



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: Rotten Project: How Effective are Fungicides that Prevent Post-Harvest Potato Rot?

Finalist's Name: Jossilyn Wagar

School and City: Sargent Jr High, Monte Vista Co

Sponsor's Name: Terri Paulson

Category: Plant Sciences (PLNT)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

My dad is a potato farmer and is always complaining about having to throw away “millions of dollars” due to post-harvest potato rot. I started thinking, “why do all these farmers spend so much money on chemicals if they don’t work?” I wanted to know how effective these chemicals are. I researched two fungicides(Mertect 340-f and Stadium) that “prevent” post-harvest potato rot, and I tested the effectiveness of these fungicides. I treated 4 groups of potatoes with these two fungicides(group 1 control, group 2 Mertect, group 3 Stadium, and group 4 both). For my second test I swabbed rotten potatoes and cultured them in four groups, each group the same as my first test. My data partially supported my hypothesis because the one fungicide was able to prevent bacterial growth, this fungicide is Mertect 340-f. The second fungicide didn’t prevent any bacterial growth and had just as much as my control group. The last group I treated with both, which significantly had less bacterial growth than the others. My first test didn’t go as I had expected, and was unable to support my hypothesis.

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 o 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.