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Scientia Horticulturae 71 (1997) 1–12

SCIENTIA HORTICULTURÆ

Postharvest moisture loss characteristics of carrot (*Daucus carota* L.) cultivars during short-term storage

S.I. Shibairo [a], M.K. Upadhyaya [a,*], P.M.A. Toivonen [b]

[a] *Department of Plant Science, University of British Columbia, Vancouver, BC, Canada V6T 1Z4*
[b] *Summerland Research Centre, Agriculture and Agri-Food Canada, Summerland, BC, Canada V0H 1Z0*

Accepted 12 April 1997

Abstract

Differences in moisture loss characteristics among carrot cultivars Imperator Special 58, Gold Pak 28, Caro-pride, Paramount, Eagle, Celloking, Top Pak and Caro-choice during short-term storage at 13°C and at either 80% or 35% relative humidity were investigated. Experiments were conducted over two years with an early and late harvest in each year. Moisture loss was significantly greater when carrots were stored at low relative humidity compared to high relative humidity. Consistent cultivar differences in moisture loss characteristics were observed only in the late-harvested carrots at low relative humidity. Cultivars with higher specific surface area and relative electrolyte leakage, and lower water and osmotic potentials exhibited high moisture losses. Regression analysis, however, showed that moisture loss differences among cultivars were mainly associated with the specific surface area of the root. © 1997 Elsevier Science B.V.

Keywords: Osmotic potential; Relative electrolyte leakage; Shelf life; Water potential; Water vapour pressure deficit