

Abstract:

Conference is by far the most important variety in the Netherlands. It is expected that the production will increase in the next years. Noticeable is a demand in the market to have year round supply, which means a longer storage period is required. Up to now the maximum storage period of Conference-pears is 8 months in CA-storage. Limiting quality factor is shrivelling, especially at the neck of the pear, resulting in the so-called "slack necks". In research influence of different harvest factors is investigated in a specially designed system to force weight loss in a short time. Factors like growing area, season, harvesting time, orchard and pear size have their specific influence. Most important and independent from other factors is pear size, smaller pears have much more weight loss. Based on possibilities for prediction of weight loss at harvest, a specific apparatus was developed to measure weight loss in a very short time. In addition, during CA-storage the influence of bin packaging has been investigated to reduce weight loss. An important result is that weight loss could be reduced to levels that guarantee a longer storage period. As a result of this research, this packaging-system is being broadly applied nowadays for long term storage in the fruit industry.