Ghabrivirales Chrymotiviricetes, **Duplornaviricota** AZP53926 Nigrospora oryzae victorivirus 2
QJW70223 Bipolaris maydis victorivirus 1c
QBA69889 Botrytis cinerea victorivirus 1
CBY84992 Tolypocladium cylindrosporum virus 1
BCA66668 Colletotrichum fructicola victorivirus 1
AAS68036 Chalara elegans RNA Virus 1
AIP92361 Botryosphaeria dothidea victorivirus 1
AIT56394 Ustilaginoidea virens RNA virus 1
AG04407 Ustilaginoidea virens RNA virus 1
CCD33024 Aspergillus foetidus slow virus 1
UHS72462 Totiviridae sp.
CCLB kl 41 94974 Chrocurosk virus Victorivirus, Leishmaniavirua, Trichomonasvirusa (Totiviridae) Alpe2361 Botryosphaena Alfresaya Ustilaginoidea virens RNA virus 1
AG004407 Ustilaginoidea virens RNA virus 1
CC33024 Aspergillus foetilus slow virus 1
UHS72462 Totiviridae sp.
CC18 k141 94974 Chrocurosk virus
BAD60833 Magnaporthe oryzae virus 1
BAM6400 Rosellinia necatrix victorivirus 1
AVD49682 Fusarium asiaticum victorivirus 1
AVD49682 Fusarium asiaticum victorivirus 1
AVD19682 Fusarium asiaticum victorivirus 1
AVD19682 Fusarium asiaticum victorivirus 2
AMQ111801 Sphaeropsis sapinea RNA virus 1
UHS72330 Totiviridae sp.
BAC81754 Helicobasidium mompa totivirus 1-17
ALP73341 Ustilaginoidea virens RNA virus 5
- UHS72457 Totiviridae sp.
UHS72531 Totiviridae sp.
UHS72531 Totiviridae sp.
UHS725320 Totiviridae sp.
UHS725320 Totiviridae sp.
UHS72532 Totiviridae sp.
AJA41109 Phomopsis vexans RNA virus 1
AJA41109 Phomopsis vexans RNA virus 1
ALP68225 Nigrospora oryzae victorivirus 1
QLC27983 Erysiphe necator associated victorivirus 1
QLC27983 Erysiphe necator associated victorivirus 1
ART91394 Ustilaginoidea virens RNA virus 3
BAV8602 Fusarium poae victorivirus 2
BAF8176 Magnaporthe oryzae virus 2
AA33116 Sphahacopetis sapinea RNA virus 3
BAV8602 Fusarium poae victorivirus 2
AA33116 Sphahacopetis sapinea RNA virus 2
CAK01180 Sphahacopetis sapinea RNA virus 2
ALM62231 Coniothyrium minitans RNA virus 1
UHS72455 Victorivirus 9p.
UHS72455 Totiviridae sp.
UHS72485 Totiviridae sp.
UHS72485 Totiviridae sp.
UHS72485 Totiviridae sp.
UHS72487 Totiviridae sp.
UHS72487 Totiviridae sp.
UHS72487 Totiviridae sp.
UHS72487 Totiviridae sp.
UHS72488 Totiviridae sp.
UHS72488 Totiviridae sp.
UHS72488 Totiviridae sp.
UHS72488 Totiviridae sp.
UHS72489 Totiviridae sp.
UHS72497 Totiviridae sp.
UHS72498 Totiviridae sp.
UHS72498 Totiviridae sp.
UHS72498 Totiviridae sp.
UHS72497 Totiviridae sp.
UHS724 MP1\_kt41\_412778 Ripugrok virus

UHS72559 Totiviridae sp.

UHS72427 Totiviridae sp.

AED99800 Trichomonas vaginalis virus 4

AED99806 Trichomonas vaginalis virus 2

UHS72446 Totiviridae sp.

AED99812 Trichomonas vaginalis virus 1

2572 Totiviridae sp. UHS72572 Totiviridae sp.
NP\_620728.1 Ustilago maydis virus H1 72 Totiviridae sp.

— DRCP2B k141 422908 Ripujint virus

— UHS72424 Totiviridae sp.
— UHS72434 Totiviridae sp.
— UHS72433 Totiviridae sp.
— UHS72437 Totiviridae sp.
— UHS72417 Totiviridae sp.
— UHS72417 Totiviridae sp.
— UHS72417 Totiviridae sp.
— UHS72417 Totiviridae sp.
— UHS72437 Totiviridae sp.
— UHS72412 Totiviridae sp.
— UHS72412 Totiviridae sp.
— UHS72412 Totiviridae sp.
— UHS72437 Totiviridae sp.
— UHS72438 Totiviridae sp.
— UHS72437 Totiviridae sp.
— UHS72548 Totiviridae sp.
— UHS72550 Totiviridae sp.
— UHS72550 Totiviridae sp.
— UHS72551 Totiviridae sp.
— UHS72551 Totiviridae sp.
— UHS72551 Totiviridae sp.
— UHS72641 Totiviridae sp.
— UHS72551 Totiviridae sp. Totivirus (Totiviridae) UHS72469 Totiviridae sp.
UHS72550 Totiviridae sp.
UHS72551 Totiviridae sp.
UHS72561 Totiviridae sp.
UHS72561 Totiviridae sp.
UHS72570 Totiviridae sp.
UHS72409 Totiviridae sp.
UHS72409 Totiviridae sp.
UHS72500 Totiviridae sp.
UHS72500 Totiviridae sp.
UHS72510 Totiviridae sp.
UHS72517 Totiviridae sp.
UHS72400 Totiviridae sp.
UHS72400 Totiviridae sp.
UHS72420 Totiviridae sp.
UHS72420 Totiviridae sp.
UHS72530 Totiviridae sp.
UHS72531 Totiviridae sp.
UHS725431 Totiviridae sp. Quadriviridae • QIJ70133 Brent toti-like virus

UHS72406 Alphachrysovirus sp.

UHS72405 Alphachrysovirus sp. Chrysoviridae ASA47445.1 Shuangao chryso-like virus 1

RCP2A\_ki41\_6866 Riputesc virus

AKP45145.1 Fusarium oxysporum chrysovirus 2

ADU54123.1 Fusarium graminearum chrysovirus 2

ALO50142.1 Penicillium janczewskii chrysovirus 1

UHS72399 Betachrysovirus sp.

BAJ15133.1 Magnaporthe oryzae chrysovirus 1

ALO50149.1 Penicillium janczewskii chrysovirus 2

ALO50149.1 Penicillium janczewskii chrysovirus 2

ALO50149.1 Penicillium janczewskii chrysovirus 1

BBC27878.1 Alternaria alternata chrysovirus 1

AKJ19574.1 Colletotrichum fructicola chrysovirus 1

AKJ19574.1 Colletotrichum fructicola chrysovirus 1

BAU24262 Rosellinia necatrix megabirnavirus 2

BAU84016.1 Rosellinia necatrix megabirnavirus 1

BBB66809 Rosellinia necatrix megabirnavirus 3

AVD68671 Entoleuca megabirnavirus 1

AVJ09269 Fusarium pseudograminearum segabirnavirus 1

AVJ09269 Fusarium pseudograminearum segabirnavirus 1

AVJ09269 Fusarium pseudograminearum segabirnavirus 1

AVX47539 Ceratobasidium virus B

OTF98696 Rhizoctonia solani megabirnavirus -like

ANR02705 Rhizoctonia solani megabirnavirus 1 DRCP2A\_k141\_6866 Megabirnaviridae 155733 Ripusarb virus UHS72436 Totiviridae sp.
UHS72414 Totiviridae sp.
MP3\_k141\_115098 Ripugr
141\_125418 Ripucex virus UHS72510 Totiviridae sp. UHS72433 Totiviridae sp.

WP1\_k141\_198389 Ripuglis virus

SP1C\_k141\_251264 Soputhyc virus • SP2C\_k141\_129314 Sopublir virus — SP2A\_k141\_49857 Sopuglig virus UHS72546 Totiviridae sp.
UHS72538 Totiviridae sp.
UHS72538 Totiviridae sp.
UHS72599 Totiviridae sp.
UHS72559 Totiviridae sp.
UHS72556 Totiviridae sp.
UHS72558 Totiviridae sp.
UHS72512 Totiviridae sp.
UHS72512 Totiviridae sp.
UHS72513 Totiviridae sp.
UHS72417 Totiviridae sp.
UHS72417 Totiviridae sp.
UHS72413 Totiviridae sp.
UHS72540 Totiviridae sp. UHS72491 Totiviridae sp.
UHS72491 Totiviridae sp.
UHS72552 Totiviridae sp.
UHS72478 Totiviridae sp.
UHS72522 Totiviridae sp.
UHS72432 Totiviridae sp.
UHS72432 Totiviridae sp. UHS72532 Totiviridae sp.
UHS72416 Totiviridae sp.
UHS72564 Totiviridae sp.
UHS72564 Totiviridae sp.
UHS72525 Totiviridae sp.
UHS72548 Totiviridae sp.
UHS725471 Totiviridae sp.
UHS72483 Totiviridae sp.
UHS72493 Totiviridae sp.
UHS72475 Totiviridae sp.
UHS72503 Totiviridae sp.
UHS72506 Totiviridae sp.
UHS72505 Totiviridae sp.
UHS72505 Totiviridae sp.
UHS72475 Totiviridae sp.
S72514 Totiviridae sp. — UHS72466 Totiviridae
— UHS72514 Totiviridae sp.
— UHS72444 Totiviridae sp.
— UHS72448 Totiviridae sp.
— UHS72468 Totiviridae sp.
— UHS72508 Totiviridae sp.
— UHS72509 Totiviridae sp. — UHS72541 Totiviridae sp. UHS72488 Totiviridae sp. UHS72487 Totiviridae sp. · UHS72429 Totiviridae sp — UHS72429 Totiviridae sp.
- UHS72480 Totiviridae sp.
- UHS72421 Totiviridae sp.
- KCAP3\_k141\_265976 Ripujoj virus
- SN1\_k141\_16361 Sonusluk virus
- MP3\_k141\_88965 Ripuslib virus
- MP1\_k141\_348862 Ripusheq virus
- MP3\_k141\_327850 Ripupryt virus
- MP3\_k141\_327850 Ripupryt virus Giardiavirus and Giardiavirus-like (Totiviridae) KCAP2\_k141\_352476 Ripujof virus

— QVU40016.1 Kamu toti-like virus 1

— UHS72545 Totiviridae sp.

— UHS72561 Totiviridae sp.

— UHS72511 Totiviridae sp.

— UHS72511 Totiviridae sp. QIJ70132 Keenan toti-like virus k141\_284261 Ripufip virus
UHS72574 Totiviridae sp.
AYP71798.1 Penicillium brevicompactum ssRNA virus 1 **Environment** AIT56395 Ustilaginoidea virens RNA virus M Chromosol (cropping) 0.5 Sodosol (pasture) Sodosol (native) Riverbank sediment

Established virus