



Disease in the Garden: Late Blight

A few weeks ago, we addressed early blight: a worrisome-looking yet common disease that tends to only mildly affect vegetable production. This week, we're shifting the focus to late blight: another fungal disease that can wipe out garden plants quickly and cause significant crop loss.

Symptoms

Late blight affects tomato and potato plants and causes dark blotches on leaves, similar to early blight. Unlike early blight, however, these spots show up and move very rapidly, can look “greasy,” and dark brown or black rather than tan. While early blight affects primarily leaves, in a case of late blight, the dark lesions appear on leaves, stems, and fruits. With early blight, the plant’s leaves yellow as the disease spreads, while late blight appears seemingly out of nowhere, and involves little to no yellowing.



Late blight lesion on a tomato leaf. *Photo from Cornell University.*

Identifying any plant disease can be confusing. A good tactic is to compare the symptoms with lots of photos. This [Cornell webpage](#) shows a thorough variety of photos of blight on leaves, stems, and fruits of tomato plants. Cornell also has a great [“late blight imitator”](#) page that helps distinguish between late blight and other similar-looking diseases.

Spread

Late blight is a fungal disease that loves wet, humid weather and spreads by spores. It can only survive on living tissue, so unlike early blight it cannot be spread through tomato seeds. The spores, however, can travel by air and affect other living plant material. For this reason, it's important to scout for the disease and quickly destroy any plants infected with late blight. Once the lesions begin on a plant, the spread is rapid and very destructive; entire plants can be consumed by the disease in as little as a few days.

Because of the devastating effect this disease can have on large areas of crop land, scientists track the spread of the disease. [This map](#) charts reported late blight occurrences. Please contact Penn State Extension if you identify late blight in your garden. Allegheny Co. Extension: 412-473-2540 AlleghenyExt@psu.edu



Late blight lesions on tomato stems. *Photo from Cornell University.*

Management

As with most plant diseases, the best management tactics are preventative. During wet weather conditions, scouting for late blight can help to protect your harvest as well as the crops of other gardeners and farmers. If you identify late blight, remove the affected plant immediately from the garden and destroy it to help keep the disease from spreading.

- A good method for getting rid of infected plants is to place them in a garbage bag, close it tightly, and place in the sun. After several days, remove the dried plants and bury them in a compost pile, to keep spores from spreading.

Potatoes cause a greater long-term risk than tomatoes, as an infected whole or partial potato may survive and re-sprout in the garden or compost pile. To manage infected potato plants, remove infected plants and tubers from the garden and destroy. Continue to scout for and remove any new sprouts from affected tubers, as the disease will survive on living tissue.



Late blight on tomato fruits. *Photo from Cornell University.*

Some organic fungicides are available to prevent late blight, but they must be sprayed before a fungal problem is apparent. We recommend [Serenade](#) as a low-impact fungicide. This product relies on beneficial fungi and bacteria (rather than heavy metals) to colonize the leaf surface, keeping harmful fungi from finding space to attach. In order to be effective, this product needs to be sprayed preventatively, every week, and more often in rainy conditions. For more information about Serenade and how it works, check out [this article](#) by Sandy Feather.