

Research Proposal for 1986

Potato Cultural and Micropropagation Studies
Michael K. Thornton

1. Potato Clone X Spacing X Fertility

Three numbered clones, AC77513-1, AC77652-1 and AC79100-1 will be compared to Centennial and Russet Burbank for yield and grade at 3 spacings and 3 nitrogen fertility levels.

2. Phosphorus Fertility

This experiment will be conducted on several fields throughout the San Luis Valley to study effect of phosphorus fertility on petiole phosphate level, yield and grade. Servi-Tech and Agro Engineering will be cooperators in this project.

3. Nitrogen Fertility

The effect of timing, rate, and last application date of seasonal nitrogen to Centennials grown at different preplant nitrogen rates on petiole nitrate level, yield and grade will be studied.

4. Conservation Tillage

The third year of this 5-year trial will concentrate on developing herbicide treatments and cultural practices to maximize yield in conservation tillage potatoes.

5. Cultural Practices for Micropropagated Potatoes

Spacing, planting depth, and starter fertilizers for microplants and minitubers will be studied to determine practices which maximize yield.

6. Growth Regulators on Micropropagated Potatoes

Use of plant growth regulators to increase production of minitubers will be evaluated.

BUDGET REQUEST

Labor	\$2,900.00
Supplies and Equipment	<u>1,600.00</u>
TOTAL	\$4,500.00