



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Elizabeth R. Ayril	Project Number S1602
Project Title Growth with Less Water	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of the project was if water storing granules (Rain Drops) helps to conserve water, while still being able to observe substantial growth in Perennial Ryegrass, Bermuda grass and Kentucky Bluegrass.</p> <p>Methods/Materials Plant 2 grams of seeds in cups #1, #2, #3, #4 and #5 of Perennial ryegrass, Bermuda grass and Kentucky Bluegrass. For each #1 cup give it the regular amount of water. For each #2 cup mix 2 grams of Rain Drops into the soil, but water it with the regular amount. For each #3 cup mix 2 grams of Rain Drops into the soil however stop watering 2 weeks before the end of the 4 weeks. For each #4 cup mix 2 grams of Rain Drops into the soil however stop watering 1 weeks before the end of the 4 weeks. For each #5 cup mix 2 grams of Rain Drops into the soil however only water for one week. Every week, measure the growth and record results. When the four weeks are complete analyze results.</p> <p>Results Perennial Ryegrass #1 at the end of the four weeks had grown 10.5 cm, #2 grew 10.2 cm, #3 grew 6.5 cm, #4 grew 10 cm and #5 grew 3.5 cm. Bermuda grass #1 grew 2.5 cm, #2 grew 2.5 cm, #3 grew 2.5 cm, #4 grew 3 cm, and #5 grew 2 cm. Kentucky bluegrass #1 grew 7.5 cm, #2 grew 7 cm, #3 grew 6 cm, #4 grew 7.5 cm, #5 grew 5 cm. My hypothesis was proven correct because Rain Drops added to the soil did conserve water, while still being able to observe growth in Perennial Ryegrass, Bermuda grass and Kentucky bluegrass.</p> <p>Conclusions/Discussion Bermuda grass conserved the most water when Rain Drops were added to the soil because it is very drought tolerant and takes considerable abuse. It's very common in Arizona. Kentucky Bluegrass needs a lot of water, however being a fast growing grass allows it to have the ability to develop a good root system against drought. Perennial Ryegrass, however, has very high water needs and flourishes best in areas with mild winters and cool moist summers. Rain Drops did help conserve water because it restores the roots water storing granules. Rain Drops, that contains another product called SaturAid, rewetting granules creates channels to move water to the roots. Rain Drops when added to the soil has been known to reduce normal watering by about fifty percent.</p>	
Summary Statement The effects of water storing granules on the growth of Bermuda grass, Kentucky Bluegrass and Perennial Ryegrass.	
Help Received	