

Title Post harvest application of salicylic acid extend storage life of strawberry (*Fragaria ananassa*) fruit

Author Ahmad Ershadi, Mahmoud Esna-Ashari, Masoumeh Kazemi and Farhad Karami

Citation Book of abstracts, APS2010 & SEAsia2010 & GMS2010, August 2-4, 2010, Radisson Hotel, Bangkok, Thailand

Keyword Strawberry; storage; fruit

Abstract

Strawberry is generally susceptible to rapid post-harvest degradation due to high respiration rate and microbial spoilage. The objective of this work was to evaluate the ability of salicylic acid (SA) to extend the shelf life of 'Kurdistan' strawberry fruit. Fruits were immersed in 0, 1.5 and 3 mmol l⁻¹ solutions of SA and stored in 4°C together with untreated fruits (dry control). Fruit weight loss, flesh firmness, soluble solids content (SSC), titrable acidity, and overall fruit quality were determined 3, 7 and 11 days after the beginning of storage. SA treatment remarkably reduced weight loss and retained flesh firmness, titrable acidity and fruit overall quality. Fruits soaked in distilled water and dry control fruits had at most 7 days storage life while fruits treated with 1.5 and 3 mmol l⁻¹ SA had marketable quality after 11 days. Fruits treated with 1.5 mmol l⁻¹ SA had the lowest rate of weight loss and highest flesh firmness during storage and this concentration was most effective.