COMPREHENSIVE RESEARCH ON PRUNES

PROGRAM AREA: Fruit Production and Quality

PROJECT NUMBER AND TITLE: Prune Dieback

PROJECT LEADER: K. Uriu

PERSONNEL: Jim Pearson

OBJECTIVES

To determine the interrelationship of leaf and air temperature, transpiration, water stress, potassium (K) level and cropping on the development of leaf scorch and dieback.

WORK IN PROGRESS and EXPERIMENTS COMPLETED

As one of the team that conducted a prune survey of about 30 orchards scattered in the Tehama, Sutter-Yuba and Tulare county areas, these orchards were evaluated for leaf scorch, dieback, leaf color, crop load, fruit size, etc. From this survey, suitable orchards for experimentation were selected.

In 3 orchards showing severe scorch, spurs and limbs showing leaf scorch, with or without dieback, were marked for future observations. Leaf samples were taken to correlate the scorch condition with level of K.

WORK PLANNED

Frequent observations and measurements will be taken to follow the development of scorch under different conditions of K level, crop load and water stress for possibly different symptoms under differing conditions. Leaf temperatures and transpiration rates will also be measured. In addition, heat will be applied to leaves and fruits to determine the temperature at which they can be injured. Frequent leaf samples will be taken throughout the growing season to follow the level of K as the leaves develop scorch.

RESULTS

None as yet.