



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Austin P. Ambrose</b>	<b>Project Number</b> <b>J1703</b>
<b>Project Title</b> <b>Bio-Friendly Ant Repellant</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of this project is to create an effective, bio-friendly, ant repellant. <b>Methods/Materials</b> This project uses 5 different spices, and water. The spices are paprika, mustard powder, garlic powder, cayenne pepper, and chili powder. The spices are diluted in water, and then put into spray bottles. Cutting boards are placed in a garden area with sugar water on top are used to attract ants. When enough ants are on a board, they are sprayed with the spice mixtures to check the effectiveness of each mixture in driving away ants (several experiments are done with each spice mixture, and plain water). A video camera and computer are used to determine each spray's effectiveness (and the effectiveness of plain water) <b>Results</b> Paprika diluted in water caused, on average, a greater percentage of ants to exit the boards within 1 minute of spray compared to 4 other spices diluted in water, and plain water. Plain water was the least effective. <b>Conclusions/Discussion</b> The paprika mixture is environmentally friendly, and doesn't kill, but rather quickly and effectively drives ants away. Creating sprays like this will hopefully contribute to humanity's efforts to become more peaceful with nature and its creatures.	
<b>Summary Statement</b> The purpose of this project is to find a bio-friendly ant repellant that drives away ants without killing them	
<b>Help Received</b> Parents helped set up experiment areas	