



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Brian E. Schneider	Project Number J1918
Project Title Stink Bugs! Do Scents Affect Cricket Behavior?	
Abstract Objectives/Goals The object of my experiment is to see if different scents affect cricket behavior. Methods/Materials One 12.5 x 7 inch clear plastic cricket cage 5 sheets of paper marked out in 2cm x 2cm grids to line cage 10 crickets, commercial cricket food, water 5 cotton balls small amounts of Pine-Sol, lemon extract, peppermint extract, and musk cologne Results The crickets in the control group moved freely about the cage. The crickets exposed to the lemon extract became agitated and went to the far ends of the cage. A similar response was also seen with the peppermint, but to a lesser degree. When the crickets were exposed to the musk, they seemed to be attracted to it. Many touched the cotton with their antennae and stayed near the cotton. The crickets exposed to the Pine-Sol acted much like the control. Conclusions/Discussion My hypothesis was partially correct in that some of the scents did affect cricket behavior. My hypothesis was incorrect in the effects of the different scents. The crickets seemed to avoid the lemon and to a lesser degree, the peppermint; which I thought would attract them. This can be explained by the fact that I now know that lemon is related to citronella, which is used in insect repellents. I thought that the musk would repel the crickets since it is produced by animals who prey on crickets, however, it seemed to strongly attract them. This may be explained by the fact that some insects, like the scorpion, use a musk-like substance in their mating. I thought the Pine-Sol would repel the crickets because of its strong smell and was surprised to see that they were not bothered by it at all. This may be because the crickets are familiar with pine or only sensed a small portion of it with their antennae. In the future, other scents may be tested which may lead to safer forms of insect control.	
Summary Statement My project is about the affect of different scents on cricket behavior.	
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