



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Joshua B. Weinerth</b>	<b>Project Number</b>  35807
<b>Project Title</b> <b>The Effect of Neonicotinoid Chemicals on Bee Health</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> To determine the effect of neonicotinoid chemicals on the health of honeybees.</p> <p><b>Methods/Materials</b> Varying levels of neonicotinoid chemicals were given to 11 different groups of caged bees via a food solution. Resulting changes in health were recorded.</p> <p><b>Results</b> I found that the greater the concentration of neonicotinoids, the faster the bees were killed.</p> <p><b>Conclusions/Discussion</b> My experiment did indeed show that neonicotinoid chemicals harm bees. However, I did not expose the bees to the chemicals the same way the bees would be exposed in nature. I believe that an interesting follow up to this experiment would be to use the same concentration of neonicotinoids that would be found in plant nectar after the plant had chemical applied to it. This would prove if the chemicals are fatal to honeybees at recommended applications levels.</p>	
<b>Summary Statement</b> My project is about the effect of neonicotinoid chemicals on the health of honeybees.	
<b>Help Received</b> I received help from my dad, grandpa, and science teachers Ms. Phillippe, and Mrs. Ransom	