Title Fungi associated with postharvest decay of persimmon in Spain

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Abstract

Most of the Spanish commercial acreage of persimmon is located in the Southeast area of the country. Our goal was to identify fungi causing postharvest diseases in our local environmental conditions. Persimmons cvs. 'Rojo Brillante' and 'Triumph' from two different orchards were used during two consecutive seasons to assess both latent pathogens (field infections) and wound pathogens (postharvest infections). Healthy persimmons were either surface-disinfected with 0.5% sodium hypochlorite or artificially wounded in the rind and placed in humid chambers at 20°C for up to 7 weeks. Additionally, decay was periodically assessed on commercially-handled fruit stored at 1°C for 4 months. Isolated fungi were plated in potato dextrose agar (PDA) Petri dishes and incubated at 25°C for further macroscopic and/or microscopic identification. Although identification of few pathogens causing minor decay is pending, results indicated that the main causal agents of latent and wound infections were *Alternaria alternata* and *Penicillium* spp. The same pathogens and also *Botrytis cinerea* and *Cladosporium* spp. were the fungi most frequently isolated from cold-stored fruit.