

Virus Taxonomy – 1999

The Universal System of Virus Taxonomy, updated to include the new proposals ratified by the International Committee on Taxonomy of Viruses during 1998

C. R. Pringle

Department of Biological Sciences, University of Warwick, Coventry, U.K.

A condensed version of the Universal System of Virus Taxonomy was published in Virology Division News at the beginning of 1998 [7]. Since then, several new taxonomic proposals from Study Groups have been considered by the Executive Committee of the International Committee on Virus Taxonomy (ICTV) [8]. These proposals have now been ratified by postal ballot of the full membership of the ICTV, as required by the Statutes of the ICTV. The Table below presents the current revision of the Universal System of Virus Taxonomy, including all the new taxonomic proposals ratified by the ICTV since publication of the Sixth Report in 1995 [5]. This condensed version of the Universal Taxonomy lists Orders, Families, Genera and Type species, but does not extend to the listing of approved virus species. The complete taxonomy will be published as the Seventh Report of the ICTV prior to the Eleventh International Congress of Virology in Sydney in 1999.

The order of presentation of virus taxa follows the convention adopted in the Sixth Report [4, 5]. It is based on four criteria: (1) the nature of the viral genome, (2) the strandedness of the viral genome, (3) the facility for reverse transcription, and (4) the polarity of the virus genome. The order of presentation does not imply any hierarchical or phylogenetic relationship. At present viruses are classified into 233 genera. Of these, 204 are classified into 64 families. The remaining 29 are unassigned (previously designated “floating”) genera which have yet to be assigned to a higher taxon. Three Orders are recognised now: the order *Caudovirales* [2], which includes the families *Myoviridae*, *Siphoviridae* and *Podoviridae*; the order *Mononegavirales* [6], which includes the four families *Bornaviridae*, *Filoviridae*, *Paramyxoviridae* and *Rhabdoviridae*; and the order *Nidovirales* [1], which includes the two families *Coronaviridae* and *Arteriviridae*.

The ICTV aims to eliminate all remaining vernacular names from the Universal Taxonomy and replace them by international names. However, a few taxa retain the designation “... -like viruses”. This may represent a situation where the name favoured by a Study Group has been rejected because it does not conform to the current Rules of Nomenclature of the ICTV [3]. Or more usually it is a consequence of unresolved indecision concerning the definitive criteria for designation of a species.

A major change in orthography was ratified by the ICTV in 1998 to bring virus taxonomy into line with other taxonomic systems [3, 4]. In future the names of all virus species will be given in italics with the initial letter capitalised. The names of viruses having the status of tentative species will not be given in italics, but will have the initial letter capitalised.

The Universal System of Virus Nomenclature, revised to include all new taxonomic proposals ratified by the ICTV up to the end of 1998, arranged according to nucleic acid type

The DNA viruses – The ssDNA Viruses

Order	Family [Subfamily]	Genus	Type species
–	<i>Inoviridae</i>	<i>Inovirus</i> <i>Plectrovirus</i>	<i>Enterobacteria phage M13</i> <i>Acholeplasma phage MV-L51</i>
	<i>Microviridae</i>	<i>Microvirus</i> <i>Spiromicrovirus</i> <i>Bdellovibrio phage MAC1</i> <i>Chlamydiamicrovirus</i>	<i>Enterobacteria phage φX174</i> <i>Spiroplasma phage 4</i> <i>Bdellovibrio phage MAC1</i> <i>Chlamydia phage 1</i>
–	<i>Geminiviridae</i>	<i>Mastrevirus</i> <i>Curtovirus</i> <i>Begomovirus</i>	<i>Maize streak virus</i> <i>Beet curly top virus</i> <i>Bean golden mosaic virus – Puerto Rico</i>
–	<i>Circoviridae</i>	<i>Circovirus</i>	<i>Chicken anaemia virus</i>
–	–	<i>Nanovirus</i>	<i>Subterranean clover stunt virus</i>
–	<i>Parvoviridae</i> [<i>Parvovirinae</i>]	<i>Parvovirus</i> <i>Erythrovirus</i> <i>Dependovirus</i>	<i>Murine Minute virus</i> <i>B19 virus</i> <i>Adeno-associated virus 2</i>
	[<i>Densovirinae</i>]	<i>Densovirus</i> <i>Iteravirus</i> <i>Brevdensovirus</i>	<i>Junonia coenia densovirus</i> <i>Bombyx mori densovirus</i> <i>Aedes aegypti densovirus</i>

The DNA Viruses – The dsDNA Viruses

Order	Family [Subfamily]	Genus	Type species
<i>Caudovirales</i>	<i>Myoviridae</i>	“T4-like viruses” “P1-like viruses” “P2-like viruses” “Mu-like viruses” “SPO1-like viruses” “φH-like viruses”	<i>Enterobacteria phage T4</i> <i>Enterobacteria phage P1</i> <i>Enterobacteria phage P2</i> <i>Enterobacteria phage Mu</i> <i>Bacillus phage SPO1</i> <i>Halobacterium virus φH</i>
	<i>Siphoviridae</i>	“λ-like viruses” “T1-like viruses” “T5-like viruses” “c2-like viruses” “L5-like viruses” “ΨM1-like viruses”	<i>Enterobacteria phage λ</i> <i>Enterobacteria phage T1</i> <i>Enterobacteria phage T5</i> <i>Lactococcus phage c2</i> <i>Mycobacterium phage L5</i> <i>Methanobacterium ψM1</i>
	<i>Podoviridae</i>	“T7-like viruses” “φ29-like viruses” “P22-like viruses”	<i>Enterobacteria phage T7</i> <i>Bacillus phage φ29</i> <i>Enterobacteria phage P22</i>
–	<i>Rudiviridae</i>	<i>Rudivirus</i>	<i>Sulfolobus virus SIRV1</i>
–	<i>Tectiviridae</i>	<i>Tectivirus</i>	<i>Enterobacteria phage PRD1</i>

The DNA Viruses – The dsDNA Viruses

Order	Family [Subfamily]	Genus	Type species
–	<i>Corticoviridae</i>	<i>Corticovirus</i>	<i>Alteromonas phage PM2</i>
–	<i>Lipothrixviridae</i>	<i>Lipothrixvirus</i>	<i>Thermoproteus virus 1</i>
–	<i>Plasmaviridae</i>	<i>Plasmavirus</i>	<i>Acholeplasma phage L2</i>
–	<i>Fuselloviridae</i>	<i>Fusellovirus</i>	<i>Sulfolobus virus SSV1</i>
–	<i>Phycodnaviridae</i>	<i>Chlorovirus</i>	<i>Paramecium bursaria Chlorella virus 1</i>
		<i>Prasinovirus</i>	<i>Micromonas pusilla virus SP'1</i>
		<i>Prymnesiovirus</i>	<i>Chrysochromulina brevifilum virus PW1</i>
		<i>Phaeovirus</i>	<i>Ectocarpus siliculosus virus 1</i>
–	–	“Sulfolobus SNDV-like viruses”	<i>Sulfolobus virus SNDV</i>
–	<i>Poxviridae</i> [Chordopoxvirinae]	<i>Orthopoxvirus</i>	<i>Vaccinia virus</i>
		<i>Parapoxvirus</i>	<i>Orf virus</i>
		<i>Avipoxvirus</i>	<i>Fowlpox virus</i>
		<i>Capripoxvirus</i>	<i>Sheeppox virus</i>
		<i>Leporipoxvirus</i>	<i>Myxoma virus</i>
		<i>Suipoxvirus</i>	<i>Swinepox virus</i>
		<i>Molluscipoxvirus</i>	<i>Molluscum contagiosum virus</i>
		<i>Yatapoxvirus</i>	<i>Yaba monkey tumor virus</i>
	[Entomopoxvirinae]	<i>Entomopoxvirus A</i>	<i>Melolontha melolontha entomopoxvirus</i>
		<i>Entomopoxvirus B</i>	<i>Amsacta moorei entomopoxvirus</i>
		<i>Entomopoxvirus C</i>	<i>Chironomus luridus entomopoxvirus</i>
–	<i>Iridoviridae</i>	<i>Iridovirus</i>	<i>Invertebrate iridescent virus 6</i>
		<i>Chloriridovirus</i>	<i>Invertebrate iridescent virus 3</i>
		<i>Ranavirus</i>	<i>Frog virus 3</i>
		<i>Lymphocystivirus</i>	<i>Lymphocystis disease virus 1</i>
–	<i>Polydnaviridae</i>	<i>Ichnovirus</i>	<i>Campoletis sonorensis ichnovirus</i>
		<i>Bracovirus</i>	<i>Cotesia melanoscela bracovirus</i>
–	<i>Herpesviridae</i> [Alphaherpesvirinae]	<i>Simplexvirus</i>	<i>Human herpesvirus 1</i>
		<i>Varicellovirus</i>	<i>Human herpesvirus 3</i>
		“Marek’s disease-like viruses”	<i>Gallid herpesvirus 2</i>
		“Infectious laryngo-tracheitis-like viruses”	<i>Gallid herpesvirus 1</i>
	[Betaherpesvirinae]	<i>Cytomegalovirus</i>	<i>Human herpesvirus 5</i>
		<i>Muromegalovirus</i>	<i>Murid herpesvirus 1</i>
		<i>Roseolovirus</i>	<i>Human herpesvirus 6</i>

The DNA Viruses – The dsDNA Viruses

Order	Family [Subfamily]	Genus	Type species
	<i>[Gammaherpesvirinae]</i>	<i>Lymphocryptovirus</i>	<i>Human herpesvirus 4</i>
		<i>Rhadinovirus</i>	<i>Saimirine herpesvirus 2</i>
–		“Ictalurid herpes-like viruses”	<i>Ictalurid herpesvirus 1</i>
–	<i>Polyomaviridae</i>	<i>Polyomavirus</i>	<i>Simian virus 40</i>
–	<i>Papillomaviridae</i>	<i>Papillomavirus</i>	<i>Cottontail rabbit papillomavirus</i>
–	<i>Adenoviridae</i>	<i>Mastadenovirus</i> <i>Aviadenovirus</i>	<i>Human adenovirus C</i> <i>Fowl adenovirus A</i>
–	<i>Ascoviridae</i>	<i>Ascovirus</i>	<i>Spodoptera frugiperda ascovirus</i>
–	<i>Baculoviridae</i>	<i>Nucleopolyhedrovirus</i> <i>Granulovirus</i>	<i>Autographa californica nucleopolyhedro virus</i> <i>Cydia pomonella granulovirus</i>
–	<i>Asfarviridae</i>	<i>Asfivirus</i>	<i>African swine fever virus</i>
–	–	<i>Rhizidiovirus</i>	<i>Rhizidiomyces virus</i>

The DNA and RNA Reverse Transcribing Viruses

Order	Family	Genus	Type species
–	<i>Pseudoviridae</i>	<i>Pseudovirus</i> <i>Hemivirus</i>	<i>Saccharomyces cerevisiae Ty1 virus</i> <i>Drosophila melanogaster copia virus</i>
–	<i>Metaviridae</i>	<i>Metavirus</i> <i>Errantivirus</i>	<i>Saccharomyces cerevisiae Ty3 virus</i> <i>Drosophila melanogaster gypsy virus</i>
–	<i>Hepadnaviridae</i>	<i>Orthohepadnavirus</i> <i>Avihepadnavirus</i>	<i>Hepatitis B virus</i> <i>Duck hepatitis B virus</i>
–	<i>Caulimoviridae</i>	<i>Badnavirus</i> <i>Caulimovirus</i> “Rice tungro bacilli- form-like viruses” “Soybean chlorotic mottle-like viruses” “Cassava vein mosaic-like viruses” “Petunia vein clearing-like viruses”	<i>Commelina yellow mottle virus</i> <i>Cauliflower mosaic virus</i> <i>Rice tungro bacilliform virus</i> <i>Soybean chlorotic mottle virus</i> <i>Cassava vein mosaic virus</i> <i>Petunia vein clearing virus</i>
–	<i>Retroviridae</i>	<i>Alpharetrovirus</i> <i>Betaretrovirus</i> <i>Gammaretrovirus</i> <i>Deltaretrovirus</i> <i>Epsilonretrovirus</i> <i>Lentivirus</i> <i>Spumavirus</i>	<i>Avian leucosis virus</i> <i>Mouse mammary tumour virus</i> <i>Murine leukaemia virus</i> <i>Bovine leukaemia virus</i> <i>Walleye dermal sarcoma virus</i> <i>Human immunodeficiency virus 1</i> <i>Human spumavirus</i>

The RNA Viruses – The dsRNA Viruses

Order	Family	Genus	Type species
–	<i>Cystoviridae</i>	<i>Cystovirus</i>	<i>Pseudomonas phage φ6</i>
–	<i>Reoviridae</i>	<i>Orthoreovirus</i> <i>Orbivirus</i> <i>Rotavirus</i> <i>Coltivirus</i> <i>Aquareovirus</i> <i>Cypovirus</i> <i>Fijivirus</i> <i>Phytoreovirus</i> <i>Oryzavirus</i>	<i>Mammalian orthoreovirus</i> <i>Bluetongue virus</i> <i>Rotavirus A</i> <i>Colorado tick fever virus</i> <i>Aquareovirus A</i> <i>Cypovirus 1</i> <i>Fiji disease virus</i> <i>Rice dwarf virus</i> <i>Rice ragged stunt virus</i>
–	<i>Birnaviridae</i>	<i>Aquabirnavirus</i> <i>Avibirnavirus</i> <i>Entombirnavirus</i>	<i>Infectious pancreatic necrosis virus</i> <i>Infectious bursal disease virus</i> <i>Drosophila X virus</i>
–	<i>Totiviridae</i>	<i>Totivirus</i> <i>Giardiavirus</i> <i>Leishmaniavirus</i>	<i>Saccharomyces cerevisiae virus L-A</i> <i>Giardia lamblia virus</i> <i>Leishmania RNA virus 1–1</i>
–	<i>Partitiviridae</i>	<i>Partitivirus</i> <i>Chrysovirus</i> <i>Alphacryptovirus</i> <i>Betacryptovirus</i>	<i>Gaeumannomyces graminis virus 019/6-A</i> <i>Penicillium chrysogenum virus</i> <i>White clover cryptic virus 1</i> <i>White clover cryptic virus 2</i>
–	<i>Hypoviridae</i>	<i>Hypovirus</i>	<i>Cryphonectria hypovirus 1-EP713</i>
–	–	<i>Varicosavirus</i>	<i>Lettuce big-vein virus</i>

The RNA Viruses – The Negative-sense ssRNA Viruses

Order	Family [Subfamily]	Genus	Type species
<i>Mononegavirales</i>	<i>Paramyxoviridae</i> [<i>Paramyxovirinae</i>]	<i>Respirovirus</i> <i>Morbillivirus</i> <i>Rubulavirus</i>	<i>Sendai virus</i> <i>Measles virus</i> <i>Mumps virus</i>
	[<i>Pneumovirinae</i>]	<i>Pneumovirus</i> <i>Metapneumovirus</i>	<i>Human respiratory syncytial virus</i> <i>Avian pneumovirus</i>
	<i>Rhabdoviridae</i>	<i>Vesiculovirus</i> <i>Lyssavirus</i> <i>Ephemerovirus</i> <i>Cytorhabdovirus</i> <i>Nucleorhabdovirus</i> <i>Novirhabdovirus</i>	<i>Vesicular stomatitis Indiana virus</i> <i>Rabies virus</i> <i>Bovine ephemeral fever virus</i> <i>Lettuce necrotic yellows virus</i> <i>Potato yellow dwarf virus</i> <i>Infectious hematopoietic necrosis virus</i>
	<i>Filoviridae</i>	“Marburg-like viruses” “Ebola-like viruses”	<i>Marburg virus</i> <i>Zaire Ebola virus</i>
	<i>Bornaviridae</i>	<i>Bornavirus</i>	<i>Borna disease virus</i>

The RNA Viruses – The Negative-sense ssRNA Viruses

Order	Family [Subfamily]	Genus	Type species
–	<i>Orthomyxoviridae</i>	<i>Influenzavirus A</i> <i>Influenzavirus B</i> <i>Influenzavirus C</i> <i>Thogotovirus</i>	<i>Influenza A virus</i> <i>Influenza B virus</i> <i>Influenza C virus</i> <i>Thogoto virus</i>
–	<i>Bunyaviridae</i>	<i>Bunyavirus</i> <i>Hantavirus</i> <i>Nairovirus</i> <i>Phlebovirus</i> <i>Tospovirus</i>	<i>Bunyamwera virus</i> <i>Hantaan virus</i> <i>Dugbe virus</i> <i>Rift Valley fever virus</i> <i>Tomato spotted wilt virus</i>
–	<i>Arenaviridae</i>	<i>Arenavirus</i>	<i>Lymphocytic choriomeningitis virus</i>
–	–	<i>Ophiovirus</i>	<i>Citrus psorosis virus</i>
–	–	<i>Tenuivirus</i>	<i>Rice stripe virus</i>
–	–	<i>Delta virus</i>	<i>Hepatitis delta virus</i>

The RNA Viruses – The Positive-sense ssRNA Viruses

Order	Family [Subfamily]	Genus	Type species
–	<i>Leviviridae</i>	<i>Levivirus</i> <i>Allolevivirus</i>	<i>Enterobacteria phage MS2</i> <i>Enterobacteria phage Qβ</i>
–	<i>Picornaviridae</i>	<i>Enterovirus</i> <i>Rhinovirus</i> <i>Hepatovirus</i> <i>Cardiovirus</i> <i>Aphthovirus</i> <i>Parechovirus</i>	<i>Poliovirus</i> <i>Human rhinovirus A</i> <i>Hepatitis A virus</i> <i>Encephalomyocarditis virus</i> <i>Foot-and-mouth disease virus</i> <i>Human parechovirus</i>
–	–	“Cricket paralysis-like viruses”	<i>Cricket paralysis virus</i>
–	<i>Sequiviridae</i>	<i>Sequivirus</i> <i>Waikavirus</i>	<i>Parsnip yellow fleck virus</i> <i>Rice tungro spherical virus</i>
–	<i>Comoviridae</i>	<i>Comovirus</i> <i>Fabavirus</i> <i>Nepovirus</i>	<i>Cowpea mosaic virus</i> <i>Broad bean wilt virus 1</i> <i>Tobacco ringspot virus</i>
–	<i>Potyviridae</i>	<i>Potyvirus</i> <i>Rymovirus</i> <i>Bymovirus</i> <i>Macluravirus</i> <i>Ipomovirus</i> <i>Tritimovirus</i>	<i>Potato virus Y</i> <i>Ryegrass mosaic virus</i> <i>Barley yellow mosaic virus</i> <i>Maclura mosaic virus</i> <i>Sweet potato mild mottle virus</i> <i>Wheat streak mosaic virus</i>
–	<i>Caliciviridae</i>	<i>Vesivirus</i> <i>Lagovirus</i> “Norwalk-like viruses” “Sapporo-like viruses”	<i>Swine vesicular exanthema virus</i> <i>Rabbit hemorrhagic disease virus</i> <i>Norwalk virus</i> <i>Sapporo virus</i>

The RNA Viruses – The Positive-sense ssRNA Viruses

Order	Family [Subfamily]	Genus	Type species
–	–	“Hepatitis E-like viruses”	<i>Hepatitis E virus</i>
–	<i>Astroviridae</i>	<i>Astrovirus</i>	<i>Human astrovirus 1</i>
–	<i>Nodaviridae</i>	<i>Alphanodavirus</i> <i>Betanodavirus</i>	<i>Nodamura virus</i> <i>Striped jack nervous necrosis virus</i>
–	<i>Tetraviridae</i>	<i>Betatetravirus</i> <i>Omegatetravirus</i>	<i>Nudaurelia capensis β virus</i> <i>Nudaurelia capensis ω virus</i>
–	<i>Tombusviridae</i>	<i>Tombusvirus</i> <i>Carmovirus</i> <i>Necrovirus</i> <i>Dianthovirus</i> <i>Machlomovirus</i> <i>Avenavirus</i> <i>Aureusvirus</i> <i>Panicovirus</i>	<i>Tomato bushy stunt virus</i> <i>Carnation mottle virus</i> <i>Tobacco necrosis virus A</i> <i>Carnation ringspot virus</i> <i>Maize chlorotic mottle virus</i> <i>Oat chlorotic stunt virus</i> <i>Pothos latent virus</i> <i>Panicum mosaic virus</i>
<i>Nidovirales</i>	<i>Coronaviridae</i>	<i>Coronavirus</i> <i>Torovirus</i>	<i>Infectious bronchitis virus</i> <i>Equine torovirus</i>
	<i>Arteriviridae</i>	<i>Arterivirus</i>	<i>Equine arteritis virus</i>
–	<i>Togaviridae</i>	<i>Alphavirus</i> <i>Rubivirus</i>	<i>Sindbis virus</i> <i>Rubella virus</i>
–	<i>Flaviviridae</i>	<i>Flavivirus</i> <i>Pestivirus</i> <i>Hepacivirus</i>	<i>Yellow fever virus</i> <i>Bovine viral diarrhea virus</i> <i>Hepatitis C virus</i>
–	<i>Bromoviridae</i>	<i>Alfavirus</i> <i>Ilarvirus</i> <i>Bromovirus</i> <i>Cucumovirus</i> <i>Oleavirus</i>	<i>Alfalfa mosaic virus</i> <i>Tobacco streak virus</i> <i>Brome mosaic virus</i> <i>Cucumber mosaic virus</i> <i>Olive latent virus 2</i>
–	<i>Closteroviridae</i>	<i>Closterovirus</i> <i>Crinivirus</i>	<i>Beet yellows virus</i> <i>Lettuce infectious yellows virus</i>
–	<i>Barnaviridae</i>	<i>Barnavirus</i>	<i>Mushroom bacilliform virus</i>
–	<i>Luteoviridae</i>	<i>Luteovirus</i>	<i>Barley yellow dwarf virus-PAV</i>
–	–	<i>Polerovirus</i>	<i>Potato leafroll virus</i>
–	–	<i>Enamovirus</i>	<i>Pea enation mosaic virus-1</i>
–	–	<i>Tobamovirus</i>	<i>Tobacco mosaic virus</i>
–	–	<i>Tobravirus</i>	<i>Tobacco rattle virus</i>
–	–	<i>Hordeivirus</i>	<i>Barley stripe mosaic virus</i>
–	–	<i>Furovirus</i>	<i>Soil-borne wheat mosaic virus</i>
–	–	<i>Pomovirus</i>	<i>Potato mop-top virus</i>
–	–	<i>Pecluvirus</i>	<i>Peanut clump virus</i>
–	–	<i>Benyvirus</i>	<i>Beet necrotic yellow vein virus</i>

The RNA Viruses – The Positive-sense ssRNA Viruses

Order	Family [Subfamily]	Genus	Type species
–	–	<i>Idaeovirus</i>	<i>Raspberry bushy dwarf virus</i>
–	–	<i>Capillovirus</i>	<i>Apple stem grooving virus</i>
–	–	<i>Trichovirus</i>	<i>Apple chlorotic leaf spot virus</i>
–	–	<i>Sobemovirus</i>	<i>Southern bean mosaic virus</i>
–	–	<i>Umbravirus</i>	<i>Carrot mottle virus</i>
–	–	<i>Tymovirus</i>	<i>Turnip yellow mosaic virus</i>
–	–	<i>Carlavirus</i>	<i>Carnation latent virus</i>
–	–	<i>Potexvirus</i>	<i>Potato virus X</i>
–	–	<i>Allexivirus</i>	<i>Shallot virus X</i>
–	–	<i>Foveavirus</i>	<i>Apple stem pitting virus</i>
–	–	<i>Marafivirus</i>	<i>Maize rayado fino virus</i>
–	–	<i>Vitivirus</i>	<i>Grapevine virus A</i>
–	–	<i>Ourmiavirus</i>	<i>Ourmia melon virus</i>

Naked RNA Viruses

Order	Family	Genus	Type species
–	<i>Narnaviridae</i>	<i>Narnavirus</i>	<i>Saccharomyces cerevisiae 20SRNA narnavirus</i>
		<i>Mitovirus</i>	<i>Cryphonectria parasitica mitovirus-1 NB631</i>

Viroids

Order	Family	Genus	Type species
–	<i>Pospiviroidae</i>	<i>Pospiviroid</i>	<i>Potato spindle tuber viroid</i>
		<i>Hostuviroid</i>	<i>Hop stunt viroid</i>
		<i>Cocadviroid</i>	<i>Coconut cadang-cadang viroid</i>
		<i>Apscaviroid</i>	<i>Apple scar skin viroid</i>
		<i>Coleviroid</i>	<i>Coleus blumei viroid 1</i>
–	<i>Avsunviroidae</i>	<i>Avsunviroid</i>	<i>Avocado sunblotch viroid</i>
		<i>Pelamoviroid</i>	<i>Peach latent mosaic viroid</i>

Subviral Agents

Agents	Genus	Example
Satellites	–	Tobacco necrosis virus satellite
Prions	–	Scrapie agent

* signifies “unassigned”

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Author's address: Dr. C. R. Pringle, Secretary ICTV, c/o Biological Sciences Department, University of Warwick, Coventry CV4 7AL, U.K. e-mail: cp@dna.bio.warwick.ac.uk

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