DISEASE NOTE

FIRST RECORD OF COLLETOTRICHUM ACUTATUM ON STRAWBERRY IN MALTA

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Strawberry (Fragaria × ananassa Duch.), an expanding crop in Malta, is susceptible to black spot (anthracnose) caused by Colletotrichum acutatum J.H. Simmonds, which has become one of the major fungal diseases of this species worldwide (Freeman et al., 2001). In December 2005 a severe black spot attack was observed on strawberry ‘fruits’ (receptacles) grown under plastic tunnels at St Paul’s Bay, Malta. C. acutatum was constantly isolated from fruit lesions. A conidial suspension (3.5 × 10⁵ conidia ml⁻¹) was prepared by pouring sterile water on a 6-day-old fungal colony grown on PDA, and gently rubbing the colony surface with a glass rod. Ripening strawberry fruits of cv Ventana were washed under running water, treated for 2 min in a water solution of sodium hypochlorite (2% active Cl), then rinsed in sterile distilled water. Six fruits were inoculated by depositing on their surface two separate drops (0.05 ml) of the conidial suspension and six fruits (controls) were treated in the same way with sterile water previously poured on a sterile PDA plate. The fruits were kept under high moisture conditions, covered with plastic bags in an air-conditioned room (20±2°C). Typical anthracnose symptoms appeared on the inoculated receptacles within 7-10 days. C. acutatum was re-isolated from all the inoculated fruits. No symptoms developed on the controls and attempts to isolate the pathogen failed. This is the first record of C. acutatum on strawberry in Malta. The epidemiology of C. acutatum on strawberry and other plant species, on which it could show either pathogenic or non-pathogenic lifestyles (Peres et al., 2005), should be investigated in the Maltese environment.


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