WSU EXTENSION
Spokane County

C083

PREPARING SAMPLES FOR IDENTIFICATION OR DIAGNOSIS

Good sample collecting and handling are necessary to obtain an accurate diagnosis and/or identification of plants and insects. Prepare samples as per instruction for sample type and purpose. Following these steps on how to package and store plant samples will help ensure samples arrival to WSU Spokane County Plant Clinic in good condition.

- Bring the freshest sample possible. Store samples in a refrigerator prior to transport to the Clinic.
- Label the sample container with your name and date sample was collected.
    - Fill out the proper diagnosis form for your sample type. Forms are located on our https://extension.wsu.edu/spokane/mg/plant-clinics/.
- Bring your sample to the Extension Education Center, 222 N Havana Street, Spokane WA (south of the fairgrounds). The Plant Clinic is open:
    - 9:00 a.m. to 3:00 p.m Monday through Thursday
    - 9:00 a.m. to 1:00 p.m. Friday
    - Samples may also be dropped off at the Extension Main Office until 4:30 p.m. Monday through Thursday.

How to Prepare Samples for Identification/Diagnosis

Preparing Insect Specimens for Identification

1. Carefully collect insect specimens
    a) Place insect(s) in either small vial or bottle with secure cap.
    b) Place large adult moths and butterflies cushioned in a box or jar with cotton to minimize damage.

2. Bring a representative sample of any affected plant material associated with the insect pest if possible.
    a) Place plant sample material in a separate container or bag.

3. Store samples in your refrigerator until ready to bring into Plant Clinic.

Visit our website at https://extension.wsu.edu/spokane/mg/plant-clinics/
e-mail your garden questions to: mastergardener@spokanecounty.org

Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local Extension office.

Preparing Plant Specimens for Disease Diagnosis

1. If it is not practical to bring the entire plant, try to bring plant parts or images that show the various stages of the problem:
   a) a part showing the early stages of the disease,
   b) a part that is severely affected, and
   c) a healthy part, if available.
   d) Place a dry paper towel in the bag with leafy samples

2. Where practical, dig up the entire plant including its root structure.
   a) Try not to pull the plant as any diseased roots will be left behind.
   b) Wrap the roots in a plastic bag separate from the rest of the plant to prevent soil from contaminating leaves and stems.
   c) Place the entire sample in another plastic bag without additional moisture, as it also may cause contamination.
   d) Place a dry paper towel in the bag with leafy samples.

3. Tree diseases can best be diagnosed by evaluating the junction of diseased and healthy tissue. Include twigs or limbs just beginning to show symptoms, but still alive. Old, dead limbs are normally not helpful. Take multiple images of your tree showing disease, live, trunk, branches, and entire tree.

4. Store samples in your refrigerator until ready to bring into Plant Clinic.

Preparing Lawn/Turf Samples for Disease Diagnosis

1. Cut a turf square approximately 4-inches across and as deep as the roots will hold soil. Leave the soil intact. (Plugs from 1" diameter soil probes do not allow enough of a sample).

2. Bring three or four specimens each representing a different stage (healthy, slightly affected, and heavily damaged).

3. Store samples in a refrigerator until ready to bring into Plant Clinic.

Preparing for Plant/Weed Identification

Plants/weeds are identified in many ways. The most useful plant parts are flowers, fruits, leaves, buds, and young stems. Because some ornamental plants have many varieties, it may not be possible to determine the exact variety without the flower.

1. Collect as many plant parts as possible. Flowers, fruits/seeds, leaves, stems, buds and roots may aid in identification.

2. Where practical, dig up the entire plant including its root structure.

3. Place the plant specimen in a plastic bag along with a dry paper towel (don't add water) and seal.

4. Store samples in your refrigerator until ready to bring into Plant Clinic.