

**Table S4.** Mycoviruses associated with 244 *Rhizoctonia* isolates recovered from sugar beet roots with the symptoms of root and crown rot in China from 2009 to 2016 and the median effective concentration (EC<sub>50</sub>) of flutolanil, thifluzamide, and pencycuron to these *Rhizoctonia* isolates.

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup> | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| R1           | RsMV50, RsNV10                                       | 2                   | 0.1210                                  | 0.4053       | 3.0043     |
| R2           | RsNV16   | 1                   | 0.0770                                  | 0.0768       | 4.7210     |
| R3           | RsMV92, RsMV101, RsNV16                              | 3                   | 0.1640                                  | 0.1538       | 3.1715     |
| R4           | RsPV2B, RsNV16                                       | 2                   | 0.0950                                  | 0.0272       | 3.2941     |
| R5           | RsNV16   | 1                   | 0.1300                                  | 0.1347       | 0.0042     |
| R6           | RsKV, RsMV61, RsMV70, RsMV71, RsNV16                 | 5                   | 0.3710                                  | 0.3162       | 0.0032     |
| R7           | RsMV89, RsNV16                                       | 2                   | 0.0960                                  | 0.1403       | 0.0129     |
| R8           | RsMV84, RsNV16, RsOLV8, RsPV2B                       | 4                   | 0.3750                                  | 0.3535       | 0.0033     |
| R9           | RsMV45, RsMV84, RsNV16                               | 3                   | 0.2840                                  | 0.1569       | 0.0065     |
| R10          | RsMV67, RsMV84, RsMV98, RsNV16                       | 4                   | 0.4960                                  | 0.0886       | 0.0109     |
| R11          | RsNV16   | 1                   | 0.1600                                  | 0.0704       | 0.0043     |
| R12          | RsMV61, RsNV16                                       | 2                   | 0.1580                                  | 0.1072       | 0.0051     |
| R13          | RsBLV3, RsNV16                                       | 2                   | 0.2350                                  | 0.0886       | 0.0032     |
| R15          | RsBLV4, RsBLV6, RsBLV5, RsMV72, RsNV16, RsPV2B       | 6                   | 0.6170                                  | 0.5630       | 0.0117     |
| R16          | RsMV45, RsMV70, RsMV102, RsMV103, RsNV16             | 5                   | 0.1460                                  | 0.1208       | 0.0035     |
| R17          | RsNV16   | 1                   | 0.0710                                  | 0.1428       | 0.0065     |
| R18          | RsNV16, RsOLV7, RsPV2B                               | 3                   | 0.0470                                  | 0.1014       | 0.0150     |
| R19          | RsMV57, RsNV16                                       | 2                   | 0.2210                                  | 0.0669       | 0.0108     |
| R20          | RsNV16   | 1                   | 0.0220                                  | 0.1008       | 0.0100     |
| R21          | RsMV99, RsNV16                                       | 2                   | 0.2220                                  | 0.0962       | 0.0057     |
| R23          | RsNV16   | 1                   | 0.1390                                  | 0.0640       | 0.0132     |
| R24          | RsNV16   | 1                   | 0.1310                                  | 0.1385       | 0.0224     |

**Table S4.** (Continued from preceding page).

| Isolate<br>code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>    | Number of<br>mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|-----------------|---|------------------------|---|--------------|------------|
|                 |   |                        | Flutolanil                              | Thifluzamide | Pencycuron |
| R25             | RsMV54, RsNV16  | 2                      | 0.0700                                  | 0.0914       | 0.0137     |
| R26             | RsMV83, RsMV93, RsNV16                                  | 3                      | 0.1280                                  | 0.1259       | 0.0157     |
| R28             | RsMV66, RsMV90, RsNV16                                  | 3                      | 0.2520                                  | 0.0446       | 0.0166     |
| R29             | RsNV16, RsPV2B  | 2                      | 0.3810                                  | 0.1414       | 0.0241     |
| R30             | RsKV, RsMV45, RsMV72, RsNV16                            | 4                      | 0.1880                                  | 0.0211       | 0.0097     |
| R32             | RsMV45, RsMV58, RsMV87, RsNV16                          | 4                      | 0.2310                                  | 0.0231       | 0.0183     |
| R33             | RsMV45, RsMV87, RsNV16                                  | 3                      | 0.3750                                  | 0.0502       | 0.0157     |
| R35             | RsMV87, RsMV104, RsNV16                                 | 3                      | 0.3680                                  | 0.0695       | 0.0167     |
| R36             | RsNV16  | 1                      | 0.0140                                  | 0.1150       | 0.0051     |
| R37             | RsMV73, RsMV75, RsMV80, RsNV16                          | 4                      | 0.0830                                  | 0.0741       | 0.0105     |
| R38             | RsMV82, RsMV99, RsNV16                                  | 3                      | 0.3620                                  | 0.0615       | 0.0052     |
| R39             | RsNV16, RsPV17  | 2                      | 0.0770                                  | 0.1069       | 0.0186     |
| R40             | RsMV90, RsNV16  | 2                      | 0.0570                                  | 0.0860       | 5.4887     |
| R41             | RsNV16  | 1                      | 0.2280                                  | 0.1125       | 0.0118     |
| R42             | RsMV57, RsNV16, RsPV2B                                  | 3                      | 0.2360                                  | 0.3061       | 0.0100     |
| RR2             | RsMV65, RsMV81, RsNV16                                  | 3                      | 0.3650                                  | 0.6767       | 27.8497    |
| RR5             | RsNV16  | 1                      | 0.1220                                  | 0.0636       | 5.3201     |
| RR6             | RsNV16, RsOLV7  | 2                      | 0.0520                                  | 0.1402       | 0.0112     |
| RR7             | RsMV62, RsMV81, RsMV86, RsMV87, RsMV94, RsMV100, RsNV16 | 7                      | 0.1230                                  | 0.1129       | 0.0160     |
| RR8             | RsMV56, RsNV2, RsNV16                                   | 3                      | 0.0940                                  | 0.1026       | 0.0049     |
| RR11            | RsNV16  | 1                      | 0.4260                                  | 0.1844       | 0.0063     |
| RR13            | RsNV16  | 1                      | 0.3760                                  | 0.0456       | 0.0056     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>   | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RR16         | RsBLV3, RsMV90, RsNV16                                 | 3                   | 0.3470                                  | 0.1276       | 0.0059     |
| RR17         | RsMV68, RsMV99, RsNV16, RsPV15                         | 4                   | 0.2790                                  | 0.1600       | 0.0068     |
| RR18         | RsMV56, RsMV96, RsNV16                                 | 3                   | 0.1490                                  | 0.1230       | 0.0093     |
| RR20         | RsMV62, RsMV81, RsMV87, RsMV94, RsNV16, RsPV15, RsPV20 | 7                   | 0.1420                                  | 0.0369       | 2.8348     |
| RR22         | RsMV81, RsNV16   | 2                   | 0.1480                                  | 0.0503       | 3.2472     |
| RR23         | RsMV81, RsNV16   | 2                   | 0.0980                                  | 0.0454       | 3.0694     |
| RR25         | RsMV87, RsMV99, RsNV16, RsPV15                         | 4                   | 0.2210                                  | 0.1390       | 0.0074     |
| RR26         | RsNV16, RsPV2B   | 2                   | 0.1640                                  | 0.1603       | 0.0140     |
| RR27         | RsNV16   | 1                   | 0.2220                                  | 0.0776       | 4.5461     |
| R1(12)       | RsMV49, RsMV60, RsMV66, RsMV88, RsNV16                 | 5                   | 0.2760                                  | 0.0962       | 0.0081     |
| R2(12)       | RsMV47, RsMV48, RsMV59, RsNV16, RsPV2B                 | 5                   | 0.2330                                  | 0.0979       | 0.0109     |
| R3(12)       | RsMV87, RsNV16   | 2                   | 0.1390                                  | 0.1113       | 0.0067     |
| R4(12)       | RsMV42, RsMV54, RsMV95, RsNV16                         | 4                   | 0.1330                                  | 0.1405       | 0.0193     |
| R5(12)       | RsMV42, RsMV74, RsNV16, RsNLV1                         | 4                   | 0.2140                                  | 0.1525       | 0.0073     |
| R6(12)       | RsNV15, RsNV16, RsPV2B, RsPV17, RsPV20                 | 5                   | 0.1230                                  | 0.1174       | 0.0126     |
| RHB-1        | RsMV42, RsMV74, RsMV81, RsMV95, RsNV16                 | 5                   | 0.1095                                  | 0.0266       | 5.9142     |
| RHB-2        | RsMV42, RsMV74, RsMV95, RsNV16                         | 4                   | 0.1271                                  | 0.0452       | 6.0018     |
| RHB-3        | RsMV81, RsNV16   | 2                   | 0.1253                                  | 0.0347       | 5.8003     |
| RHB-4        | RsMV42, RsMV74, RsMV81, RsMV95, RsNV16                 | 5                   | 0.1200                                  | 0.0315       | 5.5436     |
| RHL1         | RsMV87, RsNSV7, RsNV13, RsNV16                         | 4                   | 0.0752                                  | 0.0421       | 0.0276     |
| RHL2         | RsNSV7, RsNV13, RsNV16                                 | 3                   | 0.0687                                  | 0.0482       | 0.0266     |
| RHL3         | RsHV8, RsMV53, RsMV87, RsNV16                          | 4                   | 0.0916                                  | 0.0588       | 0.0365     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>           | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RHL4         | RsNSV7, RsNV13, RsNV16   | 3                   | 0.0632                                  | 0.0404       | 0.0315     |
| RHL5         | RsMV80, RsMV83, RsNSV7, RsNV13, RsNV16, RsPV20                 | 6                   | 0.0658                                  | 0.0502       | 0.0315     |
| RHL6         | RsNV16, RsPV17   | 2                   | 0.1409                                  | 0.0687       | 0.0244     |
| RNM-1        | RsMV42, RsMV74, RsMV81, RsMV87, RsMV95, RsNV16                 | 6                   | 0.1928                                  | 0.0689       | 0.0209     |
| RNM-2        | RsMV42, RsMV74, RsMV81, RsMV95, RsNV16                         | 5                   | 0.2030                                  | 0.0671       | 0.0294     |
| RNM-3        | RsNV16   | 1                   | 0.2532                                  | 0.0334       | 0.0287     |
| RNM-4        | RsNV16   | 1                   | 0.2480                                  | 0.0332       | 0.0219     |
| RNM-5        | RsMV82, RsMV99, RsMV105, RsNV16, RsPV18, RsPV19                | 6                   | 0.2047                                  | 0.0244       | 0.0094     |
| RNM-7        | RsNV16   | 1                   | 0.3185                                  | 0.0318       | 0.0174     |
| RNM-8        | RsNV16, RsPV15   | 2                   | 0.3417                                  | 0.0583       | 0.0187     |
| RNM-9        | RsMV87, RsNV16, RsPV2B, RsPV16, RsPV19                         | 5                   | 0.4212                                  | 0.0536       | 0.0175     |
| RSX-1        | RsBLV4, RsBLV5, RsMV62, RsMV74, RsMV80, RsMV87, RsNV16, RsPV2B | 8                   | 0.1448                                  | 0.0725       | 0.0156     |
| RSX-2        | RsBLV4, RsMV62, RsMV80, RsMV87, RsNV16, RsPV2B                 | 6                   | 0.0819                                  | 0.0492       | 0.0092     |
| RSX-3        | RsNV16   | 1                   | 0.1102                                  | 0.0419       | 0.0158     |
| RSX-4        | RsBLV4, RsBLV6, RsBLV5, RsMV80, RsNV16                         | 5                   | 0.1307                                  | 0.0488       | 0.0161     |
| RSX-5        | RsBLV4, RsBLV5, RsMV73, RsMV75, RsMV80, RsNV16, RsPV2B         | 7                   | 0.0969                                  | 0.0431       | 0.0140     |
| RSX-6        | RsBLV4, RsBLV6, RsBLV5, RsMV80, RsNV16, RsPV2B                 | 6                   | 0.1727                                  | 0.0465       | 0.0204     |
| RSX-7        | RsNV16   | 1                   | 0.1200                                  | 0.0522       | 0.0133     |
| RX-1         | RsNV16   | 1                   | 0.1618                                  | 0.0673       | 0.0175     |
| RX-2         | RsMV42, RsMV74, RsMV95, RsNV16                                 | 4                   | 0.2051                                  | 0.1116       | 0.0342     |
| RX-3         | RsNV16   | 1                   | 0.1156                                  | 0.0333       | 0.0210     |
| RX-4         | RsMV55, RsNV16   | 2                   | 0.1576                                  | 0.0402       | 0.0257     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>           | Number of mycovirus | EC <sub>50</sub> (μg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RX-5         | RsBLV2, RsBLV4, RsBLV5, RsMV55, RsMV73, RsNV10, RsNV16, RsPV2B | 8                   | 0.1458                                  | 0.0524       | 0.0240     |
| RX6          | RsHV5, RsHV7, RsNV2, RsNV16, RsPV2B                            | 5                   | 0.1795                                  | 0.1201       | 0.0153     |
| RX7          | RsHV5, RsHV7, RsMV42, RsMV74, RsMV95, RsNV16                   | 6                   | 0.1960                                  | 0.0974       | 0.0166     |
| RX8          | RsHV5, RsNV2, RsNV16   | 3                   | 0.1918                                  | 0.0935       | 0.0214     |
| RX9          | RsBLV2, RsBLV3, RsNV16   | 3                   | 0.1035                                  | 0.0616       | 0.0147     |
| RX10         | RsBLV2, RsBLV3, RsNV16   | 3                   | 0.1189                                  | 0.0780       | 0.0145     |
| RX11         | RsBLV2, RsBLV3, RsBLV4, RsBLV5, RsBLV6, RsMV83, RsNV16         | 7                   | 0.1600                                  | 0.0900       | 0.0140     |
| RX12         | RsBLV2, RsBLV3, RsBLV4, RsBLV5, RsBLV6, RsMV83, RsNV16         | 7                   | 0.1163                                  | 0.0729       | 0.0186     |
| RX13         | RsNV16   | 1                   | 0.1275                                  | 0.0823       | 0.0202     |
| RX14         | RsBLV3, RsMV42, RsMV83, RsNV16                                 | 4                   | 0.1347                                  | 0.0835       | 0.0210     |
| RX15         | RsMV64, RsNV16   | 2                   | 0.1353                                  | 0.0756       | 0.0235     |
| RX16         | RsBLV2, RsBLV3, RsMV83, RsNV16                                 | 4                   | 0.1230                                  | 0.0777       | 0.0227     |
| RX17         | RsBLV2, RsBLV3, RsNV16   | 3                   | 0.1220                                  | 0.0823       | 0.0215     |
| RN5          | RsNV16   | 1                   | 0.1155                                  | 0.1001       | 0.0359     |
| RN6          | RsNV16   | 1                   | 0.2997                                  | 0.0699       | 0.0601     |
| RN10         | RsMV63, RsMV99, RsNV16   | 3                   | 0.4189                                  | 0.1126       | 0.0546     |
| RXJ3         | RsNV16   | 1                   | 0.1222                                  | 0.1015       | 0.0541     |
| RHL9         | RsMV75, RsNV16   | 2                   | 0.0938                                  | 0.0498       | 0.0466     |
| RHL10        | RsMV75, RsNV16   | 2                   | 0.0803                                  | 0.0734       | 0.0493     |
| RHL11        | RsMV75, RsNV16   | 2                   | 0.0837                                  | 0.0681       | 0.0450     |
| RHL17        | RsNV16   | 1                   | 0.1531                                  | 0.0791       | 0.0417     |
| RN11         | RsNV16   | 1                   | 0.1288                                  | 0.0476       | 0.0238     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup> | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RN15         | RsNV16   | 1                   | 0.5647                                  | 0.1126       | 0.0408     |
| RN17         | RsMV51, RsNV16                                       | 2                   | 0.2889                                  | 0.0928       | 10.9504    |
| RN19         | RsMV51, RsNV16                                       | 2                   | 0.3512                                  | 0.0850       | 14.4323    |
| RN20         | RsNV16, RsPV2B                                       | 2                   | 0.2632                                  | 0.0526       | 0.0418     |
| RN21         | RsMV51, RsNV16, RsPV15                               | 3                   | 0.2271                                  | 0.1205       | 0.0328     |
| RN22         | RsNV16, RsOLV8, RsPV2B                               | 3                   | 0.2393                                  | 0.1087       | 0.0318     |
| RN23         | RsNV16   | 1                   | 0.2976                                  | 0.1352       | 0.0372     |
| RN25         | RsNV16   | 1                   | 0.2154                                  | 0.1215       | 0.0364     |
| RN28         | RsNV16   | 1                   | 0.7893                                  | 0.1871       | 0.0425     |
| RN29         | RsNV16   | 1                   | 0.6872                                  | 0.1162       | 0.0368     |
| RN31         | RsNV16   | 1                   | 0.6059                                  | 0.1210       | 0.0437     |
| RN39         | RsMV56, RsMV77, RsMV86, RsNV16, RsPV2B               | 5                   | 0.5200                                  | 0.0818       | 0.0393     |
| RN43         | RsNV16   | 1                   | 0.8706                                  | 0.1818       | 0.0474     |
| RN44         | RsNV16   | 1                   | 1.1748                                  | 0.1436       | 0.0721     |
| RN49         | RsBLV3, RsMV45, RsNV16                               | 3                   | 0.8926                                  | 0.1832       | 0.0521     |
| RN50         | RsNV16   | 1                   | 1.0102                                  | 0.1828       | 0.0512     |
| RN53         | RsNV16, RsPV2B                                       | 2                   | 1.0231                                  | 0.1924       | 0.0706     |
| RN56         | RsMV45, RsNV16                                       | 2                   | 1.0589                                  | 0.1695       | 0.0628     |
| RN57         | RsNV16   | 1                   | 0.7034                                  | 0.1598       | 0.0606     |
| RN60         | RsMV45, RsNV16                                       | 2                   | 1.1904                                  | 0.1306       | 0.0675     |
| RN61         | RsMV45, RsNV2, RsNV16, RsPV2B                        | 4                   | 0.6312                                  | 0.1206       | 0.0515     |
| RN62         | RsNV16, RsPV2B                                       | 2                   | 0.7140                                  | 0.1071       | 0.0434     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup> | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RN63         | RsNV16   | 1                   | 0.6276                                  | 0.1083       | 0.0383     |
| RN65         | RsNV16   | 1                   | 0.5596                                  | 0.1216       | 0.0417     |
| RN66         | RsNV16   | 1                   | 0.7664                                  | 0.1537       | 0.0483     |
| RN67         | RsNV16   | 1                   | 0.6381                                  | 0.1311       | 0.0579     |
| RN69         | RsNV16   | 1                   | 0.5384                                  | 0.1217       | 0.0488     |
| RN72         | RsNV16   | 1                   | 0.5895                                  | 0.2443       | 0.0420     |
| RN74         | RsNV16, RsPV2B                                       | 2                   | 0.6700                                  | 0.1218       | 0.0411     |
| RN76         | RsMV56, RsMV77, RsMV86, RsNV16                       | 4                   | 0.5794                                  | 0.0801       | 0.0313     |
| RN78         | RsNV16   | 1                   | 0.1844                                  | 0.0705       | 0.0238     |
| RN79         | RsNV16   | 1                   | 0.2254                                  | 0.1048       | 0.0280     |
| RN80         | RsNV16   | 1                   | 0.2320                                  | 0.1227       | 0.0370     |
| RN81         | RsNV16   | 1                   | 0.2322                                  | 0.1168       | 0.0316     |
| RN82         | RsNV16   | 1                   | 0.2506                                  | 0.1337       | 0.0318     |
| RN83         | RsMV76, RsNV16                                       | 2                   | 0.1854                                  | 0.0845       | 0.0338     |
| RN84         | RsMV62, RsMV65, RsMV83, RsMV94, RsNV16               | 5                   | 0.1895                                  | 0.1156       | 0.0394     |
| RN85         | RsNV16   | 1                   | 0.2346                                  | 0.1052       | 0.0372     |
| RN86         | RsMV76, RsNV16                                       | 2                   | 0.2336                                  | 0.1043       | 0.0348     |
| RN87         | RsNV16   | 1                   | 0.2684                                  | 0.1655       | 0.0356     |
| RN88         | RsMV76, RsNV16                                       | 2                   | 0.2043                                  | 0.1133       | 0.0320     |
| RN90         | RsMV76, RsNV16                                       | 2                   | 0.2488                                  | 0.1401       | 0.0373     |
| RN91         | RsMV99, RsNV16                                       | 2                   | 0.5895                                  | 0.0801       | 0.0403     |
| RN92         | RsNV16   | 1                   | 0.5963                                  | 0.1220       | 0.0459     |

**Table S4.** (Continued from preceding page).

| Isolate<br>code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup> | Number of<br>mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|-----------------|--|------------------------|---|--------------|------------|
|                 |  |                        | Flutolanil                              | Thifluzamide | Pencycuron |
| RN94            | RsNV16   | 1                      | 0.7662                                  | 0.1641       | 0.0635     |
| RN95            | RsNV16   | 1                      | 0.6885                                  | 0.1245       | 0.0586     |
| RN97            | RsMV44, RsNV16                                       | 2                      | 0.6830                                  | 0.0796       | 0.0400     |
| RN98            | RsMV99, RsNV16                                       | 2                      | 0.6971                                  | 0.0875       | 0.0402     |
| RN99            | RsNV16   | 1                      | 0.6236                                  | 0.1080       | 0.0396     |
| RN100           | RsNV16, RsPV2B                                       | 2                      | 0.6352                                  | 0.0881       | 0.0431     |
| RN102           | RsNV16   | 1                      | 0.4588                                  | 0.0807       | 0.0426     |
| RN104           | RsMV41, RsMV76, RsNV16                               | 3                      | 0.6418                                  | 0.0883       | 0.0418     |
| RN105           | RsNV16   | 1                      | 0.1997                                  | 0.0831       | 0.0328     |
| RX18            | RsMV83, RsNV16                                       | 2                      | 0.1774                                  | 0.1081       | 0.0516     |
| RX19            | RsMV75, RsMV83, RsNV16                               | 3                      | 0.1575                                  | 0.0962       | 0.0568     |
| RX20            | RsMV75, RsMV77, RsMV83, RsNV16                       | 4                      | 0.1756                                  | 0.0961       | 0.0518     |
| RX21            | RsMV75, RsMV83, RsNV16, RsPV2B                       | 4                      | 0.1637                                  | 0.0935       | 0.0410     |
| RX22            | RsNV16   | 1                      | 0.1556                                  | 0.0989       | 0.0403     |
| RX23            | RsHV8, RsMV83, RsNV16                                | 3                      | 0.1140                                  | 0.1092       | 0.0304     |
| RX24            | RsMV42, RsMV95, RsNV16                               | 3                      | 0.1945                                  | 0.1367       | 0.0401     |
| RX25            | RsMV42, RsMV87, RsMV94, RsMV95, RsNV16               | 5                      | 0.2137                                  | 0.1234       | 0.0548     |
| RX26            | RsMV77, RsMV95, RsNV16, RsPV2B                       | 4                      | 0.2058                                  | 0.0952       | 0.0402     |
| RX28            | RsNV16   | 1                      | 0.3726                                  | 0.1332       | 0.0228     |
| RX29            | RsNV16   | 1                      | 0.3228                                  | 0.0741       | 0.0434     |
| RX31            | RsNV16, RsPV2B                                       | 2                      | 0.4138                                  | 0.0625       | 0.0387     |
| RX39            | RsMV41, RsMV76, RsMV91, RsNV16, RsPV2B               | 5                      | 0.1795                                  | 0.0985       | 0.0411     |



**Table S4.** (Continued from preceding page).

| Isolate<br>code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup> | Number of<br>mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|-----------------|--|------------------------|---|--------------|------------|
|                 |  |                        | Flutolanil                              | Thifluzamide | Pencycuron |
| RX44            | RsMV41, RsMV76, RsMV91, RsNV16                       | 4                      | 0.1565                                  | 0.0895       | 0.0317     |
| RN106           | RsHV8, RsNV16  | 2                      | 0.2180                                  | 0.1198       | 0.0547     |
| RN107           | RsMV44, RsNV16, RsPV17                               | 3                      | 0.2069                                  | 0.1350       | 0.0528     |
| RN108           | RsHV8, RsMV46, RsNV16, RsPV17                        | 4                      | 0.2307                                  | 0.0993       | 0.0465     |
| RN109           | RsHV8, RsNV16  | 2                      | 0.1930                                  | 0.1377       | 0.0446     |
| RN110           | RsNV16, RsPV17                                       | 2                      | 0.2624                                  | 0.1206       | 0.0530     |
| RN111           | RsBLV3, RsHV8, RsNV16                                | 3                      | 0.2348                                  | 0.1156       | 0.0489     |
| RN112           | RsHV8, RsNV16  | 2                      | 0.2356                                  | 0.1632       | 0.0555     |
| RN113           | RsHV8, RsNV16  | 2                      | 0.2651                                  | 0.1603       | 0.0526     |
| RN114           | RsMV72, RsNV16, RsPV16                               | 3                      | 0.7715                                  | 0.1753       | 0.0485     |
| RN115           | RsMV62, RsMV81, RsMV86, RsMV94, RsNV16               | 5                      | 0.3640                                  | 0.0619       | 0.0538     |
| RN116           | RsNV16   | 1                      | 0.6074                                  | 0.0839       | 0.0658     |
| RN117           | RsNV16   | 1                      | 0.6762                                  | 0.1870       | 0.0493     |
| RN118           | RsNV16   | 1                      | 0.5867                                  | 0.0931       | 0.0561     |
| RN119           | RsBLV3, RsNV16                                       | 2                      | 0.6703                                  | 0.0965       | 0.0547     |
| RN120           | RsNV16   | 1                      | 0.4560                                  | 0.0974       | 0.0378     |
| RN121           | RsKV, RsMV72, RsNV16, RsOLV8, RsPV2B                 | 5                      | 0.3646                                  | 0.0885       | 0.0513     |
| RN122           | RsBLV3, RsNV16, RsOLV8                               | 3                      | 0.2322                                  | 0.0703       | 0.0380     |
| RN123           | RsKV, RsNV16, RsOLV8                                 | 3                      | 0.4603                                  | 0.0792       | 0.0436     |
| RN124           | RsNV16, RsOLV8                                       | 2                      | 0.2670                                  | 0.0577       | 0.0409     |
| RN125           | RsNV16   | 1                      | 0.5645                                  | 0.1015       | 0.0514     |
| RN126           | RsNV16, RsOLV8                                       | 2                      | 0.5594                                  | 0.0851       | 0.0485     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>   | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|--|---------------------|---|--------------|------------|
|              |  |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RN127        | RsBLV3, RsNV16, RsOLV8, RsPV17   | 4                   | 0.4400                                  | 0.1075       | 0.0453     |
| RN128        | RsNV16, RsOLV8   | 2                   | 0.3703                                  | 0.1013       | 0.0386     |
| RN129        | RsNV16, RsPV16, RsPV20, RsPV21   | 4                   | 0.3424                                  | 0.0633       | 0.0374     |
| RN130        | RsMV69, RsNV16, RsPV21   | 3                   | 0.5125                                  | 0.0873       | 0.0388     |
| RN131        | RsMV69, RsNV16, RsPV16, RsPV20, RsPV21   | 5                   | 0.2641                                  | 0.0650       | 0.0358     |
| RN132        | RsMV69, RsNV16, RsPV16, RsPV21   | 4                   | 0.3943                                  | 0.0976       | 0.0405     |
| RN133        | RsHV8, RsMV74, RsNV16  | 3                   | 0.2112                                  | 0.1067       | 0.0549     |
| RN134        | RsMV42, RsMV74   | 2                   | 0.1596                                  | 0.0873       | 0.0478     |
| RN135        | RsMV41, RsMV76, RsMV91, RsNV1, RsNV3, RsNV8, RsNV16  | 7                   | 0.2360                                  | 0.1323       | 0.0514     |
| RN136        | RsBLV4, RsBLV5, RsHV8, RsMV41, RsMV76, RsMV91, RsNV1, RsNV4, RsNV8, RsNV9, RsNV12, RsNV16, RsNV18  | 13                  | 0.1948                                  | 0.1307       | 0.0440     |
| RN137        | RsBLV3, RsBLV4, RsBLV5, RsHV8, RsMV41, RsMV76, RsMV91, RsNV1, RsNV3, RsNV4, RsNV6, RsNV7, RsNV8, RsNV9, RsNV12, RsNV14, RsNV16, RsNV18                 | 18                  | 0.2260                                  | 0.1077       | 0.0502     |
| RN138        | RsBLV4, RsBLV5, RsHV8, RsMV41, RsMV76, RsMV91, RsNLV2, RsNV1, RsNV3, RsNV4, RsNV8, RsNV11, RsNV12, RsNV16, RsNV18, RsPV15, RsPV17                      | 17                  | 0.2106                                  | 0.1551       | 0.0508     |
| RN139        | RsNLV2, RsNV1, RsNV3, RsNV8, RsNV11, RsNV13, RsNV16  | 7                   | 0.2256                                  | 0.1299       | 0.0581     |
| RN140        | RsBLV3, RsNLV2, RsNV1, RsNV3, RsNV4, RsNV8, RsNV11, RsNV16, RsPV17   | 9                   | 0.2432                                  | 0.1628       | 0.0472     |
| RN141        | RsBLV4, RsBLV5, RsHV8, RsMV41, RsMV76, RsMV91, RsNV1, RsNV4, RsNV5, RsNV6, RsNV7, RsNV8, RsNV9, RsNV12, RsNV14, RsNV16, RsNV17, RsNV18, RsNV19, RsPV17 | 20                  | 0.1103                                  | 0.0599       | 0.0407     |
| RN142        | RsBLV4, RsBLV5, RsHV8, RsNV16, RsPV17  | 5                   | 0.2287                                  | 0.0975       | 0.0561     |
| RN143        | RsMV42, RsMV74, RsNV16, RsPV20   | 4                   | 0.1283                                  | 0.0996       | 0.0365     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>                          | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|---|---------------------|---|--------------|------------|
|              |   |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RN144        | RsMV42, RsMV74, RsNV16, RsPV20  | 4                   | 0.1349                                  | 0.1069       | 0.0346     |
| RN145        | RsNV16, RsPV17  | 2                   | 0.2227                                  | 0.1332       | 0.0394     |
| RN146        | RsMV43, RsMV56, RsMV78, RsMV86, RsNV16, RsPV2B, RsPV16, RsPV18, RsPV19        | 9                   | 0.4852                                  | 0.1404       | 0.0508     |
| RN147        | RsMV43, RsMV56, RsMV78, RsMV86, RsNV16, RsPV2B, RsPV18, RsPV19                | 8                   | 0.7049                                  | 0.0934       | 0.0510     |
| RN148        | RsBLV3, RsMV43, RsMV56, RsMV77, RsMV78, RsNV16, RsPV16, RsPV18, RsPV19        | 9                   | 0.1972                                  | 0.1158       | 0.0420     |
| RN149        | RsHV8, RsMV43, RsMV56, RsMV77, RsMV78, RsMV86, RsNV16, RsPV16, RsPV18, RsPV19 | 10                  | 0.5552                                  | 0.0929       | 0.0540     |
| RN150        | RsBLV3, RsMV43, RsMV56, RsMV78, RsMV86, RsNV16, RsPV16, RsPV18, RsPV19        | 9                   | 0.4130                                  | 0.1659       | 0.0539     |
| RN151        | RsNV16, RsPV19  | 2                   | 0.6774                                  | 0.1470       | 0.0621     |
| RN152        | RsMV56, RsNV16, RsPV18, RsPV19  | 4                   | 0.3974                                  | 0.0621       | 0.0326     |
| RN153        | RsMV56, RsNV16, RsPV16, RsPV18, RsPV19  | 5                   | 0.8131                                  | 0.1108       | 0.0539     |
| RN154        | RsNV16, RsPV2B, RsPV16, RsPV19  | 4                   | 0.4132                                  | 0.0703       | 0.0478     |
| RN155        | RsNV16, RsPV16, RsPV19  | 3                   | 0.3376                                  | 0.0530       | 0.0304     |
| RN156        | RsMV43, RsMV56, RsMV77, RsNV16, RsPV2B, RsPV19                                | 6                   | 0.5455                                  | 0.1327       | 0.0283     |
| RN157        | RsNV16, RsPV2B, RsPV16, RsPV19  | 4                   | 0.5651                                  | 0.1157       | 0.0507     |
| RN158        | RsMV77, RsNV16, RsPV16, RsPV19  | 4                   | 0.4940                                  | 0.1770       | 0.0525     |
| RN159        | RsMV77, RsNV16, RsPV16, RsPV18, RsPV19  | 5                   | 0.5351                                  | 0.2165       | 0.0605     |
| RN160        | RsBLV3, RsNV16, RsPV16, RsPV18, RsPV19  | 5                   | 0.4777                                  | 0.0687       | 0.0374     |
| RN161        | RsNV16, RsPV16, RsPV19  | 3                   | 0.6307                                  | 0.1391       | 0.0504     |
| RN162        | RsNV16, RsPV16, RsPV19  | 3                   | 0.5906                                  | 0.1666       | 0.0668     |
| RN163        | RsBLV2, RsNV16, RsPV19  | 3                   | 0.8279                                  | 0.1392       | 0.0575     |

**Table S4.** (Continued from preceding page).

| Isolate code | Mycovirus associated <i>Rhizoctonia</i> <sup>z</sup>                        | Number of mycovirus | EC <sub>50</sub> (µg·mL <sup>-1</sup> ) |              |            |
|--------------|---|---------------------|---|--------------|------------|
|              |   |                     | Flutolanil                              | Thifluzamide | Pencycuron |
| RN164        | RsMV41, RsMV69, RsMV76, RsMV91, RsNV16, RsPV2B                              | 6                   | 0.3943                                  | 0.0744       | 0.0361     |
| RN165        | RsBLV2, RsMV41, RsMV69, RsMV76, RsMV91, RsMV99, RsNV16, RsPV19              | 8                   | 0.5619                                  | 0.1180       | 0.0767     |
| RN166        | RsBLV2, RsMV41, RsMV76, RsNV16, RsPV19                                      | 5                   | 0.5810                                  | 0.0964       | 0.0479     |
| RN167        | RsMV42, RsMV74, RsMV95, RsNV16, RsPV16, RsPV17                              | 6                   | 0.1048                                  | 0.0474       | 6.7826     |
| RN168        | RsMV42, RsMV74, RsMV81, RsMV95, RsNV16                                      | 5                   | 0.0853                                  | 0.0752       | 7.8470     |
| RN169        | RsMV42, RsMV74, RsMV81, RsMV95, RsNV16, RsPV16                              | 6                   | 0.1568                                  | 0.0714       | 3.6373     |
| RX46         | RsNV2, RsNV16, RsPV2B   | 3                   | 0.5370                                  | 0.1076       | 0.0549     |
| RX47         | RsMV41, RsMV46, RsMV52, RsMV76, RsMV85, RsMV91, RsMV99, RsNV16              | 8                   | 0.5533                                  | 0.0951       | 0.0442     |
| RX48         | RsHV6, RsHV7, RsMV46, RsMV52, RsMV76, RsMV85, RsMV91, RsNV2, RsNV16, RsPV2B | 10                  | 0.6919                                  | 0.1411       | 0.0643     |

**Note:** <sup>z</sup> Letters followed by Arabic numerals represent the abbreviation of the mycovirus. RsMV, Rhizoctonia solani mitovirus; RsNV, Rhizoctonia solani narnavirus; RsPV, Rhizoctonia solani partitivirus; RsKV, Rhizoctonia solani Khurdun virus; RsOLV, Rhizoctonia solani ourmia-like virus; RsBLV, Rhizoctonia solani beny-like virus; RsHV, Rhizoctonia solani hypovirus; RsNSV, Rhizoctonia solani negative-stranded virus; RsNLV, Rhizoctonia solani narna-like virus.