



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Jacqueline M. Ahrens	Project Number J2201
Project Title The Effect of the Type of Ground Covering on the Amount of Linepithema humile	
Abstract Objectives/Goals The objective was to determine the effectiveness of different landscape ground coverings to deter Argentine ants (<i>Linepithema Humile</i>). Methods/Materials Standard ground coverings was ranked to determine which was the most effective barrier in preventing Argentine ants. This test was conducted using a food source on plates each containing a different ground covering. The five ground coverings tested were: sand, concrete, pebbles, bark, and dirt. The number of ants was counted every 30 minutes. Results On average, 16.25 ants ate from the sand, 10.75 ate from the concrete sample, 10 ants ate from the dirt sample, 3 ants ate from the bark, and .25 of an ant ate from the pebbles. Conclusions/Discussion Ants# concentration was greatest with sand and lowest with pebbles. It was found that Argentine ants tend to eat from smooth surfaces because it is easier for them to walk on. After two trials, it was concluded that a ground covering of pebbles would be best to deter ants.	
Summary Statement The project was about how to deter Argentine ants naturally using ground coverings (dirt, sand, pebbles, etc.)	
Help Received Father helped locate large ant colonies	