



Changes to taxonomy and the International Code of Virus Classification and Nomenclature ratified by the International Committee on Taxonomy of Viruses (2018)

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Abstract

This article lists the changes to virus taxonomy approved and ratified by the International Committee on Taxonomy of Viruses in February 2018. A total of 451 species, 69 genera, 11 subfamilies, 9 families and one new order were added to the taxonomy. The current totals at each taxonomic level now stand at 9 orders, 131 families, 46 subfamilies, 803 genera and 4853 species. A change was made to the International Code of Virus Classification and Nomenclature to allow the use of the names of people in taxon names under appropriate circumstances. An updated Master Species List incorporating the approved changes was released in March 2018 (<https://talk.ictvonline.org/taxonomy/>).

Introduction

Changes to virus taxonomy (the Universal Scheme of Virus Classification of the International Committee on Taxonomy of Viruses [ICTV]) take place annually and are the result of a multi-stage process. In accordance with ICTV Statutes (<http://www.ictv.global/statutes.asp>) and ICTV Executive Committee (EC) procedures, proposals undergo a review process involving input from the ICTV Study Groups (SGs) and Subcommittees (SCs), other interested virologists, and the EC. Proposals may thus be considered on more than one occasion before they are submitted for ratification by the ICTV membership. Proposals are presented for ratification by publication on the ICTV website (<http://www.ictv.global>) followed by an electronic vote. The latest set of proposals approved by the EC was made available on the ICTV website in January 2017 (see <http://ictv.global/proposals-2017> for all proposals combined into a single zip file, and use

the links provided in the References to access individual proposals). A list of proposals was then emailed on January 24, 2018 to the 160 members of ICTV, namely the EC Members, Life Members, ICTV Subcommittee Members (including the SG chairs) and ICTV National Representatives. Members were then requested to vote on whether to ratify the taxonomic proposals (voting closed on February 25, 2018). Since the processing of this year's proposals overlapped the end of the 2014–2017 EC tenure and the start of the 2017–2020 EC tenure, members of the both ECs constitute the authorship of this article.

Changes to virus taxonomy: taxa and nomenclature

Large number of changes were ratified by ICTV members (Table 1). Increase in the number of all taxa compared to the 2017 taxonomy was within the range of 9–11%, except for the number of subfamilies, which grew by 31%.

A summary of the individual proposals is provided in Table 2. Names of newly created taxa are in **bold italic** type. Names of existing taxa that have been moved or renamed are

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Table 1 Summary of taxonomic changes approved in February 2018

Change	Orders	Families	Subfamilies	Genera	Species
New	1	9	11	69	451
Moved	0	4	2	75	341
Moved/renamed	0	0	0	1	18
Abolished	0	0	0	1 ^a	2
Totals ^b	9	131	46	803	4853

^aExisting genus (*Tectivirus*) split into two new genera, resulting in a net gain of one genus

^bTotal numbers of taxa now recognized and shown in the ICTV Master Species List

shown in *plain italic* type. Each proposal is cited and listed in the References, to acknowledge the authors' efforts and to provide a link to each specific proposal on the ICTV website. These documents remain available for any who wish to see the full details of the proposals.

Changes to the International Code of Virus Classification and Nomenclature

ICTV has adopted one change to the Code, by ratifying Proposal 2017.003G.A.v2.ICVCN_Rule_3.11_Change. “Change ICVCN Rule 3.11 to permit, with limitations, the names of people to be recognised in names of taxa”. As with many other proposals dealing with general approaches

to virus taxonomy and nomenclature, this proposed change was a subject of a lively debate in the community, and was adopted by the overwhelming majority of the ICTV. This change also allowed the creation of two new taxa in the order *Caudovirales*, i.e., the family *Ackermannviridae*, to honor Hans-Wolfgang Ackermann (1936–2017), a former Life Member of the ICTV and Professor Emeritus at Université Laval, for his foundational contributions to the biology and taxonomy of prokaryotic viruses, and the subfamily *McCleskeyvirinae*, to honor Charles Shelton McCleskey (1904–1984), a former Professor Emeritus at Louisiana State University, for his pioneering work on viruses of *Leuconostoc* bacteria.

Conclusion

All of the taxonomic proposals listed below were approved by the 87–95 affirming votes from the 96 members who voted (a return rate of about 60%). The changes are now part of the official ICTV taxonomy. Several proposals that had been discussed at the 2017 EC meeting were not included in the ballot because they needed further development. Several other proposals were found, after completion of the ratification rate, to contain typographical errors in species' names. According to the current ICTV procedures, these errors will need to be corrected by additional proposals to be submitted to the 2018 EC meeting. An up-to-date list

Table 2 Taxonomic changes approved in February 2018

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
<i>Caudovirales</i>	<i>Ackermannviridae</i>				New family	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>			New subfamily	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>	<i>Ag3virus</i>		New genus	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>	<i>Ag3virus</i>	<i>Shigella virus AG3</i>	Move species to be type species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>	<i>Ag3virus</i>	<i>Salmonella virus SKML39</i>	New species	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>	<i>Limestonevirus</i>		New genus	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>	<i>Limestonevirus</i>	<i>Dickeya virus Limestone</i>	Move species to be type species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Aglimvirinae</i>	<i>Limestonevirus</i>	<i>Dickeya virus RC2014</i>	New species	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>			New subfamily	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>		New genus	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Escherichia virus CBA120</i>	Move species to be type species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus SFP10</i>	Move species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus GG32</i>	New species	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Escherichia virus Phax1</i>	Move species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus Det7</i>	Move species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus SH19</i>	Move species (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus 38</i>	New species	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus PM10</i>	New species	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Cba120virus</i>	<i>Salmonella virus SJ3</i>	Move species	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>	<i>Cvimirinae</i>	<i>Vi1virus</i>		Move genus and constituent species: <i>Salmonella virus Vi1</i> , <i>Escherichia virus ECML4</i> , <i>Salmonella virus SJ2</i> , <i>Salmonella virus Marshall</i> , <i>Salmonella virus Maynard</i> , <i>Salmonella virus STML131</i> (previous position: <i>Caudovirales/Myoviridae/Vi1virus</i>)	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>		Unassigned	<i>Erwinia virus Ea2809</i>	New species unassigned in family	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>		Unassigned	<i>Serratia virus MAM1</i>	New species unassigned in family	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>		Unassigned	<i>Serratia virus IME250</i>	New species unassigned in family	[1]
<i>Caudovirales</i>	<i>Ackermannviridae</i>		Unassigned	<i>Klebsiella virus 0507KN21</i>	New species unassigned in family	[1]
Unassigned	<i>Portogloboviridae</i>				New family	[2]
Unassigned	<i>Portogloboviridae</i>		<i>Alphaportoglobovirus</i>		New genus	[2]
Unassigned	<i>Portogloboviridae</i>		<i>Alphaportoglobovirus</i>	<i>Sulfolobus alphaportoglobovirus 1</i>	New (type) species	[2]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Caudovirales	Siphoviridae		<i>Anatolevirus</i>		New genus	[3]
Caudovirales	Siphoviridae		<i>Anatolevirus</i>	<i>Propionibacterium virus Anatole</i>	New (type) species	[3]
Caudovirales	Siphoviridae		<i>Anatolevirus</i>	<i>Propionibacterium virus B3</i>	New species	[3]
Caudovirales	Siphoviridae	Chebruvirinae			New subfamily	[4]
Caudovirales	Siphoviridae	Chebruvirinae	<i>Che9civirus</i>		Move genus (with constituent type species: <i>Mycobacterium virus Che9c</i>)	[4]
Caudovirales	Siphoviridae	Chebruvirinae	<i>Che9civirus</i>	<i>Mycobacterium virus Sbash</i>	New species	[4]
Caudovirales	Siphoviridae	Chebruvirinae	Brujitavirus		New genus	[4]
Caudovirales	Siphoviridae	Chebruvirinae	Brujitavirus	<i>Mycobacterium virus Brujita</i>	Move species to be type species (previous position: <i>Caudovirales/Siphoviridae/ Che9civirus</i>)	[4]
Caudovirales	Siphoviridae	Chebruvirinae	Brujitavirus	<i>Mycobacterium virus Babsiella</i>	Move species (previous position: <i>Caudovi- rales/Siphoviridae/Che9civirus</i>)	[4]
Caudovirales	Siphoviridae		<i>Attivirus</i>		New genus	[5]
Caudovirales	Siphoviridae		<i>Attivirus</i>	<i>Gordonia virus Attis</i>	New (type) species	[5]
Caudovirales	Siphoviridae		<i>Doucettevirus</i>		New genus	[6]
Caudovirales	Siphoviridae		<i>Doucettevirus</i>	<i>Propionibacterium virus Doucette</i>	New (type) species	[6]
Caudovirales	Siphoviridae		<i>Doucettevirus</i>	<i>Propionibacterium virus B22</i>	New species	[6]
Caudovirales	Siphoviridae		<i>Doucettevirus</i>	<i>Propionibacterium virus E6</i>	New species	[6]
Caudovirales	Siphoviridae		<i>Doucettevirus</i>	<i>Propionibacterium virus G4</i>	New species	[6]
Caudovirales	Siphoviridae	Dclasvirinae			New subfamily	[7]
Caudovirales	Siphoviridae	Dclasvirinae	<i>Plotvirus</i>		New genus	[7]
Caudovirales	Siphoviridae	Dclasvirinae	<i>Plotvirus</i>	<i>Mycobacterium virus Plot</i>	New (type) species	[7]
Caudovirales	Siphoviridae	Dclasvirinae	<i>Hawkeyevirus</i>		New genus	[7]
Caudovirales	Siphoviridae	Dclasvirinae	<i>Hawkeyevirus</i>	<i>Mycobacterium virus Hawkeye</i>	New (type) species	[7]
Caudovirales	Siphoviridae		<i>Hk97virus</i>		New genus	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK97</i>	Move species to be type species (previous position: <i>Caudovirales/Siphoviridae/ Lambdavirus</i>)	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK022</i>	Move species (previous position: <i>Caudovi- rales/Siphoviridae/Lambdavirus</i>)	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus mEpX2</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK542</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK633</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK106</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus mEp234</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK446</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK544</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus mEpX1</i>	New species	[8]
Caudovirales	Siphoviridae		<i>Hk97virus</i>	<i>Escherichia virus HK75</i>	New species	[8]
Caudovirales	Siphoviridae	Mccleskeyvirinae			New subfamily	[9]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>		New genus	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>	<i>Leuconostoc virus IA4</i>	New (type) species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>	<i>Leuconostoc virus Ln9</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>	<i>Leuconostoc virus Ln8</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>	<i>Leuconostoc virus LN25</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>	<i>Leuconostoc virus LN34</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Una4virus</i>	<i>Leuconostoc virus LNTR3</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>		New genus	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>	<i>Leuconostoc virus P793</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>	<i>Leuconostoc virus LN12</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>	<i>Leuconostoc virus LN03</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>	<i>Leuconostoc virus LN04</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>	<i>Leuconostoc virus LN6B</i>	New species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Mccleskeyvirinae</i>	<i>Lmd1virus</i>	<i>Leuconostoc virus Lmd1</i>	New (type) species	[9]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>			New subfamily	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Redivirus</i>		New genus	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Redivirus</i>	<i>Mycobacterium virus Redi</i>	Move species to be type species (previous position: <i>Caudovirales/Siphoviridae/Charlievirus</i>)	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Redivirus</i>	<i>Mycobacterium virus Panchino</i>	New species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Redivirus</i>	<i>Mycobacterium virus Skinnyp</i>	New species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Redivirus</i>	<i>Mycobacterium virus Phrann</i>	New species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Charlievirus</i>		Move genus (with constituent species: <i>Mycobacterium virus Charlie</i>)	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Charlievirus</i>	<i>Mycobacterium virus Pipsqueaks</i>	New species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Charlievirus</i>	<i>Mycobacterium virus Xeno</i>	New species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Buttersvirus</i>		New genus	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Buttersvirus</i>	<i>Mycobacterium virus Butters</i>	New (type) species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nclasvirinae</i>	<i>Buttersvirus</i>	<i>Mycobacterium virus Michelle</i>	New species	[10]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>			New subfamily	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Nymphadoravirus</i>		New genus	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Nymphadoravirus</i>	<i>Gordonia virus Nymphadora</i>	New (type) species	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Nymphadoravirus</i>	<i>Gordonia virus Kita</i>	New species	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Nymphadoravirus</i>	<i>Gordonia virus Zirinka</i>	New species	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Baxtervirus</i>		New genus	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Baxtervirus</i>	<i>Gordonia virus BaxterFox</i>	New (type) species	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>	<i>Nymbaxtervirinae</i>	<i>Baxtervirus</i>	<i>Gordonia virus Yeezy</i>	New species	[11]
<i>Caudovirales</i>	<i>Siphoviridae</i>		<i>Wizardvirus</i>		New genus	[12]
<i>Caudovirales</i>	<i>Siphoviridae</i>		<i>Wizardvirus</i>	<i>Gordonia virus Wizard</i>	New (type) species	[12]
<i>Caudovirales</i>	<i>Siphoviridae</i>		<i>Wizardvirus</i>	<i>Gordonia virus Twister6</i>	New species	[12]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Tectiviridae</i>		<i>Alphatectivirus</i>		Rename genus (previous name: <i>Tectivirus</i>)	[13]
Unassigned	<i>Tectiviridae</i>		<i>Alphatectivirus</i>	<i>Pseudomonas virus PRD1</i>	Rename species (previous name: <i>Salmonella virus PRD1</i>)	[13]
Unassigned	<i>Tectiviridae</i>		<i>Alphatectivirus</i>	<i>Pseudomonas virus PR4</i>	New species	[13]
Unassigned	<i>Tectiviridae</i>		<i>Betatectivirus</i>		New genus	[13]
Unassigned	<i>Tectiviridae</i>		<i>Betatectivirus</i>	<i>Bacillus virus Bam35</i>	Move species to be type species (previous position: <i>Tectiviridae/Tectivirus</i>)	[13]
Unassigned	<i>Tectiviridae</i>		<i>Betatectivirus</i>	<i>Bacillus virus GIL16</i>	New species	[13]
Unassigned	<i>Tectiviridae</i>		<i>Betatectivirus</i>	<i>Bacillus virus AP50</i>	Move species	[13]
Unassigned	<i>Tectiviridae</i>		<i>Betatectivirus</i>	<i>Bacillus virus Wip1</i>	New species	[13]
					Abolish species <i>Thermus virus P37-14</i> (previous position: <i>Tectiviridae/Tectivirus</i>)	[13]
					Abolish species <i>Alicyclobacillus virus NS11</i> (previous position: unassigned/ <i>Tectivirus</i>)	[13]
Unassigned	<i>Cystoviridae</i>		<i>Cystovirus</i>	<i>Pseudomonas virus phi8</i>	New species	[14]
Unassigned	<i>Cystoviridae</i>		<i>Cystovirus</i>	<i>Pseudomonas virus phi12</i>	New species	[14]
Unassigned	<i>Cystoviridae</i>		<i>Cystovirus</i>	<i>Pseudomonas virus phi13</i>	New species	[14]
Unassigned	<i>Cystoviridae</i>		<i>Cystovirus</i>	<i>Pseudomonas virus phi2954</i>	New species	[14]
Unassigned	<i>Cystoviridae</i>		<i>Cystovirus</i>	<i>Pseudomonas virus phiNN</i>	New species	[14]
Unassigned	<i>Cystoviridae</i>		<i>Cystovirus</i>	<i>Pseudomonas virus phiYY</i>	New species	[14]
Caudovirales	<i>Podoviridae</i>		<i>Df112virus</i>		New genus	[15]
Caudovirales	<i>Podoviridae</i>		<i>Df112virus</i>	<i>Dinoroseobacter virus DFL12</i>	New (type) species	[15]
Caudovirales	<i>Podoviridae</i>		<i>Sp58virus</i>		New genus	[16]
Caudovirales	<i>Podoviridae</i>		<i>Sp58virus</i>	<i>Salmonella virus FSL SP-058</i>	New (type) species	[16]
Caudovirales	<i>Podoviridae</i>		<i>Sp58virus</i>	<i>Salmonella virus FSL SP-076</i>	New species	[16]
Caudovirales	<i>Podoviridae</i>		<i>Sp58virus</i>	<i>Escherichia virus Pollock</i>	New species	[16]
Caudovirales	<i>Myoviridae</i>		<i>Svunavirus</i>		New genus	[17]
Caudovirales	<i>Myoviridae</i>		<i>Svunavirus</i>	<i>Geobacillus virus GBSV1</i>	New (type) species	[17]
Caudovirales	<i>Myoviridae</i>		<i>Svunavirus</i>	<i>Bacillus virus 1</i>	New species	[17]
Caudovirales	<i>Siphoviridae</i>		<i>Tp84virus</i>		New genus	[18]
Caudovirales	<i>Siphoviridae</i>		<i>Tp84virus</i>	<i>Geobacillus virus Tp84</i>	New (type) species	[18]
Caudovirales	<i>Myoviridae</i>		<i>Eah2virus</i>		New genus	[19]
Caudovirales	<i>Myoviridae</i>		<i>Eah2virus</i>	<i>Erwinia virus Eah2</i>	New (type) species	[19]
Caudovirales	<i>Myoviridae</i>		<i>Eah2virus</i>	<i>Erwinia virus Asesino</i>	New species	[19]
Caudovirales	<i>Podoviridae</i>		<i>Jwalphavirus</i>		New genus	[20]
Caudovirales	<i>Podoviridae</i>		<i>Jwalphavirus</i>	<i>Achromobacter virus JWAlpha</i>	New (type) species	[20]
Caudovirales	<i>Podoviridae</i>		<i>Jwalphavirus</i>	<i>Achromobacter virus Axp3</i>	New species	[20]
Caudovirales	<i>Podoviridae</i>		<i>P22virus</i>	<i>Salmonella virus BTP1</i>	New species	[21]
Caudovirales	<i>Myoviridae</i>		<i>Machinavirus</i>		New genus	[22]
Caudovirales	<i>Myoviridae</i>		<i>Machinavirus</i>	<i>Erwinia virus Machina</i>	New (type) species	[22]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Caudovirales	Siphoviridae		<i>Trigintaduovirus</i>		New genus	[23]
Caudovirales	Siphoviridae		<i>Trigintaduovirus</i>	<i>Mycobacterium virus 32HC</i>	New (type) species	[23]
Caudovirales	Siphoviridae		<i>Pfr1virus</i>		New genus	[24]
Caudovirales	Siphoviridae		<i>Pfr1virus</i>	<i>Propionibacterium virus PFRI</i>	New (type) species	[24]
Caudovirales	Siphoviridae		Lambdavirus	<i>Escherichia virus DE3</i>	New species	[25]
Caudovirales	Siphoviridae		Lambdavirus	<i>Escherichia virus HK629</i>	New species	[25]
Caudovirales	Siphoviridae		Lambdavirus	<i>Escherichia virus HK630</i>	New species	[25]
Unassigned	Belpaoviridae				New family	[26]
Unassigned	Belpaoviridae		<i>Semotivirus</i>		Move genus (with constituent species: <i>Anopheles gambiae</i> Moose virus, <i>Ascaris lumbricoides</i> Tas virus, <i>Bombyx mori</i> Pao virus, <i>Caenorhabditis elegans</i> Cer13 virus, <i>Drosophila melanogaster</i> Bel virus, <i>Drosophila melanogaster</i> Roo virus, <i>Drosophila simulans</i> Ninja virus, <i>Takifugu rubripes</i> Suzu virus)	[26]
Unassigned	Belpaoviridae		<i>Semotivirus</i>	<i>Takifugu rubripes</i> Suzu virus	Rename species (previous name: <i>Fugu rubripes</i> Suzu virus)	[26]
Unassigned	Belpaoviridae		<i>Semotivirus</i>	<i>Drosophila semotivirus</i> Max	New species	[26]
Unassigned	Belpaoviridae		<i>Semotivirus</i>	<i>Antheraea semotivirus</i> Tamy	New species	[26]
Unassigned	Belpaoviridae		<i>Semotivirus</i>	<i>Schistosoma semotivirus</i> Sinbad	New species	[26]
Unassigned	Parvoviridae	Parvovirinae	<i>Amdoparvovirus</i>	<i>Carnivore amdoparvovirus 3</i>	New species	[27]
Unassigned	Parvoviridae	Parvovirinae	<i>Amdoparvovirus</i>	<i>Carnivore amdoparvovirus 4</i>	New species	[27]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Carnivore bocaparvovirus 4</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Carnivore bocaparvovirus 5</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Carnivore bocaparvovirus 6</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Chiropteran bocaparvovirus 1</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Chiropteran bocaparvovirus 2</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Chiropteran bocaparvovirus 3</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Chiropteran bocaparvovirus 4</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Lagomorph bocaparvovirus 1</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Bocaparvovirus</i>	<i>Ungulate bocaparvovirus 6</i>	New species	[28]
Unassigned	Parvoviridae	Parvovirinae	<i>Protoparvovirus</i>	<i>Chiropteran protoparvovirus 1</i>	New species	[29]
Unassigned	Parvoviridae	Parvovirinae	<i>Protoparvovirus</i>	<i>Eulipotyphla protoparvovirus 1</i>	New species	[29]
Unassigned	Parvoviridae	Parvovirinae	<i>Protoparvovirus</i>	<i>Primate protoparvovirus 2</i>	New species	[29]
Unassigned	Parvoviridae	Parvovirinae	<i>Protoparvovirus</i>	<i>Primate protoparvovirus 3</i>	New species	[29]
Unassigned	Parvoviridae	Parvovirinae	<i>Protoparvovirus</i>	<i>Rodent protoparvovirus 3</i>	New species	[29]
Unassigned	Parvoviridae	Parvovirinae	<i>Protoparvovirus</i>	<i>Ungulate protoparvovirus 2</i>	New species	[29]
Unassigned	Iridoviridae	Alphairidovirinae	Ranavirus	<i>Common midwife toad virus</i>	New species	[30]
Unassigned	Retroviridae	Spumaretrovirinae	<i>Simiispumavirus</i>		Rename genus (previous name: <i>Spumavirus</i>)	[31]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Eastern chimpanzee simian foamy virus</i>	Rename species (previous name: <i>Simian foamy virus</i>)	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Western chimpanzee simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Central chimpanzee simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Western lowland gorilla simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Bornean orangutan simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Taiwanese macaque simian foamy virus</i>	Rename species (previous name: <i>Macaque simian foamy virus</i>)	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Rhesus macaque simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Japanese macaque simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Grivet simian foamy virus</i>	Rename species (previous name: <i>African green monkey simian foamy virus</i>)	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Guenon simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Spider monkey simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>White-tufted-ear marmoset simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Squirrel monkey simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Simiispumavirus</i>	<i>Yellow-breasted capuchin simian foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Prosimiispumavirus</i>		New genus	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Prosimiispumavirus</i>	<i>Brown greater galago prosimian foamy virus</i>	New (type) species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Bovispumavirus</i>		New genus	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Bovispumavirus</i>	<i>Bovine foamy virus</i>	Move species to be type species (previous position: <i>Retroviridae/Spumaretrovirinae/Spumavirus</i>)	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Felispumavirus</i>		New genus	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Felispumavirus</i>	<i>Feline foamy virus</i>	move species to be type species (previous position: <i>Retroviridae/Spumaretrovirinae/Spumavirus</i>)	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Felispumavirus</i>	<i>Puma feline foamy virus</i>	New species	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Equispumavirus</i>		New genus	[31]
Unassigned	<i>Retroviridae</i>	<i>Spumaretrovirinae</i>	<i>Equispumavirus</i>	<i>Equine foamy virus</i>	Move species to be type species (previous position: <i>Retroviridae/Spumaretrovirinae/Spumavirus</i>)	[31]
Unassigned	<i>Polyomaviridae</i>		unassigned	<i>Rhynchobatus djiddensis polyomavirus 1</i>	New unassigned species	[32]
Unassigned	<i>Polyomaviridae</i>		<i>Betapolyomavirus</i>	<i>Vicugna pacos polyomavirus 1</i>	New species	[32]
Unassigned	<i>Polyomaviridae</i>		<i>Betapolyomavirus</i>	<i>Rattus norvegicus polyomavirus 2</i>	New species	[32]
Unassigned	<i>Polyomaviridae</i>		<i>Betapolyomavirus</i>	<i>Leptonychotes weddellii polyomavirus 1</i>	New species	[32]
Unassigned	<i>Polyomaviridae</i>		<i>Alphapolyomavirus</i>	<i>Piliocolobus badius polyomavirus 1</i>	New species	[32]
Unassigned	<i>Polyomaviridae</i>		<i>Gammapolyomavirus</i>	<i>Lonchura maja polyomavirus 1</i>	New species	[32]
Unassigned	<i>Polyomaviridae</i>		<i>Gammapolyomavirus</i>	<i>Erythrura gouldiae polyomavirus 1</i>	New species	[32]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Polyomaviridae</i>		<i>unassigned</i>	<i>Trematomus pennellii polyomavirus 1</i>	New species	[32]
Unassigned	<i>Baculoviridae</i>		<i>Betabaculovirus</i>	<i>Cnaphalocrocis medinalis granulovirus</i>	New species	[33]
Unassigned	<i>Baculoviridae</i>		<i>Betabaculovirus</i>	<i>Mythimna unipuncta granulovirus A</i>	Rename species (previous name: <i>Pseudalattia unipuncta granulovirus</i>)	[33]
Unassigned	<i>Baculoviridae</i>		<i>Betabaculovirus</i>	<i>Mythimna unipuncta granulovirus B</i>	New species	[33]
Unassigned	<i>Circoviridae</i>		<i>Circovirus</i>	<i>Porcine circovirus 3</i>	New species	[34]
Unassigned	<i>Circoviridae</i>		<i>Circovirus</i>	<i>Bat associated circovirus 9</i>	New species	[34]
Unassigned	<i>Circoviridae</i>		<i>Cyclovirus</i>	<i>Mouse associated cyclovirus 1</i>	New species	[34]
Unassigned	<i>Circoviridae</i>		<i>Cyclovirus</i>	<i>Human associated cyclovirus 12</i>	New species	[34]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>			New subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Alphapapillomavirus</i>		Assign genus and constituent species (<i>Alphapapillomavirus 1</i> to <i>Alphapapillomavirus 14</i> , inclusive) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Betapapillomavirus</i>		Assign genus and constituent species (<i>Betapapillomavirus 1</i> to <i>Betapapillomavirus 6</i> , inclusive) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Chipapillomavirus</i>		Assign genus and constituent species (<i>Chipapillomavirus 1</i> , <i>Chipapillomavirus 2</i> , <i>Chipapillomavirus 3</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Deltapapillomavirus</i>		Assign genus and constituent species (<i>Deltapapillomavirus 1</i> to <i>Deltapapillomavirus 6</i> , inclusive) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyochipapillomavirus</i>		Assign genus and constituent species (<i>Dyochipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyodeltapapillomavirus</i>		Assign genus and constituent species (<i>Dyodeltapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyoepsilonpapillomavirus</i>		Assign genus and constituent species (<i>Dyoepsilonpapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyoetapapillomavirus</i>		Assign genus and constituent species (<i>Dyoetapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyoiotapapillomavirus</i>		Assign genus and constituent species (<i>Dyoiotapapillomavirus 1</i> , <i>Dyoiotapapillomavirus 2</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyokappapapillomavirus</i>		Assign genus and constituent species (<i>Dyokappapapillomavirus 1</i> , <i>Dyokappapapillomavirus 2</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyolambdapapillomavirus</i>		Assign genus and constituent species (<i>Dyolambdapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyomupapillomavirus</i>		Assign genus and constituent species (<i>Dyomupapillomavirus 1</i>) to new subfamily	[35]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyonupapillomavirus</i>		Assign genus and constituent species (<i>Dyonupapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyomegapapillomavirus</i>		Assign genus and constituent species (<i>Dyomegapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyomikronpapillomavirus</i>		Assign genus and constituent species (<i>Dyomikronpapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyophipapillomavirus</i>		Assign genus and constituent species (<i>Dyophipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyopipapillomavirus</i>		Assign genus and constituent species (<i>Dyopipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyopsipapillomavirus</i>		Assign genus and constituent species (<i>Dyopsipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyorchopapillomavirus</i>		Assign genus and constituent species (<i>Dyorchopapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyosigmapapillomavirus</i>		Assign genus and constituent species (<i>Dyosigmapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyotapapillomavirus</i>		Assign genus and constituent species (<i>Dyotapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyothetapapillomavirus</i>		Assign genus and constituent species (<i>Dyothetapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyousilonpapillomavirus</i>		Assign genus and constituent species (<i>Dyousilonpapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyoxipapillomavirus</i>		Assign genus and constituent species (<i>Dyoxipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyozetapapillomavirus</i>		assign genus and constituent species (<i>Dyozetapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Epsilonpapillomavirus</i>		Assign genus and constituent species (<i>Epsilonpapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Etapapillomavirus</i>		Assign genus and constituent species (<i>Etapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Gamma papillomavirus</i>		Assign genus and constituent species (<i>Gamma papillomavirus 1</i> to <i>Gamma papillomavirus 26</i> , inclusive) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Iotapapillomavirus</i>		Assign genus and constituent species (<i>Iotapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Kappapapillomavirus</i>		Assign genus and constituent species (<i>Kappapapillomavirus 1</i> , <i>Kappapapillomavirus 2</i>) to new subfamily	[35]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Lambdapapillomavirus</i>		Assign genus and constituent species (<i>Lambdapapillomavirus 1</i> to <i>Lambdapapillomavirus 5</i> , inclusive) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Mupapillomavirus</i>		Assign genus and constituent species (<i>Mupapillomavirus 1</i> , <i>Mupapillomavirus 2</i> , <i>Mupapillomavirus 3</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Nupapillomavirus</i>		Assign genus and constituent species (<i>Nupapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Omegapapillomavirus</i>		Assign genus and constituent species (<i>Omegapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Omikronpapillomavirus</i>		Assign genus and constituent species (<i>Omikronpapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Phipapillomavirus</i>		Assign genus and constituent species (<i>Phipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Pipapillomavirus</i>		Assign genus and constituent species (<i>Pipapillomavirus 1</i> , <i>Pipapillomavirus 2</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Psipapillomavirus</i>		Assign genus and constituent species (<i>Psipapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Rhopapillomavirus</i>		Assign genus and constituent species (<i>Rhopapillomavirus 1</i> , <i>Rhopapillomavirus 2</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Sigmamapillomavirus</i>		Assign genus and constituent species (<i>Sigmamapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Taupapillomavirus</i>		Assign genus and constituent species (<i>Taupapillomavirus 1</i> , <i>Taupapillomavirus 2</i> , <i>Taupapillomavirus 3</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Thetapapillomavirus</i>		Assign genus and constituent species (<i>Thetapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisdeltapapillomavirus</i>		Assign genus and constituent species (<i>Treisdeltapapillomavirus 1</i>) to new subfamily	[35]
unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisepsilon papillomavirus</i>		Assign genus and constituent species (<i>Treisepsilon papillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisetapapillomavirus</i>		Assign genus and constituent species (<i>Treisetapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treiszetapapillomavirus</i>		Assign genus and constituent species (<i>Treiszetapapillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Upsilon papillomavirus</i>		Assign genus and constituent species (<i>Upsilon papillomavirus 1</i> , <i>Upsilon papillomavirus 2</i> , <i>Upsilon papillomavirus 3</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Xipapillomavirus</i>		Assign genus and constituent species (<i>Xipapillomavirus 1</i> , <i>Xipapillomavirus 2</i> , <i>Xipapillomavirus 3</i>) to new subfamily	[35]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Zetapapillomavirus</i>		Assign genus and constituent species (<i>Zeta-papillomavirus 1</i>) to new subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Gammapapillomavirus</i>	<i>Gammapapillomavirus 27</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisthetapapillomavirus</i>		New genus	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisthetapapillomavirus</i>	<i>Treisthetapapillomavirus 1</i>	New (type) species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Psipapillomavirus</i>	<i>Psipapillomavirus 2</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Psipapillomavirus</i>	<i>Psipapillomavirus 3</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Epsilonpapillomavirus</i>	<i>Epsilonpapillomavirus 2</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Iotapapillomavirus</i>	<i>Iotapapillomavirus 2</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisiotapapillomavirus</i>		New genus	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treisiotapapillomavirus</i>	<i>Treisiotapapillomavirus 1</i>	New (type) species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Taupapillomavirus</i>	<i>Taupapillomavirus 4</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyokappapapillomavirus</i>	<i>Dyokappapapillomavirus 3</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Xipapillomavirus</i>	<i>Xipapillomavirus 4</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyokappapapillomavirus</i>	<i>Dyokappapapillomavirus 4</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyoxipapillomavirus</i>	<i>Dyoxipapillomavirus 2</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treiskappapapillomavirus</i>		New genus	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Treiskappapapillomavirus</i>	<i>Treiskappapapillomavirus 1</i>	New (type) species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Xipapillomavirus</i>	<i>Xipapillomavirus 5</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Dyokappapapillomavirus</i>	<i>Dyokappapapillomavirus 5</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Firstpapillomavirinae</i>	<i>Deltapapillomavirus</i>	<i>Deltapapillomavirus 7</i>	New species	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Secondpapillomavirinae</i>			New subfamily	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Secondpapillomavirinae</i>	<i>Alefpapillomavirus</i>		New genus	[35]
Unassigned	<i>Papillomaviridae</i>	<i>Secondpapillomavirinae</i>	<i>Alefpapillomavirus</i>	<i>Alefpapillomavirus 1</i>	New (type) species	[35]
Unassigned	<i>Smacoviridae</i>				New family	[36]
Unassigned	<i>Smacoviridae</i>		<i>Bovismacovirus</i>		New genus	[36]
Unassigned	<i>Smacoviridae</i>		<i>Bovismacovirus</i>	<i>Bovine associated bovismacovirus 1</i>	New (type) species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Bovismacovirus</i>	<i>Bovine associated bovismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Bovismacovirus</i>	<i>Dragonfly associated bovismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Drosmacovirus</i>		New genus	[36]
Unassigned	<i>Smacoviridae</i>		<i>Drosmacovirus</i>	<i>Camel associated drosmacovirus 1</i>	New (type) species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Drosmacovirus</i>	<i>Bovine associated drosmacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Drosmacovirus</i>	<i>Camel associated drosmacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>		New genus	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Bovine associated huchismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Chicken associated huchismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Human associated huchismacovirus 1</i>	New (type) species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Chicken associated huchismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Human associated huchismacovirus 2</i>	New species	[36]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Human associated huchismacovirus 3</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Huchismacovirus</i>	<i>Bovine associated huchismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>		New genus	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Camel associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Bovine associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Sheep associated porprismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 10</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Chimpanzee associated porprismacovirus 1</i>	New (type) species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Chimpanzee associated porprismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Human associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 5</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 4</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Howler monkey associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Human-associated porprismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Turkey associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 8</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 6</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Lemur associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Rat associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 3</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Camel associated porprismacovirus 2</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 9</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Camel associated porprismacovirus 3</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Camel associated porprismacovirus 4</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Porcine associated porprismacovirus 7</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Gorilla associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Sheep associated porprismacovirus 1</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Porprismacovirus</i>	<i>Sheep associated porprismacovirus 3</i>	New species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Cosmacovirus</i>		New genus	[36]
Unassigned	<i>Smacoviridae</i>		<i>Cosmacovirus</i>	<i>Bovine associated cosmacovirus 1</i>	New (type) species	[36]
Unassigned	<i>Smacoviridae</i>		<i>Dragsmacovirus</i>		New genus	[36]
Unassigned	<i>Smacoviridae</i>		<i>Dragsmacovirus</i>	<i>Dragonfly associated dragsmacovirus 1</i>	New (type) species	[36]
<i>Herpesvirales</i>	<i>Alloherpesviridae</i>		<i>Batrachovirus</i>	<i>Ranid herpesvirus 3</i>	New species	[37]
<i>Ortervirales</i>					New order	[38]
<i>Ortervirales</i>	<i>Belpaoviridae</i>				Assign new family proposed in ref [26]) to new order	[38]
<i>Ortervirales</i>	<i>Caulimoviridae</i>				Assign family to new order	[38]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Ortervirales	Metaviridae				Assign family to new order	[38]
Ortervirales	Pseudoviridae				Assign family to new order	[38]
Ortervirales	Retroviridae				Assign family to new order	[38]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Bat mastadenovirus C	New species	[39]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Bat mastadenovirus D	New species	[39]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Bat mastadenovirus E	New species	[39]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Bat mastadenovirus F	New species	[39]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Bat mastadenovirus G	New species	[39]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Simian mastadenovirus I	New species	[39]
Unassigned	Adenoviridae		<i>Aviadenovirus</i>	Psittacine aviadenovirus B	New species	[39]
Unassigned	Adenoviridae		<i>Aviadenovirus</i>	Pigeon aviadenovirus B	New species	[39]
Unassigned	Hepadnaviridae		<i>Unassigned</i>	Bluegill hepatitis B virus	New species	[40]
Unassigned	Hepadnaviridae		<i>Unassigned</i>	Tibetan frog hepatitis B virus	New species	[40]
Unassigned	Adenoviridae		<i>Atadenovirus</i>	Deer atadenovirus A	New species	[41]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Deer mastadenovirus B	New species	[41]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Dolphin mastadenovirus B	New species	[41]
Unassigned	Adenoviridae		<i>Mastadenovirus</i>	Squirrel mastadenovirus A	New species	[41]
Unassigned	Bacilladnaviridae				New family	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>		Rename genus (previous name: <i>Bacilladnavirus</i>) and assign to new family	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Chaetoceros protobacilladnavirus 1</i>	Rename species (previous name: <i>Chaetoceros salsugineum DNA virus 01</i>)	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Chaetoceros protobacilladnavirus 2</i>	New species	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Chaetoceros protobacilladnavirus 3</i>	New species	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Chaetoceros protobacilladnavirus 4</i>	New species	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Snail associated protobacilladnavirus 1</i>	New species	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Snail associated protobacilladnavirus 2</i>	New species	[42]
Unassigned	Bacilladnaviridae		<i>Protobacilladnavirus</i>	<i>Marine protobacilladnavirus 1</i>	New species	[42]
Unassigned	Bacilladnaviridae		Diatodnavirus		Newgenus	[42]
Unassigned	Bacilladnaviridae		Diatodnavirus	<i>Chaetoceros diatodnavirus 1</i>	New (type) species	[42]
Unassigned	Bacilladnaviridae		Kieseladnavirus		New genus	[42]
Unassigned	Bacilladnaviridae		Kieseladnavirus	<i>Avon-Heathcote Estuary associated kieseladnavirus</i>	New (type) species	[42]
Unassigned	Inoviridae		<i>Plectrovirus</i>	<i>Acholeplasma virus L51</i>	Rename species (previous name: <i>Acholeplasma virus MV-L51</i>)	[43]
Unassigned	Arenaviridae		<i>Mammarenavirus</i>	<i>Serra do Navio mammarenavirus</i>	Rename species (previous name: <i>Amapari mammarenavirus</i>)	[43]
Unassigned	Luteoviridae		<i>Unassigned</i>	<i>Barley yellow dwarf virus GPV</i>	Rename species (previous name: <i>Barley yellow dwarf virus-GPV</i>)	[43]
Unassigned	Luteoviridae		<i>Luteovirus</i>	<i>Barley yellow dwarf virus kerII</i>	Rename species (previous name: <i>Barley yellow dwarf virus-kerII</i>)	[43]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Luteoviridae</i>		<i>Luteovirus</i>	<i>Barley yellow dwarf virus kerIII</i>	Rename species (previous name: <i>Barley yellow dwarf virus-kerIII</i>)	[43]
Unassigned	<i>Luteoviridae</i>		<i>Luteovirus</i>	<i>Barley yellow dwarf virus MAV</i>	Rename species (previous name: <i>Barley yellow dwarf virus-MAV</i>)	[43]
Unassigned	<i>Luteoviridae</i>		<i>Luteovirus</i>	<i>Barley yellow dwarf virus PAS</i>	Rename species (previous name: <i>Barley yellow dwarf virus-PAS</i>)	[43]
Unassigned	<i>Luteoviridae</i>		<i>Luteovirus</i>	<i>Barley yellow dwarf virus PAV</i>	Rename species (previous name: <i>Barley yellow dwarf virus-PAV</i>)	[43]
Unassigned	<i>Luteoviridae</i>		Unassigned	<i>Barley yellow dwarf virus SGV</i>	Rename species (previous name: <i>Barley yellow dwarf virus-SGV</i>)	[43]
Unassigned	<i>Luteoviridae</i>		<i>Polerovirus</i>	<i>Cereal yellow dwarf virus RPS</i>	Rename species (previous name: <i>Barley yellow dwarf virus-RPS</i>)	[43]
Unassigned	<i>Luteoviridae</i>		<i>Polerovirus</i>	<i>Cereal yellow dwarf virus RPV</i>	Rename species (previous name: <i>Barley yellow dwarf virus-RPV</i>)	[43]
<i>Picornavirales</i>	Unassigned		<i>Bacillarnavirus</i>	<i>Chaetoceros socialis forma radians RNA virus 1</i>	Rename species (previous name: <i>Chaetoceros socialis f. radians RNA virus 01</i>)	[43]
Unassigned	<i>Polydnaviridae</i>		<i>Bracovirus</i>	<i>Chelonus near curvimaculatus bracovirus</i>	Rename species (previous name: <i>Chelonus nr. curvimaculatus bracovirus</i>)	[43]
<i>Nidovirales</i>	<i>Arteriviridae</i>		<i>Simartevirus</i>	<i>DeBrazza monkey arterivirus</i>	Rename species (previous name: <i>DeBrazza's monkey arterivirus</i>)	[43]
Unassigned	<i>Metaviridae</i>		<i>Errantivirus</i>	<i>Drosophila melanogaster 17-6 virus</i>	Rename species (previous name: <i>Drosophila melanogaster 17.6 virus</i>)	[43]
Unassigned	<i>Partitiviridae</i>		Unassigned	<i>Gaeumannomyces graminis virus 0196A</i>	Rename species (previous name: <i>Gaeumannomyces graminis virus 019/6-A</i>)	[43]
Unassigned	<i>Partitiviridae</i>		Unassigned	<i>Gaeumannomyces graminis virus T1A</i>	Rename species (previous name: <i>Gaeumannomyces graminis virus T1-A</i>)	[43]
<i>Picornavirales</i>	<i>Dicistroviridae</i>		<i>Triatovirus</i>	<i>Homalodisca coagulata virus 1</i>	Rename species (previous name: <i>Homalodisca coagulata virus-1</i>)	[43]
unassigned	<i>Arenaviridae</i>		<i>Mammarenavirus</i>	<i>Argentinian mammarenavirus</i>	Rename species (previous name: <i>Junín mammarenavirus</i>)	[43]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Kalanchoe latent virus</i>	Rename species (previous name: <i>Kalanchoë latent virus</i>)	[43]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Kalanchoe mosaic virus</i>	Rename species (previous name: <i>Kalanchoë mosaic virus</i>)	[43]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	<i>Kalanchoe top-spotting virus</i>	Rename species (previous name: <i>Kalanchoë top-spotting virus</i>)	[43]
Unassigned	<i>Luteoviridae</i>		<i>Polerovirus</i>	<i>Maize yellow dwarf virus RMV</i>	Rename species (previous name: <i>Maize yellow dwarf virus-RMV</i>)	[43]
Unassigned	<i>Poxviridae</i>	<i>Entomopoxvirinae</i>	Unassigned	<i>Melanoplus sanguinipes entomopoxvirus</i>	Rename species (previous name: <i>Melanoplus sanguinipes entomopoxvirus 'O'</i>)	[43]
Unassigned	<i>Caliciviridae</i>		<i>Nebovirus</i>	<i>Newbury 1 virus</i>	Rename species (previous name: <i>Newbury-1 virus</i>)	[43]
Unassigned	<i>Togaviridae</i>		<i>Alphavirus</i>	<i>Onyong-nyong virus</i>	Rename species (previous name: <i>O'nyong-nyong virus</i>)	[43]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Arenaviridae</i>		<i>Mammarenavirus</i>	<i>Paraguayan mammarenavirus</i>	Rename species (previous name: <i>Paraná mammarenavirus</i>)	[43]
Unassigned	<i>Chrysoviridae</i>		<i>Chrysovirus</i>	<i>Penicillium cyaneo-fulvum virus</i>	Rename species (previous name: <i>Penicillium cyaneo-fulvum virus</i>)	[43]
Unassigned	<i>Arenaviridae</i>		<i>Mammarenavirus</i>	<i>Cali mammarenavirus</i>	Rename species (previous name: <i>Pichindé mammarenavirus</i>)	[43]
Unassigned	<i>Arenaviridae</i>		<i>Mammarenavirus</i>	<i>Brazilian mammarenavirus</i>	Rename species (previous name: <i>Sabiá mammarenavirus</i>)	[43]
Unassigned	<i>Totiviridae</i>		<i>Totivirus</i>	<i>Saccharomyces cerevisiae virus LBCLa</i>	Rename species (previous name: <i>Saccharomyces cerevisiae virus L-BC (La)</i>)	[43]
Unassigned	<i>Virgaviridae</i>		<i>Tobamovirus</i>	<i>Opuntia chlorotic ringspot virus</i>	Rename species (previous name: <i>Santons's Opuntia virus</i>)	[43]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Sint-Jan onion latent virus</i>	Rename species (previous name: <i>Sint-Jan's onion latent virus</i>)	[43]
<i>Picornavirales</i>	<i>Dicistroviridae</i>		<i>Aparavirus</i>	<i>Solenopsis invicta virus 1</i>	Rename species (previous name: <i>Solenopsis invicta virus-1</i>)	[43]
unassigned	<i>Flaviviridae</i>		<i>Flavivirus</i>	<i>Saint Louis encephalitis virus</i>	Rename species (previous name: <i>St. Louis encephalitis virus</i>)	[43]
<i>Mononegavirales</i>	<i>Filoviridae</i>		<i>Ebolavirus</i>	<i>Tai Forest ebolavirus</i>	Rename species (previous name: <i>Tai Forest ebolavirus</i>)	[43]
Unassigned	<i>Pseudoviridae</i>		<i>Pseudovirus</i>	<i>Triticum aestivum WIS2 virus</i>	Rename species (previous name: <i>Triticum aestivum WIS-2 virus</i>)	[43]
<i>Picornavirales</i>	<i>Iflaviridae</i>		<i>Iflavirus</i>	<i>Varroa destructor virus 1</i>	Rename species (previous name: <i>Varroa destructor virus-1</i>)	[43]
Unassigned	<i>Retroviridae</i>	<i>Orthoretrovirinae</i>	<i>Lentivirus</i>	<i>Visna-maedi virus</i>	Rename species (previous name: <i>Visna/maedi virus</i>)	[43]
Unassigned	<i>Potyviridae</i>		<i>Tritimovirus</i>	<i>Yellow oat grass mosaic virus</i>	Rename species (previous name: <i>Yellow oat-grass mosaic virus</i>)	[43]
Unassigned	<i>Pseudoviridae</i>		<i>Sirevirus</i>	<i>Zea mays Opie2 virus</i>	Rename species (previous name: <i>Zea mays Opie-2 virus</i>)	[43]
Unassigned	<i>Pseudoviridae</i>		<i>Sirevirus</i>	<i>Zea mays Prem2 virus</i>	Rename species (previous name: <i>Zea mays Prem-2 virus</i>)	[43]
Unassigned	<i>Pseudoviridae</i>		<i>Pseudovirus</i>	<i>Zea mays Sto4 virus</i>	Rename species (previous name: <i>Zea mays Sto-4 virus</i>)	[43]
Unassigned	<i>Arenaviridae</i>		<i>Hartmanivirus</i>		See TP List for proposed change to ICVCN New genus	[44] [45]
Unassigned	<i>Arenaviridae</i>		<i>Hartmanivirus</i>	<i>Haartman hartmanivirus</i>	New (type) species	[45]
Unassigned	<i>Arenaviridae</i>		<i>Mammarenavirus</i>	<i>Ryukyu mammarenavirus</i>	New species	[46]
Unassigned	<i>Arenaviridae</i>		<i>Mammarenavirus</i>	<i>Souris mammarenavirus</i>	New species	[47]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>		Rename genus	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Elapid 1 orthobornavirus</i>	Rename species (previous name: <i>Elapid 1 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Mammalian 1 orthobornavirus</i>	Rename species (previous name: <i>Mammalian 1 bornavirus</i>)	[48]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Mammalian 2 orthobornavirus</i>	Rename species (previous name: <i>Mammalian 2 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Passeriform 1 orthobornavirus</i>	Rename species (previous name: <i>Passeriform 1 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Passeriform 2 orthobornavirus</i>	Rename species (previous name: <i>Passeriform 2 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Psittaciform 1 orthobornavirus</i>	Rename species (previous name: <i>Psittaciform 1 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Psittaciform 2 orthobornavirus</i>	Rename species (previous name: <i>Psittaciform 2 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Orthobornavirus</i>	<i>Waterbird 1 orthobornavirus</i>	Rename species (previous name: <i>Waterbird 1 bornavirus</i>)	[48]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Carbovirus</i>		New genus	[49]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Carbovirus</i>	<i>Queensland carbovirus</i>	New (type) species	[49]
<i>Mononegavirales</i>	<i>Bornaviridae</i>		<i>Carbovirus</i>	<i>Southwest carbovirus</i>	New species	[49]
<i>Bunyavirales</i>	<i>Peribunyaviridae</i>		<i>Orthobunyavirus</i>	<i>Wolkberg orthobunyavirus</i>	New species	[50]
<i>Bunyavirales</i>	<i>Nairoviridae</i>		<i>Orthonairovirus</i>	<i>Artashat orthonairovirus</i>	New species	[51]
<i>Bunyavirales</i>	<i>Nairoviridae</i>		<i>Orthonairovirus</i>	<i>Tamdy orthonairovirus</i>	Rename species (previous name: <i>Burana orthonairovirus</i>)	[51]
<i>Bunyavirales</i>	<i>Nairoviridae</i>		<i>Orthonairovirus</i>	<i>Chim orthonairovirus</i>	New species	[51]
<i>Mononegavirales</i>	<i>Rhabdoviridae</i>		<i>Ledantevirus</i>	<i>Kanyawara ledantevirus</i>	New species	[52]
<i>Mononegavirales</i>	<i>Paramyxoviridae</i>		<i>Avulavirus</i>	<i>Avian avulavirus 14</i>	New species	[53]
<i>Mononegavirales</i>	<i>Paramyxoviridae</i>		<i>Avulavirus</i>	<i>Avian avulavirus 15</i>	New species	[53]
<i>Mononegavirales</i>	<i>Paramyxoviridae</i>		<i>Avulavirus</i>	<i>Avian avulavirus 16</i>	New species	[53]
<i>Mononegavirales</i>	<i>Paramyxoviridae</i>		<i>Avulavirus</i>	<i>Avian avulavirus 17</i>	New species	[53]
<i>Mononegavirales</i>	<i>Paramyxoviridae</i>		<i>Avulavirus</i>	<i>Avian avulavirus 18</i>	New species	[53]
<i>Mononegavirales</i>	<i>Paramyxoviridae</i>		<i>Avulavirus</i>	<i>Avian avulavirus 19</i>	New species	[53]
Unassigned	<i>Orthomyxoviridae</i>		<i>Alphainfluenzavirus</i>		Rename genus (previous name: <i>Influenzavirus A</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Betainfluenzavirus</i>		Rename genus (previous name: <i>Influenzavirus B</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Gammainfluenzavirus</i>		Rename genus (previous name: <i>Influenzavirus C</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Deltainfluenzavirus</i>		Rename genus (previous name: <i>Influenzavirus D</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Isavirus</i>	<i>Salmon isavirus</i>	Rename species (previous name: <i>Infectious salmon anemia virus</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Quarantavirus</i>	<i>Johnston Atoll quarantavirus</i>	Rename species (previous name: <i>Johnston Atoll virus</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Quarantavirus</i>	<i>Quaranfil quarantavirus</i>	Rename species (previous name: <i>Quaranfil virus</i>)	[54]
Unassigned	<i>Orthomyxoviridae</i>		<i>Thogotovirus</i>	<i>Dhori thogotovirus</i>	Rename species (previous name: <i>Dhori virus</i>)	[54]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Orthomyxoviridae</i>		<i>Thogotovirus</i>	<i>Thogoto thogotovirus</i>	Rename species (previous name: <i>Thogoto virus</i>)	[54]
<i>Mononegavirales</i>	<i>Rhabdoviridae</i>		<i>Lyssavirus</i>	<i>Gannoruwa bat lyssavirus</i>	New species	[55]
<i>Mononegavirales</i>	<i>Rhabdoviridae</i>		<i>Lyssavirus</i>	<i>Lleida bat lyssavirus</i>	New species	[56]
Unassigned	<i>Arenaviridae</i>		<i>Reptarenavirus</i>	<i>Golden reptarenavirus</i>	Rename species (previous name: <i>Alethinophid 1 reptarenavirus</i>)	[57]
Unassigned	<i>Arenaviridae</i>		<i>Reptarenavirus</i>	<i>California reptarenavirus</i>	Rename species (previous name: <i>Alethinophid 2 reptarenavirus</i>)	[57]
Unassigned	<i>Arenaviridae</i>		<i>Reptarenavirus</i>	<i>Rotterdam reptarenavirus</i>	Rename species (previous name: <i>Alethinophid 3 reptarenavirus</i>)	[57]
Unassigned	<i>Arenaviridae</i>		<i>Reptarenavirus</i>	<i>Ordinary reptarenavirus</i>	New species	[57]
Unassigned	<i>Arenaviridae</i>		<i>Reptarenavirus</i>	<i>Giessen reptarenavirus</i>	New species	[57]
Unassigned	<i>Reoviridae</i>	<i>Spinareovirinae</i>	<i>Orthoreovirus</i>	<i>Mahlapitsi orthoreovirus</i>	New species	[58]
<i>Mononegavirales</i>	<i>Rhabdoviridae</i>		<i>Tibrovirus</i>	<i>Beatrice Hill tibrovirus</i>	New species	[59]
Unassigned	<i>Potyviridae</i>		<i>Roymovirus</i>		New genus	[60]
Unassigned	<i>Potyviridae</i>		<i>Roymovirus</i>	<i>Rose yellow mosaic virus</i>	Species assigned as type species of new genus	[60]
Unassigned	<i>Potyviridae</i>		<i>Bevemovirus</i>		New genus	[60]
Unassigned	<i>Potyviridae</i>		<i>Bevemovirus</i>	<i>Bellflower veinal mottle virus</i>	New (type) species	[60]
Unassigned	<i>Aspiviridae</i>				Rename family (previous name: <i>Ophiioviridae</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Blueberry mosaic associated ophiovirus</i>	Rename species (previous name: <i>Blueberry mosaic associated virus</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Citrus psorosis ophiovirus</i>	Rename species (previous name: <i>Citrus psorosis virus</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Freesia sneak ophiovirus</i>	Rename species (previous name: <i>Freesia sneak virus</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Lettuce ring necrosis ophiovirus</i>	Rename species (previous name: <i>Lettuce ring necrosis virus</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Mirafiori lettuce big-vein ophiovirus</i>	Rename species (previous name: <i>Mirafiori lettuce big-vein virus</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Ranunculus white mottle ophiovirus</i>	Rename species (previous name: <i>Ranunculus white mottle virus</i>)	[61]
Unassigned	<i>Aspiviridae</i>		<i>Ophiovirus</i>	<i>Tulip mild mottle mosaic ophiovirus</i>	Rename species (previous name: <i>Tulip mild mottle mosaic virus</i>)	[61]
Unassigned	<i>Solemoviridae</i>				New family	[62]
Unassigned	<i>Solemoviridae</i>		<i>Sobemovirus</i>		Assign genus (and constituent species) to new family	[62]
Unassigned	<i>Solemoviridae</i>		<i>Polemovirus</i>		Assign genus (and constituent species) to new family	[62]
Unassigned	<i>Alphasatellitidae</i>				New family	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminalphasatellitinae</i>			New subfamily	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminalphasatellitinae</i>	<i>Ageyisatellite</i>		New genus	[63]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Ageyesisatellite</i>	<i>Ageratum yellow vein Singapore alphasatellite</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Ageyesisatellite</i>	<i>Cotton leaf curl Saudi Arabia alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Cleome leaf crumple alphasatellite</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Croton yellow vein mosaic alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Euphorbia yellow mosaic alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Tomato yellow spot alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Melon chlorotic mosaic alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Sida Cuba alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Whitefly associated Guatemala alphasatellite 2</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Clecrusatellite</i>	<i>Whitefly associated Puerto Rico alphasatellite 1</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Ageratum enation alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Ageratum yellow vein alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Ageratum yellow vein China alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Ageratum yellow vein India alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Bhendi yellow vein alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Cassava mosaic Madagascar alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Chilli leaf curl alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Cotton leaf curl Egypt alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Cotton leaf curl Gezira alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Cotton leaf curl Multan alphasatellite</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Cotton leaf curl Lucknow alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Gossypium darwinii symptomless alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Malvastrum yellow mosaic Cameroon alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Malvastrum yellow mosaic alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Pedilanthus leaf curl alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Sida leaf curl alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Sida yellow vein Vietnam alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Sunflower leaf curl Karnataka alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Synedrella leaf curl alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Tobacco curly shoot alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Tomato leaf curl Buea alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Tomato leaf curl Cameroon alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Tomato yellow leaf curl Thailand alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Tomato yellow leaf curl China alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Colecusatellite</i>	<i>Tomato yellow leaf curl Yunnan alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>	<i>Gossypium mustelinum symptomless alphasatellite</i>	New (type) species	[63]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>	<i>Hollyhock yellow vein alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>	<i>Mesta yellow vein mosaic alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>	<i>Okra enation leaf curl alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>	<i>Okra yellow crinkle Cameroon alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	<i>Gosmusatellite</i>	<i>Vernonia yellow vein Fujian alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	Unassigned	<i>Whitefly associated Guetamala alphasatellite 1</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Geminialphasatellitinae</i>	Unassigned	<i>Dragonfly associated alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>			New subfamily	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Babusatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Babusatellite</i>	<i>Banana bunchy top alphasatellite 3</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Babusatellite</i>	<i>Banana bunchy top alphasatellite 1</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Babusatellite</i>	<i>Banana bunchy top alphasatellite 2</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Babusatellite</i>	<i>Cardamom bushy dwarf alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Fabenesatellite</i>		New genus	
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Fabenesatellite</i>	<i>Faba bean necrotic yellows alphasatellite 2</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Milvetsatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Milvetsatellite</i>	<i>Milk vetch dwarf alphasatellite 3</i>	Bew (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Clostunsatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Clostunsatellite</i>	<i>Milk vetch dwarf alphasatellite 2</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Clostunsatellite</i>	<i>Pea necrotic yellow dwarf alphasatellite 2</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Clostunsatellite</i>	<i>Sophora yellow stunt alphasatellite 5</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Clostunsatellite</i>	<i>Sophora yellow stunt alphasatellite 4</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Clostunsatellite</i>	<i>Subterranean clover stunt alphasatellite 2</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Mivedwarsatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Mivedwarsatellite</i>	<i>Milk vetch dwarf alphasatellite 1</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Mivedwarsatellite</i>	<i>Pea necrotic yellow dwarf alphasatellite 1</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Mivedwarsatellite</i>	<i>Sophora yellow stunt alphasatellite 2</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Mivedwarsatellite</i>	<i>Faba bean necrotic stunt alphasatellite</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Subclovsatellite</i>	<i>Faba bean necrotic yellows alphasatellite 1</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Subclovsatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Subclovsatellite</i>	<i>Sophora yellow stunt alphasatellite 1</i>	New species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Subclovsatellite</i>	<i>Subterranean clover stunt alphasatellite 1</i>	New (type) species	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Sophoyesatellite</i>		New genus	[63]
Unassigned	<i>Alphasatellitidae</i>	<i>Nanoalphasatellitinae</i>	<i>Sophoyesatellite</i>	<i>Sophora yellow stunt alphasatellite 3</i>	New (type) species	[66]
Unassigned	<i>Alphasatellitidae</i>		Unassigned	<i>Coconut foliar decay alphasatellite</i>	New species	[63]
<i>Picornavirales</i>	<i>Secoviridae</i>	<i>Comovirinae</i>	<i>Fabavirus</i>	<i>Grapevine fabavirus</i>	New species	[64]
<i>Picornavirales</i>	<i>Secoviridae</i>	<i>Comovirinae</i>	<i>Fabavirus</i>	<i>Prunus virus F</i>	New species	[64]
<i>Picornavirales</i>	<i>Secoviridae</i>	<i>Comovirinae</i>	<i>Nepovirus</i>	<i>Potato virus B</i>	New species	[64]
<i>Picornavirales</i>	<i>Secoviridae</i>	<i>Comovirinae</i>	<i>Nepovirus</i>	<i>Soybean latent spherical virus</i>	New species	[64]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
<i>Picornavirales</i>	<i>Secoviridae</i>		<i>unassigned</i>	<i>Dioscorea mosaic associated virus</i>	New species	[64]
Unassigned	<i>Potyviridae</i>		<i>Ipomovirus</i>	<i>Coccinia mottle virus</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Barbacena virus Y</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Callistephus mottle virus</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Daphne virus Y</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Impatiens flower break virus</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Pecan mosaic-associated virus</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Sunflower ring blotch virus</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Tobacco mosqueado virus</i>	New species	[65]
Unassigned	<i>Potyviridae</i>		<i>Potyvirus</i>	<i>Wild onion symptomless virus</i>	New species	[65]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Chickpea yellow dwarf virus</i>	New species	[66]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Dragonfly-associated mastrevirus</i>	New species	[66]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Sugarcane striate virus</i>	New species	[66]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Sweet potato symptomless virus I</i>	New species	[66]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Sugarcane chlorotic streak virus</i>	New species	[66]
Unassigned	<i>Geminiviridae</i>		<i>Turncurtovirus</i>	<i>Turnip leaf roll virus</i>	New species	[67]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Allamanda leaf mottle distortion virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Andrographis yellow vein leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Asystasia mosaic Madagascar virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Bean white chlorosis mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Cnidoscolus mosaic leaf deformation virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Coccinia mosaic Tamil Nadu virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Common bean mottle virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Common bean severe mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Cotton leaf curl Barasat virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Cotton yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Deinbollia mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Desmodium mottle virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Duranta leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Euphorbia mosaic Peru virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Euphorbia yellow leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Hollyhock yellow vein mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Jacquemontia yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Jatropha leaf curl Gujarat virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Jatropha leaf yellow mosaic virus</i>	New species	[71]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Lisianthus enation leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Lycianthes yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Macrotidium bright mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Macrotidium common mosaic virus</i>	New species	[68]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Malvastrum bright yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Malvastrum yellow vein Cambodia virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Melochia mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Melochia yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Mirabilis leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Okra leaf curl Oman virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Oxalis yellow vein virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Passionfruit leaf distortion virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Pavonia mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Pavonia yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Pea leaf distortion virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Pepper yellow leaf curl Thailand virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Ramie mosaic Yunnan virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Senna leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sida angular mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sida bright yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sida chlorotic mottle virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sida chlorotic vein virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sida golden yellow spot virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Solanum mosaic Bolivia virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sweet potato golden vein Korea virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Sweet potato leaf curl Guangxi virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Synedrella yellow vein clearing virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Telfairia golden mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato chlorotic mottle Guyane virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato enation leaf curl virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato golden leaf spot virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato latent virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato leaf curl Burkina Faso virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato mottle wrinkle virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato yellow leaf curl Shuangbai virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Tomato yellow leaf curl Yunnan virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Triumfetta yellow mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Velvet bean golden mosaic virus</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Whitefly-associated begomovirus 1</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Whitefly-associated begomovirus 2</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Whitefly-associated begomovirus 3</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Whitefly-associated begomovirus 4</i>	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Whitefly-associated begomovirus 6</i>	New species	[68]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	Whitefly-associated begomovirus 7	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	Vernonia crinkle virus	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	Vinca leaf curl virus	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	Wissadula yellow mosaic virus	New species	[68]
Unassigned	<i>Geminiviridae</i>		<i>Begomovirus</i>	<i>Pedilanthus leaf curl virus</i>	Rename species (previous name: <i>Pedilanthus leaf curl virus</i>)	[69]
Unassigned	<i>Tolecusatellitidae</i>		<i>Betasatellite</i>	<i>Tomato leaf curl Java betasatellite</i>	Rename species (previous name: <i>Tomato leaf curl Java virus betasatellite</i>)	[69]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Sporobolus striate mosaic virus 1</i>	Rename species (previous name: <i>Sporobolus striate mosaic virus 1</i>)	[69]
Unassigned	<i>Geminiviridae</i>		<i>Mastrevirus</i>	<i>Sporobolus striate mosaic virus 2</i>	Rename species (previous name: <i>Sporobolus striate mosaic virus 2</i>)	[69]
Unassigned	<i>Endornaviridae</i>		<i>Alphaendornavirus</i>	Winged bean alphaendornavirus 1	New species	[70]
Unassigned	<i>Endornaviridae</i>		<i>Betaendornavirus</i>	Botrytis cinerea betaendornavirus 1	New species	[70]
Unassigned	<i>Bromoviridae</i>		<i>Ilarvirus</i>	Ageratum latent virus	New species	[71]
Unassigned	<i>Bromoviridae</i>		<i>Ilarvirus</i>	Privet ringspot virus	New species	[71]
Unassigned	<i>Bromoviridae</i>		<i>Ilarvirus</i>	Tomato necrotic streak virus	New species	[71]
Unassigned	<i>Luteoviridae</i>		<i>Polerovirus</i>	Maize yellow mosaic virus	New species	[72]
Unassigned	<i>Luteoviridae</i>		<i>Polerovirus</i>	Pepo aphid-borne yellows virus	New species	[73]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	Cacao mild mosaic virus	New species	[74]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	Cacao yellow vein banding virus	New species	[74]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	Dioscorea bacilliform RT virus 1	New species	[74]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	Dioscorea bacilliform RT virus 2	New species	[74]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	Dioscorea bacilliform TR virus	New species	[74]
Unassigned	<i>Caulimoviridae</i>		<i>Badnavirus</i>	Wisteria badnavirus 1	New species	[74]
Unassigned	<i>Closteroviridae</i>		<i>Ampelovirus</i>	Grapevine leafroll-associated virus 13	New species	[75]
Tymovirales	<i>Tymoviridae</i>		<i>Marafivirus</i>	Grapevine asteroid mosaic associated virus	New species	[76]
Tymovirales	<i>Tymoviridae</i>		<i>Marafivirus</i>	Peach marafivirus D	New species	[76]
Tymovirales	<i>Deltaflexiviridae</i>				New family	[77]
Tymovirales	<i>Deltaflexiviridae</i>		<i>Deltaflexivirus</i>		New genus	[77]
Tymovirales	<i>Deltaflexiviridae</i>		<i>Deltaflexivirus</i>	<i>Sclerotinia deltaflexivirus 1</i>	New (type) species	[77]
Tymovirales	<i>Deltaflexiviridae</i>		<i>Deltaflexivirus</i>	<i>Soybean-associated deltaflexivirus 1</i>	New species	[77]
Tymovirales	<i>Deltaflexiviridae</i>		<i>Deltaflexivirus</i>	<i>Fusarium deltaflexivirus 1</i>	New species	[77]
Tymovirales	<i>Alphaflexiviridae</i>		<i>Potexvirus</i>	<i>Actinidia virus X</i>	New species	[78]
Tymovirales	<i>Alphaflexiviridae</i>		<i>Potexvirus</i>	<i>Pitaya virus X</i>	New species	[78]
Tymovirales	<i>Alphaflexiviridae</i>		<i>Potexvirus</i>	<i>Vanilla virus X</i>	New species	[78]
Tymovirales	<i>Alphaflexiviridae</i>		<i>Allexivirus</i>	<i>Blackberry virus E</i>	Move species (previous position: <i>Tymovirales/Alphaflexiviridae/unassigned</i>)	[78]
Tymovirales	<i>Alphaflexiviridae</i>		<i>Allexivirus</i>	<i>Arachis pintoii virus</i>	New species	[78]
Tymovirales	<i>Alphaflexiviridae</i>		<i>Allexivirus</i>	<i>Alfalfa virus S</i>	New species	[78]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
<i>Tymovirales</i>	<i>Alphaflexiviridae</i>		<i>Allexivirus</i>	<i>Vanilla latent virus</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Yam latent virus</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Sambucus virus C</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Sambucus virus D</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Sambucus virus E</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Atractylodes mottle virus</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Carlavirus</i>	<i>Ligustrum virus A</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Quinvirinae</i>	<i>Foveavirus</i>	<i>Asian prunus virus 2</i>	New species	[78]
<i>Tymovirales</i>	<i>Betaflexiviridae</i>	<i>Trivirinae</i>	<i>Vitivirus</i>	<i>Arracacha virus V</i>	New species	[78]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Aalivirus</i>		New genus	[79]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Aalivirus</i>	<i>Aalivirus A</i>	New (type) species	[79]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Bopivirus</i>		New genus	[80]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Bopivirus</i>	<i>Bopivirus A</i>	New (type) species	[80]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Crohivirus</i>		New genus	[81]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Crohivirus</i>	<i>Crohivirus A</i>	New species	[81]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Crohivirus</i>	<i>Crohivirus B</i>	New (type) species	[81]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Enterovirus</i>	<i>Enterovirus K</i>	New species	[82]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Enterovirus</i>	<i>Enterovirus L</i>	New species	[82]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Kunsagivirus</i>	<i>Kunsagivirus B</i>	New species	[83]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Kunsagivirus</i>	<i>Kunsagivirus C</i>	New species	[83]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Megrivirus</i>	<i>Megrivirus A</i>	Rename (type) species (previous name: <i>Melegrivirus A</i>)	[84]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Megrivirus</i>	<i>Megrivirus B</i>	New species	[84]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Megrivirus</i>	<i>Megrivirus C</i>	New species	[84]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Megrivirus</i>	<i>Megrivirus D</i>	New species	[84]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Megrivirus</i>	<i>Megrivirus E</i>	New species	[84]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Orivirus</i>		New genus	[85]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Orivirus</i>	<i>Orivirus A</i>	New (type) species	[85]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Shanbavirus</i>		New genus	[86]
<i>Picornavirales</i>	<i>Picornaviridae</i>		<i>Shanbavirus</i>	<i>Shanbavirus A</i>	New (type) species	[86]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus A</i>	Rename (type) species (previous name: <i>Bovine viral diarrhea virus 1</i>)	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus B</i>	Rename species (previous name: <i>Bovine viral diarrhea virus 2</i>)	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus C</i>	Rename species (previous name: <i>Classical swine fever virus</i>)	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus D</i>	Rename species (previous name: <i>Border disease virus</i>)	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus E</i>	New species	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus F</i>	New species	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus G</i>	New species	[87]

Table 2 (continued)

Order	Family	Subfamily (blank = unassigned)	Genus	Species	Taxonomic change	References
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus H</i>	New species	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus I</i>	New species	[87]
Unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus J</i>	New species	[87]
unassigned	<i>Flaviviridae</i>		<i>Pestivirus</i>	<i>Pestivirus K</i>	New species	[87]
<i>Picornavirales</i>	<i>Polycipiviridae</i>				New family	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>		New genus	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Solenopsis invicta virus 2</i>	nNew (type) species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Solenopsis invicta virus 4</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Lasius niger virus 1</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Shuangao insect virus 8</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Myrmica scabrinodis virus 1</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Lasius neglectus virus 1</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Monomorium pharaonis virus 1</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Lasius neglectus virus 2</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Linepithema humile virus 2</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Monomorium pharaonis virus 2</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Sopolycivirus</i>	<i>Formica exsecta virus 3</i>	New species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Hupolycivirus</i>		New genus	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Hupolycivirus</i>	<i>Hubei hupolycivirus</i>	New (type) species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Chipolycivirus</i>		New genus	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Chipolycivirus</i>	<i>Chironomus riparius virus 1</i>	New (type) species	[88]
<i>Picornavirales</i>	<i>Polycipiviridae</i>		<i>Chipolycivirus</i>	<i>Hubei chipolycivirus</i>	New species	[88]

Names of newly created taxa are in bold italic type

Names of existing taxa that have been moved or renamed are shown in plain italic type

of all approved taxa can be found on the ICTV website at <http://ictv.global/msl>.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflicts of interest.

Human rights This article does not contain any studies with human participants or animals performed by any of the authors. All authors have contributed to this work and agreed to its publication.

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



















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