



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Noah H. Lurtz	Science Fair Use Only
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) The Chemical Effects of Various Plants On Gelatin	J0421
Preferred Category (See page 5 for descriptions.) 4 - Chemistry	Division <u>J</u> Junior (6-8) <u>J</u> Senior (9-12)
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
<p>The objective of my project was to learn what it is in pineapple that makes it dissolve gelatin and to find out if there are any other plants with this same effect. To do so I tested pineapple and other plants as well as chemicals that are found in plants (an acid, a starch, a sugar, and an oil). I placed replicates of these test substances on pieces of gelatin for 24 hours and noted the state of the gelatin at the end of the test period. When I found a plant that dissolved gelatin I boiled two pieces and froze two pieces of it, then tested these pieces on gelatin for 24 hours. I did this to test to see if there were enzymes that were melting the gelatin. I looked for indicators of the presence of an enzyme because nothing had happened to the gelatin when it was tested with oil, sugar, starch, or acid. I concluded that there were enzymes in pineapple, papaya, kiwi, and gingerroot that were dissolving the gelatin.</p>	
Summary Statement (In one sentence, state what your project is about.) What is in fresh pineapple that dissolves gelatin and do other plants also do this?	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. Carol Ralph provided plant information. Sister, Casey Lurtz, suggested line of inquiry and helped set up experimental design. Mother, Linda Gleye, provided plant materials, critiqued work, helped type report.	