Name(s)	**Project Number**
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Project Title

The Aging of Fruits and Vegetables and Ways to Slow It Down

Abstract

Objectives/Goals

My goal is to find a chemical or natural resource that has been made into a product which can slow the aging of fruits and vegetables better than man-made wax coatings.

Methods/Materials

I retrieved 26 Red Bell Peppers straight from their original plant. I cleaned them with soap and water and then santized them with household chlorine (bleach). They were divided into three (3) groups: one group had nothing on them, the second group had Signa-Fresh (a product of new technology used on fruits and vegetables to slow the aging process), while the third group had a man-made wax coating applied to each pepper. Every five (5) days I measured weight in grams, color using a book of color variations, and visible signs of decay such as bruises, black spots or shriveling. The results were recorded in a log book. On the fifteenth day I ended the experiment.

Results

In weight, the Signa-Fresh group peppers on average lost the least amount of weight. In color, (the goal being to have true RED color tone), the Signa-Fresh treated peppers had the most vegetables with a true red color tone. In checking for visible decay, I found Signa-Fresh ended with the most amount of peppers without decay.

Conclusions/Discussion

My hypothesis was correct. Signa-Fresh performed better than man-made wax coatings although the results were close. This is because Signa-Fresh is a pre-harvest product and my experiment was done post-harvest, causing the products to be less effective. Signa-Fresh still performed better because it contains a natural occuring phospholipid known as lysophospholipid which can help extend the life of the commodity.

Summary Statement

I am trying to find a way to prevent fruits and vegetables from rotting quickly.

Help Received

Agriculture consultant retrieved the peppers from the plant and gave me the Signa-Fresh product.