

## DISEASE NOTE

### FIRST REPORT OF *COLLETOTRICHUM SANSEVIERIAE* CAUSING ANTHRACNOSE ON *SANSEVIERIA TRIFASCIATA* IN IRAN

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*Sansevieria* is a genus of flowering plants which is taxonomically classified in the family Agavaceae. During the summer of 2015, leaf spots were observed on *Sansevieria trifasciata* in greenhouses of Mazandaran province, Iran. The symptoms initially appeared as small, round, water-soaked lesions resulting in blight of the leaves and as the disease progressed, lesions rapidly enlarged and coalesced. Mature lesions revealed numerous brownish black acervuli that were produced in concentric rings, which is characteristic of anthracnose. Warm, humid and wet conditions are cause of disease development, sporulation and spread of *Colletotrichum* species. Small pieces were cut from infected tissues and after surface-sterilization, they were transferred to Potato Dextrose Agar (PDA). The isolates were purified and were transferred onto Malt Extract Agar (MEA). Colonies on PDA were grayish white and on MEA were light brown. Conidia were straight, cylindrical and  $(13\text{--}16.2\text{--}22\text{--}31) \times (3\text{--}3.9\text{--}7\text{--}8.1) \mu\text{m}$  mean  $\pm$  SD =  $17.86 \pm 2.36 \times 4.96 \pm 1.04 \mu\text{m}$ , L/W ratio = 3.6  $\mu\text{m}$ . Based on morphological characteristics, the pathogen was identified as *Colletotrichum sansevieriae* (Nakamura *et al.*, 2006). In order to confirm Koch's postulates, pathogenicity tests were done three times with conidial suspension ( $10^6$  spores/ml). One week after inoculation, symptoms were observed on the inoculated plants and *C. sansevieriae* was consistently reisolated from artificially infected plants. Molecular identification was performed based on the ITS1, 5.8S and ITS2 (ITS) and sequenced using primers ITS1 and ITS4 (White *et al.*, 1990). BLAST search of a 566 bp sequence (accession No. KP835682.1) showed 100% identity with *C. sansevieriae* (LC179806.1) in accordance with morphological identification. To our knowledge, this is the first report of anthracnose caused by *C. sansevieriae* on *S. trifasciata* in Iran.

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Received January 24, 2017  
Accepted February 25, 2017

## DISEASE NOTE

### FIRST REPORT OF *CYTOSPORA PUNICAE* CAUSING FRUIT ROT ON POMEGRANATE IN ITALY

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Pomegranate (*Punica granatum* L.) is an emerging crop in Italy, particularly in Apulia region, where more than a third of fruits is produced. In 2016, rot symptoms were observed on the fruits of cv. Wonderful One in local markets and in a packinghouse in the province of Lecce, with an incidence of ca. 5%. Symptoms consisted of circular creamy-brownish lesions, centrally darker, with tissue softening. A fungus was isolated by plating marginal rotted tissue fragments from surface-sterilized (2% sodium hypochlorite) fruits on semi-selective Potato Dextrose Agar (PDA). Plates were incubated at 24°C in the dark. Colonies were whitish, turning olive green and dark brown at maturity. Globose and dark brown pycnidia (250-500  $\mu\text{m}$ ) covered the mycelium after 14 days. Conidia were 4-6  $\times$  1-2  $\mu\text{m}$  in size, allantoid, hyaline, and aseptate. These characteristics corresponded to those of *Cytospora punicae* Sacc. (Saccardo, 1884). The ITS1-5.8S-ITS2 region (accession No. KY496629) proved 100% identical to a *C. punicae* sequence from GenBank (KJ621687). To fulfill Koch's postulates, five surface-sterilized pomegranate fruit of cvs Acco and Wonderful One were wounded with a 5-mm-cork-borer at two opposite sides along the equatorial axis, and inoculated with mycelial plugs from 14-day-old PDA cultures. Sterile plugs were used as controls. Fruit were incubated as above. Symptoms were visible only on inoculated fruit, and after 14 days, pycnidia appeared. Fruits of cv. Acco proved to be the most susceptible. *Cytospora punicae* was re-isolated only from inoculated pomegranates. Although reported as a rot agent of pomegranate plants (Samouel and Kanetis, 2016) and recently fruits in South Africa (Venter *et al.*, 2017), to our knowledge, this is the first report of *C. punicae* causing postharvest rot on pomegranate fruit in Italy.

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Samouel S., Kanetis L., 2016. First report of *Cytospora punicae* causing trunk canker of pomegranate (*Punica granatum*) in Cyprus. *Plant Disease* **100**: 222.

Venter E., Lennox C., Meitz J.C., 2017. First report of *Cytospora punicae* causing post-harvest fruit rot on pomegranate in South Africa. *Plant Disease* doi: <http://dx.doi.org/10.1094/PDIS-08-16-1157-PDN>

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Received January 31, 2017  
Accepted February 23, 2017