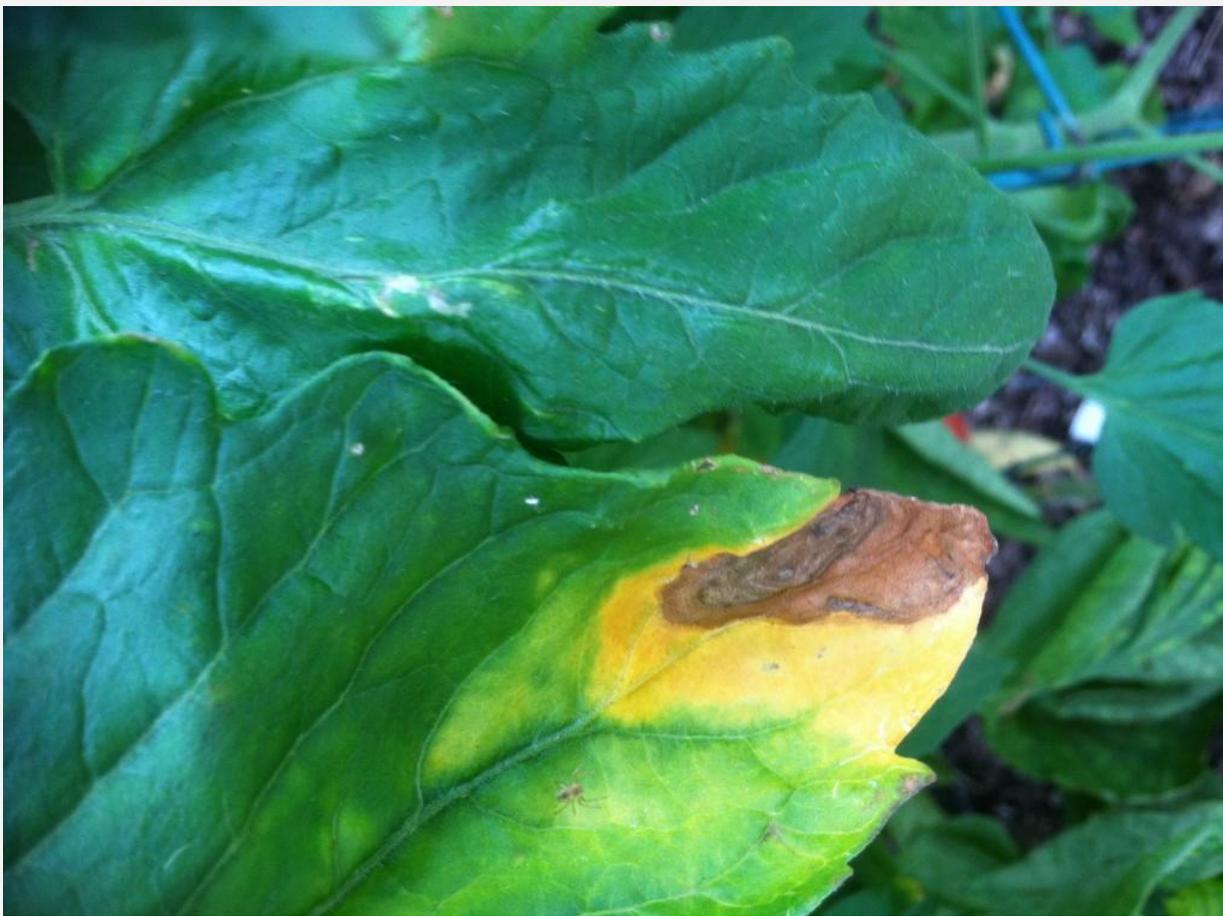


Disease in the Garden: Early Blight

The idea that your garden plants may have a disease can make your stomach drop! Disease is a serious word and it's true that some diseases can be devastating in the garden. However, there are a few diseases with a more "low-key" prognosis. Early blight is one of them. It's a very common disease; it's seen in most home gardens in this area, as well as on larger-scale farms. This fungus affects primarily tomatoes and potatoes.

Symptoms

Early blight typically starts at the bottom of the plant, causing yellowed leaves and dark brown irregularly-shaped spots with concentric circles. (See photos below.) The yellowing and dark spots tend to spread upwards on the plant and may cover a significant portion of the plant by fall. Early blight causes the plant to lack some vigor and may cause some fruits to rot. But in general, plants with early blight continue to produce a significant amount of fruit. It is not necessary to remove plants with early blight from the garden.



Early blight on a tomato leaf. Note the faint, concentric circles within the brown spot..

Spread

Since the disease is a fungus, it is spread by spores, and loves damp, moderately warm conditions. So in a wet year, like this one, you may see more early blight than usual. The disease is typically soil-borne. This means that spores survive the winter in the soil and make their way onto the plant's lower leaves, typically by rainwater splashing soil onto the lower leaves. Lesions may form within 2-3 days of the spores reaching the leaves. Warm (80 degree) and wet conditions encourage the disease to spread.



Management/Prevention

Because this disease is so common, it is difficult to eradicate from the garden. However, good garden management can keep early blight under control. Here are some tips:

- At the beginning of the season, place straw or leaf mulch under plants, to keep soil from splashing up on lower leaves.
- During the season, remove any heavily-affected leaves to slow the spread of the spores and disease.
- Clean up the garden well at the end of the season by removing the entire infected plant and leaves, to keep spores from proliferating in the soil.
- Get rid of the infected plant matter away from the garden, not in the compost pile.

*Note: Fungicides can slow or prevent early blight. However, they need to be sprayed on a regular schedule and can introduce somewhat toxic materials into the garden. So with predominantly benign diseases like early blight, we recommend avoiding the use of fungicides.

Early blight is an annoyance as it is unsightly and can affect the overall production of plants. However, it is a crop disease that we have learned to live with in this region.



With advanced early blight, leaves turn completely brown. Note that this tomato plant continues to produce.

One More Note...

Unlike early blight, *late blight* is a serious tomato disease that requires immediate removal of plants from the garden. This disease differs from early blight as it causes very little yellowing and creates shiny dark lesions on leaves, stems, and fruits. This disease is less common but can be devastating, so observe your tomato plants regularly for indicators.