RESEARCH PROPOSAL FOR 1993

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

TITLE: Field evaluation of transgenic potatoes resistant to tuber black spot and bacterial pathogens.

PROJECT LEADER: Dr. Richard T. Zink in cooperation with Dr. William Belknap, USDA/ARS, Albany, CA.

PROJECT JUSTIFICATION: Many of the problems facing the potato industry caused by insects and diseases are now being addressed through the application of genetic engineering to variety development and improvement. All major potato producing states in the United States are involved to some extent in either developing or field testing transgenic potatoes. It is imperative, therefore, that Colorado become involved in this new technology. Participating in this project will establish Colorado as a cooperator in a nationwide USDA/ARS program that involves California, Idaho, Minnesota, North Dakota and Maine. This funding request is for one year only, after which Colorado will be formally part of the project and receive funding from the USDA.

PROJECT STATUS: This is a new project.

OBJECTIVES FOR 1993:

1) Characterize the agronomic properties of potato lines engineered to carry genes for resistance to tuber black spot and bacterial pathogens.

2) Establish the San Luis Valley Research Center as a site for field testing genetically engineered plants through compliance with regulatory and procedural requirements at the federal and state levels.

3) Establish Colorado State University as a formal cooperator in the USDA/ARS Potato Genetic Engineering Program thereby enabling the SLV Research Center to evaluate transgenic potatoes on an on-going basis and receive funding.

FUNDING REQUEST: 1993 request $2500.00