

# What Makes a Good Sample

## Advice for collecting a good plant or insect sample for identification.

### Insect or spider identification

1. Please bring in live insects or spiders. Place them in an airtight container. Insects that are running and flying about our office are tough to identify.
2. If you must kill the bug(s) in order to bring them in, try to select samples that are not mangled and squished. Live insects dumped into rubbing alcohol preserve well and often make good samples.
3. Extra specimens can be helpful. Often an insect's antennae or a spider's legs are important in a complete identification. Insect and spider parts break off easily, so extra samples can be important.
4. Do not use sticky tape to collect the insects. Imagine almost anything stuck at weird angles and you get some idea as to why this sampling method does not work for identification.
5. Try to remember where you found it and how many (approximately) were there. Have you seen this pest before?
6. Remember, most insects and spiders are beneficial and all are food for some other insect / spider / animal in the food chain.

### Weed or plant identification

1. Fresh plants with intact parts are best. Please do not bring in dead or dried up plants. They are very difficult to work from and seldom yield results that we can be confident about.
2. Be sure to bring in flowers or fruit (if present). We may not be able to identify a plant or weed that is not in flower or fruit.
3. Bring in a whole plant, if possible, or a whole branch with multiple leaves. The fresher the better. Never bring in a single leaf or small piece of stem. They simply are not sufficient to work from.
4. Note where the plant is growing (sun/shade, wet/dry, alone or in a clump, etc).
5. Bring samples in paper bags, not plastic bags unless you can keep it in a cooler. Plastic bags help to grow gray mold and will destroy your sample. Samples that are fresh and kept cool yield better results.

### Plant Problem identification

1. Bring in a living sample or at least a sample with live tissue. Dead plant pieces seldom give any information aside from our confirmation of its death. The best samples show the problem progressing. That is, they show healthy tissue that is being affected.
2. If possible, bring in a healthy sample for comparison, along with a range of affected parts (again, if available) showing the progression and/or variability of the symptoms.
3. Freshness means everything in diagnosing a problem. Keep your sample in good condition. Storing it in a paper bag in a cooler works well. We will transfer it to a refrigerator if we cannot immediately look at your sample.
4. Size is important. Short pieces of plant stem or single leaves seldom are useful samples. The whole plant including well washed roots is best. Try to find a reasonable balance between whole logs and tiny fragments. If you are not sure of how much plant is necessary to provide an accurate diagnosis, contact the Master Gardener Plant Clinic (541-344-0265) before collecting the sample.
5. Please be prepared to provide as much information about the plant, its environment, and the problem as possible. History of the plant's location is often helpful. What was growing there before? Have you seen this problem before? Have other plants died in this location? A picture of the plant in context is very helpful.
6. Does this area drain quickly or does water pool there for longer than 24 hours? How did the problem begin? Is the whole plant involved? Are there other plants affected?
7. We may be able to diagnose some plant problems with digital photos. Please consider the guidelines for fresh plant samples when submitting photos. Email photos to [lanemg@oregonstate.edu](mailto:lanemg@oregonstate.edu)

### Turfgrass

1. Collect two or three squares (approximately 3" x 3") with at least one inch of attached soil and roots from the edge of the affected area. This sample should include both dying and apparently healthy plants.
2. Wrap each sample in one thickness of slightly dampened newspaper or paper towel, then in dry newspaper.
3. Turfgrass problems are sometimes very difficult to diagnose accurately, so please be prepared to provide as much information about the problem as possible. Photographs and digital images of the lawn from different angles are very helpful.