Abstract

Hot pepper (*Capsicum annuum* L.) cv. 'Superhot' at export-ripeness stage produced under the GAP system were subjected to room cooling at 4°C for 2 hr as commercially practiced and placed in foam trays wrapped with either ordinary plastic bag with 8 perforations (control), 15 μm PVC (export practice) or 15-25 μm LLDPE. The samples were kept at 4°C for 36 hr simulating the transport period to export markets and transferred to 8°C for shelf life evaluation for 15 days. Inpackage atmosphere was maintained at more than 18% O₂ and less than 0.2% CO₂. Film wrapping did not affect fruit reddening (a* values) but remarkably reduced pedicel browning. LLDPE of 15 μm thickness decreased browning more effectively than 25 μm LLDPE or 15 μm PVC. Browning was due to water loss as it correlated strongly with weight loss but not with phenolics content. Film wrapping also reduced respiration rates, particularly after 6 days storage, with LLDPE being more effective to elicit the effect than PVC. Dehydro-ascorbic acid content increased with storage while that of ascorbic acid decreased. Film wrapping had no appreciable effect on these. After 15 days storage, all film-wrapped fruits were still highly acceptable and marketable while the control lasted for only 12 days. LLDPE-wrapped fruits appeared more desirable due to lower pedicel browning than the PVC-wrapped fruits.