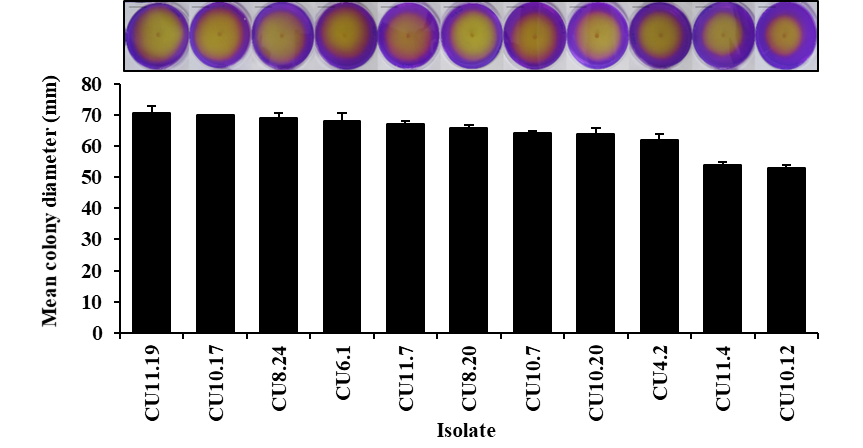
**Supplementary Material**

**Supplementary Table 1**. Mean AUDPC values for each isolate x variety/accession interaction (germplasm set 1).

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *B. napus entry* | | | | | | | | | | | | |
| *Isolate ID* | 06\_06\_3792 | Marlin | Mystic | Skipton | Tawriffic TT | Thunder TT | Bravo TT | AV Garnet | Warrior | Charlton | Additive AUDPC | Isolates selected for germplasm set 2 | |
| CU10.12 | 172 | 243 | 451 | 479 | 494 | 848 | 881 | 1058 | 1152 | 1256 | 7034 | - | |
| CU11.4 | 307 | 406 | 399 | 1340 | 747 | 1031 | 1061 | 1021 | 1239 | 1283 | 8834 | - | |
| CU4.2 | 444 | 491 | 1343 | 1958 | 773 | 1485 | 1424 | 1172 | 1923 | 2215 | 13227 | - | |
| CU11.7 | 774 | 1517 | 694 | 1352 | 1246 | 1497 | 1898 | 1412 | 1345 | 1820 | 13553 | - | |
| CU10.7 | 1087 | 1721 | 923 | 1101 | 899 | 1510 | 1596 | 2258 | 1572 | 2121 | 14786 | - | |
| CU6.1 | 852 | 1724 | 1552 | 1809 | 798 | 1310 | 1434 | 1826 | 2017 | 1797 | 15119 | - | |
| CU10.20 | 539 | 1855 | 1551 | 2477 | 1252 | 1412 | 1093 | 2145 | 1472 | 2142 | 15936 | - | |
| CU10.17 | 1034 | 2148 | 1196 | 2135 | 1310 | 1838 | 2309 | 2206 | 1241 | 1541 | 16956 | yes | |
| CU11.19 | 1280 | 1162 | 1316 | 2444 | 1586 | 1454 | 1709 | 2456 | 2048 | 1880 | 17331 | yes | |
| CU8.20 | 1144 | 1157 | 1721 | 1953 | 1792 | 1749 | 2140 | 1774 | 1889 | 2132 | 17449 | - | |
| CU8.24 | 775 | 1840 | 1862 | 2098 | 1874 | 1145 | 1940 | 1398 | 2366 | 2769 | 18066 | yes | |
| Additive AUDPC | 8406 | 14262 | 13005 | 19144 | 12769 | 15277 | 17485 | 18726 | 18262 | 20955 |  |  | |

**Supplementary Table 2.** Growth on PDA, mycelial compatibility group and IGS haplotype

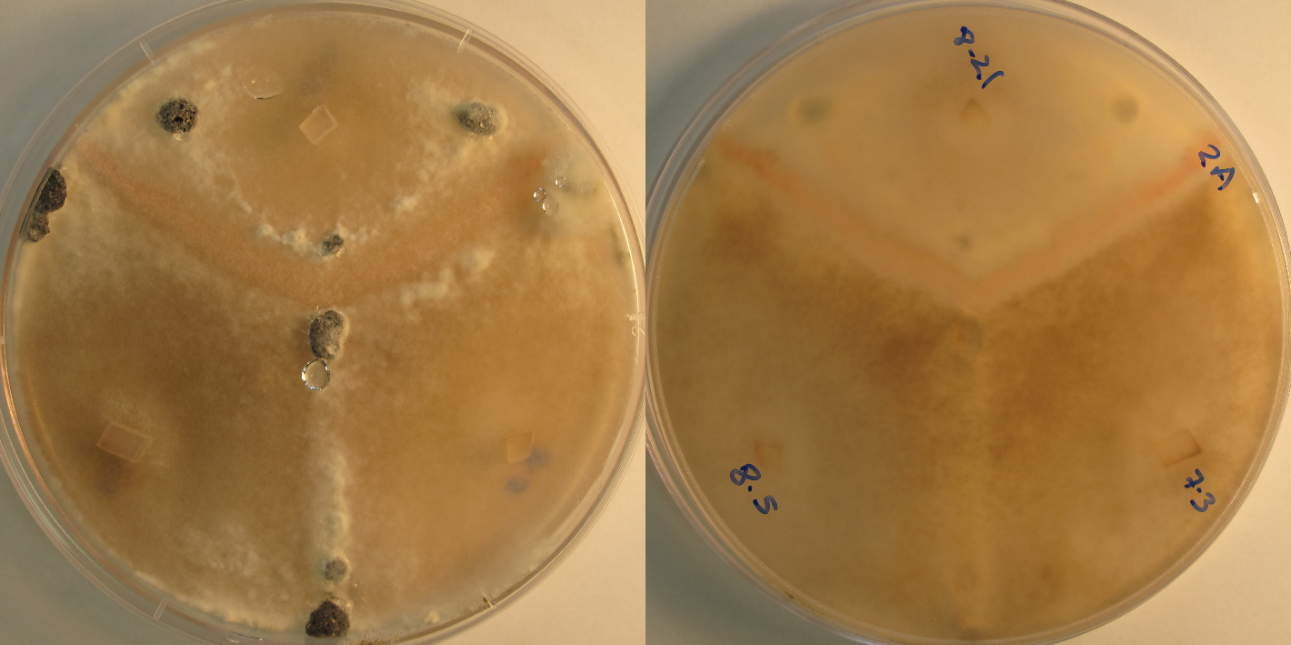
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Isolate ID* | Collection location | Collection date | Host species | Adequate growth on PDA | Mycelial compatibility group | IGS haplotype (from Clarkson et al. (2017) | Isolates selected for screening of *B. napus* germplasm set 1 and 2, respectively |
| CU1.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 3 |  |
| CU1.2 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 3 |  |
| CU1.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 3 |  |
| CU2.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU2.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU3.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 3 |  |
| CU3.2 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU4.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU4.2 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 | 1 |
| CU5.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | IX | 7 |  |
| CU5.2 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | IX | 7 |  |
| CU5.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 7 |  |
| CU6.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | II | 7 | 1 |
| CU6.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 7 |  |
| CU7.2 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | II | 7 |  |
| CU7.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | II | 7 |  |
| CU8.2 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | III | 5 |  |
| CU8.3 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | IX | 7 |  |
| CU8.5 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | II | 7 |  |
| CU8.12 | South Stirling, Western Australia | 2014 | *Brassica napus* | No | N/A | 5 |  |
| CU8.13 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | IX | 7 |  |
| CU8.14 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU8.19 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | III | 5 |  |
| CU8.20 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | III | 5 | 1 |
| CU8.21 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | III | 5 |  |
| CU8.22 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | IV | 3 |  |
| CU8.23 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU8.24 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | IV | 3 | 1 and 2 |
| CU8.25 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | III | 5 |  |
| CU8.30 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | XII | 7 |  |
| CU8.31 | South Stirling, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 3 |  |
| CU10.1 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | X | 5 |  |
| CU10.2 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 5 |  |
| CU10.3 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | VII | 5 |  |
| CU10.4 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 7 |  |
| CU10.5 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | V | 5 |  |
| CU10.6 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | XII | 7 |  |
| CU10.7 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | V | 5 | 1 |
| CU10.8 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | V | 5 |  |
| CU10.9 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 7 |  |
| CU10.10 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | V | 5 |  |
| CU10.11 | Geraldton, Western Australia | 2014 | *Brassica napus* | No | N/A | 5 |  |
| CU10.12 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | VI | 3 | 1 |
| CU10.13 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 5 |  |
| CU10.14 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | VI | 3 |  |
| CU10.15 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 5 |  |
| CU10.16 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 7 |  |
| CU10.17 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | VII | 5 | 1 and 2 |
| CU10.18 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 5 |  |
| CU10.19 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 5 |  |
| CU10.20 | Geraldton, Western Australia | 2014 | *Brassica napus* | Yes | VIII | 3 | 1 |
| CU11.1 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | VIII | 3 |  |
| CU11.2 | Geraldton, Western Australia | 2014 | *Lupinus albus* | Yes | XI | 5 |  |
| CU11.3 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | IX | 7 |  |
| CU11.4 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | IX | 7 | 1 |
| CU11.5 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 7 |  |
| CU11.6 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 7 |  |
| CU11.7 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | X | 5 | 1 |
| CU11.8 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | IX | 7 |  |
| CU11.9 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | IX | 7 |  |
| CU11.10 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 5 |  |
| CU11.11 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | XII | 7 |  |
| CU11.12 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | V | 5 |  |
| CU11.13 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 3 |  |
| CU11.14 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 5 |  |
| CU11.15 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 5 |  |
| CU11.17 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | IX | 7 |  |
| CU11.18 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 5 |  |
| CU11.19 | Geraldton, Western Australia | 2014 | *Lupinus albus* | Yes | XI | 5 | 1 and 2 |
| CU11.20 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | Unique | 5 |  |
| CU11.21 | Eneabba, Western Australia | 2013 | *Lupinus albus* | Yes | III | 5 |  |
| CU1.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 3 |  |
| CU1.2 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 3 |  |
| CU1.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | No | N/A | 3 |  |
| CU2.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU2.3 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | I | 7 |  |
| CU3.1 | Mount Barker, Western Australia | 2014 | *Brassica napus* | Yes | Unique | 3 |  |



**Supplementary Fig 1.** Images show 11 *S*. *sclerotiorum* isolates grown on PDA supplemented with the pH indicator, bromophenol blue, which turns the initial purple medium at pH 7 to yellow at pH 4 (scale bar = 15 mm). The histogram shows the mean colony diameter on PDA of the same isolates at 48 hpi. Error bars = 1 standard deviation.



**Supplementary Fig. 2.** Six *B*. *napus* accessions in germplasm set 2 inoculated with three *S*. *sclerotiorum* isolates separately. The white arrows indicate lesion boundaries on each stem 21 days post inoculation. Scale bar = 50 mm.



**Supplementary Fig. 3.** Three *S*. *sclerotiorum* isolates grown on PDA amended with red food colouring seen from above (left side) and below (right side). Isolate CU8.21 is incompatible with the two other isolates, CU7.3 and CU8.5, as evident by the barrage between their mycelium (left) and the red V-shaped border (right).