

## Early Blight, Septoria Leaf Spot (*Alternaria solani*, *Septoria lycopersici*)

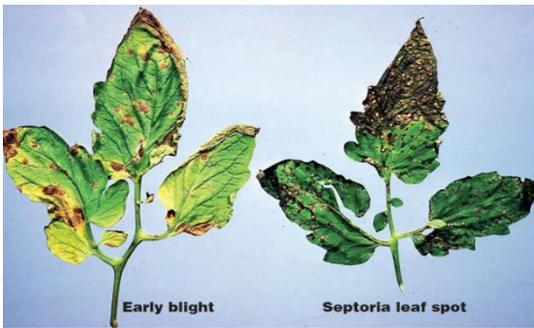


Figure 1 Tomato leaves (early blight and leaf spot)



Figure 2 Potato leaf (early blight)

### Damage

Early blight is characterized by roughly circular brown spots on lower leaves and stems of affected plants; these get larger as the disease progresses, and are often surrounded by concentric rings and a yellow halo. Early blight can cause lesions and rot in fruit. Septoria leaf spot primarily damages the leaves and stems of affected plants, but does not affect fruit. Early symptoms are similar to early blight, but the spots that develop on leaves typically are small, and have a light center and darker border. Both early blight and septoria leaf spot can lead to extensive, bottom-up defoliation of affected plants, destruction of fruit (in the case of early blight) and eventual death of the plant.

### When Active

Fungi spores flourish in warm, wet environments. They are spread by wind and rain, also by gardeners who come in contact with infected plant material and then handle healthy plants.

### Susceptible Plants

Most varieties of tomatoes and potatoes are susceptible to early blight, as are other plants in the nightshade family (e.g. eggplant, peppers). Septoria leaf spot primarily affects tomatoes.

### Prevention Methods

Fungi can survive in plant debris and seed from previously infected plants. Healthy, well-nourished plants will have greater resistance to disease. Use resistant vegetable varieties, and plant with adequate spacing to ensure good air flow and thus reduce humidity. Mulch with good quality mulch and water at the base of the plant to avoid splashing and the spread of infection. Destroy infected plants by burning or burying them. If possible, rotate vegetables to different parts of your garden each year to avoid areas where infested debris (and thus fungus spores) may be present.

### Treatment Methods

Once symptoms appear, it is difficult to control either disease. Preventative measures are key. Thinning plants or removing infected branches may slow the progression of the disease, primarily by increasing air flow and thus reducing humidity. Early and regular use of copper fungicides may help to control the disease.

### Additional Information/Resources

- UW Extension Bulletin [A2606 Tomato Disorders: Early Blight and Septoria Leaf Spot](#)
- UW Extension Garden Fact Sheets [XTH1073 Septoria Leaf Spot](#) and [XHT1074 Early Blight](#)
- Dane County UW Extension Horticulture Hotline 608-224-3721 (M-F 9 a.m.-12 noon, April 15-October 31) or [horticulture@countyofdane.com](mailto:horticulture@countyofdane.com)

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