

Become a Pest Detective

BE A PEST DETECTIVE: DIAGNOSE GARDEN PROBLEMS

Ask to identify the source of the problem; knowing the source is critical to finding the solution.

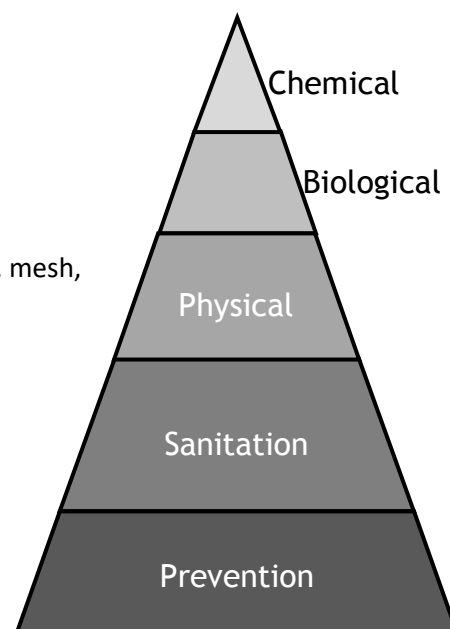
1. What kind of plant is it? What kinds of pest problems does this plant have?
2. Has something changed recently about where the plant is growing? (*amount of sun, water, pruning, nutrients, soil conditions, construction, herbicide use*)
3. Has the weather been different lately? (*heat, cold, drought, flooding, strong winds, hail*)
4. Did the problem appear suddenly or has it developed gradually?
5. Where did the problem start? (*top or bottom, inside or outside, one side or all around*)
6. What parts of the plant are affected? (*leaves, stem, roots, flowers, fruit*)
7. What does the damage look like (*symptom*)? Do you see the source of the problem (*signs*)?

USE INTEGRATED PEST MANAGEMENT (I.P.M.)

Identify the source; ask if the problem will damage the plant

- **Prevention**
 - Choose the right plants for your location
- **Sanitation Controls**
 - Practice good gardening habits to keep plants healthy
- **Physical Controls**
 - Prevent pests from reaching plants using fences, netting, mesh, and mulch
 - Move the threatened plants
 - Physically remove pests & damaged plant material
- **Biological Controls**
 - Invite predatorial species
 - Remove competing plants or plants that host insects
- **Chemical Controls**
 - Use pesticides if necessary

IMPORTANT: Make sure the problem you're treating is listed on the pesticide label



COMMON GARDEN PROBLEMS

- **Abiotic** – Severe weather or temperatures, too much/too little water, pesticide drift, nutrition depletion, soil compaction, physical damage
- **Animal** – Voles, birds, squirrels, rabbits, woodchucks, racoon, deer
- **Insect** – Caterpillars, beetles, mites, borers, aphids
- **Microbial** – Fungal (Rust, mildews, mold), Bacteria (Wilt, rots), and viral

LEARN MORE WITH THESE RESOURCES

- ❖ **University of MN Extension Website** www.extension.umn.edu/garden/yard-garden
- ❖ **Ask An Expert Website** <http://www.extension.umn.edu/garden/ask/>
- ❖ **The Organic Gardener's Handbook of Natural Insect & Disease Control** book by Barbara W. Ellis
- ❖ **Insects of the North Woods** book by Jeffrey Hahn
- ❖ **The Truth About Garden Remedies** book by Jeff Gillman
- ❖ **PRO-TIP:** Google "*site:edu garden pest control*" (or *site:gov*) for more research-based advice

CLASS NOTES

QUESTIONS TO CONSIDER

Are there plants in my landscape that have had problems in the past? What did it look like?

How will I confirm the source of the problem if I see it again?

What steps will I take to either prevent or fix those problems?

Where will I get help if the problems continue?