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(Article begins on next page)





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First Report of Web Blight on Winter Savory (*Satureja Montana "Repandens"*) caused by *Rhizoctonia solani* AG-1-IA in Italy. A. Garibaldi, D. Bertetti, P. Pensa, M.T. Amatulli and M. L.Gullino. Center of Competence AGROINNOVA, University of Torino, Via Leonardo da Vinci, 44, 10095 Grugliasco, Italy

Satureja montana L. (winter savory, cv repandens), is an evergreen shrub used in gardens as a ground cover or potted plant. In the late summer of 2010, a blight was observed on a farm located near Alberga (northern Italy) on 3% of 500 potted 2-month-old plants, grown in a peat-clay-pomice substrate. Semi-circular, water soaked lesions appeared first on stems, then on leaves. As the disease progressed, blighted leaves turned brown, withered, clung to the shoots, and matted on the surrounding foliage, within 5-6 days. Stem fragments taken from the margin of the diseased tissues belonging to 10 plants were disinfected for 10 sec in 1% NaOCl, rinsed with sterile water and plated on potato dextrose agar (PDA) amended with 100 µg/l streptomycin sulphate. A fungus with the morphological characters of *Rhizoctonia solani* was consistently and readily recovered, then transferred and maintained in pure culture. In all, 10 isolates were obtained. Three isolates of R. solani obtained from affected plants were successfully anastomosed with R. solani isolate AG 1 (ATCC 58946). Three pairings were made for each tested strain. The hyphal diameter at the point of anastomosis was reduced, the anastomosis point was obvious, and death of adjacent cells was observed. Results were consistent with other reports on anastomosis reactions (2). Isolates from winter savory were paired with R. solani isolates AG 2, 3, 4, 6, 7, or 11 and examined microscopically. Anastomosis was not observed in any of the pairings. Tests were repeated once. Mycelium of 10 day old isolates from winter savory appeared light brown, compact and radiate. Numerous dark brown sclerotia, 1-4 mm diam (average 1.7) developed within 20 days after transfer of mycelia to PDA in 90 mm diam petri dishes and incubated (11 h daylight, 13 h dark) at 21-24°C. The descriptions of mycelium and sclerotia were typical for subgroup IA Type 2 (3). The Internal Transcribed Spacer (ITS) region of rDNA was amplified using the primers ITS1/ITS4 and sequenced. BLASTn analysis (1) of the 696 bp showed a 99% homology with the sequence of *Rhizoctonia solani*. The nucleotide sequence has been assigned the GenBank Accession JQ313811. For pathogenicity tests, inoculum of R.

solani was prepared by growing the pathogen on wheat kernels autoclaved in 1 L glass flasks (30 min at 121°C and at 1 atm) for 15 days. One of the isolates assigned to the anastomosis group AG 1 IA was tested. Five 90-day-old plants of *S. montana* were inoculated. Each plant grown in 2 L pots in a steam disinfested peat:pomice:pine bark:clay mix (50:20:20:20:10) was inoculated with 10 g of infested wheat kernels, placed at the base of the stem. Five plants inoculated with non-infested wheat kernels served as control treatments. Plants were covered with plastic bags and arranged randomly in a growth chamber at 20±1 °C with 12 h light/dark for 5 days. The first symptoms, similar to those observed in the farm, developed 4 days after inoculation. About ten colonies of *R. solani* were reisolated from infected leaves and stems of each inoculated plant. Control plants remained healthy. The pathogenicity test was carried out twice with similar results. Symptoms caused by *R. solani* have been recently observed on *S. hortensis* in Poland (4). This is, to our knowledge, the first report of blight of *S. montana* caused by *R. solani* in Italy.

References: (1) S.F. Altschul *et al.* Nucleic Acids Res., 25:3389, 1997. (2) D.E. Carling. Grouping in *Rhizoctonia solani* by hyphal anastomosis reactions. In: *Rhizoctonia* Species: Taxonomy, Molecular Biology, Ecology, Pathology and Disease control. Kluwer Academic Publishers, The Netherlands, 1996. (3) R.T. Sherwood. Phytopathology 59:1924, 1969. (4) B. Zimowska. Herba Polonica, 56: 29, 2010.