

1987

ANNUAL PROJECT REPORT

PREPARED FOR
SAN LUIS VALLEY RESEARCH CENTER ADVISORY COMMITTEE

TITLE: FIELD SIMULATED SULFONYLUREA HERBICIDE INJURY ON POTATOES.

PROJECT JUSTIFICATION: OUST damage to thousands of acres of San Luis Valley potatoes threatens the reputation and quality of the primary export crop from the valley. Documentation of the effects of low rates of sulfonyleurea herbicides on the growth and development of potatoes, and the persistence of these rates under SLV conditions is necessary to help farmers wanting to know when they can return to planting potatoes in contaminated fields.

PROJECT LEADER: PHILIP WESTRA, WEED SCIENTIST

DEPARTMENT: PLANT PATHOLOGY/WEED SCIENCE
COLORADO STATE UNIVERSITY

PROJECT STATUS: NEW

SIGNIFICANT ACCOMPLISHMENTS FOR 1988: Although no SLV funding was provided, I carried out a complicated bioassay of 41 SLV soils for the detection of alleged OUST contamination. This research at CSU in Ft. Collins has been backed up by independent LRB (lentil root bioassay) and HPLC studies at the Minnesota Valley Testing Lab. This research was conducted at the request of the SLV potato growers and the CSU extension service with the goal of helping determine the severity of the herbicide contamination problem that some farmers have.

OBJECTIVES FOR 1988-89: Sub lethal doses of OUST, GLEAN, ALLY, and HARMONY PLUS would be sprayed on potatoes at 3 stages of development in 10 X 20 foot plots replicated 3 times. Herbicide damage to potatoes would be documented by visual ratings, plant excavations, and photography. All plots would be taken to yield and tubers scored for quality. ASSANA at a field rate would also be included as a treatment.

FUNDING:

1988-89 request:	DOLLARS

1. 1 month technician salary	2000
2. travel	1500
3. hourly labor	1000
4. materials and supplies	500

TOTAL	5000