

## Abstract

Complete inhibition of the germination of spores of *Botrytis cinerea* occurred after a 10 s exposure to 30% ethanol or more at 24 °C. Mortality of spores in heated 10% ethanol was higher than in water at the same temperatures. Immersion of naturally infected, freshly harvested table grapes for 30 s in 30% ethanol at 24 °C reduced decay approximately 50% after 35 days of storage at 1 °C. The addition of ethanol significantly improved the efficacy of a hot water treatment applied to grapes that were inoculated with *B. cinerea* two hours prior to immersion in heated solutions. Immersion of inoculated, freshly harvested table grapes for 3 min at 30, 40, or 50 °C in 10% ethanol reduced decay to 20.7, 6.7, and 0.1 berries/kg after 30 days of storage at 1 °C, while decay after immersion in water at these temperatures was 35.9, 17.6, and 1.7 berries/kg, respectively. Immersion for 30 or 60 s at 50, 55, or 60 °C in water or 10% ethanol also significantly reduced the number of decayed berries that developed after storage for 30 days at 1 °C. The appearance of the rachis and berries, incidence of cracked berries, flesh browning, flavor, weight loss, and berry color were examined and most treatments did not adversely affect these quality parameters. Prompt drying of the fruit after treatment was important to prevent berry cracking.