



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: Mold Patrol: How Storage Conditions Affect Mold Growth and Animal Feed

Finalist's Name: Cash Stone

School and City: Genoa-Hugo School, Hugo

Sponsor's Name: McKenzi Stone

Category: Micro & Molecular Biology

Division: Junior (grades 6 - 8)

Abstract (250 words or less):

The purpose of this project is to understand how temperature impacts the quality of livestock feed, with the goal of improving feed storage practices for ranchers and reducing spoilage and waste. The procedure of my project was, first I got my 5 petri dishes that I put the feed in. In each dish I put exactly $\frac{1}{2}$ cup of feed. Next, I wet each dish to exactly 20% moisture content and put the lid on. Once I had the dishes sealed, and closed I placed each dish in my 5 testing spots, (Heat lamp, outside, inside, freezer, and fridge.) Once each dish was set in place I closed the area that they were in. After every 4 days I tested the moisture content of each dish. After every day I also took notes on any changes that the feed might be doing. Once the 16 days were up, I took all the dishes out of their area, and noted anything that changed, and took pictures. The results of my project were as expected. The feed under the heat lamp resulted in the worst quality, and the feed inside resulted in the best quality. The reason the feed under the heat lamp resulted in the worst quality was because it grew mold, and also it rose in moisture content. The reason the feed inside resulted in the best quality was because it grew no mold, and lowered in moisture content, so it had no chance of growing mold.

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.**