

RainScapes

Unhealthy Plant ID

Below are 6 of the most common health problems seen in young plants. Signs and Symptoms are pictured.

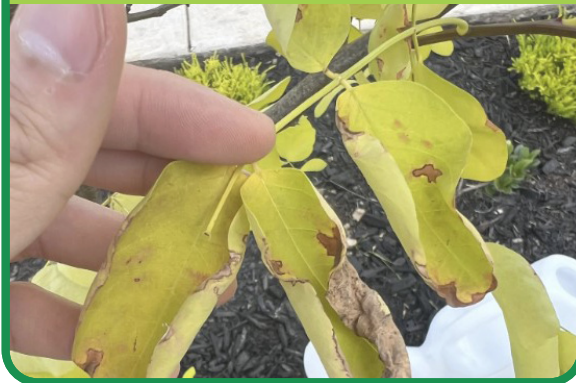


DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**
MONTGOMERY COUNTY • MARYLAND



Over-Watering

Yellowing, wilting, browning are common when a plant's soil is kept too wet.



Under-Watering

Crispy wilting and shriveling, leaves turning brown or black.



Powdery Mildew

Soft grey-white fungus growing on leaves.



Aphid Infestation

Yellowing, small dots. Clustering of small bugs on stem and leaves.



Thrips & other Mites

Small white dots on leaves, usually underside. Curling, warping, browning, dying.



Fungus Gnats

Tiny flies live in the soil, caught with sticky trap. Sign soil is too moist.



Monitoring Handout

RainScapes Schools Growing Program

Use this info to fill out the chart on the opposite side of the handout



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**
MONTGOMERY COUNTY • MARYLAND

Regular monitoring and “scouting” of plants is a key step in keeping them healthy by identifying problems early when they’re easier to fix. Sometimes identifying problems can be difficult for new growers. Watering problems, light problems, fertilizer issues, bugs, and diseases are all relatively common. The location of damage on the plant, the type of damage, and other symptoms are important clues to learning the cause of the problems. Once diagnosed, appropriate action can be taken to keep plants healthy.

Location: Where is the plant? Information about the location helps people find the plants that need treatment and may help you identify problems.

Examples:

- You could note something like first table in the greenhouse or on a cart. (This could help others find the plant.)
- It might be good to note if it is under lights or in shade or sun. (If the plant is in a hot/sunny space or a cold/shady spot it might be a problem for that plant.)
- Is the plant inside or outside? (This might be useful for finding the plant AND deciding if the location is a problem for the plant.)

Plant & Problem Level: Write the name of the plant, and use the following format to note the condition of the plant:

- None - the plants of that species look OK or healthy with no problems
- L=Low – Only one or two of the plants have problems or there are only a few leaves with issues on the plants.
- M=Medium – Several of the plants have problems or a few plants look bad.
- H=High – Nearly all the plants look unhealthy and for example have many insects, powdery mildew on all plants, or all leaves have brown spots.

Symptoms & Signs: A symptom is a change in the plants growth that helps describes the damage to the plant. Examples:

- Leaves are yellowing, have brown edges, or wilting OR they have holes, chew marks, spots or other damage.
- Stems are rotted, have spots or have broken off.
- Roots rotted or dried-out OR it looks like roots have been eaten.
- Plants have died-off.

A sign is evidence of what is causing damage to the plant or the actual cause of the problem. Examples:

- Soil is too dry or too wet.
- Substances or colors are on leaves that look like a disease such as Powdery Mildew, Fungus, or Rust.
- Insects are on the plants, or in the pots at the roots (aphids, fungus gnats, thrips, mites).
- Evidence of insects may include egg masses, scat (poop!), empty cocoons, etc.

Pest / Issue: Write down what you think the problems are. It could be one or more. Examples:

- A few dead leaves could just be regular die-off and the plants are ok.
- The plants are dying because they have been over- or under-watered.
- There is Powdery Mildew because you see it on the leaves and leaves are dying.

Sometimes you might see what looks like a disease or insect but can’t identify it, so just note “Disease” or “Insect” and get help identifying it.

Action Taken & Date Taken: Write the date and how you decide to fix the problem. You might recommend a few options. Examples:

- Soil water level is wrong – Flag plants to be let to dry out or that need more watering.
- Aphids – Hose off insects, pinch off insects or ask if there is another treatment for the insects that is allowed.
- Powdery Mildew – Cut-back dead leaves and spread plants out across several trays with space in between for more circulation.
- Fungus Gnats - Sign of overwatering. Reduce watering, and use beneficial nematodes. Spray with a gentle homemade castille soap mixture.