

## **Instructions for collecting, packaging, and submitting plant and soil specimens:**

Proper collection, packaging, and shipment of plant specimens are extremely important to successful diagnosis of plant disease problems. Inappropriate specimens, specimens arriving desiccated or in advanced stages of decay, or specimens damaged in shipment are of little or no use in attempting to diagnose plant disease problems. The most rapid and accurate diagnosis results from proper specimen collection and shipment, together with submission of complete background information concerning the problem. It is essential that the diagnostic form be filled out as completely as possible.

The following procedures are suggested to insure that the specimen arrives at the laboratory in the best possible condition: Submit only freshly collected specimens. If possible, send several specimens showing a progression of symptoms. Keep specimens refrigerated until shipment.

Where specific plant parts are affected (leaf spots, root rots, stem rots, fruit rots, flower blights, stem cankers), submit the affected part in as many stages of the disease as are showing. If practical, submit the whole plant. Enclose specimen in a plastic bag. For plants showing wilting, yellowing, stunting or general decline, send the entire plant including the root system. Dig the plant carefully so as to disturb the root system as little as possible. Shake away excess soil. Do not wash soil from the root system. Enclose the root system in a plastic bag and seal it at the base of the plant stem to prevent soil spillage. Then enclose the entire plant in another plastic bag and seal.

For leaf spots, submit leaves showing various stages of infection. If possible, send twigs or branches with leaves still attached. Enclose leaves in a plastic bag. Do not add additional moisture. Package bagged specimen in a cardboard box to prevent crushing during shipment.

### **Packaging and Mailing**

- Package all specimens securely to prevent damage during transit.
- Cardboard boxes usually help prevent crushing. Add packing material such as crumpled newspaper to prevent specimen damage during shipment.
- Shipment by overnight mail or overnight delivery is strongly encouraged.

### **According to California Food and Agricultural Code Section 6421;**

Each shipment of plants shall have legibly marked upon it in a conspicuous manner and place of the following:

- (a) The name and address of shipper or owner.
- (b) The name of the person to whom the shipment is forwarded or shipped or the name of his agent.
- (c) The name of the country, state, or territory where the contents were grown.
- (d) A statement of its contents.

### **Address:**

Eskalen Lab.  
232 Fawcett Laboratory,  
Department of Plant Pathology and Microbiology,  
University of California,  
Riverside, CA, 92521