



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Grace K. Cabri	Project Number J0508
Project Title Starch Production in Fruit Ripening	
Abstract Objectives/Goals The objective was to see if storing a fresh pear with a ripe banana affects the ripening process of the pear. Methods/Materials One fresh pear was stored in one gallon sized Ziploc bag (repeated for numerous trials) and both a fresh pear and a ripe banana were stored in a separate bag (also repeated for numerous trials). After nine days the fruit in each bag was stained with Lugol's iodine, which is a starch indicator. The fruit was cut in half and the cut surface was dipped into the iodine solution. The tested surface of each fruit changed color based on the amount of starch. The color of the stained surface was then compared to a starch color scale (which indicated the amount of starch in the fruit). Results The solitary pears had a slightly higher average color scale value than the average color scale value of the pears stored with the bananas.(color scale value refers to the amount of starch) Conclusions/Discussion The effects of the hormone ethylene cannot be accurately tested after fruit experiences nine days of exposure to the gas with the use of Lugol's iodine.	
Summary Statement This project shows the lack of change in starch production and lack of change in the ripening rate of fruit exposed to ethylene over a period of nine days.	
Help Received Parents supplied all the needed materials and oversaw the experiemnt; Mr. Hagelsieb and Mrs. Perrino offered suggestions for revisions that they thought necessary	