



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> Kevin T. Verkaik	<b>Project Number</b> <b>J1427</b>
<b>Project Title</b> <b>Can Electromagnetic Fields Cause Mutations in Drosophila melanogaster Bugs?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My project was to find out if electromagnetic fields were bad for people or any living creatures. That is why I did my experiment on non-vertebrate Drosophila Melanogaster Bugs. <b>Methods/Materials</b> I had two Kritter Keepers with one half of an orange in each and one half of a tomato in each. I put one vial of flies in one Kritter Keeper with two ballasts, one on each side, that gives off an electromagnetic field of 1250 miligauss. I put another vial into a Kritter Keeper without an electromagnetic field. I let them live in their environment for 34 days then I took them out, and froze them, and looked at them through a microscope. <b>Results</b> Towards the end of the project I noticed the flies in the electromagnetic fields were very active. I suspected that the offspring must have gotten used to the electromagnetic field's presence. There were also many more flies in the electromagnetic fields than in the environment. <b>Conclusions/Discussion</b> My conclusion is that the electromagnetic field either made the flies produce more eggs than usual, or the electromagnetic field sped up the flies' life cycle so more flies lived, reproduced, and died a lot faster than usual. That would make the many more flies that I saw when I removed the ballasts.	
<b>Summary Statement</b> The effect of electromagnetic fields on Drosophila Melanogaster.	
<b>Help Received</b> My dad showed me how to use a gauss meter.	