Martellivirales Alsuviricetes, Kitrinoviricota YP\_003002352.1 Lettuce chlorosis virus
YP\_001816770.1 Bean yellow disorder virus
NP\_851780.1 Cucurbit yellow stunting disorder virus
YP\_009507961.1 Tetterwort vein chlorosis virus
YP\_293695.1 Tomato chlorosis virus
NP\_689396.1 Sweet potato chlorotic stunt virus
YP\_025082.2 Strawberry pallidosis-associated virus
YP\_09507950.1 Diodia vein chlorosis virus
NP\_940785.1 Beet pseudoyellows virus
YP\_927356.1 Blackberry yellow vein-associated virus
YP\_003204952.1 Tomato infectious chlorosis virus
YP\_03204952.1 Tomato infectious chlorosis virus
NP\_733943.1 Lettuce infectious yellows virus
AFJ05046.1 Cordyline virus 2
AFJ05065.2 Cordyline virus 1
AFJ05065.2 Cordyline virus 4
AFJ05065.1 Areca palm velarivirus 1
AKI2805.1 Areca palm velarivirus 1
AXNO106.1 Little cherry virus 1 Closteroviridae — AKIZ6005.1 Areca paim velarivirus 1

- AXIX7016.1 Little Cherry virus 1

- YP\_009552003.1 Rehmannia virus 1

- YP\_009162622.1 Tobacco virus 1

- YP\_09162622.1 Tobacco virus 1

- YP\_009506332.1 Carnation necrotic fleck virus

- YP\_003075965.1 Carrot yellow leaf virus

- YP\_003075965.1 Rose leaf rosette—associated virus

- YP\_001851 Respective familiary virus YP\_009589291 Nose leaf rosette—associated virus
YP\_874185.1 Raspberry leaf mottle virus
YP\_762622.1 Strawberry chlorotic fleck—associated virus
NP\_733947 Citrus tristeza virus
YP\_009664804.1 Beet yellow stunt virus
NP\_733949.1 Beet yellows virus
OZI85207 Hainan closterovirus 2 QZI85207 Hainan closterovirus 2
AL018184.1 Grapevine leafroll-associated virus 2
YP\_009551994.1 Arracacha virus 1
YP\_009553660.1 Blackcurrant leafroll-associated virus 1
YP\_006628167.1 Blueberry virus A
YP\_00966027.1 Olive leaf yellowing-associated virus
YP\_009407919.1 Actinidia virus 1
YP\_009112883.1 Persimmon virus B
AL068570.1 Grapevine leafroll-associated virus 4
ACS44663.1 Grapevine leafroll-associated virus 6
CAU89002.1 Grapevine leafroll-associated virus 10
ABD62348.1 Pineapple mealybug wilt-associated virus 3
AAL66709.1 Pineapple mealybug wilt-associated virus 1
AZB50207.1 Air potato virus 1
ABW81235.1 Plum bark necrosis stem pitting-associated virus KCAP3 k141\_149814 Ripokrek virus ABW81235.1 Plum bark necrosis stem pitting-associate
KCAP3 k141 149814 Ripokrek virus

AXY96743.1 Grapevine leafroll-associated virus 3

AGS48178.1 Blackberry vein banding-associated virus 2

ABU68561.1 Grapevine leafroll-associated virus 13

ODJ94283.1 Grapevine leafroll-associated virus 13

ODJ94283.1 Grapevine leafroll-associated virus 13

AAK19544.1 Little cherry virus 2

AVN99305.1 Pitstachio ampelovirus A

- YP\_009506336.1 Mint vein banding-associated virus

- YP\_001285483.1 Citrus variegation virus

- NP\_619575.1 Elm mottle virus

- NP\_620754.1 Tulare apple mosaic virus

- NP\_620754.1 Tulare apple mosaic virus

- NP\_009508870.1 Tomato necrotic streak virus

- NP\_009508370.1 Tilare apple mosaic virus

- NP\_009507940.1 Lilac ring mottle virus

- YP\_009165997.1 Privet ringspot virus

- YP\_009165997.1 Trivet ringspot virus

- YP\_008470970.1 Ageratum latent virus

- YP\_008470970.1 Ageratum latent virus

- YP\_008470.1 Apple mosaic virus

- NP\_60447.1 Parietaria mottle virus

- NP\_604470.1 Apple mosaic virus

- NP\_604802.1 Fragaria chiloensis latent virus

- NP\_61151.1 Prune dwarf virus

- NP\_61151.1 Prune dwarf virus

- NP\_602313.1 American plum line pattern virus **Bromoviridae** NP 602313.1 American plum line pattern virus
NP 602313.1 American plum line pattern virus
YP 054423.1 Humulus japonicus latent virus
ADW09018.1 Brome mosaic virus
BAC10646.1 Spring beauty latent virus
BAI40162.1 Melandrium yellow fleck virus
AEI54609.1 Cowpea chlorotic mottle virus
BAD98317.2 Cassia yellow blotch virus
AAA86114.1 Broad bean mottle virus
QYF50045 Guangxi bromovirus
BBA22646.1 Pelargonium zonate spot virus
QYF50041 Sichuan bromovirus
BBL52668.1 Cucumber mosaic virus QYF50041 Sichuan bromovirus
BBL52668.1 Cucumber mosaic virus
CAT02557.1 Gayfeather mild mottle virus
BBD78637.1 Tomato aspermy virus
QZI85203 Inner Mongolia bromovirus
BAF80086.1 Peanut stunt virus
CAA64073.1 Olive latent virus 2
CZS63540.1 Privet leaf blotch—associated virus CAA64073.1 Olive latent virus 2

CZS63540.1 Privet leaf blotch-associated virus

APM22302 Black currant leaf chlorosis associated virus

AHM22915 Raspberry bushy dwarf virus

AZP55488.1 Maize-associated pteridovirus

ACT67464 Japanese holly fern mottle virus

OBL95848 Tobacco mosaic virus

AZS59357 Tomato mosaic virus

AZS59357 Tomato mosaic virus

APG77540 Pepper mild mottle virus

APG77540 Pepper mild mottle virus

APG77540 Pepper mild mottle virus

APG71718 Paprika mild mottle virus

AVG88957 Brugsmania latent virus

AVT28143 Tobacco mild green mosaic virus

BAB82444 Wasabi mottle virus

AKS3541 Youcai mosaic virus

AEU04723 Turnip vein-clearing virus

OYW08470 Sichuan virgavirus

YP \_009362087 Hoya chlorotic spot virus

YP \_098760 Cucumber mottle virus

QRL54228 Watermelon green mottle mosaic virus

QRUW08484 Hubei sediment virgavirus 3

CAH69365 Zucchini green mottle mosaic virus

PP \_009094908 Hibiscus latent Fort Pierce virus

BBC15190 Hibiscus latent Singapore virus

AEI29173 Passion fruit mosaic virus—TGP

YP \_009130654 Plumeria mosaic virus

YP \_009553014 Opuntia virus 2 Mayoviridae Virgaviridae YP\_009130654 Plumeria mosaic virus
AEW67306 Frangipani mosaic virus
YP\_009553014 Opuntia virus 2
YP\_00455905 Cactus mild mottle virus
YP\_004956727 Clitoria yellow mottle virus
OYW08476 Hubei sediment virgavirus 1
ALT22313 Soil-borne virus 2
QYW08458 Inner Mongolia sediment virgavirus 1
NP\_612605 Beet virus Q
VP\_009220367.1 Colombian potato soil-borne virus 2 NP\_612605 Beet virus Q
YP\_009220367.1 Colombian potato soil-borne virus
ALM54940 Potato mop-top virus
QYW08466 Jiangsu sediment virgavirus
ACS14040 Beet soil-borne virus
NP\_740761 Broad bean necrosis virus
YP\_009508077 Japanese soil-borne wheat mosaic virus
NP\_059510 Oat golden stripe virus
NP\_059510 Cat golden stripe virus
NP\_059511 Soil-borne wheat mosaic virus
CAC40981 Soil-borne wheat mosaic virus
NP\_835282.1 Indian peanut clump virus
NP\_620047 Peanut clump virus
AKH39758 Drakaea virus A
NP\_60481.1 Barley stripe mosaic virus NP\_620047 Peanut clump virus

AKH39758 Drakaea virus A

NP 604481.1 Barley stripe mosaic virus

NP\_620033 Pepper ringspot virus

NP\_049325.1 Pea early-browning virus

AHG52758.1 Tobacco rattle virus

- YP\_09550870.1 Citrus leprosis virus C2

- YP\_04925.1 Citrus leprosis virus C2

- YP\_04928118.1 Hibiscus green spot virus 2

- QQM16332 Tohsystermes virus

- YP\_009551530.1 Tea plant necrotic ring blotch virus

- YP\_004901701.1 Blueberry necrotic ring blotch virus

- YP\_004901701.1 Blueberry necrotic ring blotch virus

- QIJ70136 Dougjudy virga—like virus

- NP\_062879.1 Ross River virus

- NP\_463457.1 Semliki Forest virus

- NP\_463457.1 Semliki Forest virus

- ASF83122.1 Mayaro virus

- ASF83122.1 Mayaro virus

- AAC97204.1 Onyong—nyong virus

- YP\_00888544.1 Ndumu virus

- YP\_08888544.1 Ndumu virus

- YP\_08888546.1 Whataroa virus

- QCS33855.1 Sindbis virus

- YP\_008901141.1 Eilat virus Kitaviridae and Virga-like viruses Togaviridae YP\_008888546.1 Whataroa virus
QCS38855.1 Sindbis virus
YP\_008901141.1 Eilat virus
AAD13622.2 Aura virus
YP\_009507804.1 Tonate virus
YP\_009507798.1 Mucambo virus
AAC19321.2 Venezuelan equine encephalitis virus
YP\_009507794.1 Cabassou virus
YP\_009507800.1 Pixuna virus
YP\_009507800.1 Pixuna virus
YP\_009507802.1 Rio Negro virus
YP\_009507802.1 Rio Negro virus
YP\_002802299.1 Highlands J virus
NP\_640330.1 Western equine encephalitis virus
AXV43854.1 Madariaga virus
ACI74964.1 Eastern equine encephalitis virus
YP\_003824587.1 Fort Morgan virus
YP\_008888545.1 Southern elephant seal virus
NP\_647496.1 Salmon pancreas disease virus
NP\_647496.1 Salmon pancreas disease virus
NP\_647496.1 Salmon pancreas disease virus
AZF86093 Sclerotium rolfsii alphavirus-like virus 1
AZF86095 Sclerotium rolfsii alphavirus-like virus 3 AZF86095 Sclerotium rolfsii alphavirus-like virus 3 MP3 k141 330543 Ripohuk virus AZF86094 Sclerotium rolfsii alphavirus-like virus 2

AZF86094 Sclerotium rolfsii alphavirus-like virus 2

AZT88617 Morchella importuna endornavirus 2

AZT88615 Gyromitra esculenta endornavirus 1

SP2B k141, 173697 Sopojir virus

MP1 k141, 271715 Ripotroq virus

MP1 k141, 271715 Ripotroq virus Alphaendornavirus (Endornaviridae) PP\_009310113 Ceratobasidium endornavirus A
P009310113 Ceratobasidium endornavirus A
AMM45288 Rhizoctonia solani endornavirus 2
DRCP2A\_k141\_30372 Ripovint virus
DRCP2A\_k141\_25990 Ripocalt virus
MP3\_k141\_219900 Ripopof virus
MP1\_k141\_294319 Ripoziv virus YP\_009310114 Ceratobasidium endornavirus B
YP\_003280846 Helicobasidium mompa alphaendornavirus 1
YP\_00952276 Rhizoctonia solani endornavirus 1
YP\_009310111 Ceratobasidium endornavirus C - YP\_009510111 Ceratobasticum endomavirus C
- YP\_009165596 Hot pepper alphaendornavirus
- AEK22062 Bell pepper alphaendornavirus 2
- AYE54436 Phaseolus vulgaris alphaendornavirus 2
- YP\_00935414.1 Winged bean alphaendornavirus 1
- YP\_009553622 Cluster bean endornavirus 1
- YP\_009212849 Hordeum vulgare alphaendornavirus 2 YP\_00931863.1 Phaseolus Vulgaris alphae
 SP1C\_k141\_276897 Sopojox virus
 YP\_009336626 Shahe endorna-like virus 1
 KCAP3\_k141\_94145 Ripofreq virus
 KCAP3\_k141\_94005 Ripoblep virus
 SP2C\_k141\_155003 Sopoful virus APG77570 Behai endorna-like virus 1
DRCP2A\_kt41\_180116 Ripolurk virus 1
DRCP2A\_kt41\_180116 Ripolurk virus 1
YP\_438201.1 Vicia faba alphaendornavirus
YP\_009225663.1 Erysiphe cichoracearum alphaendornavirus
YP\_07003829.1 Grapevine endophyte alphaendornavirus AZO92732 Arthrocladiella mougeotii alphaendornavirus
ADN43901 Chalara endornavirus 1
CAP3 k141 317018 Ripoflas virus YP\_009552081 Diatom colony associated dsRNA virus 15 KCAP3\_k141\_85221 Ripoflax virus RCCP2\_k141\_14540 Ripojed virus PCCP2\_kt41\_14540 Ripojed virus

YP\_009315910 Botrytis cinerea betaendornavirus 1

YP\_009022070 Sclerotinia sclerotiorum betaendornavirus 1

ABD73306 Gremmeniella abietina type B RNA virus XL2

YP\_009552723 Sclerotinia minor endornavirus 1

AZT88618 Morchella importuna endornavirus 3

ADU64759.1 Tuber aestivum betaendornavirus

YP\_00915493.1 Alternaria brassicicola betaendornavirus 1

AZT88616 Morchella importuna endornavirus 1

YP\_009551959 Phaseolus vulgaris endornavirus 3

OBB21108 Geranium carolinianum endornavirus

Sopolap virus Betaendornavirus (Endornaviridae) SP1A\_k141\_97024 Sopolap virus SP1A\_k141\_14317 Sopodon virus KCAP1\_k141\_380742 Ripocund vir Environment

0.5

Chromosol (cropping)
Chromosol (native)

Sodosol (pasture)

Riverbank sediment

Established virus