

Abstract

Straw mushrooms (*Volvariella volvacea*) in boxes with holes were pre-cooled in a forced air cooling system (8°C, 1 m/sec air speed) and stored at 8, 10, 13 or 15°C with 95% RH. Mushroom quality deteriorated quickly at 8-10°C due to chill-induced browning. Browning was least at 13°C. After 5 days storage, browning was still much less severe at 13-15°C than that after 2 days at 8-10°C. L* values partly compared with browning scores. Respiration rate was very high but decreased with storage while weight loss increased with storage. Both changes did not correlate with the rate of quality deterioration. On the other hand, the texture measured as shear force increased with storage at higher degree at 8-10°C than at 13-15°C. Overall acceptability was best maintained at 13°C. The mushrooms were still acceptable after 5 days while the other treatments remained acceptable after 4 days at 15°C, 2 days at 10°C and only 1 day at 8°C.