

Title Changes in jasmonates of mangoes during development and storage after varying harvest times.
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Abstract

Jasmonic acid (JA) and methyl jasmonate were quantified in the skin, pulp and seeds of mango cultivars Nam Dok Mai and Nang Klangwan. JA showed similar changes during development in both cultivars of fruit. JA concentrations were high in the early growth stages of skin and pulp development, decreased with days after full bloom, and then increased during ripening. JA concentrations in the skin were higher than those in the pulp. 1-aminocyclopropane-1-carboxylic acid (ACC) concentrations in the skin and pulp of both cultivars increased toward harvest. Differences in JA and ACC concentrations in the pulp of both cultivars were high compared to those in the skin. This fact suggests that although JA and ACC are associated with the ripening of mangoes, they may play different roles. JA concentrations in the seeds of both cultivars decreased toward harvest, possibly suggesting a lack of dormancy in mango seeds. Changes in jasmonates during storage were also examined. JA content in the skin and pulp increased in stored fruit. In addition, the increase in JA content was largest in fruit that lost the most fresh weight. This suggests that JA accumulation that occurs during fruit senescence is associated with moisture loss.