



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> Max G. Ross	<b>Project Number</b> <b>J1918</b>
<b>Project Title</b> Ants and Plants	
<b>Abstract</b> <b>Objectives/Goals</b> The objective is to find out if white sage and eucalyptus concentrates repel argentine ants. The information discovered in this experiment can help make a less toxic ant repelent to people and repel ants but not kill them. <b>Methods/Materials</b> I used six ant farms with ten ants in each farm. Then I put ten drops of a white sage concentrate into two farms and the same with a eucalyptus concentrate in another two farms. I didn't put anything but water into my remaining two ant farms because they were my control group. Then I put a piece of food in between where the chemicals had been placed and the wall of the farm. After leaving the ants alone for five days I measured in centimeters how far to the left, right, and down the ants tunneled away from the concentrates. I measured the closest tunnel to the concentrate, not the farthest. <b>Results</b> The ants avoided the plants by tunneling far below them or to the left and right of them. In the two sage ant farms the ants avoided the sage to the left a total of 18 cm, to the right a total of 11.5 cm, and down a total of 6.5 cm. In the eucalyptus farms the ants avoided the concentrates by 15.5 cm to the left, 14.5 cm to the right, and 6 cm down. In the control group the ants tunneled right through where the drops were in the other farms. <b>Conclusions/Discussion</b> I wanted to find out if white sage and eucalyptus repeled ants. I did so by making concentrates of the two plants and putting them into ant farms and recorded the ants reaction. It turned out that they avoided both plants significantly and tunneled right through where the drops were placed in the control group.	
<b>Summary Statement</b> My project's purpose was to find out if ants avoided white sage and eucalyptus because I never spotted any ants near those plants in the wild.	
<b>Help Received</b> Mom matted my titles on colored paper for me.	