



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Jeffrey Chen	Project Number S1408
Project Title Alternative Termite Prevention Methods	
Abstract Objectives/Goals This experiment was designed to test whether or not certain odorous household items such as vanilla extract, various liquid air fresheners, catnip, hydrogen peroxide, rubbing alcohol, garlic, and lemons could effectively block a termite's pheromone trail and/or deter the termites from home invasion. Methods/Materials The controls of this experiment were the pheromone mimicking inks of Bic and Papermate pens. The termites were placed on a paper mat that contained a four-inch circle of ink control and with a deterrent placed across the ink path. Results In summary, the data yielded that out of the ten materials used, catnip as well as lemon and rubbing alcohol, were effective three out of six trials in effectively deterring the termites to various degrees ranging from medium to strong reactions. Conclusions/Discussion In conclusion, the results support the hypothesis in that certain odorous household items deterred/blocked a termite's pheromone trail. Catnip, lemons, and rubbing alcohol were effective in blocking the termite's pheromone trail and deterring it from the ink pheromone trail.	
Summary Statement This experiment was designed to test whether or not certain odorous household items could effectively block a termite's pheromone trail and/or deter the termites from home invasion.	
Help Received Family supported me during long nights spent experimenting; Father helped come up with idea, photograph the experiment, and be my lab partner; Ward's Natural Science supplied subterranean termites; Mrs. Carothers lent me equipment and guided me through the experimental process.	