



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Sara Carman; Rachel Enriquez	Project Number J1406
Project Title There's a Fly in My Ginseng!	
Abstract Objectives/Goals The purpose of this experiment was to determine if <i>E. senticosus</i> (Ginseng) causes mutagenic effects on <i>D. melanogaster</i> (fruit flies). A lethal mutation will result in the absence of any red eye males in the Experimental F2 generation. Methods/Materials A population of over 100 Wild Type male fruit flies were administered an LD(50)dose [0.0216g] of Ginseng via food medium. They were then bred with virgin Muller-5 female fruit flies to produce an F1 generation. The F1 were allowed to breed again and produce an F2 generation. The F2 generation were sorted according to gender and specified phenotypes. A phenotypic ratio was calculated. Results Nineteen percent of the Experimental F2 Group was White eye male and 25% was red eye male. The resulting F2 generation ratio of 1:1:1:1 indicated that a lethal mutation did not exist. Conclusions/Discussion <i>E. senticosus</i> does not induce mutagenic effects on <i>D. melanogaster</i> , therefore our hypothesis was incorrect. However, after thoroughly analyzing our results, and closely comparing the eyes of the red eye Wild Type males in the Experimental Group to the red eye Wild Type males of the Control Group, there might have been a slight mutation. The color of the Experimental red eye Wild Type male flies' eyes have a slight yellowish tint. The difference between the two colors is miniscule, but enough to give us an incentive to continue on with this project.	
Summary Statement Our project tests the effects of <i>E. senticosus</i> (Ginseng) on <i>D. melanogaster</i> (fruit flies).	
Help Received Ms. Carman helped us setup our project.	