

RESEARCH PROPOSAL FOR 1985

Michael K. Thornton

1. Potato Clone x Spacing x Fertility

Four numbered clones, WNC285-18, WNC567-1, AC77652-1 and TC582-1 will be compared to Centennial and Russet Burbank for yield and grade at 3 spacings and 3 nitrogen fertility levels.

2. Effect of Preplant Nitrogen Level on Tuberization of Centennial, Russet Burbank and Sangre

More information is needed on the effect of preplant nitrogen on tuberization, tuber growth rate, and final yield of these three cultivars under San Luis Valley conditions. Information on cultivar differences in petiole nutrient levels is also being obtained in this study.

3. Conservation Tillage in Wheat-Potato Rotation

Several more herbicides will be evaluated in an attempt to identify combinations which will effectively control weeds in conservation tillage potatoes. Use of a winter rye cover crop after potatoes will be evaluated again.

4. Spacing of Micropropagated Potatoes

This trial will be continued to determine the optimum spacing of Centennial, Russet Burbank, and Sangre microplants in the field.

5. Starter Fertilizer for Micropropagated Potatoes

Use of starter fertilizers with different levels of phosphorus at transplanting will be evaluated.

6. Use of Growth Regulators on Minitubers

Alar 85 will be sprayed on Russet Burbank minitubers at tuber initiation to try and increase tuber set and size uniformity.

BUDGET REQUEST

Labor	\$2,400.00
Supplies & Equipment	<u>1,600.00</u>
TOTAL	\$4,000.00