

Title Responses of straw mushroom stored at low temperature

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Citation Book of Abstracts, Southeast Asia Symposium Quality and Safety of Fresh and Fresh Cut Produce Greater Mekong Subregion Conference on Postharvest Quality Management in Chains, August 3-5, 2009, Radisson Hotel, Bangkok, Thailand.

Keyword straw mushroom; low temperature; stored

Abstract

Straw mushroom is a tropical mushroom, physiological changing to the cap browning in a few hours after harvest. Storage of straw mushroom at different low temperature of 4, 8, 12, and 15°C with high relative humidity of 90-95%, compared to at ambient condition (25-32°C and 60-65% RH), was studied. The lower storage temperatures resulted the lower weight loss, but apparently exhibited the higher chilling injury symptoms as storage period proceeded. Mushroom kept at 4°C, showing water soaking tissues, contained the highest malonaldehyde (MDA) content (2.119 µmol MDA/g FW) whereas it was lowest in mushroom stored at 12 and 15°C (0.836 µmol MDA/g FW) on day 1. Stored at 15°C and ambient storage, mushroom comprised the highest percentage of proteins, following by 4 and 8°C storage. Storage of straw mushroom at 12 and 15°C delayed a reduction of L* values, responsible for 3 days of acceptable storage.