Guidelines for Submitting Plant Samples for Diagnosis

Accurate and rapid diagnoses depend upon the quality and quantity of the sample submitted for diagnosis. Please consult the following guidelines before collecting, packing, and submitting the samples.

✓ Plan to collect and submit samples early in the week.
✓ Pack samples properly (See ‘how to pack a sample’).
✓ Collect specimens representing a range of symptoms.
✓ Collect all parts of the plant that show symptoms.
✓ Collect specimens before applying any chemicals.
✓ Submit generous amount of plant material.

✓ Samples must be accompanied with a completed Sample Submission Form. Samples without ‘Sample Submission Form’ will not be diagnosed. Place Sample Submission Form in a plastic bag when sample contains roots, soil or perishable tissue (Sample Submission Form).

✓ Samples must be accompanied with the diagnostic fee (samples without diagnostic fee may not be diagnosed) (Diagnostic Fee).

✓ Write correct mailing address on the package. (Sample Mailing Address)
✓ Specimens from different plant species should be packed separately.
✓ Out of state samples must be accompanied with the PPQ 526 permit for interstate movement of the plant/plant material (Contact Dr. Singh for the Permit).
Sample Collection

Foliar or Above Ground Symptoms

- **Symptoms including leaf spots, blights, discoloration, mottling, mosaic**
  - Collect plant tissue with advance stages of disease development. Completely dead tissue seldom generates accurate diagnosis.
  - Collect several (15 to 20) leaves with range of symptoms from the affected plant (fig).
  - If possible prune the twigs showing leaf spots.

- **Symptoms including cankers, galls, swellings, diebacks**
  - Collect plant tissue with advance stages of disease development. Completely dead tissue seldom generates accurate diagnosis.
  - Prune the affected tissue several inches below symptoms.
  - Diagnosis of dieback caused by root rot requires roots with soil intact from the affected plant. Shake off excess soil and pack the roots in a plastic bag.
  - Wrap the tissue in DRY paper towel.
  - Place wrapped specimens in plastic bag.
  - Pack samples in an envelope or cardboard box.
➢ **Leaf Scorch Symptoms**

- Leaf scorch can be caused by several different biotic and abiotic agents (Fig.).
- Collect several (5-7) one foot long branches/twigs with leaves showing leaf scorch symptoms (Fig.)
- Sample should include specimens representing a range of symptoms.

➢ **Fruit Sample**

- Do not submit completely rotten fruits.
- Do not pack fruits in plastic bags.
- Wrap fruits in dry paper towel.
- Pack samples in sturdy cardboard box with packing material to avoid bruising in transit.

**Systemic Symptoms**

➢ **Symptoms include general decline, browning, dieback, leaf drop, stunting, wilting, and yellowing.**

- Send entire plant, if practical.
- Dig the affected plant. Do not pull up.
- Wrap the roots in plastic bag (see fig.)
- If sending entire plant is not feasible, dig up roots from the affected plant with soil intact and pack these in a plastic bag.
✓ Collect several (5-7) one foot long branches/twigs from the affected plants.

**Homeowner Turfgrass Samples**

✓ Collect turf sample with early & advanced stages of disease development. Completely dead turf grass seldom generates an accurate diagnosis.

✓ Collect turf sample from transition zone between healthy & diseased turfgrass containing both healthy & affected turf.

✓ Collect 6 X 6 inches section of affected turf with soil intact.

✓ Wrap the sample in newspaper or aluminum foil.

✓ Place sample in a sturdy cardboard box and pack securely.

✓ Do not add any water to the samples.

✓ **Place the completed Sample Submission Form in a plastic bag and send it with the sample.**

✓ Ship turf samples immediately to the Diagnostic Center after collection.

**Sample Packing**

✓ Do not add water to the samples.

✓ Wrap plant tissue such as leaves or twigs in dry paper towel.

✓ Place wrapped tissue in plastic bags.

✓ Pack roots with soil intact in plastic bags.

✓ Pack foliage and roots collected from same plant in separate plastic bags.

✓ Wrap fruits in dry paper towel.

✓ Pack samples in a sturdy cardboard box.
✓ Foliage samples can be packed in parcel envelope.
✓ Do not forget to include completed Sample Submission Form with the sample.
✓ Do not forget to include diagnostic fee with the sample.

**Sample Submission**

✓ Send samples to **correct address**.
✓ Submit samples early in the week.
✓ Samples are not received on Saturdays, Sundays & other LSU AgCenter holidays.
✓ Walk ins are always welcome.
✓ Remember to include completed Sample Submission Form and Diagnostic fee with the sample.