



Colorado Science and Engineering Fair

2024 Individual Project Abstract Form

Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.

Title of Project: Thriving Waters

Finalist's Name: Gabriel Ferguson

School and City: Craver Middle School, Colorado City

Sponsor's Name: Ms. Bethany Bak

Category: Plant Sciences (PLNT)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

All plants grow differently in different water. But which water can help the plant grow the most? And do certain chemicals in the water affect it too? This project looks to find what the BEST water is to grow plants, including 5 subjects, lake water, City of Pueblo, Colorado City, Alkaline and last but not least Reverse Osmosis, and looks for the best water for growing plants out of the 5. The waters were tested in small bottles in a propagation station. Clippings from the pathos plants were inserted into the cups and began growing. Over the course of around 4 weeks (1 month) I would measure the roots in centimeters. By measuring the roots from plants growing in different waters in every cup I could determine what water grows the most. My hypothesis was that Reverse Osmosis would be the best, lake water would be next, City of Pueblo water would come in 3rd and Alkaline water in last. My hypothesis was mostly incorrect as plants grown in the City of Pueblo water showed massive superiority over all the other options.

I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.

Finalist's Signature: Gabe Ferguson

Date: March 2nd, 2024

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with you Finalist Verification/Permission Form. A signed copy of this form must be included in your notebook.