

CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

Amanda C. Lu

Project Number

J2014

Project Title

The Juiciest Apple

Abstract

Objectives/Goals

For my science fair project, I wanted to find out which type of apple, Red Delicious, Fuji, or Granny Smith, produced the most juice, using pectinase to extract it. I hypothesized that the Red Delicious Apple would have the most juice.

Methods/Materials

The materials I used to perform the procedure included 3 different types of apples, pectinase, beakers, water bottles, a water bath, a balance, coffee filters, pipettes, plastic wrap and funnels. I used the pectinase to extract the juice from the same amount of apple (50 grams) using a technique I found online.

Results

The Granny Smith Apple produced the most juice, with 23 grams, while the Red Delicious Apple generated 21 grams of juice. The Fuji Apple created only 19 grams of juice. The results proved my hypothesis was wrong.

Conclusions/Discussion

I think that the Granny Smith was the juiciest because it was the most acidic apple, or had a lower pH than the other apples. Using these results, I concluded that the Granny Smith Apple was the juiciest of the apples I tested. The results of my project can help people decide which apples they would use everyday for cooking and other things. If I were to do this experiment over, I would try to obtain pH strips to test the level of acidity in each type of apple before I conducted my experiment.

Summary Statement

My project was about extracting juice from different types of apples and discovering which type was the juiciest.

Help Received

Emily Dykes helped write results and conclusions; Sister helped conduct experiment; Father helped obtain materials