Title	Microflora on Georgia-grown Cantaloupes Related to Packaging and Handling Practices
Author	E. Deann Akins, Mark A. Harrison, and William C. Hurst
Citation	Program and Abstract Book, IAFP 2005 (International Association for Food Protection) - 92nd Annul Meeting, 14-17 August 2005, Baltimore, Maryland, USA. 256 pages.
Keyword	cantaloupe; sanitization; packaging line

Abstract

In recent years, there have been outbreaks associated with the consumption of cantaloupe. Contamination of cantaloupes with microorganisms could occur anywhere from the field to the packing line. Cantaloupes are handled and packed differently in various regions of the United States. Typically, California cantaloupes are field packaged while in Georgia they are brought to sheds, washed, and packaged. The objective of this study was to enumerate aerobic bacteria on cantaloupes from the field, after washing, and after packaging. Four Georgia growers with packing facilities using different variations in product handling were visited four times during the harvest season. For each visit, 20 cantaloupes were sampled after transport from the field, after washing and after packaging. The washing methods varied among the facilities with 2 using chlorinated water, 1 using heated water, and 1 using a combination of heat and chlorinated water. Exposing cantaloupes to water between 41 to 50 °C for 5 to 10 min did not result in a significant change in the microbial population sizes. Microbial populations on cantaloupes from the two farms using chlorinated treatments were < 0.5 log lower than on those no chlorinated. However, aerobic populations after packing were approximately the same as that on the prewashed cantaloupes. Thus washing, chlorination and hot water treatments applied under actual field packing conditions in Georgia do not affect the total aerobic populations on cantaloupes.