

# ICTV 2<sup>nd</sup> Report

Fenner, F. (1976). Classification and nomenclature of viruses. Second report of the International Committee on Taxonomy of Viruses. *Intervirology* 7: 1-115.

At this stage in the history of ICTV, there were no formal procedures for recognising and naming virus species and in some families/genera/groups there was a reluctance to use the term 'species'. Lists of species (or 'members') were revised when the Report was produced and sometimes differed substantially from the preceding Report.

In the absence of any other documentation, this file lists the changes introduced by the 2<sup>nd</sup> Report with page references.

## 1. Changes to group names

Previous group name	New group name	Reference
Lipid phage PM2	PM2 phage group	p92
T-even phages	T-even phage group	p93
Lambda phage	Lambda phage group	p95
phiX group	phiX phage group	p97
Filamentous phage	fd phage group	p96

## 2. Changes to assignments

Genus *Calicivirus*, previously classified as a genus in the family *Picornaviridae*, is now listed as a 'possible genus' in the family (p40). For database purposes that is treated as a removal from the family (which is confirmed by later taxonomic treatments).

The species Influenza type C virus, previously listed as a member of the genus *Influenzavirus* (family *Orthomyxoviridae*), is now included in the family *Orthomyxoviridae* but not assigned to a genus (p57).

**3. Species that were abolished (i.e. disappeared as fully-recognised members of their genus; the reference is to the genus list lacking these species or showing them only as possible/probable members of the genus)**

<b>Family</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Poxviridae	Orthopoxvirus	Alastrim virus	p27
Poxviridae	Leporipoxvirus	California myxoma virus	p28
Poxviridae	Unassigned	Horse pox virus	p30
Poxviridae	Unassigned	Rhinoceros pox virus	p30
Parvoviridae	Parvovirus	H viruses	p32
Picornaviridae	Enterovirus	Nodamura virus	p39
Togaviridae	Flavivirus	Tick-borne encephalitis virus	p46
Togaviridae	Flavivirus	US bat salivary gland virus	p46
Herpetoviridae	Herpesvirus	Herpesvirus T	p51
Herpetoviridae	Herpesvirus	Herpesvirus of Cercopithecus	p51
Herpetoviridae	Herpesvirus	Herpesvirus of patas monkeys	p51
Herpetoviridae	Herpesvirus	Herpesvirus of saimiri	p51
Herpetoviridae	Herpesvirus	Herpesvirus cuniculi (virus III of rabbits)	p51
Herpetoviridae	Herpesvirus	Pseudorabies (Aujeszky's disease) virus	p51
Herpetoviridae	Herpesvirus	Infectious bovine rhinotracheitis virus	p51
Herpetoviridae	Herpesvirus	Equine rhinopneumonitis (equine abortion) virus	p51
Herpetoviridae	Herpesvirus	Malignant catarrh virus of cattle	p51
Herpetoviridae	Herpesvirus	Bovine ulcerative mammillitis (Allerton) virus	p51
Herpetoviridae	Herpesvirus	Feline rhinotracheitis virus	p51
Herpetoviridae	Herpesvirus	Canine herpesvirus	p51
Herpetoviridae	Herpesvirus	Infectious laryngotracheitis (avian)	p51
Herpetoviridae	Herpesvirus	Snake herpesvirus	p51
Herpetoviridae	Herpesvirus	Porcine inclusion body rhinitis virus	p51
Herpetoviridae	Herpesvirus	Sheep pulmonary adenomatosis (Jaagsiekte) virus	p51
Papovaviridae	Papillomavirus	Canine oral papilloma virus	p53
Papovaviridae	Papillomavirus	Rabbit oral papilloma virus	p53
Arenaviridae	Arenavirus	Lassa virus	p55
Arenaviridae	Arenavirus	Pistillo virus	p55
Orthomyxoviridae	Influenzavirus	Influenza type C virus	p57
Retroviridae	Type C oncovirus group	RIF 1	p62
Retroviridae	Type C oncovirus group	RIF 2	p62
Retroviridae	Type C oncovirus group	RIF 12	p62
Retroviridae	Type C oncovirus group	Osteopetrosis virus	p62
Retroviridae	Type C oncovirus group	Fujinami sarcoma virus	p62
Retroviridae	Type C oncovirus group	FAV 1	p62
Retroviridae	Type C oncovirus group	Nodule-inducing virus	p62
Unassigned	Cucumovirus group	Cucumber yellow mosaic virus	p70
Unassigned	Nepovirus group	Strawberry latent ringspot virus	p74
Unassigned	Potyvirus group	Pea mosaic virus	p86
Baculoviridae	Baculovirus	Portheria dispar nuclear polyhedrosis virus	p101
Baculoviridae	Baculovirus	Plodia interpunctella granulosis virus	p101

#### 4. Species names that disappeared by merging

<b>Family</b>	<b>Genus</b>	<b>Old species</b>	<b>New species</b>	<b>Ref</b>
Rhabdoviridae	Vesiculovirus	Flanders virus	Flanders-Hart Park virus	p41
Rhabdoviridae	Vesiculovirus	Hart Park virus	Flanders-Hart Park virus	p41
Retroviridae	Type C oncovirus group	Mouse leukemia virus	Murine sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Gross virus	Murine sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Friend virus	Murine sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Graffi virus	Murine sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Moloney virus	Murine sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Rauscher virus	Murine sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Feline leukemia virus	Feline sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Feline sarcoma virus	Feline sarcoma and leukemia virus	p62
Retroviridae	Type C oncovirus group	Rous sarcoma virus	Chicken leukosis and sarcoma virus	p63
Retroviridae	Type C oncovirus group	Fowl sarcoma virus	Chicken leukosis and sarcoma virus	p63
Retroviridae	Type C oncovirus group	RAV 1-6	Chicken leukosis and sarcoma virus	p63

## 5. Species that were re-named

Family	Genus	Old name	New name	Ref
Poxviridae	Orthopoxvirus	Infectious ectromelia virus	Ectromelia virus	p27
Poxviridae	Parapoxvirus	Bovine papular dermatitis virus	Bovine pustular stomatitis virus	p29
Poxviridae	Parapoxvirus	Milker's node (paravaccinia) virus	Milker's node virus	p29
Poxviridae	Unassigned	Swine pox virus	Swinepox virus	p30
Poxviridae	Unassigned	Tana virus	Tanapox virus	p30
Parvoviridae	Parvovirus	Minute mouse virus	MVM virus	p32
Parvoviridae	Densovirus	Densonucleosis virus of Galleria	Densovirus of Galleria mellonella	p33
Picornaviridae	Enterovirus	Poliovirus type 1	Human poliovirus 1	p39
Picornaviridae	Enterovirus	EMC virus	Cardiovirus	p39
Picornaviridae	Calicivirus	Feline picornavirus	Feline calicivirus	p40
Picornaviridae	Rhinovirus	Rhinovirus 1A	Human rhinovirus 1A	p40
Rhabdoviridae	Vesiculovirus	Cocal virus	Vesicular stomatitis virus Cocal	p41
Togaviridae	Flavivirus	St. Louis encephalitis virus	St. Louis virus	p45
Togaviridae	Flavivirus	Kyasanur Forest virus	Kyasanur Forest disease virus	p45
Togaviridae	Flavivirus	Entebbe bat salivary gland virus	Entebbe bat virus	p46
Togaviridae	Flavivirus	Omsk haemorrhagic fever virus	Omsk hemorrhagic fever virus	p46
Adenoviridae	Mastadenovirus	Adenovirus type 1	Human adenovirus type 1	p49
Herpetoviridae	Herpesvirus	Herpes simplex virus	Human herpesvirus 1	p51
Herpetoviridae	Herpesvirus	Herpesvirus simiae (B virus)	Cercopithecoid herpesvirus 1	p51
Papovaviridae	Polyomavirus	Polyomavirus	Polyoma virus	p53
Papovaviridae	Polyomavirus	Rabbit vacuolating virus	RKV virus	p53
Papovaviridae	Polyomavirus	Simian vacuolating virus (SV40)	SV40 virus	p53
Arenaviridae	Arenavirus	Tamiami virus	Tamiami virus	p55
Coronaviridae	Coronavirus	Human respiratory virus	Human coronavirus	p56
Coronaviridae	Coronavirus	Mouse hepatitis virus	Murine hepatitis virus	p56
Coronaviridae	Coronavirus	Transmissible gastro-enteritis virus of swine	Porcine transmissible gastroenteritis virus	p56
Orthomyxoviridae	Influenzavirus	Influenza virus	Influenza virus A	p57
Orthomyxoviridae	Influenzavirus	Influenza type B virus	Influenza virus B	p57
Retroviridae	Type C oncovirus group	Avian leukosis virus	Avian reticuloendotheliosis virus	p63
Unassigned	Carlavirus group	Cactus virus 2	Cactus virus	p82
Unassigned	Potyvirus group	Columbian Datura virus	Colombian datura virus	p86
Unassigned	Tobamovirus group	Sunn hemp mosaic virus	Sunnhemp mosaic virus	p88

## 6. New groups that are listed

Group name	Family	Reference
Plant reovirus group	Reoviridae	p35
Plant rhabdovirus group	Rhabdoviridae	p42
T7 phage group	Unassigned	p94
phi6 phage group	Unassigned	p98

## 7. New species that are listed

Family	Subfamily	Genus	Species	Ref
Iridoviridae		Iridovirus	Aedes iridescent virus 3	p25
Iridoviridae		Iridovirus	Aedes iridescent virus 4	p25
Iridoviridae		Iridovirus	Aedes iridescent virus 5	p25
Iridoviridae		Iridovirus	Aedes iridescent virus 11	p25
Iridoviridae		Iridovirus	Aedes iridescent virus 12	p25
Iridoviridae		Iridovirus	Aedes iridescent virus 14	p25
Iridoviridae		Iridovirus	Aedes iridescent virus 15	p25
Iridoviridae		Iridovirus	Corethrella iridescent virus	p25
Iridoviridae		Iridovirus	Costelytra iridescent virus	p25
Iridoviridae		Iridovirus	Culicoides iridescent virus	p25
Iridoviridae		Iridovirus	Odontria iridescent virus	p25
Iridoviridae		Iridovirus	Opongonia iridescent virus	p25
Iridoviridae		Iridovirus	Pterostriatus iridescent virus	p25
Iridoviridae		Iridovirus	Simulium iridescent virus	p25
Iridoviridae		Iridovirus	Wiseana iridescent virus	p25
Iridoviridae		Iridovirus	Witlesia iridescent virus	p25
Iridoviridae		Iridovirus	Chironomous iridescent virus	p25
Iridoviridae		Iridovirus	Octopus iridescent virus	p25
Iridoviridae		Iridovirus	Nereis iridescent virus	p25
Iridoviridae		Iridovirus	Entamoeba iridescent virus	p25
Poxviridae		Avipoxvirus	Quail pox virus	p27
Poxviridae		Entomopoxvirus	Melolontha melolontha entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Anomala cuprea entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Aphodius tasmaniae entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Demodema boranensis entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Dermolepida albohirtum entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Figulus sublaevis entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Geotrupes sylvaticus entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Othononius batesi entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Phyllopertha horticola entomopoxvirus	p29: subgenus A
Poxviridae		Entomopoxvirus	Amscata moorei entomopoxvirus	p29: subgenus B
Poxviridae		Unassigned	Yaba monkey tumor poxvirus	p30
Poxviridae		Entomopoxvirus	Acrobasis zelleri entomopoxvirus	p30: subgenus B
Poxviridae		Entomopoxvirus	Choristoneura biennis entomopoxvirus	p30: subgenus B
Poxviridae		Entomopoxvirus	Choristoneura conflictata entomopoxvirus	p30: subgenus B
Poxviridae		Entomopoxvirus	Choristoneura diversicana entomopoxvirus	p30: subgenus B
Poxviridae		Entomopoxvirus	Chorizagrotis auxillaris entomopoxvirus	p30: subgenus B

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
			entomopoxvirus	subgenus B
Poxviridae		Entomopoxvirus	Operophtera brumata	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus B
Poxviridae		Entomopoxvirus	Oreopsyche angustella	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus B
Poxviridae		Entomopoxvirus	Melanoplus sanguinipes	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus B
Poxviridae		Entomopoxvirus	Chironomus luridus	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus C
Poxviridae		Entomopoxvirus	Aedes aegypti entomopoxvirus	p30:
Poxviridae		Entomopoxvirus	Camptochironomus tentans	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus C
Poxviridae		Entomopoxvirus	Chironomus attenuatus	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus C
Poxviridae		Entomopoxvirus	Chironomus plumosus	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus C
Poxviridae		Entomopoxvirus	Goeldichironomus holoprasinus	p30:
Poxviridae		Entomopoxvirus	entomopoxvirus	subgenus C
Parvoviridae		Parvovirus	TVX virus	p32
Parvoviridae		Parvovirus	LuIII virus	p32
Parvoviridae		Parvovirus	RT virus	p32
Parvoviridae		Parvovirus	MVM virus	p32
Parvoviridae		Parvovirus	Bovine parvovirus	p32
Parvoviridae		Parvovirus	Feline panleukopenia virus	p32
Parvoviridae		Parvovirus	Goose hepatitis virus	p32
Parvoviridae		Adeno-associated virus group	Bovine adeno-associated virus	p33
Parvoviridae		Densovirus	Densovirus of Junonia coenia	p33
Reoviridae		Plant reovirus group	Rice dwarf virus	p36
Reoviridae		Plant reovirus group	Wound tumor virus	p36
Reoviridae		Plant reovirus group	Maize rough dwarf virus	p36
Reoviridae		Plant reovirus group	Rice black-streaked dwarf virus	p36
Reoviridae		Plant reovirus group	Sugarcane Fiji disease virus	p36
Bunyaviridae		Bunyavirus	Anhembi virus	p37
Bunyaviridae		Bunyavirus	Batai virus	p37
Bunyaviridae		Bunyavirus	Biroa virus	p37
Bunyaviridae		Bunyavirus	Cache Valley virus	p37
Bunyaviridae		Bunyavirus	Calovo virus	p37
Bunyaviridae		Bunyavirus	Germiston virus	p37
Bunyaviridae		Bunyavirus	Guaroa virus	p37
Bunyaviridae		Bunyavirus	Ilehsa virus	p37
Bunyaviridae		Bunyavirus	Kairi virus	p37
Bunyaviridae		Bunyavirus	Lokern virus	p37
Bunyaviridae		Bunyavirus	Maguari virus	p37
Bunyaviridae		Bunyavirus	Main Drain virus	p37
Bunyaviridae		Bunyavirus	Northway virus	p37
Bunyaviridae		Bunyavirus	Sororoca virus	p37
Bunyaviridae		Bunyavirus	Tensaw virus	p37
Bunyaviridae		Bunyavirus	Tlacotalpan virus	p37
Bunyaviridae		Bunyavirus	Wyeomyia virus	p37
Bunyaviridae		Bunyavirus	Bwamba virus	p37
Bunyaviridae		Bunyavirus	Pongola virus	p37

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Bunyaviridae		Bunyavirus	Apeu virus	p37
Bunyaviridae		Bunyavirus	Caraparu virus	p37
Bunyaviridae		Bunyavirus	Gumbo Limbo virus	p37
Bunyaviridae		Bunyavirus	Itaqui virus	p37
Bunyaviridae		Bunyavirus	Marituba virus	p37
Bunyaviridae		Bunyavirus	Madrid virus	p37
Bunyaviridae		Bunyavirus	Murutucu virus	p37
Bunyaviridae		Bunyavirus	Nepuyo virus	p37
Bunyaviridae		Bunyavirus	Oriboca virus	p37
Bunyaviridae		Bunyavirus	Ossa virus	p37
Bunyaviridae		Bunyavirus	Restan virus	p37
Bunyaviridae		Bunyavirus	Bocas virus	p37
Bunyaviridae		Bunyavirus	California encephalitis virus	p37
Bunyaviridae		Bunyavirus	Inkoo virus	p37
Bunyaviridae		Bunyavirus	Jamestown Canyon virus	p37
Bunyaviridae		Bunyavirus	Jerry Slough virus	p37
Bunyaviridae		Bunyavirus	Keystone virus	p37
Bunyaviridae		Bunyavirus	La Crosse virus	p37
Bunyaviridae		Bunyavirus	Melao virus	p37
Bunyaviridae		Bunyavirus	San Angelo virus	p37
Bunyaviridae		Bunyavirus	Tahyna virus	p37
Bunyaviridae		Bunyavirus	Trivittatus virus	p37
Bunyaviridae		Bunyavirus	Acara virus	p37
Bunyaviridae		Bunyavirus	Bushbush virus	p37
Bunyaviridae		Bunyavirus	Capim virus	p37
Bunyaviridae		Bunyavirus	Guajara virus	p37
Bunyaviridae		Bunyavirus	Juan Diaz virus	p37
Bunyaviridae		Bunyavirus	Moriche virus	p37
Bunyaviridae		Bunyavirus	Bertioga virus	p37
Bunyaviridae		Bunyavirus	Bimiti virus	p37
Bunyaviridae		Bunyavirus	Catu virus	p37
Bunyaviridae		Bunyavirus	Guama virus	p37
Bunyaviridae		Bunyavirus	Mahogany Hammock virus	p37
Bunyaviridae		Bunyavirus	Moju virus	p37
Bunyaviridae		Bunyavirus	Koongol virus	p37
Bunyaviridae		Bunyavirus	Wongai virus	p37
Bunyaviridae		Bunyavirus	Pahayokee virus	p37
Bunyaviridae		Bunyavirus	Patois virus	p37
Bunyaviridae		Bunyavirus	Shark River virus	p37
Bunyaviridae		Bunyavirus	Zegla virus	p37
Bunyaviridae		Bunyavirus	Aino virus	p37
Bunyaviridae		Bunyavirus	Akabane virus	p37
Bunyaviridae		Bunyavirus	Buttonwillow virus	p37
Bunyaviridae		Bunyavirus	Ingwavuma virus	p37
Bunyaviridae		Bunyavirus	Manzanilla virus	p37
Bunyaviridae		Bunyavirus	Mermet virus	p37
Bunyaviridae		Bunyavirus	Nola virus	p37
Bunyaviridae		Bunyavirus	Oropouche virus	p37
Bunyaviridae		Bunyavirus	Sabo virus	p37

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Bunyaviridae		Bunyavirus	Samford virus	p37
Bunyaviridae		Bunyavirus	Sango virus	p37
Bunyaviridae		Bunyavirus	Sathuperi virus	p37
Bunyaviridae		Bunyavirus	Shamonda virus	p37
Bunyaviridae		Bunyavirus	Shuni virus	p37
Bunyaviridae		Bunyavirus	Simbu virus	p37
Bunyaviridae		Bunyavirus	Thimiri virus	p37
Bunyaviridae		Bunyavirus	Bahig virus	p37
Bunyaviridae		Bunyavirus	Matruh virus	p37
Bunyaviridae		Bunyavirus	Tete virus	p37
Bunyaviridae		Bunyavirus	Tsuruse virus	p37
Bunyaviridae		Bunyavirus	Botambi virus	p37
Bunyaviridae		Bunyavirus	Gamboa virus	p37
Bunyaviridae		Bunyavirus	Guaratuba virus	p37
Bunyaviridae		Bunyavirus	Jurona virus	p37
Bunyaviridae		Bunyavirus	Kaeng Khoi virus	p37
Bunyaviridae		Bunyavirus	Minatitlan virus	p37
Bunyaviridae		Bunyavirus	Mirim virus	p37
Picornaviridae		Enterovirus	Bovine enterovirus	p39
Picornaviridae		Enterovirus	Human enteroviruses	p39
Picornaviridae		Enterovirus	Porcine enteroviruses	p39
Picornaviridae		Enterovirus	Simian enteroviruses	p39
Picornaviridae		Enterovirus	Acute bee paralysis virus	p39
Picornaviridae		Enterovirus	Drosophila C virus	p39
Picornaviridae		Enterovirus	Gonometavirus	p39
Picornaviridae		Rhinovirus	Bovine rhinoviruses	p40
Picornaviridae		Rhinovirus	Equine rhinoviruses	p40
Picornaviridae		Rhinovirus	Human rhinoviruses 1B-113	p40
Rhabdoviridae		Vesiculovirus	Chandipura virus	p41
Rhabdoviridae		Vesiculovirus	Flanders-Hart Park virus	p41
Rhabdoviridae		Vesiculovirus	Piry virus	p41
Rhabdoviridae		Vesiculovirus	Vesicular stomatitis virus Argentina	p41
Rhabdoviridae		Vesiculovirus	Vesicular stomatitis virus Brazil	p41
Rhabdoviridae		Vesiculovirus	Vesicular stomatitis virus New Jersey	p41
Rhabdoviridae		Plant rhabdovirus group	Lettuce necrotic yellows virus	p42
Rhabdoviridae		Plant rhabdovirus group	Potato yellow dwarf virus	p42
Rhabdoviridae		Lyssavirus	Duvenhage virus	p42
Rhabdoviridae		Lyssavirus	Kotonkan virus	p42
Rhabdoviridae		Lyssavirus	Lagos bat virus	p42
Rhabdoviridae		Lyssavirus	Mokola virus	p42
Rhabdoviridae		Lyssavirus	Obodhiang virus	p42
Rhabdoviridae		Unassigned	Drosophila sigma virus	p42: possible genus Sigmavirus
Togaviridae		Alphavirus	Bebaru virus	p44
Togaviridae		Alphavirus	Everglades virus	p44
Togaviridae		Alphavirus	Ndumu virus	p44
Togaviridae		Alphavirus	Sagiyama virus	p44
Togaviridae		Flavivirus	Alfuy virus	p45



<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Togaviridae		Flavivirus	Bouboui virus	p45
Togaviridae		Flavivirus	Jugra virus	p45
Togaviridae		Flavivirus	Sepik virus	p45
Togaviridae		Flavivirus	Sokoluk virus	p45
Togaviridae		Flavivirus	Tembusu virus	p45
Togaviridae		Flavivirus	Abbsettarov virus	p45
Togaviridae		Flavivirus	Hanzalova virus	p45
Togaviridae		Flavivirus	Hypr virus	p45
Togaviridae		Flavivirus	Kadam virus	p45
Togaviridae		Flavivirus	Karshi virus	p45
Togaviridae		Flavivirus	Kumlinge virus	p45
Togaviridae		Pestivirus	Border disease virus	p46
Togaviridae		Pestivirus	Hog cholera (European swine fever) virus	p46
Togaviridae		Flavivirus	Royal Farm virus	p46
Togaviridae		Flavivirus	Russian spring-summer encephalitis virus	p46
Togaviridae		Flavivirus	Tyuleny virus	p46
Togaviridae		Flavivirus	Batu Cave virus	p46
Togaviridae		Flavivirus	Carey Island virus	p46
Togaviridae		Flavivirus	Jutiapa virus	p46
Togaviridae		Flavivirus	Koutango virus	p46
Togaviridae		Flavivirus	Phnom Penh bat virus	p46
Togaviridae		Flavivirus	Rio Bravo virus	p46
Togaviridae		Flavivirus	Saboya virus	p46
Adenoviridae		Mastadenovirus	Adenovirus type 2	p49
Adenoviridae		Mastadenovirus	Human adenovirus types 3-33	p49
Adenoviridae		Mastadenovirus	Simian adenoviruses	p49
Adenoviridae		Mastadenovirus	Bovine adenovirus	p49
Adenoviridae		Mastadenovirus	Canine adenovirus	p49
Adenoviridae		Mastadenovirus	Equine adenovirus	p49
Adenoviridae		Mastadenovirus	Murine adenovirus	p49
Adenoviridae		Mastadenovirus	Opossum adenovirus	p49
Adenoviridae		Mastadenovirus	Ovine adenovirus	p49
Adenoviridae		Mastadenovirus	Porcine adenovirus	p49
Adenoviridae		Aviadenovirus	GAL virus	p49
Herpetoviridae		Herpesvirus	Cercopithecoid herpesvirus 3	p51
Herpetoviridae		Herpesvirus	Human herpesvirus 2	p51
Papovaviridae		Polyomavirus	BK virus	p53
Papovaviridae		Polyomavirus	JC virus	p53
Papovaviridae		Papillomavirus	Deer papilloma virus	p53
Papovaviridae		Papillomavirus	Goat papilloma virus	p53
Papovaviridae		Papillomavirus	Hamster papilloma virus	p53
Papovaviridae		Papillomavirus	Equine papilloma virus	p53
Papovaviridae		Papillomavirus	Ovine papilloma virus	p53
Coronaviridae		Coronavirus	Calf neonatal diarrhea coronavirus	p56
Coronaviridae		Coronavirus	Porcine hemagglutinating encephalitis virus	p56
Coronaviridae		Coronavirus	Rat coronavirus	p56
Coronaviridae		Coronavirus	Rat sialodacryoadentitis virus	p56

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Coronaviridae		Coronavirus	Turkey bluecomb disease virus	p56
Paramyxoviridae		Paramyxovirus	Turkey parainfluenza virus	p59
Paramyxoviridae		Paramyxovirus	Yucaia paramyxovirus	p59
Paramyxoviridae		Paramyxovirus	Finch paramyxovirus	p59
Paramyxoviridae		Paramyxovirus	Parrot paramyxovirus	p59
Paramyxoviridae		Morbillivirus	Canine distemper virus	p59
Paramyxoviridae		Morbillivirus	Rinderpest virus	p59
Paramyxoviridae		Morbillivirus	Pest des petits ruminants virus	p59
Paramyxoviridae		Pneumovirus	Bovine respiratory syncytial virus	p60
Paramyxoviridae		Pneumovirus	Pneumonia virus of mice	p60
Retroviridae	Oncovirinae	Type C oncovirus group	Murine sarcoma and leukemia virus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Feline sarcoma and leukemia virus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Baboon endogenous type C oncovirus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Bovine type C oncovirus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Guinea pig type C oncovirus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Porcine type C oncovirus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Rat type C oncovirus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Feline endogenous type C oncovirus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Woolly monkey sarcoma and leukemia virus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Gibbon sarcoma and leukemia virus	p62
Retroviridae	Oncovirinae	Type C oncovirus group	Chicken leukosis and sarcoma virus	p63
Retroviridae	Oncovirinae	Type C oncovirus group	Viper type C virus	p63
Retroviridae	Spumavirinae	Unassigned	Bovine syncytial virus	p64
Retroviridae	Spumavirinae	Unassigned	Feline syncytial virus	p64
Retroviridae	Spumavirinae	Unassigned	Hamster syncytial virus	p64
Retroviridae	Spumavirinae	Unassigned	Human foamy virus	p64
Retroviridae	Spumavirinae	Unassigned	Simian foamy viruses	p64
Retroviridae	Lentivirinae	Unassigned	Visna/maedi virus	p64
Unassigned		Caulimovirus group	Carnation etched ring virus	p67
Unassigned		Comovirus group	Bean rugose mosaic virus	p69
Unassigned		Comovirus group	Desmodium virus	p69
Unassigned		Comovirus group	Quail pea mosaic virus	p69
Unassigned		Cucumovirus group	Peanut stunt virus	p70
Unassigned		Iarvirus group	Black raspberry latent virus	p71
Unassigned		Iarvirus group	Citrus leaf rugose virus	p71
Unassigned		Iarvirus group	Citrus variegation virus	p71
Unassigned		Iarvirus group	Elm mottle virus	p71
Unassigned		Iarvirus group	Tulare apple mosaic virus	p71
Unassigned		Iarvirus group	Apple mosaic virus	p71
Unassigned		Iarvirus group	Cherry rugose mosaic virus	p71
Unassigned		Iarvirus group	Danish plum line pattern virus	p71
Unassigned		Iarvirus group	Hop virus A	p71
Unassigned		Iarvirus group	Hop virus C	p71
Unassigned		Iarvirus group	Prunus necrotic ringspot virus	p71

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Unassigned		Illarvirus group	Rose mosaic virus	p71
Unassigned		Luteovirus group	Beet western yellows virus	p73
Unassigned		Luteovirus group	Soybean dwarf virus	p73
Unassigned		Nepovirus group	Cherry leaf roll virus	p74
Unassigned		Nepovirus group	Cherry raspberry leaf virus	p74
Unassigned		Nepovirus group	Cocoa necrosis virus	p74
Unassigned		Nepovirus group	Grapevine chrome mosaic virus	p74
Unassigned		Tombusvirus group	Pelargonium leaf curl virus	p79
Unassigned		Tymovirus group	Clitoria yellow vein virus	p80
Unassigned		Tymovirus group	Desmodium yellow mottle virus	p80
Unassigned		Tymovirus group	Erysimum latent virus	p80
Unassigned		Tymovirus group	Kennedya yellow mosaic virus	p80
Unassigned		Tymovirus group	Okra mosaic virus	p80
Unassigned		Tymovirus group	Physalis mosaic virus	p80
Unassigned		Tymovirus group	Plantago mottle virus	p80
Unassigned		Tymovirus group	Scrophularia mottle virus	p80
Unassigned		Carlavirus group	Cowpea mild mottle virus	p82
Unassigned		Carlavirus group	Lily symptomless virus	p82
Unassigned		Closterovirus group	Carnation necrotic fleck virus	p83
Unassigned		Closterovirus group	Citrus tristeza virus	p83
Unassigned		Closterovirus group	Festuca necrosis virus	p83
Unassigned		Closterovirus group	Wheat yellow leaf virus	p83
Unassigned		Hordeivirus group	Lychnis ringspot virus	p84
Unassigned		Hordeivirus group	Poa semilatifolia virus	p84
Unassigned		Potexvirus group	Cassava common mosaic virus	p85
Unassigned		Potexvirus group	Cymbidium mosaic virus	p85
Unassigned		Potexvirus group	Narcissus mosaic virus	p85
Unassigned		Potexvirus group	Papaya mosaic virus	p85
Unassigned		Potyvirus group	Bidens mottle virus	p86
Unassigned		Potyvirus group	Carnation vein mottle virus	p86
Unassigned		Potyvirus group	Celery mosaic virus	p86
Unassigned		Potyvirus group	Cocksfoot streak virus	p86
Unassigned		Potyvirus group	Dasheen mosaic virus	p86
Unassigned		Potyvirus group	Hippeastrum mosaic virus	p86
Unassigned		Potyvirus group	Iris mild mosaic virus	p86
Unassigned		Potyvirus group	Lettuce mosaic virus	p86
Unassigned		Potyvirus group	Nothoscordum mosaic virus	p86
Unassigned		Potyvirus group	Onion yellow dwarf virus	p86
Unassigned		Potyvirus group	Papaya ringspot virus	p86
Unassigned		Potyvirus group	Parsnip mosaic virus	p86
Unassigned		Potyvirus group	Passionfruit woodiness virus	p86
Unassigned		Potyvirus group	Pea necrosis virus	p86
Unassigned		Potyvirus group	Pea seed-borne mosaic virus	p86
Unassigned		Potyvirus group	Peanut mottle virus	p86
Unassigned		Potyvirus group	Pepper mottle virus	p86
Unassigned		Potyvirus group	Pepper veinal mottle virus	p86
Unassigned		Potyvirus group	Pokeweed mosaic virus	p86
Unassigned		Potyvirus group	Sugarcane mosaic virus	p86
Unassigned		Potyvirus group	Tulip breaking virus	p86

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Unassigned		Potyvirus group	Watermelon mosaic virus	p86
Unassigned		Tobamovirus group	Chara corallina virus	p88
Unassigned		Tobamovirus group	Cucumber virus 3	p88
Unassigned		Tobamovirus group	Frangipani mosaic virus	p88
Unassigned		T-even phage group	Phage C16	p93
Unassigned		T-even phage group	Phage Dd	p93
Unassigned		T-even phage group	Phage Vi	p93
Unassigned		T-even phage group	Phage PST	p93
Unassigned		T-even phage group	Phage SMB	p93
Unassigned		T-even phage group	Phage SMP2	p93
Unassigned		T-even phage group	Phage 1	p93
Unassigned		T-even phage group	Phage 3	p93
Unassigned		T-even phage group	Phage 3T+	p93
Unassigned		T-even phage group	Phage 9/O	p93
Unassigned		T-even phage group	Phage 11F	p93
Unassigned		T-even phage group	Phage 50	p93
Unassigned		T-even phage group	Phage 66F	p93
Unassigned		T-even phage group	Phage 5845	p93
Unassigned		T-even phage group	Phage 8893	p93
Unassigned		T7 phage group	Phage T7	p94
Unassigned		T7 phage group	Phage H	p94
Unassigned		T7 phage group	Phage PTB	p94
Unassigned		T7 phage group	Phage R	p94
Unassigned		T7 phage group	Phage T3	p94
Unassigned		T7 phage group	Phage Y	p94
Unassigned		T7 phage group	Phage W31	p94
Unassigned		T7 phage group	Phage phiI	p94
Unassigned		T7 phage group	Phage phiII	p94
Unassigned		Lambda phage group	Phage PA2	p95
Unassigned		Lambda phage group	Phage phiD328	p95
Unassigned		Lambda phage group	Phage phi80	p95
Unassigned		phiX phage group	Phage dphi3	p97
Unassigned		phiX phage group	Phage dphi4	p97
Unassigned		phiX phage group	Phage dphi5	p97
Unassigned		phiX phage group	Phage G4	p97
Unassigned		phiX phage group	Phage G6	p97
Unassigned		phiX phage group	Phage G13	p97
Unassigned		phiX phage group	Phage 1phi1	p97
Unassigned		phiX phage group	Phage 1phi3	p97
Unassigned		phiX phage group	Phage 1phi7	p97
Unassigned		phiX phage group	Phage 1phi9	p97
Unassigned		phiX phage group	Phage M20	p97
Unassigned		phiX phage group	Phage S13	p97
Unassigned		phiX phage group	Phage WA/1	p97
Unassigned		phiX phage group	Phage WF/1	p97
Unassigned		phiX phage group	Phage alpha3	p97
Unassigned		phiX phage group	Phage alpha10	p97
Unassigned		phiX phage group	Phage delta1	p97
Unassigned		phiX phage group	Phage zeta3	p97

<b>Family</b>	<b>Subfamily</b>	<b>Genus</b>	<b>Species</b>	<b>Ref</b>
Unassigned		phiX phage group	Phage eta8	p97
Unassigned		phiX phage group	Phage omicron6	p97
Unassigned		phiX phage group	Phage phiA	p97
Unassigned		phiX phage group	Phage PhiR	p97
Unassigned		phi6 phage group	Phage phi6	p98
Unassigned		Ribophage group	Coliphage R17	p99
Unassigned		Ribophage group	Phage fcan	p99
Unassigned		Ribophage group	Phage FH5	p99
Unassigned		Ribophage group	Phage fr	p99
Unassigned		Ribophage group	Phage MS2	p99
Unassigned		Ribophage group	Phage M12	p99
Unassigned		Ribophage group	Phage Qbeta	p99
Unassigned		Ribophage group	Phage R23	p99
Unassigned		Ribophage group	Phage R34	p99
Unassigned		Ribophage group	Phage R40	p99
Unassigned		Ribophage group	Phage ZG/1	p99
Unassigned		Ribophage group	Phage Zj/1	p99
Unassigned		Ribophage group	Phage ZL/3	p99
Unassigned		Ribophage group	Phage ZS/3	p99
Unassigned		Ribophage group	Phage alpha15	p99
Unassigned		Ribophage group	Phage beta	p99
Unassigned		Ribophage group	Phage mu2	p99
Baculoviridae		Baculovirus	Oryctes virus	p101