



Colorado Science and Engineering Fair

2025 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: Electroculture Gardening and How it Affects Plants

Finalist's Name: Caprise Priestley

School and City: Mancos Middle School Mancos

Sponsor's Name: Adam Priestley

Category: Plant Sciences

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

How do Plants React to Electrical Currents? Does Electroculture Help Produce a Higher Yield of Vegetables? The hypothesis is that if an electrical current is applied to a plant then the plant should grow faster, produce more blooms, and provide a higher vegetable yield. I built 3 raised vegetable boxes, filled each of them with soil, and put copper wire through two of the boxes. Then planted 10 seeds in each of the boxes, watered, and measured each of the plants every other day for 21 days. In the experiment six of the plants in the controlled group grew better than the other plants. In the single wire box four of the plants grew better than the other plants and in the multi-wire box none of the plants grew the best. The results show that electroculture can not be completely ruled out because even though the electroculture groups didn't grow as good, four of the plants in the single wire electroculture group still out grew the others. So this shows that electroculture can still work.

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:

Date:

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.**