CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY

Name(s)
Marianna Ripa

Project Number
J2026

Project Title
DNA Extraction

Abstract

Objectives/Goals
My objective is to find out how to extract DNA from plants using household materials that can be accesible to any person.

Methods/Materials
Method: I broke down the plant cells by blending the plant using salt for that can be easier to extract the DNA. From there I put a layer of rubbing alcohol over the solution, that way the DNA would rise into the layer and I would have a visual.

Materials: Alcohol (isopropyle), clear glasses, iced water, distill water, measuring cup, salt, clear detergent, spoon, plastic bag, blender, paper coffee filter, ruber band, drainer, toothpick or popsicle stick, vegetables or any kind of plant.

Results
I was successful in separating DNA from approximately 73% overall from the chosen samples. In the case of the vegetables I had a 75% overall success rate. In the case of the plants I had a 70% overall success rate. Comparing the two groups, there is a consistent outcome of approximately 73%. The variable of the experiment was the time to separate the DNA from the solution. The extraction of the DNA from the peas took 10 minutes loger due to the thickness of the solution.

Conclusions/Discussion
I was able to extract the DNA using household materials, accesible to any person.

Summary Statement
How to extract DNA from plants using household materials.

Help Received
Science teacher revised report and mother helped getting materials.