DISEASE NOTE

FIRST REPORT OF **Fusarium oxysporum** On **Cereus peruvianus florida** in Italy

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In October 2014, 2% of 50,000 plants of *Cereus peruvianus florida* (family Cactaceae) grown in a nursery of Vallercosia (Imperia province, Northern Italy) showed symptoms of a disease characterized by chlorotic and stunted stems and a progressive very slow withering which, however, did not cause death of the plants. A fungus was constantly isolated from symptomatic stem tissues, which produced chlamydospores, microconidia and macroconidia typical of *Fusarium oxysporum* (Leslie and Summerell, 2006) on carnation leaf agar (CLA). Primers EF1/EF2 (O’Donnell et al., 1998) were used to amplify the elongation factor 1 alpha gene (*EF1α*) of the DNA from a single-spore culture. BLASTn analysis of the amplified product 413 bp in size (GenBank accession No. KT183484) showed 100% homology with the sequence of *F. oxysporum* LN828036. For pathogenicity tests, three healthy plants of *C. peruvianus florida* were inoculated with the isolated mycete as described by Talgø and Stensvand (2013). Two days post inoculation, the first rot symptoms appeared around the wounds of inoculated stems, from which *F. oxysporum* was constantly reisolated. Controls remained symptomless. This is the first report of *F. oxysporum* on *C. peruvianus florida* in Italy, as well as in the world.


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DISEASE NOTE

FIRST REPORT OF **Alternaria arborescens** causing leaf spot of **Dracaena marginata** in Pakistan

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Dracaena marginata (family Asparagaceae) is a common ornamental plant in Pakistan on whose leaves circular brown spots were observed in March 2015 in a private garden at Lahore. For pathogen isolation, one spot per leaf from six symptomatic leaves were cut into pieces, surface-sterilized, inoculated in 2% malt extract agar (MEA) and incubated at 25±2°C. Morphological observations were made on 7-day-old cultures grown on MEA at 25±2°C. Fungal colonies were light brown, conidia were produced in short chains, had echinulate walls, were 1-4 transversely septate and ranged from 15-40 x 812 μm. The fungus was morphologically identified as *Alternaria arborescens* (FCBP1527) (Simmons, 2007) and this identification was confirmed by sequencing of the internal transcribed spacer (ITS) of rDNA. For this purpose, a DNA fragment of approximately 650 bp was amplified using the universal primers ITS1/ITS4 and total genomic DNA as template (White et al., 1990). BLASTn results indicated that the ITS nucleotide sequence of this strain (KT072732) has 100% similarity with many other isolates of *A. arborescens* from GenBank (JN648342, JX241641, AF397237, KC707557, KC415812). Spores from a 7-day-old culture were scratched and suspended in sterilized saline Tween 80 solution. For pathogenicity tests 10⁵ spores were injected in stem nodes of three young plants (Farrag and Abo-Elyousr, 2011) while control plants were injected with sterilized water. Injection places were wrapped with moistened cotton. All plants were kept at 27±2°C in a greenhouse. Necrotic spots appeared on the leaves of inoculated plants only 7 days post injection. Re-isolation of the same pathogen fulfilled Koch’s postulates. To our knowledge, this is the first report of *D. marginata* leaf spot in *A. arborescens* from Pakistan.


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