

Title Effect of a mango film on quality of whole and minimally processed mangoes
Author Rungsinee Sothornvit and Patratip Rodsamran
Citation Postharvest Biology and Technology, Volume 47, Issue 3, March 2008, Pages 407-415
Keywords Mango; Edible films; Minimally processed mango; Quality

Abstract

Ripe mango fruit tissue offers the possibility to form edible films and coatings, thus extending fruit shelf-life. The effect of a mango edible film and storage conditions on fresh mango quality and shelf-life was determined. A mango film provided a good oxygen barrier with sufficient mechanical properties to wrap whole and minimally processed mangoes. The film reduced weight loss and extended the ripening period of whole fresh mangoes. The shelf-life of unwrapped minimally processed mangoes kept in cellophane bags at room temperature (30 °C) and cold storage (5 °C) were 2 and 4 days, respectively. When the minimally processed mangoes were wrapped in a mango film and kept in cellophane bags, the shelf-life was extended to 5 and 6 days, when stored at 30 and 5 °C, respectively. The highly hydrophilic character of the mango film meant solubility of the film limited its application. However, this opens further research to improve mango films for use with frozen and dried foods.