



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Jarod A. Corey</b>	<b>Project Number</b> <b>J0503</b>
<b>Project Title</b> <b>Borax Acts or Gets the Ax</b>	
<b>Objectives/Goals</b> Due to the recent fires in Southern California, my objective was to determine if the amount of borax will affect the flammability rate in wood. My hypothesis is that even the smallest amount of borax will slow the flammability rate in wood.	
<b>Abstract</b>	
<b>Methods/Materials</b> Diamond Kitchen Matches were cut to a length of 5 centimeters. The match sticks were divided into six groups of five sticks for all three tests. I soaked the match sticks in different solutions containing 1 gram, 2 grams, 3 grams, 4 grams, and 5 grams of Borax Laundry Booster along with a controlled group containing only water. They were soaked for two days and dried for three days. Using a torch, each match stick was burned for ten seconds. The average length of wood left after burning each group of match sticks was determined and graphed.	
<b>Results</b> All of the borax solutions slowed the flammability rate in the match sticks; however, Group E with 5 grams had the least amount of burn with the average length of (4.313 cm.), followed by Group B with 2 grams (4.293 cm.), Group D with 4 grams (4.273 cm.), Group C with 3 grams (4.08 cm.), and lastly Group A with 1 gram (3.926 cm.).	
<b>Conclusions/Discussion</b> It appears that, as the amount of Borax concentration increases, the rate of burn decreases. I found my hypothesis to be is correct, based on my conclusions.	
<b>Summary Statement</b> To determine if the amount of borax will affect the flammability rate in wood.	
<b>Help Received</b> My father supervised me using the propane torch and started and stopped the timer. My mother took the pictures.	