspot	CRSV	Diantho
Carnation vein mottle	CVMV	Poty (aphid)
Carnation yellow stripe	CYSV	? Necro
Carrot latent	CtLtV	Rhabdo (aphid)
Carrot mottle	CMoV	"Umbra"
Carrot red leaf	CaRLV	Luteo
Carrot temperate 1	CTeV1	Crypto I
Carrot temperate 2	CTeV2	Crypto II
Carrot temperate 3	CTeV3	Crypto I
Carrot temperate 4	CTeV4	Crypto I
Carrot thin leaf	CTLV	Poty (aphid)
Carrot yellow leaf	CYLV	Clostero
Cassava American latent	CsALV	Nepo
Cassava common mosaic	CsCMV	Potex
Cassava brown streak	CBSV	? Carla (whitefly)
Cassava green mottle	CGMV	Nepo
Cassava vein banding (= c. vein mosaic)	CVBV	? Caulimo
Cassava virus C	CVC	"Ourmia melon virus group"
Cassava virus X	CsVX	Potex
Cassia yellow blotch	CYBV	Bromo 6
Cauliflower mosaic	CaMV	Caulimo
Celery mosaic	CeMV	Poty (aphid)

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Cereal chlorotic mottle	CeCMV	Rhabdo B (leafhopper)
Cestrum	CV	? Caulimo
Chara australis	CAV	? Tobamo
Chenopodium necrosis	ChNV	Necro
Cherry leaf roll	CLRV	Nepo
Cherry rasp leaf	CRLV	? Nepo
Cherry rugose	CRV	Iilar III
Chicory virus X	ChVX	Potex
Chicory yellow mottle	ChYMV	Nepo
Chloris striate mosaic	CSMV	Gemini I
Chrysanthemum B	CVB	Carla
Citrus leaf rugose	CLRV	Iilar II
Citrus tatter leaf	CLTLV	? Clostero
Citrus tristera	CTV	Clostero
Citrus variegation	CVV	Iilar II
Clitoria yellow vein	CYVV	Tymo
Clover yellow mosaic	CIYMV	Potex
Clover yellows	CYV	Clostero
Clover yellows vein	CIYVV	Poty (aphid)
Cocksfoot mild mosaic	CMMV	? Sobemo
Cocksfoot mottle	CoMV	Sobemo
Cocksfoot streak	CSV	Poty (aphid)
Cocoa necrosis, s. cacao necrosis		
Coffee ringspot	CoRSV	Rhabdo B (mite)
Colocasia bacilliform	CBV	? Badna
Colocasia bobone disease	CBDV	Rhabdo (leafhopper)
Colombian datura	CDV	Poty (aphid)
Commelina mosaic	ComMV	Poty (aphid)
Commelina X	CoVX	Potex
Commelina yellow mottle	COYMV	Badna
Cotton leaf crumple	CLCrV	Gemini II
Cotton leaf curl	CLCuV	? Gemini II
Cowpea aphid-borne mosaic (= azuki bean mosaic)	CABMV	Poty (aphid)
Cowpea chlorotic mottle	CCMV	Bromo
Cowpea golden mosaic	CpGMV	? Gemini II
Cowpea green vein banding	CGVBV	Poty
Cowpea mild mottle	CPMMV	Carla
Cowpea mosaic	CPMV	Como
Cowpea mottle	CPMoV	? Carmo
Cowpea ringspot	CPRSV	? Cucumo
Cowpea severe mosaic	CPSMV	Como
Crimson clover latent	CCLV	Nepo
Cucumber green mottle mosaic	CGMMV	Tobamo
Cucumber leaf spot	CLSV	? Carmo
Cucumber mosaic	CMV	Cucumbo
Cucumber necrosis	CuNV	Tombus
Cucumber soil-borne	CSBV	Carmo
Cucumber yellows	CYV	? Clostero

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Cycas necrotic stunt	CNSV	Nepo
Cymbidium mosaic	CyMV	Potex
Cymbidium ringspot	CyRSV	Tombus
Cynosurus mottle	CnMoV	? Sobemo
Dahlia mosaic	DMV	Caulimo
Dandelion latent	DaLV	Carla
Dandelion yellow mosaic	DaYMV	? "Umbra"
Danish plum line pattern	DPLPV	Ilar III
Daphne X	DVX	Potex
Dasheen mosaic	DsMV	Poty (aphid)
Datura shoestring	DSTV	Poty (aphid)
Dendrobium mosaic	DeMV	Poty (aphid)
Dendrobium vein necrosis	DVNV	? Clostero
Desmodium yellow mottle	DYMV	Tymo
Digitaria streak	DSV	Gemini I
Digitaria striate	DiSV	Rhabdo ? B (leafhopper)
Dioscorea bacilliform	DBV	? Badna
Dioscorea latent	DLV	Potex
Dulcamara mottle	DuMV	Tymo
Eggplant mosaic	EMV	Tymo
Eggplant mottled crinkle	EMCV	Tombus
Eggplant mottled dwarf	EMDV	Rhabdo B (vector unknown)
Elderberry carla (= elderberry A)	ECV	Carla
Elderberry latent	ELV	? Carmo
Elm mottle	EMoV	Ilar II
Epirus cherry	EpCV	"Ourmia melon virus group"
Erysium latent	ErLV	Tymo
Euphorbia mosaic	EuMV	Gemini II
European wheat striate mosaic	EWSMV	Tenui
Fern mottle	FMoV	Furo
Fescue cryptic	FCV	Crypto ? I
Festuca leaf streak	FLSV	Rhabdo A (vector unknown)
Festuca necrosis	FNV	Clostero
Figwort mosaic	FMV	Caulimo
Fiji disease	FDV	Fiji, Plant Reo II
Foxtail mosaic	FoMV	Potex
Frangipani mosaic	FrMV	Tobamo
Galinsoga mosaic	GaMV	Carmo
Garland chrysanthemum temperate	GCTV	Crypto ? I
Garlic mosaic	GarMV	Poty (aphid)
Ginger chlorotic fleck	GCFV	? Sobemo
Gloriosa stripe mosaic	GSMV	Poty (aphid)
Glycine mosaic	GMV	Como
Glycine mottle	GMoV	? Carmo
Grapevine A (= grapevine stem-pitting associated)	GVA	Clostero

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Grapevine Algerian latent	GALV	Tombus
Grapevine Bulgarian latent	GBLV	Nepo
Grapevine chrome mosaic	GCMV	Nepo
Grapevine fanleaf	GFLV	Nepo
Grapevine Tunisian ringspot	GTRSV	Nepo
Groundnut crinkle	GCV	? Carla (whitefly)
Groundnut eyespot	GEV	Poty (aphid)
Groundnut rosette	GRV	"Umbra"
Groundnut rosette assistor	GRAV	Luteo
Guinea grass mosaic	GGMV	Poty (aphid)
Helenium S	HVS	Carla
Helenium Y	HVY	Poty (aphid)
Henbane mosaic	HMV	Poty (aphid)
Heracleum latent	HLV	? Clostero
Heracleum virus 6	HV6	? Clostero
Hibiscus chlorotic ringspot	HCRSV	Carmo
Hibiscus latent ringspot	HLRSV	Nepo
Hippeastrum mosaic	HiMV	Poty (aphid)
Honeysuckle latent	HnLV	Carla
Honeysuckle yellow vein mosaic	HYVMV	Gemini II
Hop A	HVA	Ilar III
Hop C	HVC	Ilar III
Hop latent	HpLV	Carla
(s. also, American hop latent)	AHLV	Carla)
Hop mosaic	HpMV	Carla
Hop trefoil cryptic 1	HTCV1	Crypto I
Hop trefoil cryptic 2	HTCV2	Crypto II
Hop trefoil cryptic virus 3	HTCV3	Crypto I
Hordeum mosaic	HoMV	Poty (? mite)
Horsegram yellow mosaic	HgYMV	Gemini II
Horseradish latent	HRLV	Caulimo
Humulus japonicus	HJV	Ilar IX
Hydrangea latent	HdLV	Carla
Hydrangea mosaic	HdMV	Ilar
Hydrangea ringspot	HRSV	Potex
Hypochoeris mosaic	HyMV	? Furo/ ? Tobamo
Indian cassava mosaic	ICMV	Gemini II
Indian peanut clump	IPCV	? Furo
Indonesian soybean dwarf	ISDV	Luteo
Iris fulva mosaic	IFMV	Poty (aphid)
Iris mild mosaic	IMMV	Poty (aphid)
Iris severe mosaic	ISMV	Poty (aphid)
Jatropha mosaic	JMV	Gemini II
Johnsongrass mosaic	JGMV	Poty (aphid)
Kalanchoë latent	KLV	Carla
Kalanchoë top spotting	KTSV	Badna
Kennedya yellow mosaic	KYMV	Tymo

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Kyuri green mottle mosaic	KGMMV	TGMMV
Lamium mild mosaic	LMMV	Faba
Lato river	LRV	Tombus
Leek yellow stripe	LYSV	Poty (aphid)
Lettuce big vein	LBVV	unclassif. dsRNA rod
Lettuce infectious yellows	LIYV	? Clostero
Lettuce mosaic	LMV	Poty (aphid)
Lettuce necrotic yellows	LNYV	Rhabdo A (aphid)
Lettuce speckles mottle	LSMV	"Umbra"
Lilac chlorotic leafspot	LCLV	Clostero
Lilac mottle	LiMV	Carla
Lilac ring mottle	LRMV	Iilar VII
Lily symptomless	LSV	Carla
Lily X	LVX	Potex
Limabean golden mosaic	LGMV	Gemini II
Lisianthus necrosis	LNV	? Necro
Lucerne Australian latent	LALV	Nepo
Lucerne Australian symptomless	LASV	? Nepo
Lucerne transient streak	LTSV	Sobema
Lychnis ringspot	LRSV	Hordei
Maclura mosaic	MacMV	? Poty (aphid)
Maize chlorotic dwarf	MCDV	MCDV group
Maize chlorotic mottle	MCMV	? Sobemo
Maize dwarf mosaic	MDMV	Poty (aphid)
Maize mosaic	MMV	Rhabdo B (leafhopper)
Maize rayado fino	MRFV	Marafi
Maize rough dwarf	MRDV	Fiji, Plant Reo II
Maize sterile stunt	MSSV	Rhabdo A (planthopper)
Maize streak	MSV	Gemini I
Maize stripe	MSPV	Tenui
Maize white line mosaic	MWLMV	unclassif. isometric
Malvaceous chlorosis	MCV	Gemini II
Maracuja mosaic	MaMV	Tobamo
Melandrium yellow fleck	MYFV	Bromo
Melon leaf curl	MLCV	Gemini II
Melon necrotic spot	MNSV	Carmo
Mibuna temperate	MTV	Crypto ? I
Mimosa bacilliform	MBV	? Badna
Mirabillis mosaic	MiMV	Caulimo
Miscanthus streak	MiSV	Gemini I
Moroccan pepper	MPV	Tombus
Mulberry latent	MLV	Carla
Mulberry ringspot	MRSV	Nepo
Mungbean yellow mosaic	MYMV	Gemini II
Muskmelon vein necrosis	MVNV	Carla
Myrobalan latent ringspot	MLRSV	Nepo
Nandina mosaic	NaMV	Potex
Nandina stem-pitting	NSPV	? Capillo

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Narcissus degeneration	NDV	Poty (aphid)
Narcissus latent (= gladiolus ringspot)	NLV	Carla
Narcissus mosaic	NMV	Potex
Narcissus tip necrosis	NTNV	? Carmo
Narcissus yellow stripe	NYSV	Poty (aphid)
Neckar river	NRV	Tombus
Nerine latent (= hippeastrum latent)	NeLV	Carla
Nerine X	NVX	Potex
Nicotiana velutina mosaic	NVMV	? Furo
Northern cereal mosaic (= wheat rosette stunt)	NCMV	Rhabdo A (planthopper)
Nothoscordum mosaic	NoMV	Poty (aphid)
Oat blue dwarf	OBDV	Marafi
Oat golden stripe	OGSV	? Furo
Oat mosaic	OMV	Poty (fungus)
Oat necrotic mottle	ONMV	Poty (? mite)
Oat sterile dwarf	OSDV	Fiji, Plant Reo II
Odontoglossum ringspot	ORSV	Tobamo
Okra mosaic	OkMV	Tymo
Olive latent ringspot	OLRSV	Nepo
Olive latent 1	OLV1	? Sobemo
Olive latent 2	OLV2	unclassif. small bacilliform
Onion yellow dwarf	OYDV	Poty (aphid)
Ononis yellow mosaic	OYMV	Tymo
Orchid fleck	OFV	“naked” Rhabdo
Ornithogalum mosaic	OrMV	Poty (aphid)
Ourmia melon	OuMV	“Ourmia melon virus group”
Pangola stunt	PaSV	Fiji, Plant Reo II
Panicum mosaic	PMV	? Sobemo
Papaya mosaic	PapMV	Potex
Papaya ringspot (= watermelon mosaic 1)	PRSV	Poty (aphid)
Parsnip mosaic	ParMV	Poty (aphid)
Parsnip yellow fleck	PYFV	“Umbra”
Passiflora latent	PLV	Carla
Passionfruit woodiness	PWV	Poty (aphid)
Passionfruit yellow mosaic	PFYMV	Tymo
Pea early-browning	PEBV	Tobra
Pea enation mosaic	PEMV	PEMV group
Pea leaf roll	PeLRV	Luteo
Pea mild mosaic	PMiMV	Como
Pea seed-borne mosaic	PSbMV	Poty (aphid)
Pea streak (= alfalfa latent)	PeSV	Carla
Peach rosette mosaic	PRMV	Nepo
Peanut chlorotic streak	PCSV	Caulimo
Peanut clump	PCV	Furo

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Peanut mottle	PeMoV	Poty (aphid)
Peanut stripe	PStV	Poty (aphid)
Peanut stunt (= robinia mosaic)	PSV	Cucumo
Peanut yellow mosaic	PeYMV	Tymo
Pelargonium flower-break	PFBV	Carmo
Pelargonium leaf curl	PLCV	Tombus
Pelargonium line pattern	PLPV	? Carmo
Pelargonium zonate spot	PZSV	unclassif. ? Ilar affin.
Pepino mosaic	PepMV	Potex
Pepper mild mottle	PMMV	Tobamo
Pepper mottle (may = PVY)	PepMoV	Poty (aphid)
Pepper ringspot	PepRSV	Tobra
Pepper severe mosaic	PeSMV	Poty (aphid)
Pepper veinal mottle	PVMV	Poty (aphid)
Peru tomato	PTV	Poty (aphid)
Petunia asteroid mosaic	PeAMV	Tombus
Petunia vein clearing	PVCV	? Caulimo
Physalis mosaic	PhyMV	Tymo
Plantago 4	PV4	? Caulimo
Plantago mottle	P1MV	Tymo
Plantago severe mottle	PSMV	Potex
Plantain 6	PV6	? Carmo
Plantain X	P1VX	Potex
Plum pox	PPV	Poty (aphid)
Poa semilatifolia	PSLV	Hordei
Poinsettia mosaic	PnMV	? Tymo
Pokeweed mosaic	PkMV	Poty (aphid)
Poplar mosaic	PopMV	Carla
Potato A	PVA	Poty (aphid)
Potato aucuba mosaic	PAMV	? Potex
Potato black ringspot	PBRV	Nepo
Potato leaf roll (= tomato yellow top)	PLRV	Luteo
Potato M	PVM	Carla
Potato mop-top	PMTV	Furo
Potato S (= pepino latent)	PVS	Carla
Potato T	PVT	Capillo
Potato U	PVU	Nepo
Potato V	PVV	Poty (aphid)
Potato X	PVX	Potex
Potato Y	PVY	Poty (aphid)
Potato yellow dwarf	PYDV	Rhabdo B (leafhopper)
Potato yellow mosaic	PYMV	Gemini II
Prune dwarf	PDV	Ilar III
Prunus necrotic ringspot (= some isolates of rose mosaic)	PNRSV	Ilar III
Quail pea mosaic	QPMV	Como
Radish mosaic	RaMV	Como
Radish yellow edge	RYEV	Crypto ? I

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Raspberry bushy dwarf	RBDV	“Idaeovirus group”
Raspberry ringspot	RRSV	Nepo
Raspberry vein chlorosis	RVCV	Rhabdo (aphid)
Red clover cryptic 1	RCCV 1	Crypto I
Red clover cryptic 2	RCCV 2	Crypto II
Red clover mottle	RCMV	Como
Red clover necrotic mosaic	RCNMV	Diantho
Red clover vein mosaic	RCVMV	Carla
Red pepper cryptic 1	RPCV1	Crypto ? I
Red pepper cryptic 2	RPCV2	Crypto ? I
Rhubarb temperate	RTV	Crypto ? I
Rhynchosia mosaic	RhMV	Gemini II
Ribgrass mosaic	RMV	Tobamo
Rice black-streaked dwarf	RBSDV	Fiji, Plant Reo II
Rice dwarf	RDV	Phytoreo, Plant Reo I
Rice gall dwarf	RGDV	Phytoreo, Plant Reo I
Rice grassy stunt	RGSV	Tenui
Rice hoja blanca	RHBV	Tenui
Rice necrosis mosaic	RNMV	Poty (fungus)
Rice ragged stunt	RRSV	Plant Reo II
Rice stripe	RSV	Tenui
Rice stripe necrosis	RSNV	? Furo
Rice transitory yellowing	RTYV	Rhabdo B (leafhopper)
Rice tungro bacilliform	RTBV	Badna
Rice tungro spherical	RTSV	? MCDV group
Rice yellow mottle	RYMV	Sobemo
Rubus yellow net	RYNV	? Badna
Ryegrass cryptic	RGCV	Crypto I
Ryegrass mosaic	RGMV	Poty (mite)
Saguaro cactus	SCV	Carmo
Sammons' opunita	SOV	Tobamo
Santosai temperate	STV	Crypto ? I
Satellite of TNV	STNV	“STNV group”
Satsuma dwarf	SDV	? Nepo
Schlefflera ringspot	SRSV	? Badna
Scrophularia mottle	ScrMV	Tymo
Shallot latent	SLV	Carla
Soil-borne wheat mosaic	SBWMV	Furo
Solanum nodiflorum mottle	SNMV	Sobemo
Sonchus	SV	Rhabdo A (vector unknown)
Sonchus mottle	SMoV	? Caulimo
Sonchus yellow net	SYNV	Rhadbo B (aphid)
Sorghum chlorotic spot	SoCSV	Furo
Sorghum mosaic	SrMV	Poty (aphid)
Southern bean mosaic	SBMV	Sobemo
Sowbane mosaic	SoMV	Sobemo
Sowthistle yellow vein	SYVV	Rhabdo B (aphid)
Soybean chlorotic mottle	SbCMV	Caulimo
Soybean dwarf (subterranean clover red leaf, strawberry mild yellow edge)	SbDV	Luteo

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Soybean mosaic	SbMV	Poty (aphid)
Spartina mottle	SpMV	Poty (? mite)
Spinach latent	SpLV	Ilar
Spinach temperate	SpTV	Crypto I
Spring beauty latent	SBLV	Bromo
Squash leaf curl	SLCV	Gemini II
Squash mosaic	SMV	Como
Statice Y	SVY	Poty (aphid)
Strawberry crinkle	SCrV	Rhabdo A (aphid)
Strawberry latent ringspot	SLRSV	? Nepo
Strawberry pseudo mild yellow edge	SPMYEV	Carla
Strawberry vein banding	SVBV	Caulimo
Subterranean clover mottle	SCMoV	Sobemo
Subterranean clover stunt	SCSV	unclassif. isometric
Sugarcane bacilliform	SCBV	Badna
Sugarcane mosaic	SCMV	Poty (aphid)
Sunn-hemp mosaic	SHMV	Tobamo
Sweet clover necrotic mosaic	SCNMV	Diantho
Sweet potato feathery mottle	SPFMV	Poty (aphid)
Sweet potato mild mottle	SPMMV	Poty (whitefly)
Tamarillo mosaic	TamMV	Poty (aphid)
Telfairia mosaic	TeMV	Poty (aphid)
Tephrosia symptomless	TeSV	? Carmo
Thistle mottle	ThMoV	Caulimo
Tigre disease	TDV	Gemini II
Tobacco etch	TEV	Poty (aphid)
Tobacco leaf curl	TLCV	Gemini II
Tobacco mild green mosaic	TMGMV	Tobamo
Tobacco mosaic	TMV	Tobamo
Tobacco mottle	TMoV	"Umbra"
Tobacco necrosis	TNV	Necro
Tobacco necrotic dwarf	TNDV	Luteo
Tobacco rattle	TRV	Tobra
Tobacco ringspot	TRSV	Nepo
Tobacco streak	TSV	Ilar I
Tobacco stunt	TStV	unclassif. dsRNA rod
Tobacco vein distorting	TVDV	? Luteo
Tobacco vein mottling	TVMV	Poty (aphid)
Tobacco yellow dwarf	TYDV	Gemini ? I
Tobacco yellow vein	TYVV	? "Umbra"
Tobacco yellow vein assistor	TYVAV	? Luteo
Tomato aspermy	TAV	Cucumo
Tomato black ring	TBRV	Nepo
Tomato bushy stunt	TBSV	Tombus
Tomato golden mosaic	TGMV	Gemini II
Tomato leaf curl	ToLCV	Gemini II
Tomato mosaic	ToMV	Tobamo
Tomato pale chlorosis	TPCV	? Carla (whitefly)
Tomato Peru mosaic, s. Peru tomato mosaic		

Table 1 (continued)

Virus name	Acronym	Family/group and subgroup
Tomato ringspot	ToRSV	Nepo
Tomato spotted wilt	TSWV	Bunya
Tomato top necrosis	ToTNV	? Nepo
Tomato yellow dwarf	ToYDV	Gemini II
Tomato yellow mosaic	ToYMV	Gemini II
Tomato yellow leaf curl	TYLCV	Gemini II
Tulare apple mosaic	TAMV	Iilar II
Tulip breaking	TBV	Poty (aphid)
Tulip chlorotic blotch	TCBV	Poty (aphid)
Tulip X	TVX	Potex
Turnip crinkle	TCV	Carmo
Turnip mosaic	TuMV	Poty (aphid)
Turnip rosette	TRoV	Sobemo
Turnip yellow mosaic	TYMV	Tymo
Ullucus C	UVC	Como
Ullucus mild mottle	UMMV	Tobamo
Velvet tobacco mottle	VTMoV	Sobemo
Vicia cryptic	VCV	Crypto I
Viola mottle	VMV	Potex
Voandzeia mosaic	VoMV	? Carla (whitefly)
Voandzeia necrotic mosaic	VNMV	Tymo
Watermelon chlorotic stunt	WCSV	Gemini II
Watermelon curly mottle	WMCMV	Gemini II
Watermelon mosaic virus 2	WMV2	Poty (aphid)
Wheat American striate mosaic, s. American wheat striate mosaic		
Wheat dwarf	WDV	Gemini I
Wheat spindle streak mosaic	WSSMV	Poty (fungus)
Wheat streak mosaic	WSMV	Poty (mite)
Wheat yellow leaf	WYLV	Clostero
White clover cryptic 1	WCCV1	Crypto I
White clover cryptic 2	WCCV2	Crypto II
White clover cryptic 3	WCCV3	Crypto I
White clover mosaic	WC1MV	Potex
Wild cucumber mosaic	WCMV	Tymo
Wineberry latent	WLV	Potex
Wisteria vein mosaic	WVMV	Poty (aphid)
Wound tumour	WTV	Phytoreo, Plant Reo I
Yam mosaic	YMV	Poty (aphid)
Yucca bacilliform	YBV	"Badna"
Zucchini yellow fleck	ZYFV	Poty (aphid)
Zucchini yellow mosaic	ZYMV	Poty (aphid)

^a Roman numerals (I, II, etc) or upper case letters (A, B, etc) indicate recognized subgroups

^b The vector is indicated where of taxonomic importance

^c ? indicates uncertain taxonomic position, or other doubt

^d This is the generally accepted but not official name of a recognized group

^e Groups in inverted commas are informally accepted but not yet officially recognized

Table 2. List of standard acronyms proposed for selected viroids

Viroid name	Acronym
Apple scar skin	ASSVd
Avocado sun-blotch	ASBVd
Burdock stunt	BSVd
Carnation stunt-associated	CSAVd
Chrysanthemum chlorotic mottle	CCMVd
Chrysanthemum stunt	CSVd
Citrus cachexia	CCaVd
Citrus exocortis	CEVd
Coconut cadang-cadang	CCCVD
Coconut tinangaja	CTVd
Columnnea latent	CLVd
Cucumber pale fruit	CPFVd
Grapevine viroid 1 B	GVd 1 B
Grapevine yellow speckle	GYSVd
Hop latent	HLVd
Hop stunt	HSVd
Potato spindle tuber	PSTVd
Tomato apical stunt	TASVd
Tomato bunchy top	TBTVd
Tomato planta macho	TPMVd

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