

CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

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Project Number

J0411

Project Title

Extracting DNA

Abstract

Objectives/Goals

The objective of my experiment was to find whether the dehydration process of a strawberry affected the amount of nucleic acid it contained. To do so, I had extract the nucleic acid from both the dried and the fresh strawberry and compare the amount. I chose to find both the mass and the volume of the nucleic acid.

Methods/Materials

First, using nessary material, I extracted the nucleic acid from the fresh strawberries, The using hte same tools (which were cleaned), I extracted the nucleic acid from the dry fruit. Then, using a specific formula, I found the volume of the nucleic acid for the dry and fresh strawberry. Later, using an extremely sensitive weighing scale and a centrifuge machine, I found the mass of the nucleic acid. I then compared results for both the mass and the volume of the nucleic acid.

Results

My results repeatedly stated that the dried strawberry had less nucleic acid that the fresh strawberry.

Conclusions/Discussion

The conclusion I came to, due to the results, was that the dehydration process of a strawberry does affect the amount of nucleic acid inside the cells. The fresh strawberry did have more nucleic acid, but the dried strawberry did have a small amount.

Summary Statement

My project was about finding the difference in the nucleic acid level of a dried strawberry compared to that of a fresh strawberry.

Help Received

Mom helped with experiment: Dad helped get supplies: Was loaned lab equipment from Dr.Saldivar