



First report of *Sclerotinia sclerotiorum* on *Verbena bonariensis* in Poland

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Verbena bonariensis L. is an ornamental plant, cultivated in natural gardens. In June 2017, foliage wilt and stem necrosis and decay were observed on a dozen plants in a home garden located in Nowy Tomyśl county (Poland). The affected plants were collected, small pieces of the stems were surface-disinfested (1 min 3% NaOCl), rinsed with sterile water and transferred onto potato dextrose agar (PDA). The isolations yielded white, fluffy colonies forming 2 to 6 mm in diameter, silvery-dark, globose sclerotia. Total genomic DNA was extracted using Plant/Fungi DNA Isolation Kit (Norgen Biotek). The internal transcribed spacer region was PCR amplified and sequenced using primers ITS1/ITS4 (White et al. 1990), GenBank Accession No. MF582351. A BLAST search revealed the 100% identity to the tens sequences of *S. sclerotiorum* and 99% identity to reference cultures MH856725 (CBS499.50) and MH857810 (CBS 344.58). The pathogen distinction from *S. trifoliorum* was confirmed with TU1/TU2/T3 primers (Vleugels et al. 2012). Based on these results the disease agent was recognised as *Sclerotinia sclerotiorum* (Lib.) de Bary. The pathogenicity test was conducted on 4-month-old *V. bonariensis* seedlings. Four plants were inoculated with 5 mm diameter PDA plugs from a ten-day-old *S. sclerotiorum* culture, and one with a pure PDA plug. The disks were placed directly on the stalk and covered with a piece of Parafilm. The plants were covered with plastic bags to maintain high humidity and incubated at 20 to 24 °C. After five days, the first symptoms of the disease appeared on the stems as water soaking necrosis. The necrosis enlarged

and during two weeks white mycelium covered 5–15 cm of the stems. Re-isolation of the fungus confirmed the agent of the disease. To my knowledge (Farr and Rossman 2017) this is the first report on the occurrence of *S. sclerotiorum* on *V. bonariensis* worldwide.

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