

Kamryn Holland
All of a Spudden . . .

Dormancy in potatoes is a healthy and natural thing, where the potato “hibernates.” However, sometimes seed needs to be planted before tubers have sprouted. My project was an experiment to see if I could shorten the dormancy period, and if so, which method works the best. Working with the Colorado State University San Luis Valley Research Center, I tested two varieties of potatoes, Canela Russets and Rio Grande Russets. My main treatment was a chemical known to be used to stimulate sprouting called ProGibb, or Gibberellic Acid. I also used CapSil, a surfactant, and a coring tool to open up the tuber. I hypothesized that ProGibb+CapSil would be the most effective, as my background research taught me that those chemicals are highly recommended by experts in crop stimulation. After soaking the potatoes in the chemicals, and applying the coring treatments, I set the potatoes in a cooler, where I took weekly data. In the end, I found that the treatments were mostly the same for the varieties, and in Canela, both ProGibb+ CapSil and ProGibb+CapSil+Wounding were equally effective, and had the shortest dormancy lengths. Rio Grande’s most effective treatment was the combination treatment, ProGibb+CapSil+Wounding. My hypothesis would be considered somewhat correct, even though I was right in thinking that ProGibb+CapSil are the most effective. However, I didn’t include wounding in my hypothesis. This project can definitely inform potato growers on how they can plant seed potatoes sooner.