Title Postharvest water loss in 'Clara Frijs' pears

Author Sylvia Travers

Citation Abstracts of 7th International Postharvest Symposium 2012 (IPS2012). 25-29 June, 2012.

Putra World Trade Centre (PWTC), Kuala Lumpur, Malaysia. 238 pages.

Keywords pear; loss

Abstract

Changes in harvested fruit include ripening as well as some deterioration in quality. Fruit quality at harvest determines storage and shelf life potential. Water loss through respiration is a significant issue, especially once fruit is removed from cold storage. The pears discussed here came from two control treatments, one root pruned (RP) and the other nonroot pruned (NP), that were harvested on the same day and part of a larger experiment carried out in the orchards at Aarhus University, Aarslev, Denmark. In addition some fruit from the non-root pruned treatment were harvested two weeks later (LNP). Changes in fruit quality from these three treatments were assessed.

Fruit was stored at 0.5°C following harvest. After 18 and 32 days of cold storage, water loss was measured on fruit placed in a 16°C room at approximately 99% humidity for 2, 4 or 7 days. Water loss was expressed as a percentage of overall fruit weight. Parameters for colour and firmness were also recorded. When compared to the other treatments, growers would consider the harvest quality of fruit from the NP treatment as optimal. However results from each sampling date show that pears from the NP treatment lost consistently more water than fruit from the RP or LNP trees. Significant differences in fruit colour and firmness were also observed. This suggests that they deteriorated faster both in and out of cold storage in terms of water loss, firmness and colour.