How to handle insect and plant specimens for identification

1. Fill out an Insect and Disease Diagnosis Worksheet for each specimen. Be COMPLETE! The accuracy of your diagnosis depends on the information you supply. **NOTE:** If you have more than 3 specimens, a charge of $15 is required for each additional specimen.

2. Pick and pack the specimen properly.

   **Insects:** Collect 5-10 samples of the insect you would like identified. Include samples of the plant host (if applicable to a plant issue), as well as the insect. Place them in a container (a plastic Rx bottle works great) in the freezer overnight. This will usually kill the insects so they do not escape when we open them here. After they are dead, tape the container shut, and place it with packing filler and the completed worksheet in a cardboard box (it MUST be in a CRUSHPROOF BOX).

   **Plants:** **Disease issues?** Don't be afraid to collect a large sample; a small sample may not contain all the signs needed to make an accurate diagnosis. Send a representative sample, including both damaged and healthy tissue. Plant material that has been dead for some time is useless in determining the causal agent.

   **Plant Identification** Include leaves, stems, roots, and flowering or seed bearing portions of the plant. Place green leaves between dry paper towels and enclose them in a plastic bag without added moisture. Carefully shake excess soil from roots. Place roots in a plastic bag with moist (not water-logged) wood shavings or torn paper towels to prevent material from drying out. Wrap fruits separately and without added moisture. Place your samples in a cardboard box (it MUST be in a CRUSHPROOF BOX), along with your worksheet.

3. To lessen the possibility of sample deterioration over the weekend, mail specimens no later than Wednesday morning.

   **Mail samples to:**
   UVM Extension Master Gardener
   659 Spear St.
   Burlington, VT 05405

   **To drop off your specimens,** following are directions to the Master Gardener Office at 659 Spear St.

   From I-89N or S - Take I-89 to Exit 14W or 14E. This brings you onto Route 2 west (Williston Road). Take a right at the first light after the Sheraton Conference Center. Take an immediate left (around the U-turn) to a set of lights. Go straight through the lights. This brings you onto Spear Street. Go approximately 1 mile. Turn right at the UVM Bioresearch Facility sign. Bear left thru the parking lot. Building # 659 is the 2nd building on your left. If lost, please call 802-656-5421.

   **WEED IDENTIFICATION**
   Due to the high volume of all types of plant and insect specimens submitted during the growing season; weed identification will only be made to the genus level. Control or eradication methods can be correctly determined, and will be provided to you, based on the specimen’s genus.

---

*University of Vermont Extension and U.S. Department of Agriculture, cooperating, offer education and employment to everyone without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status.*
Insect and Disease Diagnosis Worksheet

Name: ___________________________________________ Date: ________________

Address: ___________________________________________

City/Town: ___________________________ State: ___________ Zip: __________

Home Phone: ___________ Work Phone: ___________ E-Mail: __________________

1. Type of Problem: ☐ House Plant ☐ Household ☐ Yard (host unknown) ☐ Yard or garden pest (host known)

If problem is a household insect, skip to Question 15.

2. Host: ☐ Tree ☐ Vegetable ☐ Annuals ☐ Perennials ☐ House Plant

3. Common name of host plant: ___________________________________________

4. How long have you had the affected plant? ___________________________

5. Plant parts affected: ☐ Leaves ☐ Stem ☐ Roots ☐ Entire Plant

☐ Flowers ☐ Trunk ☐ Fruit ☐ Unknown

6. Symptoms noticed:

LEAVES: ☐ Yellowing ☐ Holes in leaves ☐ Leaf rotting or streaking
☐ Wilt ☐ Leaf spots ☐ Abnormal growth or gall
☐ Defoliation ☐ Burning of margins ☐ Leaf curled or puckered
☐ Other: ___________________________________________

BRANCHES/TRUNK: ☐ Cracks in bark ☐ Gummy discharge ☐ White stuff on bark
☐ Stunting ☐ Abnormal growth on twigs or stem
☐ Hole in trunk ☐ Abnormal growth on trunk ☐ Wilted branch tip
☐ Other: ___________________________________________

7. Distribution of damage or disease symptoms on the plant:

☐ Top branches ☐ Tip of branches ☐ Scattered throughout

☐ Bottom branches ☐ All branches on one side ☐ All over plant

8. When was the problem first noticed? ___________________________

9. Soil drainage: ☐ Very wet ☐ Very dry ☐ Good drainage

PLEASE CONTINUE ON PAGE 2
10. How often do you water:  
Is soil allowed to dry between watering? [ ] Yes [ ] No

Does container have drainage holes? [ ] Yes [ ] No

11. Recent weather: [ ] Rainy/wet [ ] Very dry [ ] Cold [ ] Normal/Average

12. Light condition: If outside: [ ] Full sun [ ] Light shade [ ] Heavy shade
   If inside: [ ] Direct sun [ ] Indirect sun [ ] Little or no light

13. Current management practices (give brand, rates, amount used, dates of application):
   [ ] Fertilizer: ____________________________
   [ ] Pesticides: ____________________________
   [ ] Weed killer: ____________________________

14. Recent environmental disturbances:
   [ ] Soil added or removed [ ] Construction nearby [ ] High winds
   [ ] Gas or sewer leaks [ ] Frost [ ] High temperature
   [ ] Other: ____________________________

15. If it is an insect problem, how many insects have you seen? (This applies to every type of pest problem, not just household pests).
   [ ] A few (1 or 2) [ ] Moderate amount (10-20) [ ] Too many to count

16. How long has the pest been a problem? ____________________________

17. Where was the problem seen? (Check all that apply)
   [ ] Kitchen [ ] Dining Room [ ] Living Room [ ] Bed Room [ ] Stored Food Products - (cereal, pet food, bird seed)
   [ ] Basement [ ] Attic [ ] Garage [ ] Around foundation
   [ ] Closets [ ] Window Sills [ ] Porch [ ] In food
   [ ] In clothes [ ] In Rugs [ ] In Bed [ ] Other: ____________________________

18. Other information that might be useful: ____________________________

To lessen the possibility of sample deterioration over the weekend, please mail specimens no later than Wednesday morning.

Please Mail Samples To:
Extension Master Gardener
University of Vermont
659 Spear St.
Burlington, VT 05405