



# First Report of *Rhizoctonia solani* AG-4 HG-I on *Campanula trachelium* in Italy

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In the autumn of 2017, a crown rot was observed on three-month-old plants of *Campanula trachelium* growing in a nursery located in Grugliasco (Northern Italy). Petioles rotted at the base and leaves wilted. Finally, affected plants died. *Rhizoctonia solani* was consistently isolated from affected tissues. Colonies did not produce sclerotia. One of these isolates was paired with *R. solani* tester strains belonging to the anastomosis groups AG-1, AG-2, AG-4, AG-7, and AG-11. The hyphal fusions were observed microscopically only with the group AG-4 (Fusion Frequency < 30%) (Sneh et al. 1991). The internal transcribed spacer (ITS) region of rDNA was amplified using the primers ITS1/ITS4 and sequenced (GenBank Accession number MG766874). BLASTn analysis (Altschul et al. 1997) of the 678 bp showed 99% identity with the sequence AY154307 of *Thanatephorus cucumeris* (teleomorph of *R. solani*). The high identity with a member of AG-4 HG-I led the *R. solani* isolated from *C. trachelium* to this subgroup (Gonzales et al. 2016). For pathogenicity tests, three

two-month-old healthy plants of *C. trachelium* were inoculated with fragments (about 5 × 5 × 3 mm) of a single isolate of *R. solani* grown on potato dextrose agar (PDA). About seven days later, a crown rot started on inoculated plants and *R. solani* was constantly reisolated from affected petioles. *R. solani* AG-4 HG-I is reported on *C. trachelium* for the first time in Italy.

## References

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