

DISEASE NOTE

**FIRST REPORT OF LEAF SPOT OF
CAMPANULA GLOMERATA CAUSED BY
ALTERNARIA sp. IN ITALY**

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During Summer 2014, extensive necrosis were observed on *Campanula glomerata* plants grown in a private garden near the city of Biella (northern Italy). Pale-brown, irregular lesions were present on the leaves that wilted and rotted. When also the stems were affected, the plants died. A fungus was consistently isolated on potato dextrose agar (PDA) which, on potato carrot agar (PCA) produced a greenish mycelium, with brown, septate, ovoid, elliptical or obclavate conidia, measuring 8-33×6-11 µm (average: 15×8 µm). These morphometric traits allowed the identification of the pathogen as *Alternaria* sp. (Simmons, 2007). DNA was extracted using the NucleoSpin Plant kit (Macherey Nagel, Germany) and PCR amplification carried out using ITS1/ITS4 primers. The 484 bp amplified product was sequenced (GenBank accession No. KP225273) and a BLASTn search (Altschul *et al.*, 1997) confirmed that the sequence corresponded to that of *Alternaria* sp. For pathogenicity tests, leaves of three healthy plants of *C. glomerata* were inoculated with disks excised from fungal colonies grown on PDA. Plants inoculated only with sterile PDA disks served as controls. All plants were covered with plastic bags and maintained at a temperature of 19 to 25°C. Seven days post inoculation, lesions developed only on inoculated leaves from which the same fungus used for inoculation was consistently reisolated. To the best of our knowledge this the first report of *Alternaria* sp. on *C. glomerata* in Italy and in the world.

Altschul S.F., Madden T.L., Schaffer A.A., Zhang Z., Miller W., Lipman D.J., 1997. Gapped BLAST and PSI-BLAST: a new generation of protein database search programme. *Nucleic Acids Research* **25**: 3389-3402.

Simmons E.G., 2007. *Alternaria*. An Identification Manual. CBS Fungal Biodiversity Centre, Utrecht, the Netherlands.

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**DETECTION OF *ALFALFA MOSAIC VIRUS*
IN LAURUSTINUS IN APULIA**

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Laurustinus (*Viburnum tinus* L.), an evergreen shrub of the Mediterranean scrub, is widely used in Italy as an ornamental in private and public gardens. In the spring of 2014, conspicuous interveinal yellow spots and mottling were observed on the foliage of a *V. tinus* plant cv. Eve Price growing in the Campus of the University of Bari (Italy). Since *Alfalfa mosaic virus* (AMV) has been reported from *V. tinus* and related species (*V. opulus* and *V. lucidum*) in several countries, and in northern Italy (De Sanctis and Quacquarelli, 1985; Parrella *et al.*, 2011), the symptomatic plant was tested by RT-PCR for the presence of this virus. The specific primer set CPAMV1/CPAMV2, designed in the viral RNA3 sequence (Finetti-Sialer *et al.*, 1997) amplified the expected 754 bp fragment, spanning the whole coat protein gene and the 3'-UTR. There was no amplification from symptomless plants. The amplified fragment was cloned into pSC-A-amp/kan, custom-sequenced (Macrogen Europe, The Netherlands) and the sequence was deposited in GenBank as accession No. KP233749. The cloned sequences were BLAST compared with those of a Chilean strain of AMV from *V. tinus* and a Spanish isolate from *V. lucidum*, with which an identity at the nucleotide level of 99% and 94%, respectively, was found. These results demonstrate the presence of an AMV strain in laurustinus in southern Italy.

De Sanctis F., Quacquarelli A., 1985. Il virus del mosaico dell'erba medica (LMV) su viburno. *Annali Istituto Sperimentale per la Patologia Vegetale* **10**: 43-46.

Parrella G., Cavicchi L., Rosati S., Bellardi M.G., 2011. Detection of *Alfalfa mosaic virus* by IC-RT-PCR in *Viburnum opulus*. *Journal of Plant Pathology* **93**: S4.48.

Finetti-Sialer M., Di Franco A., Papanice M.A., Gallitelli D., 1997. Tomato necrotic yellows induced by a novel strain of alfalfa mosaic virus. *Journal of Plant Pathology* **79**: 115-120.

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