Date December 12, 1977

Project Title: Prune Diseases

Investigator(s): J. M. Ogawa and B. T. Manji

Objectives:

1. Monitor for benomyl-tolerant and test for alternate fungicides for brown rot control.

2. Relate thrips to possible role in the development of russet scab on prune.

Results and Conclusions Obtained During Past Year:

1. Benomyl-tolerant isolates of Monilinia were not detected on prunes or in other stone fruit crops in California. Method used for detection was tested on benomyl-tolerant isolates from South Carolina, New York, and Michigan. PDA medium incorporated with 10 ppm active benomyl was used and benomyl-tolerant isolates grew in 500 ppm benomyl medium. Although benomyl-tolerant Monilinia vary in their identification features such as reduced sporulation, the fungus readily sporulated on apricot or peach halves canned in heavy syrup. Benomyl-tolerant Monilinia was sensitive to captan as well as to new chemicals for future registration such as Cela 524, CGA 1-105, and Rp26019. Evidence was developed that Monilinia infections of blossoms (anthers) can be suppressed even after 48 hr with CGA1-105. Such a fungicide would allow fungicide applications after an infection period. Studies are needed to establish the exact conditions required for initial infection and disease development to test such a chemical under field conditions.

2. A test plot was set up in Davis using chemicals to prevent buildup of thrips. Treatments were captan, Guthion plus captan, and nontreated; 1977 was not conducive weather for russet scab. This test will be set up again for the 1978 season.

Current Status of Project and Work Planned: