



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) William B. Hance	Project Number J0814
Project Title Can Your Household Trash Make a Backyard Splash?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My main objective throughout this experiment was to try and discover if normal household waste products could be put back to use in our environment somehow. I was eager to observe exactly which household waste product could act as the most effective waste fertilizer and help promote the growth of the English Primrose and Quinalt Strawberry plants the most.</p> <p>Methods/Materials While planting the primroses and strawberries, I used instruments and supplements such as potting soil, the waste fertilizers, and 10 cm plastic pots. During my test, I planted 25 mL of each waste product 3.25 cm below the soil of each English Primrose and Quinalt Strawberry plant. Every five days, I recorded a very thorough log of writing and quantitative measurements. I spaced my measurements every five days to give the plants enough room to grow healthily and to fully show the results of each household waste fertilizer.</p> <p>Results Overall, the used coffee grounds promoted the growth of both the English Primrose and Quinalt Strawberry plants the most. In the primroses, the plants grew to an average height of 20.2 cm from an average height of 14.3 cm in the beginning of the experiment. The strawberries grew to an average height of 15.1 cm from an average height of 10.1 cm. There was a 24% higher growth rate in the primrose plant fertilized with coffee grounds and a 10% higher growth rate in the strawberry plant fertilized with coffee grounds than the waste fertilized primrose and strawberry plant with the next highest growth rate.</p> <p>Conclusions/Discussion I have concluded that the coffee grounds were the most effective form of waste fertilizer for both the plants used in my experiment. I have also concluded that all of the waste fertilizers helped the plants grow to their full potential, and that they helped provide nutrients and essential elements that normal potting soil could not provide. Overall, I have concluded that my experiment was a great success, and that it was one of the most fun and fulfilling experiments I have ever performed.</p>	
Summary Statement My science fair experiment is about the use of household waste products to help enhance growth in plants.	
Help Received Mother helped glue board.	