



First report of web blight on toothache plant caused by *Rhizoctonia solani* AG-4 HG-I in Italy

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During the summer of 2017, a web blight occurred on seedlings of *Spilanthus oleracea* growing in a commercial farm located near Albenga (Northern Italy). Affected plants showed a collar rot followed by leaf wilting and stem collapse. *Rhizoctonia solani* was consistently isolated from affected tissues. On potato dextrose agar (PDA), colonies were light-brown, not aerial, with coarse hyphae and produced few, small, flat, brown sclerotia with a crusty surface, up to 1 mm in diameter. The characterization was determined by using *R. solani* tester strains belonging to the anastomosis groups AG-1, AG-2, AG-4, AG-7, and AG-11. *R. solani* from *S. oleracea* anastomosed only with *R. solani* AG-4 (Fusion Frequency < 30%) (Sneh et al. 1991). Primers ITS1/ITS4 were used to amplify the Internal Transcribed Spacer (ITS) region of rDNA. BLASTn analysis (Altschul et al. 1997) of the 700 bp sequence (GenBank accession number MG366819) showed 99% similarity with the sequence AY154307 of *R. solani* AG-4 HG-I. One of the isolates was grown on sterilized wheat kernels that were distributed (3 g/l)

close to the collar of 15 60-day-old healthy plants of *S. oleracea* grown in pots (12 cm in diameter). Controls were treated with non-infected kernels. All plants were maintained in a moistened plastic bag, at the temperature of 23 ± 1 °C. About three days after the inoculation, a collar rot developed on all the inoculated plants and *R. solani* was reisolated from symptomatic tissues. Controls remained healthy. This is the first report of *R. solani* on *S. oleracea* in Italy as well as worldwide.

References

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