Common Plant Diseases

While out in the garden weeding, watering, harvesting, or teaching you should be on the lookout for these common plant diseases.

**Powdery Mildew**

Commonly found on cucurbits – cucumbers, winter squash, pumpkins, and zucchini – as well as zinnias. Powdery mildew will not kill a plant. It may slow down or stop fruiting.

Prevention: Avoid overhead watering whenever possible. Prune older/outside leaves to improve airflow and reduce humidity.

Treatment: If caught early, we can carefully trim off diseased leaves and dispose of them. Mildew is airborne, so this must be done with care to prevent spreading the disease further. Do not leave infected leaves in the ‘weed’ pile as the spores may continue to spread by wind. Neem oil spray may also be effective in controlling powdery mildew. Remember that neem oil is also an insecticide, so we may choose not to use it as a fungicide to avoid harming beneficial insects.
Sun scald

Peppers, eggplants, and tomatoes can get sun scald if foliage on plants is scarce. It appears as a translucent or white area on the exposed side of the fruit.

Prevention: Try to avoid unnecessary loss of foliage (i.e. Don't pick these leaves with students for art or to show a pest, be mindful when pruning tomato plants). Sun scald is not infectious.

Blossom End Rot

We usually see blossom end rot on large tomatoes, peppers, and eggplants, and usually on the first fruits of the plant. It appears as a brown spot on the blossom end of the fruit, which grows over time. Blossom end rot is caused by inconsistent watering (over or under watering) and a calcium deficiency in the soil. It is not simply a matter of adding more calcium to the soil, but due to the fast growing fruit not absorbing the amount of calcium required. (Sometimes this soft spot is used as an entryway for pests or other diseases, but if there are no other pests in the fruit you can cut off the damaged part and eat the rest of the fruit.)
Bacterial Wilt

Affects cucurbitis – usually cucumbers but also summer squash and pumpkins. Cucumbers often succumb to wilt overnight, while summer squash can fruit for 1-2 weeks while wilting. Leaves first appear dull green and may wilt during the day. Wilt progresses down the vine until the entire plant is wilted and eventually killed. If a vine from an infected plant is cut and then pressed together, it will show sticky strands when pulled back apart (see image below). The bacteria that causes this wilt lives in the gut of cucumber beetles, therefore managing cucumber beetles is the best way to manage bacterial wilt. (see IPM section for managing cucumber beetles)

*It is easy to confuse bacterial wilt with vine borer damage in summer squash and pumpkins. Check the stems of these plants for signs of vine borer before assuming bacterial wilt. (see IPM section for how to identify and manage vine borer)*

If you spot bacterial wilt, your best bet is to remove the plant immediately and dispose of it so that cucumber beetles cannot continue to feed on it and spread the disease - do not leave it in the weed/compost pile where beetles can find it.

Resources: [https://apps.extension.umn.edu/garden/diagnose/plant/vegetable/](https://apps.extension.umn.edu/garden/diagnose/plant/vegetable/)