



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Kaylee S. Steiner-Olson	Project Number J1825
Project Title Natural Ant Repellent	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My project was to test which natural spices: wasabi, cayenne pepper, black pepper, tumeric or cinnamon would act as a deterrent to ants. I hypothesized that cinnamon would be the best natural repellent.</p> <p>Methods/Materials The first step in my experiemnt was to determine what the ants were attracted to because some ants go for sweet items, some for meat items and some like both. I placed the same amounts of wild flower honey and organic beef drippings on paper plate circles with a 5 1/2 inch diameter and offered them to the ants. They went for the honey. After determining the food item to use, I measured and taped 8, 9X9 squares on the floor near an ants source. In each 9X9 square, I placed a paper plate circle measuring 5 1/2 inches in diameter. In the middle of each circle, I placed 1 tsp. of honey. On five of the circles I placed a ring of each spice (tumeric, wasabi, black pepper, cayenne peper and cinnamon) measuring 2 tsp. around the honey but 1/2 inch away from it. In the left over sqaures I placed a circle with just honey on it, a circle with nothing on it and an empty sqaure with nothing in it.</p> <p>Results The tumeric and cinnamon had the fewest number of ants in the square and on the circle. The cinnamon had the least amount of ants over all and no ants made it through the cinnamon barrier.</p> <p>Conclusions/Discussion My conclusion is that cinnamon would work the best as a natural ant repellent. I watched the few ants that did approach the cinnamon ring; it was as if there was a force field that was preventing them from entering. Surprisingly, the wasabi had the most ants and was not much of a deterrent.</p>	
Summary Statement My project is about finding a natural repellent that would safely deter ants from human environments.	
Help Received I got help from teachers at Monument Middle: my mom, Ms. Steiner and Mr. Quintal who willingly let me use their classrooms to test the ants. My dad suggested the grid test for the ants.	