

DISEASE NOTE

FIRST REPORT OF *MYCOSPHAERELLA CITRI*, THE AGENT OF GREASY SPOT OF ORANGE IN EGYPT

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In winter 2011, extensive greasy spots was observed on about 36% of 12-year-old orange trees of cv. Navel in a commercial farm of Tahreer province (Bohara Governorate, Egypt). Symptoms consisted of yellow spots on the leaves, which eventually turned dark acquiring a greasy appearance. Isolations from symptomatic leaves on potato dextrose agar yielded colonies with verruculose, branched, septate, red-brown to medium brown hyphae, 2-3 µm wide. Conidiophores are sparse, arising from extramatricular hyphae, simple, deep olivaceous, paler towards the apex, septate, lightly rough walled, 12-40×2-3.5 µm. Conidigenous cells are terminal, unbranched, thickened, darkened, 5-10×2.8-4 µm. Pseudothecia immersed in decomposing leaves, subepidermal, amphigenous, up to 90 µm in diameter with a papillate ostiole. Asci obclavate, 8-spored, 25-35×8-10 µm. Ascospores hyaline, 1-septate, slightly curved, 6-14×2-4 µm. Based on these morphological and cultural features the fungus was identified as *Mycosphaerella citri* (Mondal *et al.*, 2004). Identification was confirmed using comparisons of DNA sequences for the internal transcribed spacers (ITS1 and ITS2) of ribosomal DNA (Goodwin *et al.*, 2001). A conidial suspension (6×10^5 conidia ml⁻¹) prepared from single-conidial cultures was sprayed on 60 seedlings that were kept in the dark under plastic cover for 5 days. The first reactions appeared 25 days after inoculation and, within two months, all inoculated seedling but not the water-sprayed controls showed symptoms. *M. citri* was reisolated from symptomatic seedlings. This is the first record of *M. citri* in Egypt.

Goodwin S.B., Dunkle L.D., Zismann V.L., 2001. Phylogenetic analysis of *Cercospora* and *Mycosphaerella* based on the internal transcribed spacer region of ribosomal DNA. *Phytopathology* **91**: 648-658.

Mondal S.N., Howd D.S., Brilansky R.H., Timmer L.W., 2004. Mating and pseudothecial development in *Mycosphaerella citri*, the cause of citrus greasy spot. *Phytopathology* **94**: 978-982.

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FIRST REPORT OF *BOTRYOSPHERIA DOTHIDEA* CAUSING FRUIT ROT OF QUINCE IN ITALY

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In autumn 2011, a severe rot of fruits was observed in some quince (*Cydonia oblonga* Mill.) plants located in San Lorenzo Nuovo (province of Viterbo) and Frascati (province of Rome). Affected fruits showed rotting that evolved rapidly, covering their entire surface and causing mummification. Some mummified fruits dropped prematurely, although most of them persisted on the trees. No symptoms were observed on leaves or branches of the affected plants. A fungus consistently isolated from rotting fruits was identified as *Fusicoccum aesculi* Corda, the anamorph of *Botryosphaeria dothidea* Ces. et de Not., based on morphological characters (Sutton, 1980). The rDNA ITS regions of two fungal isolates, (ER1739, ER1757) one from each location, were amplified by PCR using the universal primers ITS1 and ITS4. The sequences (GenBank accession No. JQ686227 and JQ686228) revealed 100% homology with those of 21 isolates of *B. dothidea* retrieved from GenBank, confirming the morphological identification. Koch's postulates were verified on eight detached fruits from healthy *C. oblonga* trees. Seven days post inoculation with both fungal isolates, rotting initiated at the site of infection and expanded rapidly to the rest of the fruit. Non-inoculated controls remained healthy. Fruits rots and mummifications were similar to those observed in naturally infected trees in the field. The anamorph of *B. dothidea* was reisolated from all the inoculated fruits but not from the controls. *B. dothidea* is known to infect the fruits of several hosts, among which olive drupes (Lazzizzera *et al.*, 2008), but this is the first time that it is identified as the causal agent of fruit rot of quince in Italy.

Lazzizzera C., Frisullo S., Alves A., Phillips A.J.L., 2008. Morphology, phylogeny and pathogenicity of *Botryosphaeria* and *Neofusicoccum* species associated with drupe rot of olives in southern Italy. *Plant Pathology* **57**: 948-956.

Sutton B.C., 1980. The Coelomycetes. Commonwealth Mycological Institute, Kew, UK.

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