

RESEARCH PROPOSAL FOR 1993

Submitted to:
SLV Research Center Committee
and the
Colorado Potato Administrative Committee (Area II)

TITLE: FACTORS INVOLVED IN RED COLOR DECLINE IN SANGRE

PROJECT LEADERS: Robert Davidson & Richard Zink

PROJECT JUSTIFICATION: Red potatoes constitute a small market share (6% +) of the potatoes grown in the San Luis Valley, however, they are considered a very important part of the overall annual marketing effort. Over the past few years, primarily since Sangre's release, the visual red skin color of potatoes grown in the SLV has shown a marked decline in intensity. This decline shows up during the first stages of harvest with a more gradual color reduction during storage. There may be several reasons for this color decline including physiological (non-disease) and pathological causes. This project is designed to examine several of the more common factors found to be involved with red color decline.

PROJECT STATUS: New project for 1993.

1993 OBJECTIVES: Three to six grower cooperators raising Sangre potatoes will be solicited for 1993. We will examine several factors which may be related to color decline; i.e.- fumigated versus non-fumigated ground, seed generation level (Gen2 vs Gen5) and crop history (number of years in potatoes, fertility, etc.). Tuber samples will be taken from each field on a weekly basis starting in early August and continuing until harvest and then on a bimonthly basis throughout the storage season. Samples will be scored for intensity of red color, skin set, etc. In addition, samples will be screened for pathological problems (silver scurf, light russet scab, etc.). Data collected will be analyzed to determine if there are specific factors involved in the red color decline.

FUNDING REQUEST: No funds will be requested for 1993. Unused funds from previous projects will be collated and utilized for this year. Estimated expenses - \$2500 to \$3000.

Is in Red Dead

Immigration

Fret - on station

Crop list = soil born Grower

Generation = Turkey born Grower
vs

Harvest date

Weekly harvest

Aug - harvest

Storage samples