



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Zachary J. Kadar	Project Number J1124
Project Title Biodegradable Plastic	
Objectives/Goals I did my experiment on biodegradable plastic. I picked this experiment because I thought it would be interesting to make my own type of plastic and learn about how plastic is made. I think it is important to find ways to protect our environment.	
Abstract Methods/Materials I found information about making biodegradable plastic in a project book. It explained how to make plastic using whole milk and vinegar. The fat, minerals, and protein (casein) is what is left after heating the milk and that is the part that becomes the biodegradable plastic. I buried both, the plastics I made and the petroleum based plastic to test how they would dissolve in soil. I weighed both types before and after they were buried to measure the decomposition.	
Results The plastic I made began to dissolve very quickly in soil. After 1 week it lost 50% or more of the original mass. The petroleum based plastic did not change.	
Conclusions/Discussion There are many different ways to make biodegradable plastic from organic products. I was able to show how quickly the samples I made dissolved in soil. My research points out the advantages and some of the problems with using biodegradable plastic.	
Summary Statement Making and testing biodegradable plastic and learning about how it compares to petroleum based plastic.	
Help Received My parents watched over the experiments and helped me learn.	