First Report of Botrytis Blight Caused by *Botrytis cinerea* on *Anemone japonica* in Italy. A. Garibaldi, G. Gilardi, S. Franco Ortega and M. L. Gullino, Centre of Competence for the Innovation in the Agro-Environmental Sector (AGROINNOVA) and DISAFA, University of Torino, Via Leonardo da Vinci 44, 10095 Grugliasco, Italy.

Anemone japonica (Japanese anemone or windflower) is an elegant, late summer flowering perennial, originating from China, producing gorgeous, well shaped blooms mainly in rose to pink shades for many weeks and providing the perfect end to the summer, belonging to the Ranunculaceae. This species is characterized by resistance to drought and to low temperatures. Starting September 2014, symptoms of a previously unknown blight were observed on plants 2 to 5 years old, in a private garden located near Biella (northern Italy), 850 m (45°36′00″N 8°03′00″E), Leaves appeared at first chlorotic and later necrotic, particularly in correspondence of petal dropping. Severely infected tissues eventually became completely rotted, and later desiccated. A soft, grey mycelium was observed on symptomatic tissues. About 10 to 25% of plants were affected by the disease at the end of August-early September, reaching 40 to 60% in October, with temperatures ranging between 10 and 15°C. Diseased tissue was excised from affected leaves, immersed in a solution containing 1% sodium hypochlorite for 10 seconds, rinsed in sterile water, then cultured on potato dextrose agar (PDA) medium amended with 25 mg/liter of streptomycin sulphate. A fungus developed which produced abundant mycelium on PDA medium when incubated under 12 h day light at 22 ± 1°C. Branched conidiophores with enlarged apical cells were produced by 10-day-old colonies. Conidia were smooth, light ash-colored, unicellular, ovoid, measuring 11.4-19.3 x 10.3-11.6 (average 14.5 x 11.6) µm. These morphological features were typical of those described for *Botrytis cinerea* (Ellis, 1971). The Internal Transcribed Spacer (ITS) region of rDNA was amplified using the primers ITS1/ITS4, and sequenced. BLAST analysis (White et al. 1990) of the 447 bp segment showed a 100% similarity with the sequence of *Botryotinia fuckeliana* (perfect stage of *B. cinerea*) isolate with GenBank Accession KT692578.1. The nucleotide sequence has been assigned the GenBank Accession KU497733. Pathogenicity tests were performed by spraying leaves of healthy 12-month-old potted *A. japonica* with a spore and mycelial suspension (1 x 10^5 conidia/ml) obtained from 7 day old PDA cultures of the pathogen. Each plant received 4 ml of the inoculum. Plants sprayed with water only served as controls. Three plants per treatment were used. Plants were covered with plastic bags for 5 days after inoculation and maintained in a glasshouse at temperatures ranging between 17 and 20°C. The first foliar lesions developed on leaves 5 days after inoculation and 7 days after the artificial inoculation symptoms were similar to those observed in the garden. *B. cinerea* was consistently reisolated from

affected plants. Control plants remained healthy and no colonies developed by the reisolations attempted from these plants. The pathogenicity test was completed twice showing the same results. To our knowledge, this is the first report of *B. cinerea* on *A. japonica* in Italy, as well as worldwide. *B. cinerea* has been previously reported on *A. coronaria* in Italy (Garibaldi, 1981). The disease is spreading in several gardens and its importance might increase due to the widespread use of this species as bedding plant.

References:

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