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Abstract In 2018, the order *Mononegavirales* was expanded by inclusion of 1 new genus and 12 novel species. This article presents the updated taxonomy of the order *Mononegavirales* as now accepted by the International Committee on Taxonomy of Viruses (ICTV) and summarizes additional taxonomic proposals that may affect the order in the near future.

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2 Taxonomy of the order *Mononegavirales*: update 2018

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25 Abstract

26 In 2018, the order *Mononegavirales* was expanded by inclusion of 1 new genus and 12 novel species. This article presents the
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28 Introduction

29 The virus order *Mononegavirales* was established in 1991
 A:Q4 to accommodate related viruses with nonsegmented, linear,
 31 single-stranded, negative-sense RNA genomes distributed
 32 among three families [19, 20]. Today, the order includes 8
 A:Q5 families [1, 2, 11, 21]. Amended/emended order descriptions
 34 were published in 1995 [5], 1997 [22], 2000 [23], 2005 [24],
 A:Q6 2011 [6], 2016 [2], and 2017 [3]. In 2017, the Study Groups of
 36 the International Committee on Taxonomy of Viruses (ICTV)
 37 responsible for the taxonomy of the order and its 8 families
 A:Q7 assigned unclassified mononegaviruses to existing or novel
 39 taxa and continued efforts to streamline the order nomenclature
 40 in collaboration with other virus experts. Here we present the
 A:Q8 changes that have been proposed via official ICTV taxonomic
 42 proposals (TaxoProps) at <http://www.ictvonline.org/> in 2017
 A:Q9 and accepted by the ICTV Executive Committee (EC). These
 44 changes are part of the official ICTV taxonomy as of 2018.

A:Q10 Taxonomic changes at the order rank

46 In 2018, no changes were made at the order rank.

47 Taxonomic changes at the family rank

48 Bornaviridae

A:Q11 The family *Bornaviridae* was expanded in 2018 by creation
 50 of a second genus (*Carbovirus*), including two novel species
 51 for the newly discovered jungle carpet python virus (JCPV)
 52 and southwest carpet python virus (SWCPV) found in car-
 A:Q12 pet pythons (Pythonidae: *Morelia spilota*), respectively [10].

54 The previously established genus *Bornavirus* was renamed
 55 *Orthobornavirus* to remove the ambiguity of the terms
 56 “bornavirus”/“bornaviral” that resulted due to the creation
 57 of the second genus (in absence of the genus name change,
 58 “bornavirus”/“bornaviral” could refer either to all members
 59 of the family *Bornaviridae* or only to those of the genus *Bor-*
 60 *navirus*). All binomial species names of the genus *Bornavi-*
 61 *rus* were adjusted by replacing the genus epithet “bornavi-
 62 *rus*” with “*orthobornavirus*” (TaxoProps 2017.005M.A.v1.
 63 *Carbovirus* and 2017.004M.A.v1.*Bornaviridae_ren*).

64 Filoviridae

65 The species name *Tai Forest ebolavirus* was changed to *Tai*
 66 *Forest ebolavirus* by removal of the diaeresis (TaxoProp
 67 2017.001G.A.v2.43sren).

Mymonaviridae

In 2018, no changes were made at the family rank.

Nyamiviridae

In 2018, no changes were made at the family rank.

Paramyxoviridae

The genus *Avulavirus* was expanded in 2018 by the addition
 of six species (TaxoProp 2017.010M.A.v2.*Avulavirus_6sp*).
 The species *Avian avulavirus 14–16* were established for
 avian paramyxoviruses 14–16 (APMV-14–16) that were
 recently discovered in an unspecified duck in Japan, a white-
 rumped sandpiper (Scolopacidae: *Calidris fuscicollis*) in
 Brazil, and unspecified birds in South Korea, respectively
 [12, 27, 28]. The species *Avian avulavirus 17–19* were estab-
 lished for Antarctic penguin viruses A–C (APVA–APVC)
 that were recently discovered in Antarctic long-tailed gentoo
 penguins (Spheniscidae: *Pygoscelis papua*) [18].

Pneumoviridae

In 2018, no changes were made at the family rank.

Rhabdoviridae

The genus *Ledantavirus* was expanded in 2018 by one spe-
 cies, *Kanywara ledantavirus*, for Kanywara virus (KYAV)
 recently discovered in an unclassified nycteribiid batfly in
 Uganda [8] (TaxoProp 2017.009M.A.v1.*Ledantavirus_sp*).

The genus *Lyssavirus* was expanded by the addition of
 two novel species, *Gannoruwa bat lyssavirus* and *Lleida*
bat lyssavirus, for Gannoruwa bat lyssavirus (GBLV)
 and Lleida bat virus (LLEBV), recently discovered in
 Indian flying foxes (*Pteropus medius*) in Sri Lanka and
 in a Schreibers’s long-fingered bat (*Miniopterus schreib-*
ersii) in Spain in 2011, respectively [4, 9, 15] (TaxoProps
 2017.013M.A.v1.*Lyssavirus_sp* and 2017.014M.A.v1.
Lyssavirus_sp).

Finally, the genus *Tibrovirus* was expanded by one
 species, *Beatrice Hill tibrovirus*, for Beatrice Hill virus
 (BHV) discovered in 1984 in Australian biting midges
 (Ceratopogonidae: *Culicoides peregrinus*) [26, 29] (Taxo-
 Prop 2017.019M.U.v1.*Tibrovirus_sp*).

Sunviridae

In 2018, no changes were made at the family rank.

Table 1 ICTV-accepted taxonomy of the order *Mononegavirales* as of 2018. Listed are all mononegaviruses that have been classified into species

Genus	Species [¶]	Virus (Abbreviation) [¶]
Family Bornaviridae		
<i>Carbovirus</i>	<i>Queensland carbovirus</i> *	jungle carpet python virus (JCPV)
	<i>Southwest carbovirus</i>	southwest carpet python virus (SWCPV)
<i>Orthobornavirus</i>	<i>Elapid 1 orthobornavirus</i>	Loveridge's garter snake virus 1 (LGSV-1)
	<i>Mammalian 1 orthobornavirus</i> *	Borna disease virus 1 (BoDV-1)
		Borna disease virus 2 (BoDV-2)
	<i>Mammalian 2 orthobornavirus</i>	variegated squirrel bornavirus 1 (VSBV-1)
	<i>Passeriform 1 orthobornavirus</i>	canary bornavirus 1 (CnBV-1)
		canary bornavirus 2 (CnBV-2)
		canary bornavirus 3 (CnBV-3)
	<i>Passeriform 2 orthobornavirus</i>	estrildid finch bornavirus 1 (ESBV-1)
	<i>Psittaciform 1 orthobornavirus</i>	parrot bornavirus 1 (PaBV-1)
		parrot bornavirus 2 (PaBV-2)
		parrot bornavirus 3 (PaBV-3)
		parrot bornavirus 4 (PaBV-4)
	parrot bornavirus 7 (PaBV-7)	
	parrot bornavirus 5 (PaBV-5)	
	psittaciform 2 orthobornavirus	parrot bornavirus 5 (PaBV-5)
	<i>Waterbird 1 orthobornavirus</i>	aquatic bird bornavirus 1 (ABBV-1)
		aquatic bird bornavirus 2 (ABBV-2)
Family Filoviridae		
<i>Cuevavirus</i>	<i>Lloviu cuevavirus</i> *	Lloviu virus (LLOV)
<i>Ebolavirus</i>	<i>Bundibugyo ebolavirus</i>	Bundibugyo virus (BDBV)
	<i>Reston ebolavirus</i>	Reston virus (RESTV)
	<i>Sudan ebolavirus</i>	Sudan virus (SUDV)
	<i>Tai Forest ebolavirus</i>	Tai Forest virus (TAFV)
	<i>Zaire ebolavirus</i> *	Ebola virus (EBOV)
<i>Marburgvirus</i>	<i>Marburg marburgvirus</i> *	Marburg virus (MARV)
		Ravn virus (RAVV)
Family Mymonaviridae		
<i>Sclerotimonavirus</i>	<i>Sclerotinia sclerotimonavirus</i> *	Sclerotinia sclerotiorum negative-stranded RNA virus 1 (SsNSRV-1)
Family Nyamiviridae		
<i>Nyavirus</i>	<i>Midway nyavirus</i>	Midway virus (MIDWV)
	<i>Nyamanini nyavirus</i> *	Nyamanini virus (NYMV)
	<i>Sierra Nevada nyavirus</i>	Sierra Nevada virus (SNVV)
<i>Peropuvirus</i>	<i>Pteromalus puparum peropuvirus</i> *	Pteromalus puparum negative-strand RNA virus 1 (PpNSRV-1)
<i>Socycivirus</i>	<i>Soybean cyst nematode socycivirus</i> *	soybean cyst nematode virus 1 (SbCNV-1)
Family Paramyxoviridae		
<i>Aquaparamyxovirus</i>	<i>Salmon aquaparamyxovirus</i> *	Atlantic salmon paramyxovirus (AsaPV)
<i>Avulavirus</i>	<i>Avian avulavirus 1</i> *	avian paramyxovirus 1 (APMV-1) ¹
	<i>Avian avulavirus 2</i>	avian paramyxovirus 2 (APMV-2)
	<i>Avian avulavirus 3</i>	avian paramyxovirus 3 (APMV-3)
	<i>Avian avulavirus 4</i>	avian paramyxovirus 4 (APMV-4)
	<i>Avian avulavirus 5</i>	avian paramyxovirus 5 (APMV-5)
	<i>Avian avulavirus 6</i>	avian paramyxovirus 6 (APMV-6)
	<i>Avian avulavirus 7</i>	avian paramyxovirus 7 (APMV-7)

Author Proof

Table 1 (continued)

Genus	Species [¶]	Virus (Abbreviation) [¶]
	<i>Avian avulavirus 8</i>	avian paramyxovirus 8 (APMV-8)
	<i>Avian avulavirus 9</i>	avian paramyxovirus 9 (APMV-9)
	<i>Avian avulavirus 10</i>	avian paramyxovirus 10 (APMV-10)
	<i>Avian avulavirus 11</i>	avian paramyxovirus 11 (APMV-11)
	<i>Avian avulavirus 12</i>	avian paramyxovirus 12 (APMV-12)
	<i>Avian avulavirus 13</i>	avian paramyxovirus 13 (APMV-13)
	<i>Avian avulavirus 14</i>	avian paramyxovirus 14 (APMV-14)
	<i>Avian avulavirus 15</i>	avian paramyxovirus 15 (APMV-15)
	<i>Avian avulavirus 16</i>	avian paramyxovirus 16 (APMV-16)
	<i>Avian avulavirus 17</i>	Antarctic penguin virus A (APV-A)
	<i>Avian avulavirus 18</i>	Antarctic penguin virus B (APV-B)
	<i>Avian avulavirus 19</i>	Antarctic penguin virus C (APV-C)
<i>Ferlavirus</i>	<i>Reptilian ferlavirus*</i>	Fer-de-Lance virus (FDLV)
<i>Henipavirus</i>	<i>Cedar henipavirus</i>	Cedar virus (CedV)
	<i>Ghanaian bat henipavirus</i>	Kumasi virus (KV) ²
	<i>Hendra henipavirus*</i>	Hendra virus (HeV)
	<i>Mojiang henipavirus</i>	Mòjiāng virus (MojV)
	<i>Nipah henipavirus</i>	Nipah virus (NiV)
<i>Morbillivirus</i>	<i>Canine morbillivirus</i>	canine distemper virus (CDV)
	<i>Cetacean morbillivirus</i>	cetacean morbillivirus (CeMV)
	<i>Feline morbillivirus</i>	feline morbillivirus (FeMV)
	<i>Measles morbillivirus*</i>	measles virus (MeV)
	<i>Small ruminant morbillivirus</i>	peste-des-petits-ruminants virus (PPRV)
	<i>Phocine morbillivirus</i>	phocine distemper virus (PDV)
	<i>Rinderpest morbillivirus</i>	rinderpest virus (RPV)
<i>Respirovirus</i>	<i>Bovine respirovirus 3</i>	bovine parainfluenza virus 3 (BPIV-3)
	<i>Human respirovirus 1</i>	human parainfluenza virus 1 (HPIV-1)
	<i>Human respirovirus 3</i>	human parainfluenza virus 3 (HPIV-3)
	<i>Porcine respirovirus 1</i>	porcine parainfluenza virus 1 (PPIV-1)
	<i>Murine respirovirus*</i>	Sendai virus (SeV) ³
<i>Rubulavirus</i>	<i>Achimota rubulavirus 1</i>	Achimota virus 1 (AchPV-1)
	<i>Achimota rubulavirus 2</i>	Achimota virus 2 (AchPV-2)
	<i>Bat mumps rubulavirus</i>	bat mumps virus (BMV) ⁴
	<i>Canine rubulavirus</i>	parainfluenza virus 5 (PIV-5) ⁵
	<i>Human rubulavirus 2</i>	human parainfluenza virus 2 (HPIV-2)
	<i>Human rubulavirus 4</i>	human parainfluenza virus 4a (HPIV-4a)
		human parainfluenza virus 4b (HPIV-4b)
	<i>Mapuera rubulavirus</i>	Mapuera virus (MapV)
	<i>Menangle rubulavirus</i>	Menangle virus (MenPV)
	<i>Mumps rubulavirus*</i>	mumps virus (MuV)
	<i>Porcine rubulavirus</i>	La Piedad Michoacán Mexico virus (LPMV) ⁶
	<i>Simian rubulavirus</i>	simian virus 41 (SV-41)
	<i>Sosuga rubulavirus</i>	Sosuga virus
	<i>Teviot rubulavirus</i>	Teviot virus (TevPV)
	<i>Tioman rubulavirus</i>	Tioman virus (TioPV)
	<i>Tuhoko rubulavirus 1</i>	Tuhoko virus 1 (ThkPV-1)
	<i>Tuhoko rubulavirus 2</i>	Tuhoko virus 2 (ThkPV-2)
	<i>Tuhoko rubulavirus 3</i>	Tuhoko virus 3 (ThkPV-3)

Table 1 (continued)

Genus	Species [¶]	Virus (Abbreviation) [¶]
Family <i>Pneumoviridae</i>		
<i>Metapneumovirus</i>	<i>Avian metapneumovirus</i> *	avian metapneumovirus (AMPV) ⁷
	<i>Human metapneumovirus</i>	human metapneumovirus (HMPV)
<i>Orthopneumovirus</i>	<i>Bovine orthopneumovirus</i>	bovine respiratory syncytial virus (BRSV)
	<i>Human orthopneumovirus</i> *	human respiratory syncytial virus A2 (HRSV-A2)
	<i>Murine orthopneumovirus</i>	human respiratory syncytial virus B1 (HRSV-B1)
Family <i>Rhabdoviridae</i>		
<i>Almendravirus</i>	<i>Arboretum almendravirus</i>	Arboretum virus (ABTV)
	<i>Balsa almendravirus</i>	Balsa virus (BALV)
	<i>Coot Bay almendravirus</i>	Coot Bay virus (CBV)
	<i>Puerto Almendras almendravirus</i> *	Puerto Almendras virus (PTAMV)
	<i>Rio Chico almendravirus</i>	Rio Chico virus (RCHV)
<i>Curiovirus</i>	<i>Curionopolis curiovirus</i> *	Curionopolis virus (CURV)
	<i>Iriiri curiovirus</i>	Iriiri virus (IRIRV)
	<i>Itacaiunas curiovirus</i>	Itacaiunas virus (ITAV)
	<i>Rochambeau curiovirus</i>	Rochambeau virus (RBUV)
<i>Cytorhabdovirus</i>	<i>Alfalfa dwarf cytorhabdovirus</i>	alfalfa dwarf virus (ADV)
	<i>Barley yellow striate mosaic cytorhabdovirus</i>	barley yellow striate mosaic virus (BYSMV)
	<i>Broccoli necrotic yellows cytorhabdovirus</i>	broccoli necrotic yellows virus (BNYV)
	<i>Colocasia bobone disease-associated cytorhabdovirus</i>	Colocasia bobone disease-associated virus (CBDaV)
	<i>Festuca leaf streak cytorhabdovirus</i>	festuca leaf streak virus (FLSV)
	<i>Lettuce necrotic yellows cytorhabdovirus</i> *	lettuce necrotic yellows virus (LNYV)
	<i>Lettuce yellow mottle cytorhabdovirus</i>	lettuce yellow mottle virus (LYMoV)
	<i>Northern cereal mosaic cytorhabdovirus</i>	northern cereal mosaic virus (NCMV)
	<i>Sonchus cytorhabdovirus 1</i>	sonchus virus (SonV)
	<i>Strawberry crinkle cytorhabdovirus</i>	strawberry crinkle virus (SCV)
	<i>Wheat American striate mosaic cytorhabdovirus</i>	wheat American striate mosaic virus (WASMV)
<i>Dichorhavirus</i>	<i>Coffee ringspot dichorhavirus</i>	coffee ringspot virus (CoRSV)
	<i>Orchid fleck dichorhavirus</i> *	orchid fleck virus (OFV) ⁸
<i>Ephemerovirus</i>	<i>Adelaide River ephemerovirus</i>	Adelaide River virus (ARV)
	<i>Berrimah ephemerovirus</i>	Berrimah virus (BRMV)
	<i>Bovine fever ephemerovirus</i> *	bovine ephemeral fever virus (BEFV)
	<i>Kimberley ephemerovirus</i>	Kimberley virus (KIMV)
	<i>Koolpinyah ephemerovirus</i>	Malakal virus (MALV)
	<i>Kotonkan ephemerovirus</i>	Koolpinyah virus (KOOLV)
	<i>Obodhiang ephemerovirus</i>	kotonkan virus (KOTV)
	<i>Yata ephemerovirus</i>	Obodhiang virus (OBOV)
<i>Hapavirus</i>	<i>Flanders hapavirus</i>	Yata virus (YATV)
	<i>Hart Park hapavirus</i>	Flanders virus (FLAV)
	<i>Gray Lodge hapavirus</i>	Hart Park virus (HPV)
	<i>Joinjakaka hapavirus</i>	Gray Lodge virus (GLOV)
	<i>La Joya hapavirus</i>	Joinjakaka virus (JOIV)
	<i>Kamese hapavirus</i>	La Joya virus (LJV)
	<i>Landjia hapavirus</i>	Kamese virus (KAMV)
	<i>Manitoba hapavirus</i>	Landjia virus (LANV = LJAV)
	<i>Marco hapavirus</i>	Manitoba virus (MANV = MNTBV)
	<i>Mosqueiro hapavirus</i>	Marco virus (MCOV)
		Mosqueiro virus (MQOV)

Table 1 (continued)

Genus	Species [¶]	Virus (Abbreviation) [¶]
<i>Ledantevirus</i>	<i>Mossuril hapavirus</i>	Mossuril virus (MOSV)
	<i>Ngaingan hapavirus</i>	Ngaingan virus (NGAV)
	<i>Ord River hapavirus</i>	Ord River virus (ORV)
	<i>Parry Creek hapavirus</i>	Parry Creek virus (PCV)
	<i>Wongabel hapavirus*</i>	Wongabel virus (WONV)
	<i>Barur ledantevirus</i>	Barur virus (BARV)
	<i>Fikirini ledantevirus</i>	Fikirini virus (FKRV)
	<i>Fukuoka ledantevirus</i>	Fukuoka virus (FUKV)
	<i>Kanyawara ledantevirus</i>	Kanyawara virus (KYAV)
	<i>Kern Canyon ledantevirus</i>	Kern Canyon virus (KCV)
	<i>Keuraliba ledantevirus</i>	Keuraliba virus (KEUV)
	<i>Kolente ledantevirus</i>	Kolente virus (KOLEV)
	<i>Kumasi ledantevirus</i>	Kumasi rhabdovirus (KRV)
	<i>Le Dantec ledantevirus*</i>	Le Dantec virus (LDV)
	<i>Mount Elgon bat ledantevirus</i>	Mount Elgon bat virus (MEBV)
	<i>Nkolbisson ledantevirus</i>	Nkolbisson virus (NKOV)
	<i>Nishimuro ledantevirus</i>	Nishimuro virus (NISV) ⁹
	<i>Oita ledantevirus</i>	Oita virus (OITAV)
	<i>Wuhan ledantevirus</i>	Wūhàn louse fly virus 5 (WLFV-5)
	<i>Yongjia ledantevirus</i>	Yǒngjiā tick virus 2 (YTV-2)
<i>Lyssavirus</i>	<i>Aravan lyssavirus</i>	Aravan virus (ARAV)
	<i>Australian bat lyssavirus</i>	Australian bat lyssavirus (ABLV)
	<i>Bokeloh bat lyssavirus</i>	Bokeloh bat lyssavirus (BBLV)
	<i>Duvenhage lyssavirus</i>	Duvenhage virus (DUVV)
	<i>European bat 1 lyssavirus</i>	European bat lyssavirus 1 (EBLV-1)
	<i>European bat 2 lyssavirus</i>	European bat lyssavirus 2 (EBLV-2)
	<i>Gannoruwa bat lyssavirus</i>	Gannoruwa bat lyssavirus (GBLV)
	<i>Ikoma lyssavirus</i>	Ikoma lyssavirus (IKOV)
	<i>Irkut lyssavirus</i>	Irkut virus (IRKV)
	<i>Khujand lyssavirus</i>	Khujand virus (KHUV)
	<i>Lagos bat lyssavirus</i>	Lagos bat virus (LBV)
	<i>Lleida bat lyssavirus</i>	Lleida bat virus (LLEBV)
	<i>Mokola lyssavirus</i>	Mokola virus (MOKV)
	<i>Rabies lyssavirus*</i>	rabies virus (RABV)
	<i>Shimoni bat lyssavirus</i>	Shimoni bat virus (SHIBV)
	<i>West Caucasian bat lyssavirus</i>	West Caucasian bat virus (WCBV)
	<i>Novirhabdovirus</i>	<i>Hirame novirhabdovirus</i>
<i>Piscine novirhabdovirus</i>		viral hemorrhagic septicemia virus (VHSV) ¹⁰
<i>Salmonid novirhabdovirus*</i>		infectious hematopoietic necrosis virus (IHNV)
<i>Snakehead novirhabdovirus</i>		snakehead rhabdovirus (SHRV)
<i>Nucleorhabdovirus</i>	<i>Datura yellow vein nucleorhabdovirus</i>	datura yellow vein virus (DYVV)
	<i>Eggplant mottled dwarf nucleorhabdovirus</i>	eggplant mottled dwarf virus (EMDV)
	<i>Maize fine streak nucleorhabdovirus</i>	maize fine streak virus (MSFV)
	<i>Maize Iranian mosaic nucleorhabdovirus</i>	maize Iranian mosaic virus (MIMV)
	<i>Maize mosaic nucleorhabdovirus</i>	maize mosaic virus (MMV)
	<i>Potato yellow dwarf nucleorhabdovirus*</i>	potato yellow dwarf virus (PYDV)
	<i>Rice yellow stunt nucleorhabdovirus</i>	rice yellow stunt virus (RYSV)
	rice transitory yellowing virus (RTYV)	
	<i>Sonchus yellow net nucleorhabdovirus</i>	sonchus yellow net virus (SYNV)

Table 1 (continued)

Genus	Species [¶]	Virus (Abbreviation) [¶]
<i>Perhabdovirus</i>	<i>Sowthistle yellow vein nucleorhabdovirus</i>	sowthistle yellow vein virus (SYVV)
	<i>Taro vein chlorosis nucleorhabdovirus</i>	taro vein chlorosis virus (TaVVCV)
	<i>Anguillid perhabdovirus</i>	eel virus European X (EVEX)
	<i>Perch perhabdovirus</i> *	perch rhabdovirus (PRV)
<i>Sigmavirus</i>	<i>Sea trout perhabdovirus</i>	lake trout rhabdovirus (LTRV)
	<i>Drosophila affinis sigmavirus</i>	<i>Drosophila affinis</i> sigmavirus (DAffSV)
	<i>Drosophila ananassae sigmavirus</i>	<i>Drosophila ananassae</i> sigmavirus (DAAnaSV)
	<i>Drosophila immigrans sigmavirus</i>	<i>Drosophila immigrans</i> sigmavirus (DImmSV)
	<i>Drosophila melanogaster sigmavirus</i> *	<i>Drosophila melanogaster</i> sigmavirus (DMelSV)
	<i>Drosophila obscura sigmavirus</i>	<i>Drosophila obscura</i> sigmavirus (DObsSV)
	<i>Drosophila tristis sigmavirus</i>	<i>Drosophila tristis</i> sigmavirus (DTriSV)
<i>Sprivirus</i>	<i>Muscina stabulans sigmavirus</i>	<i>Muscina stabulans</i> sigmavirus (MStaSV)
	<i>Carp sprivirus</i> *	spring viremia of carp virus (SVCV)
	<i>Pike fry sprivirus</i>	grass carp rhabdovirus (GrCRV)
<i>Sripuvirus</i>		pike fry rhabdovirus (PFRV)
		tench rhabdovirus (TenRV)
	<i>Almpiwar sripuvirus</i>	Almpiwar virus (ALMV)
	<i>Chaco sripuvirus</i>	Chaco virus (CHOV)
	<i>Niakha sripuvirus</i> *	Niakha virus (NIAV)
<i>Tibrovirus</i>	<i>Sena Madureira sripuvirus</i>	Sena Madureira virus (SMV)
	<i>Sripur sripuvirus</i>	Sripur virus (SRIV)
	<i>Bas Congo tibrovirus</i>	Bas-Congo virus (BASV)
	<i>Beatrice Hill tibrovirus</i>	Beatrice Hill virus (BHV)
	<i>Coastal Plains tibrovirus</i>	Coastal Plains virus (CPV)
	<i>Ekpoma 1 tibrovirus</i>	Ekpoma virus 1 (EKV-1)
	<i>Ekpoma 2 tibrovirus</i>	Ekpoma virus 2 (EKV-2)
	<i>Sweetwater Branch tibrovirus</i>	Sweetwater Branch virus (SWBV)
<i>Tupavirus</i>	<i>Tibrogargan tibrovirus</i> *	Bivens Arm virus (BAV)
		Tibrogargan virus (TIBV)
	<i>Durham tupavirus</i> *	Durham virus (DURV)
	<i>Klamath tupavirus</i>	Klamath virus (KLAV)
<i>Varicosavirus</i>	<i>Tupaia tupavirus</i>	tupaia virus (TUPV)
	<i>Lettuce big-vein associated varicosavirus</i> *	lettuce big-vein associated virus (LBVaV) ¹¹
<i>Vesiculovirus</i>	<i>Alagoas vesiculovirus</i>	vesicular stomatitis Alagoas virus (VSAV)
	<i>American bat vesiculovirus</i>	American bat vesiculovirus (ABVV)
	<i>Carajas vesiculovirus</i>	Carajás virus (CJSV)
	<i>Chandipura vesiculovirus</i>	Chandipura virus (CHPV)
	<i>Cocal vesiculovirus</i>	Cocal virus (COCV)
	<i>Indiana vesiculovirus</i> *	vesicular stomatitis Indiana virus (VSIV)
	<i>Isfahan vesiculovirus</i>	Isfahan virus (ISFV)
	<i>Jurona vesiculovirus</i>	Jurona virus (JURV)
	<i>Malpais Spring vesiculovirus</i>	Malpais Spring virus (MSPV)
	<i>Maraba vesiculovirus</i>	Maraba virus (MARAV)
	<i>Morreton vesiculovirus</i>	Morreton virus (MORV)
	<i>New Jersey vesiculovirus</i>	vesicular stomatitis New Jersey virus (VSNJV)
	<i>Perinet vesiculovirus</i>	Perinet virus (PERV)
	<i>Piry vesiculovirus</i>	Piry virus (PIRYV)
	<i>Radi vesiculovirus</i>	Radi virus (RADV)
	<i>Yug Bogdanovac vesiculovirus</i>	Yug Bogdanovac virus (YBV)

Table 1 (continued)

Genus	Species [¶]	Virus (Abbreviation) [¶]
Unassigned	<i>Moussa virus</i>	Moussa virus (MOUV)
Family <i>Sunviridae</i>		
<i>Sunshinevirus</i>	<i>Reptile sunshinevirus 1</i> *	Sunshine Coast virus (SunCV)
Unassigned		
<i>Anphevirus</i>	<i>Xincheng anphevirus</i> *	Xīnchéng mosquito virus (XcMV)
<i>Arlivirus</i>	<i>Lishi arlivirus</i> *	Líshí spider virus 2 (LsSV-2)
<i>Chengtivirus</i>	<i>Tacheng chengtivirus</i> *	Tǎchéng tick virus 6 (TcTV-6)
<i>Crustavirus</i>	<i>Wenzhou crustavirus</i> *	Wēnzhōu crab virus 1 (WzCV-1)
<i>Wastrivirus</i>	<i>Sanxia wastrivirus</i> *	Sānxiá water strider virus 4 (SxWSV-4)

*Asterisks denote type species. [¶]Please note that viruses are real objects that are assigned to concepts that are called taxa. Species, genera, families, and orders are taxa. Taxon names are always italicized and always begin with a capital letter. Virus names, on the other hand, are not italicized and are not capitalized, except if the name or a name component is a proper noun. This column lists the virus names with their correct (lack of) capitalization

¹Includes: Newcastle disease virus (NDV) and pigeon paramyxovirus 1 (PPMV-1); ²synonym: GH-M74a virus; ³synonym: murine parainfluenza virus 1; ⁴synonym: bat paramyxovirus; ⁵synonym: simian virus 5; ⁶synonym: porcine rubulavirus; ⁷synonyms: avian pneumovirus, turkey rhinotracheitis virus; ⁸synonyms: citrus leprosis virus nuclear type, citrus necrotic spot virus; ⁹synonym: wild boar rhabdovirus 1 (WBRV1); ¹⁰synonyms: Egtved virus, Paralichthys olivaceus rhabdovirus; ¹¹synonym: tobacco stunt virus

107	Outlook		
108	The taxonomy of viruses of the order <i>Mononegavirales</i>	that include a total of five species for novel invertebrate	134
109	remains in flux and additional important changes are likely	viruses [13, 25];	135
110	forthcoming. Indeed, in 2017, two additional taxonomic	• establishment of a new family that absorbs the previ-	136
111	proposals that would affect the order <i>Mononegavirales</i>	ously free-floating genus <i>Anphevirus</i> and expansion of	137
112	were debated during the most recent ICTV EC meeting	this genus by six species for novel invertebrate viruses	138
113	in Singapore. TaxoProp 2017.006M.U.v2.Negarnaviricota	[7, 13, 14, 25]; and	139
114	proposes	• dissolution of the previously free-floating genera <i>Chen-</i>	140
115	• establishment of a phylum for negative-sense RNA	<i>givirus</i> and <i>Wastrivirus</i> and transfer of their species into	141
116	viruses that is subdivided into two subphyla;	the genus <i>Arlivirus</i> , expansion of <i>Arlivirus</i> by three new	142
117	• establishment of a sister order to the order <i>Monon-</i>	species for novel invertebrate viruses [13, 25], and trans-	143
118	<i>egavirales</i> to accommodate the recently discovered	fer of this genus into a new family.	144
119	“chūviruses” [13, 25]; and		
120	• combination of both sister orders in a class assigned to	These two proposals failed to find unanimous approval	145
121	one of the subphyla.	at a final ICTV EC vote in fall of 2017 and were deferred to	146
122	TaxoProp 2017.016M.U.v3.Mononegavirales_rev	the 2018 ICTV EC meeting, at which a simple majority vote	147
123	proposes	would suffice for approval of the original proposals.	148
124	• expansion of the family <i>Mymonaviridae</i> by 6 species	Summary	149
125	for novel soybean leaf-associated viruses and an inver-	A summary of the current, ICTV-accepted taxonomy of the	150
126	tebrate virus [16, 17, 25];	order <i>Mononegavirales</i> is presented in Table 1.	151
127	• transfer of the nyamiviral genus <i>Peropuvirus</i> into a new	Acknowledgements We thank Laura Bollinger (NIH/NIAID Integrated	152
128	family and expansion of the genus by 6 species for novel	Research Facility at Fort Detrick, Frederick, MD, USA) for critically	153
129	invertebrate viruses [13, 25];	editing the manuscript.	154
130	• transfer of the free-floating genus <i>Crustavirus</i> into the	Funding This work was supported in part through Battelle Memorial	155
131	family <i>Nyamiviridae</i> ; the expansion of <i>Crustavirus</i>	Institute’s prime contract with the US National Institute of Allergy and	156
132	by two species for novel invertebrate viruses; and the	Infectious Diseases (NIAID) under Contract no. HHSN272200700016I	157
133	expansion of <i>Nyamiviridae</i> by an additional three genera	(Y.C., J.H.K.). This work was also funded in part under Contract	158
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		agement and operation of the National Biodefense Analysis and	160

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169 Compliance with ethical standards

170 The views and conclusions contained in this document are those of the
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