



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> Nathaniel B. Tweed	<b>Project Number</b> <b>J1129</b>
<b>Project Title</b> Can Cross Linked Polymers Help with California's Water Crisis	
<b>Abstract</b> <b>Objectives/Goals</b> My goal is to see if by using cross linked polymers, I could reduce the amount of water usage to sustain the life of a plant which could help save California's water if it were used in agriculture. <b>Methods/Materials</b> I used a baby's diaper for the crossed linked polymers, peat pots, a snapdragon (plant), unsweetened cherry mix, 2 glasses, different liquids, and mixed soil. <b>Results</b> The results in the first experiment was that the cross linked polymers swelled up and held the liquid that I poured into them for two weeks. The second experiment showed that soil treated with cross linked polymers held all the water poured into it, and the untreated soil could not retain the water. The third experiment showed that a snapdragon plant lived eight days longer in soil treated with cross linked polymers than the same kind of plant that was potted in untreated soil. <b>Conclusions/Discussion</b> My conclusion is that by using crossed linked polymers a plants life will be sustained using less water.	
<b>Summary Statement</b> To see if crossed linked polymers can help with California's water drought.	
<b>Help Received</b> Mother helped with proofreading and dad helped with understanding and pronunciations.	