

Title Effect of BTH treatment on storability and activity of related enzymes of harvested loquat fruit
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Abstract

Postharvest loquat fruits were treated with 0 (control), 10, 30 or 60 mg.L⁻¹ benzothiadiazole (BTH) before storage at 22°C. The changes in storability were evaluated. The activities of superoxide dismutase (SOD), peroxidase (POD), catalase (CAT), polyphenol oxidases (PPO), chitinase, β -1,3-glucanase and phenylalanine ammonia lyase (PAL) in peel tissues, and lipoxygenase (LOX) and PAL activities in flesh tissues were measured. Compared with the control fruit, the BTH-treated fruits showed lower decay incidence and lower increase rate in flesh firmness, which indicated that the BTH treatment improved the storability of loquat fruits. Significant induced activities of defense enzymes chitinase and β -1,3-glucanase and enhanced activities of antioxidant enzymes POD, CAT, PPO and LOX, but marked inhibition of PAL activity in both peel and flesh tissues and no effect of SOD activity were observed in BTH-treated fruit.