

Abstract

A study has been conducted whereby the moisture loss of sweet onions during curing has been observed. Sweet onions 'Granex 33' were harvested at three stages of maturity either early, optimal or late. Bulbs were artificially cured for durations of either 24, 48, 72 or 96 h. They were cured at three depths, referred to as being at the bottom, middle or at the top of a stack of onions in curing chambers 1.2 m high. Harvest maturity had the greatest influence on the variation of moisture loss during curing, diminishing from 10.1%-early, to 7.3%-optimal, to 5.9%-late. Duration of curing influenced moisture loss ranging from 7.2%/24 h to 10.3%/96 h at an independent linear estimate of 1.53%/24 h. Depth had a limited effect on the variation of moisture loss. Local ambient conditions also influenced moisture loss. As a result of the study it was concluded that moisture loss of sweet onions during curing is sufficiently important to deserve consideration, especially for early harvested onions. Though curing helps to extend the shelf life of sweet onions, it also reduces the mass of onions available for retail.