

DISEASE NOTE

FIRST REPORT OF *COLLETOTRICHUM ACUTATUM SENSU STRICTO* CAUSING POSTHARVEST ROT ON POMEGRANATE FRUIT IN ITALY

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In 2016, anthracnose symptoms were observed on 11% of cold-stored pomegranate (*Punica granatum* L.) fruit cv. Wonderful from a packinghouse in the province of Lecce, Apulia, Italy. Lesions were circular, concentric, and brown with darker spots. Increasing in diameter, those soft sunken lesions merged, and white mycelium and black acervuli grew on them. Marginal pieces of rotted tissue of surface-sterilized (2% sodium hypochlorite) fruit were plated on PDA, containing streptomycin and ampicillin (250 mg/l each). Plates were incubated at 25°C in the dark. Colonies were fluffy, initially whitish with a salmon-greyish reverse, then peachy-pink and covered by salmon conidial masses. Single elliptical-fusiform conidia measured $11.26 \pm 2.79 \times 4.22 \pm 1.15 \mu\text{m}$. These characteristics corresponded to *Colletotrichum acutatum* Simmonds (Damm *et al.*, 2012). A multilocus approach confirmed the identification as *C. acutatum sensu stricto*. Fungal DNA was amplified using primers: ITS5/ITS4, ACT512F/ACT783R, Bt2a/Bt2b, GDF1/GDR1, and GSF1/GSR1 (Stephenson *et al.*, 1997; Bragança *et al.*, 2016). The related amplicons (GenBank accession Nos. MF581923, MF581920, MF581919, MF581921 and MF581922) were 100% identical to FJ788417.1, FJ788419.1, JQ005839.1, FJ788418.1 and KX069811.1, respectively. To fulfill Koch's postulates, surface-sterilized fruits of cvs Acco and Wonderful were wounded, inoculated with a mycelial plug (5 mm Ø) or a sterile PDA plug of the same size, and incubated as above. *C. acutatum* was re-isolated only from inoculated fruit. The strain was deposited in the fungal collection of DISSPA, University of Bari Aldo Moro. To our knowledge, this is the first report of postharvest rot caused by this pathogen on pomegranate fruit in Italy. The disease deserves attention since it may cause important economic loss on a product with high added value.

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