# CALIFORNIA STATE SCIENCE FAIR
## 2012 PROJECT SUMMARY

**Name(s)**
Lucca F. DeBiaso

**Project Number**
**J0204**

**Project Title**
## Cooking with Solar Power

**Abstract**

**Objectives/Goals**
My project was to test three different green house containers in a solar oven. My hypothesis was that the plastic container will hold the most heat in the solar oven.

**Methods/Materials**
Materials: 4 5-gallon buckets,several large rocks, 12 2 foot long stakes, 4 windshield sun shades, Duct tape: silver and black, 2 quart plastic container with lid, 2 quart glass container with lid, oven bag (specifically for cooking), 2 #beer can# cooking racks, 4 digital thermometers, water, 1 cup measuring cup, 4 small Dutch oven cooking pots, apple crisp.

**Results**
The glass container held and gained the heat in the most.

**Conclusions/Discussion**
While my results demonstrated that the glass container was the most efficient greenhouse container - achieving and retaining the highest temperature out of all the containers - they are not, however, 100% conclusive. The test needs futher repetition as well as for other factors - time of year/angle of the sun/ longer exposure/multiple-day tests - to be in play for more conclusive results.

**Summary Statement**
My project is about testing the efficiency of different greenhouse containers in a solar oven.

**Help Received**
Mom helped type report, dad helped make ovens and showed me how to make graphs using Exel, teacher (Mrs. Kelley) helped with registration as well as general support.