

Table 2. Summary of novel betacytorhabdoviruses identified in plant RNA-seq data available on NCBI.

Plant host	Taxa/ family	Virus name/ Abbreviation	Bioproject ID/ Data citation	Length (nt)	Accession number	Protein ID	Length (aa)	Highest scoring virus- protein/ <i>E</i> -value/query coverage%/identity% (Blast P)
Rock wormwood (<i>Artemisia rupestris</i>)	Dicot/ <i>Asteraceae</i>	Artemisia betacytorhabdovirus 1/ ArtBCRV1	PRJNA730219/ [68]	13426	BK064305	N P P3 M G P6 L	484 340 201 202 524 84 2076	NCMV-N/2e-41/94/28.1 no hits RudV1-P3/3e-09/62/26.72 no hits PpVE-G/7e-24/89/22.67 no hits RudV1-L/0.0/99/42.91
Zip begonia (<i>Begonia conchifolia</i>)	Dicot/ <i>Begoniaceae</i>	Begonia betacytorhabdovirus 1/ BegBCRV1	PRJEB26711/ [69]	13838	BK064306	N P P3 M G P6 L	447 299 181 206 572 68 2161	TiCRV1-N/5e-52/62/34.21 TiCRV1-P/2e-19/97/28.04 no hits TiCRV1-M/7e-10/83/23.12 TiCRV1-G/2e-70/85/27.93 no hits TiCRV1-L/0.0/99/41.72
White birch (<i>Betula pendula</i>)	Dicot/ <i>Betulaceae</i>	Betula betacytorhabdovirus 1/ BetBCRV1	PRJEB29260/ [70]	14744	BK064307	N P P3 M G P6 L	449 485 195 196 556 138 2242	RaCV-N/8e-69/90/34.24 no hits RaCV-P4/6e-19/91/23.46 RaCV-M/1e-04/83/23.78 RaCV-G/3e-59/92/27.08 no hits RaCV-L/0.0/92/40.01
Himalayan birch (<i>Betula utilis</i>)	Dicot/ <i>Betulaceae</i>	Betula betacytorhabdovirus 2/ BetBCRV2	PRJNA638802/ Kumar, N., CSIR, India, unpublished	15147	BK064308	N P P3 M G P6 L	443 470 196 193 551 138 2246	RaCV-N/2e-78/92/36.01 no hits RaCV-P4/3e-22/89/28.41 RaCV-M/4e-08/86/25.68 RaCV-G/2e-53/87/27.44 no hits RaCV-L/0.0/94/39.58
Buffalo grass (<i>Bouteloa dactyloides</i>)	Monocot/ <i>Poaceae</i>	Bouteloa betacytorhabdovirus 1/ BouBCRV1	PRJNA297834/ [71]	14127	BK064309	N P P3	452 381 195	RudV1-N/2e-65/95/32.07 RVR-P/1e-07/17/33.33 RudV1-P3/9e-36/89/39.13

						M G P6 P7 P8 L	199 508 72 255 190 2070	RudV1-M/5e-28/84/34.32 NCMV-G/5e-21/94/23.43 no hits no hits no hits RudV1-L/0.0/99/49.04
Hardy garden mum (<i>Chrysanthemum morifolium</i>)	Dicot/ <i>Asteraceae</i>	Chrysanthemum betacytorhabdovirus 1/ ChrBCRV1	PRJNA397042/ [72]	13309	BK064310	N P P3 M G P6 L	450 333 198 206 511 86 2075	MaCyV-N/1e-45/92/30.07 RVR-P/0.007/26/29.55 TaEV1-P3/3e-11/67/29.93 no hits PpVe-G/7e-22/69/24.66 no hits RudV1-0.0/99/42.21
Siberian hazelnut (<i>Corylus heterophylla</i>)	Dicot/ <i>Betulaceae</i>	Corylus betacytorhabdovirus 1/ CorBCRV1	PRJNA899668/ Sun, J, Lianoning, China, unpublished	15228	BK064311	N P P3 M G P6 L	461 479 197 201 555 141 2257	RaCV/7e-64/93/31.96 no hits YmVA-P4/4e-14/71/28.97 RaCV-M/4e-04/87/21.59 PpVE-G/3e-73/94/27.58 no hits RaCV-L/0.0/89/40.21
Buffalo gourd (<i>Cucurbita foetidissima</i>)	Dicot/ <i>Cucurbitaceae</i>	Cucurbita betacytorhabdovirus 1/ CucBCRV1	PRJNA473174/ Sun, University of California, USA, unpublished	12969	BK064312	N P P3 M G P6 L	450 302 195 209 514 79 2079	MaCyV-N/1e-47/94/29.88 no hits RudV1-P3/3e-08/59/31.03 RudV1-M/2e-06/71/27.81 RSMV-G/5e-22/93/23.35 no hits RudV1-L/0.0/99/41.7
Slipper orchid (<i>Cypripedium flavum</i>)	Monocot/ <i>Orchidaceae</i>	Cypripedium betacytorhabdovirus 1/ CypBCRV1	PRJNA479379/ [73]	9958	BK064313	N P P3 L	430 280 198 2114	MYSV-N/1e-38/56/36 no hits no hits RaCV-L/0.0/91/33.81
Keladan (<i>Dryobalanops oblongifolia</i>)	Dicot/ <i>Dipterocarpaceae</i>	Dryobalanops betacytorhabdovirus 1/ DryBCRV1	PRJDB8182/ [74]	14393	BK064314	N P P3 M G	495 598 234 273 261	YmVA-N/1e-95/98/35.8 YmVA-P/6e-07/23/32 YmVa-P4/1e-29/68/38.04 no hits no hits

						L	2259	YmVA-L/0.0/98/42.34
Durian (<i>Durio zibethinus</i>)	Dicot/ <i>Malvaceae</i>	Durio betacytorhabdovirus 1/ DurBCRV1	PRJNA400310/ [75]	12791	BK064315	N P P3 M G P6 L	434 318 193 174 539 62 2057	NCMV-N/6e-52/97/33.03 no hits PMuMaV-P3/8e-13/68/28.79 no hits RSMV-G/6e-34/84/24.74 no hits MYSV-L/0.0/98/45.16
Littleleaf honey locust (<i>Gleditsia microphylla</i>)	Dicot/ <i>Fabaceae</i>	Gleditsia betacytorhabdovirus 1/ GleBCRV1	PRJNA848854/ [76]	13339	BK064316	N P P3 M G L	483 454 240 251 162 2240	YmVA-N/9e86/99/33.61 no hits YmVA-P4/6e-37/69/37.35 no hits no hits YmVA-L/0.0/99/40.15
Chinese licorice (<i>Glycyrrhiza inflata</i>)	Dicot/ <i>Fabaceae</i>	Glycyrrhiza betacytorhabdovirus 1/ GlyBCRV1	PRJNA574093/ [77]	14755	BK064317	N P P3 M G L	493 500 238 280 169 2264	YmVA-N/8e-95/96/37.89 YmVA-P/3e-25/19/57.14 YmVA-P4/2e-39/76/37.57 no hits no hits YmVA-L/0.0/98/42.05
Pennywort (<i>Hepatica nobilis</i>)	Dicot/ <i>Ranunculaceae</i>	Hepatica betacytorhabdovirus 1/ HepBCRV1	PRJDB6630/ Nodai Genome Research Center, Japan, unpublished	10440	BK064318	N P P3 M L	432 384 183 162 2074	RVR-N/2e-77/92/35.78 CBDaV-P/6e-07/52/24.63 RVR-P3/9e-13/70/27.91 no hits RVR-L/0.0/99/48.03
Kentia palm (<i>Howea forsteriana</i>)	Monocot/ <i>Arecaceae</i>	Howea betacytorhabdovirus 1/ HowBCRV1	PRJNA244607/ [78]	13727	BK064319	N P P3 M G P6 L	447 301 173 211 557 69 2145	TiCRV1-N/7e-46/53/36.86 TiCRV1-P/6e-10/95/24.76 TiCRV1-P3/5e-11/81/25.53 TiCRV1-M/1e-10/91/24.37 TiCRV1-G/1e-58/92/26.15 no hits TiCRV1-L/0.0/99/40.22
Sweet potato (<i>Ipomoea batatas</i>)	Dicot/ <i>Convolvulaceae</i>	Ipomoea betacytorhabdovirus 1/ IpoBCRV1	PRJNA626066/ Read, ARC, SouthAfrica, unpublished	12811	BK064320	N P P3 M	448 327 196 210	NCMV-N/2e-55/93/32.62 RVR-P/0.001/25/26.76 RudV1-P3/1e-06/56/30 RudV1-M/0.015/70/24.68

						G P6 L	533 101 2071	RSMV-G/1e-22/86/22.76 no hits TaEV1-1/0.0/99/41.46
Malabar nut (<i>Justicia adhatoda</i>)	Dicot/ <i>Acanthaceae</i>	Justicia betacytorhabdovirus 1/ JusBCRV1	PRJNA842169/ [79]	15957	BK064321	N X P P3 M G P7 P8 L	463 180 408 198 199 574 150 140 2236	RaCV-N/3e-89/99/37.26 no hits no hits RaCV-P4/4e-31/95/31.94 RaCV-M/1e-08/83/23.7 RaCV-G/8e-96/89/32.44 RaCV-P7/1e-06/82/29.27 no hits RaCV/0.0/96/45.34
Royle's sedge (<i>Kobresia royleana</i>)	Monocot/ <i>Cyperaceae</i>	Kobresia betacytorhabdovirus 1/ KobBCRV1	PRJNA588660/ Qu, G., Lhasa, China, unpublished	14255	BK064322	N P M G P5 L P7	542 550 175 545 89 2098 106	RSMV-N/7e-91/97/36.17 RSMV-P/8e-07/17/34.38 RSMV-M/0.003/88/26.28 RSMV-G/1e-124/94/39.24 no hits RsMV-L/0.0/99/52.39 no hits
Plate-seed conebrush (<i>Leucadendron platyspermum</i>)	Dicot/ <i>Proteaceae</i>	Leucadendron betacytorhabdovirus 1/ LeuBCRV1	PRJEB45774/ [80]	12698	BK064323	N P P3 M G P6 L	445 408 192 188 533 63 2081	NCMV-N/1e-115/93/43.97 NCMV-P/2e-32/72/31.76 NCMV-P3/3e-09/76/26.35 TaEV1-M/8e-08/86/26.83 RSMV-G/9e-34/94/26.07 no hits RudV1-L/0.0/99/42.01
Black goji (<i>Lycium ruthenicum</i>)	Dicot/ <i>Solanaceae</i>	Lycium betacytorhabdovirus 1/ LycBCRV1	PRJNA505629/ [81]	14855	BK064324	N P P3 M G L	504 515 239 286 208 2260	YmVA-N/2e-78/92/35.16 YmVA-P/1e-20/22/45.76 YmVA-P4/2e-37/95/34.06 YmVA-M/0.003/67/23.35 no hits YmVA-L/0.0/98/41.21
Mango (<i>Mangifera indica</i>)	Dicot/ <i>Anacardiaceae</i>	Mango betacytorhabdovirus 1/ ManBCRV1	PRJNA487154/ [82]	13826	BK064325	N P P3 M	477 359 167 195	YmVA-N/8e-35/84/26.25 no hits no hits no hits

						G P6 L	577 95 2148	RVR-G/7e-20/78/22.41 no hits RaCV-L/0.0/94/35.18
White mulberry (<i>Morus alba</i>)	Dicot/ <i>Moraceae</i>	Morus betacytorhabdovirus 1/ MorBCRV1	PRJNA597172/ [83]	15904	BK064326	N P P3 M G L	502 617 231 263 215 2260	YmVA-N/8e-99/91/36.15 YmVA-P/5e-32/74/29.3 YmVA-P4/5e-39/84/37.44 no hits no hits YmVA-L/0.0/98/43.14
Nitre bush (<i>Nitraria tangutorum</i>)	Dicot/ <i>Nitrariaceae</i>	Nitraria betacytorhabdovirus 1/ NitBCRV1	PRJNA686177/ [84]	15520	BK064327	N P P3 M G P6 L	433 544 189 187 583 153 2246	RaCV-N/2e-121/99/42.96 RaCV-P/2e-14/51/27.97 RaCV-P4/1e-38/95/37.57 RaCV-M/2e-21/95/30.56 RaCV-G/6e-98/86/34.9 RaCV-P7/3e-09/59/32.97 RaCV-L/0.0/99/44.89
Hall's panicgrass (<i>Panicum hallii</i>)	Monocot/ <i>Poaceae</i>	Panicum betacytorhabdovirus 1/ PanBCRV1	PRJNA306692/ [85]	12136	BK064328	N P P3 M G L	418 280 195 172 505 2068	CBDaV-N/0.0/99/72.9 CBDaV-P/2e-128/100/66.07 CBDaV-P3/3e-104/94/75.14 CBDaV-M/1e-83/98/68.05 CBDaV-G/0.0/100/66.14 CBDaV-L/0.0/100/75.87
Blue passionflower (<i>Passiflora caerulea</i>)	Dicot/ <i>Passifloraceae</i>	Passiflora betacytorhabdovirus 1/ PasBCRV1	PRJEB21674/ 1000 Plant (1KP) Transcriptomes Initiative, Unpublished	13471	BK064329	N P P3 P4 M G P7 L	500 317 188 69 209 541 72 2138	TiCRV1-N/8e-130/92/44.49 TiCRV1-P/6e-35/89/32.77 TiCRV1-P3/1e-22/80/29.14 no hits TiCRV1-M/5e-48/85/47.19 TiCRV1-G/4e-160/90/44.85 no hits TiCRV1-L/0.0/99/62.66
Peat soil	-	Peat soil associated betacytorhabdovirus 1/ PSaBCRV1	PRJNA412438/ [86]	12663	BK064330	N P P3 M G P6	436 315 186 169 505 56	MYSV-N/5e-96/99/38.79 NCMV-P/2e-26/86/31.62 BYSMV-P3/1e-21/78/36.99 MYSV-M/7e-09/94/24.07 MaCyV-G/2e-75/95/31.43 no hits

						L	2083	MaCyV-L/0.0/99/53.75
Peat soil	-	Peat soil associated betacytorhabdovirus 2/ PSaBCRV2	PRJNA570134/ JGI, USA, unpublished	14865	BK064331	N P P3 M G P6 P7 P8 L	457 397 194 199 516 66 276 182 2066	RudV1-N/2e-65/88/33.41 BYSMV-P/4e-09/26/35.51 RudV1-P3/9e-29/78/36.84 RudV1-M/2e-21/88/31.64 PpVe-G/8e-35/82/25.61 no hits no hits no hits RudV1-L/0.0/99/50.63
<i>Pentaphragma spicatum</i>	Dicot/ <i>Pentaphragmataceae</i>	Pentaphragma betacytorhabdovirus 1/ PenBCRV1	PRJNA636634/ [87]	12983	BK064332	N P P3 M G P6 L	446 288 178 197 550 63 2160	TiCRV1-N/2e-50/57/34.91 TiCRV1-P/8e-17/87/27.21 no hits TiCRV1-M/0.008/84/25.44 TiCRV1-G/3e-76/91/30.18 no hits TiCRV1-L/0.0/99/41.12
Amur cork tree (<i>Phellodendron amurense</i>)	Dicot/ <i>Rutaceae</i>	Phellodendron betacytorhabdovirus 1/ PheBCRV1	PRJNA817294/ [88]	14292	BK064333	N P P3 M G L	488 541 241 294 251 2258	YmVA-N/1e-85/97/34.43 YmVA-P/3e-40/61/34.47 YmVA-P4/7e-30/78/32.28 no hits no hits YmVA-L/0.0/98/41.42
Desert poplar (<i>Populus pruinosa</i>)	Dicot/ <i>Salicaceae</i>	Populus betacytorhabdovirus 1/ PopBCRV1	PRJNA354971/ Yu, L., Lanzhou, China, unpublished	15094	BK064334	N P P3 M G P6 L	432 569 188 201 586 150 2246	RaCV-N/8e-118/99/42.73 RaCV-P/6e-10/50/22.37 RaCV-P4/1e-33/90/34.71 RaCV-M/1e-17/85/26.59 RaCV-G/2e-102/92/32.84 RaCV-P7/2e-10/78/31.15 RaCV-L/0.0/99/45.75
Kudzu (<i>Pueraria montana</i>)	Dicot/ <i>Fabaceae</i>	Pueraria betacytorhabdovirus 1/ PueBCRV1	PRJNA515956/ [89]	13614	BK064335	N P P3 M G L	481 338 230 255 166 2254	YmVA-N/1e-69/97/33.74 YmVA-P/8e-11/75/41.35/ YmVA-P4/3e-20/58/36.57 no hits no hits YmVA-L/0.0/98/39.88

Sesame (<i>Sesamum indicum</i>)	Dicot/ <i>Pedaliaceae</i>	Sesamum betacytorhabdovirus 1_Ses/ SesBCRV1_Ses	PRJNA644139/ [90]	13565	BK064336	N P P3 P4 M G L	439 340 183 76 224 575 2113	CuCV1-N/5e-72/95/34.95 YmCaV-P/9e-15/58/30.10 SbBMV-P3/2e-28/73/41.18 no hits CuCV1-M/1e-23/75/30.59 YmCaV-G/2e-100/84/35.74 CuCV1-L/0.0/99/48.07
Madagascar periwinkle (<i>Catharanthus roseus</i>)	Dicot/ <i>Apocynaceae</i>	Sesamum betacytorhabdovirus 1_Cat/ SesBCRV1_Cat	PRJNA246273/ [91]	13497	BK064337	N P P3 P4 M G L	440 340 183 76 224 575 2113	CuCV1-N/1e-71/95/35.33 YmCaV-P/9e-15/58/30.10 SbBMV-P3/9e-28/73/41.18 no hits CuCV1-M/7e-24/75/30.59 YmCaV-G/3e-100/84/35.95 CuCV1-L/0.0/99/48.02
<i>Schiedea pentandra</i>	Dicot/ <i>Caryophyllaceae</i>	Schiedea betacytorhabdovirus 1/ SchBCRV1	PRJNA491458 [92]	12964	BK064338	N P P3 M G L P7	439 379 206 182 524 2062 114	MYSV-N/3e-55/93/33.01 NCMV-P/6e-95/98/42.89 RVR-P3/8e-10/62/30.47 no hits RSMV-G/1e-32/95/24.86 RudV1-L/0.0/99/43.63 no hits
Japanese pagoda tree (<i>Sophora japonica</i>)	Dicot/ <i>Fabaceae</i>	Sophora betacytorhabdovirus 1/ SopBCRV1	PRJNA797104/ [93]	13767	BK064339	N P P3 M G L	501 493 241 283 137 2255	YmVA-N/3e-94/91/36.54 YmVA-P/2e-37/72/31.27 YmVA-P4/1e-39/93/35.29 YmVA-M/0.001/61/24.57 no hits YmVA-L/0.0/97/41.79
Red clover (<i>Trifolium pratense</i>)	Dicot/ <i>Fabaceae</i>	Trifolium betacytorhabdovirus 1/ TriBCRV1	PRJNA561285/ [94]	13511	BK064340	N P P3 M G P6 L P8	429 372 218 176 529 72 2069 175	BYSMV-N/4e-46/90/34.43 CBDaV-P/6e-06/30/26.55 PMuMaV-P3/5e-19/66/31.65 AntAmV1-M/4e-04/66/25.42 RSMV-G/4e-37/91/25.2 no hits BYSMV-L/0.0/99/45.15 no hits

Broad bean (<i>Vicia faba</i>)	Dicot/ <i>Fabaceae</i>	Vicia betacytorhabdovirus 1/ VicBCRV1	PRJNA591424/ [95]	12101	BK064341	N P P3 M L	434 441 186 164 2099	MaCyV-N/3e-60/95/31.13 RVR-P/0.035/16/30.99 RVR-P3/8e-22/75/34.04 no hits CBDaV-L/0.0/98/44.27
Japanese prickly ash (<i>Zanthoxylum ailanthoides</i>)	Dicot/ <i>Rutaceae</i>	Zanthoxylum betacytorhabdovirus 1/ ZanBCRV1	PRJNA656412/ [96]	16669	BK064342	N P P3 M G L	488 627 243 276 278 2278	YmVA-N/1e-88/92/33.98 YmVA-P/2e-25/22/47.18 YmVA-P4/9e-26/70/33.53 no hits no hits YmVA-L/0.0/98/41.48
Japanese prickly ash (<i>Zanthoxylum ailanthoides</i>)	Dicot/ <i>Rutaceae</i>	Zanthoxylum betacytorhabdovirus 2/ ZanBCRV2	PRJNA656412/ [96]	15584	BK064343	N P P3 M G L	492 579 242 270 281 2280	YmVA-N/8e-88/91/35.01 YmVA-P/6e-37/61/33.33 YmVA-P4/8e-27/68/37.35 no hits no hits YmVA-L/0.0/98/40.79
Japanese prickly ash (<i>Zanthoxylum ailanthoides</i>)	Dicot/ <i>Rutaceae</i>	Zanthoxylum betacytorhabdovirus 3/ ZanBCRV3	PRJNA656412/ [96]	16283	BK064344	N P P3 M G L	492 578 242 272 283 2282	YmVA-N/3e-88/98/34.2 YmVA-P/6e-27/17/57.84 YmVA-P4/2e-24/80/32.82 no hits no hits YmVA-L/0.0/99/41.24

* Acronyms of best hits are listed in Supp. Table S1.