

Late Blight Of Tomato & Potato

Late Blight is a **very** destructive and **very** infectious disease that kills tomato and potato plants in gardens and on commercial farms in the eastern U.S. In fact, it is the same disease that caused the Irish Potato Famine in the 1840s.

Since Late Blight does not over-winter in our region, early infection from this disease is uncommon in Northern New York. The occurrence of late blight in 2009 is different compared to most growing seasons in two ways. First, this is the earliest the disease has been reported in the Northeast. Second, and more tragic for the Northeast, is that infected plants were distributed to large local retail stores throughout the region (Ohio to Maine). Never before has such an extensive distribution of infected plants occurred.

One of the most visible early symptoms of the disease are **brown spots (lesions) on stems**. They begin small and firm, then quickly enlarge, with some **white fungal growth** developing under moist conditions that leads to a soft rot collapsing the stem. Classic leaf symptoms are large (at least nickel-sized) olive-green to brown spots on leaves with slightly fuzzy white fungal growth on the underside when conditions have been humid such as in the early morning or after rain. Sometimes the border of the spot is yellow or has a water-soaked appearance. If the plant is infected after fruit-set, firm, brown spots develop on tomato fruit.

All gardeners need to act quickly to protect their garden-grown tomato and potato plants and to make sure that home garden plants don't become a source of spores that could infect commercial farms, as late blight spores are easily disperse several miles by wind. These are the steps all home gardeners should take:

1. Examine your tomato and potato plants thoroughly at least once a week for signs of late blight.
2. Spray fungicides preventively and regularly **and/or**
3. Be prepared to destroy your plants when late blight starts to become severe. **Seal them in a plastic bag. Do not put them in the compost pile.** Leave the bag 'cooking' in sunlight for several hours to kill plant and pathogen, then put in the trash.



Photograph of late blight stem lesions on infected tomato plant.

Any home gardener wishing to try to control late blight with fungicides needs to begin spraying fungicide now – even before visible symptoms appear – and spraying needs to continue regularly. Copper and many other fungicides are not very effective on Late Blight. Use a product that contains chlorothalonil, the active ingredient in several brand name fungicides. Even if using a fungicide, gardeners should inspect for Late Blight symptoms regularly and immediately destroy infected plants. Preventative fungicides do not always provide 100% protection against this disease.



Photograph of Late Blight infected tomato leaves.

Late blight is very destructive. If no action is taken it will kill plants faster than any other disease. If your plants are showing any late blight symptoms, please contact your local Cornell Cooperative Extension Office: Clinton 518.561.7450; Essex 518.962.4810; Franklin 518.483.7403; Jefferson 315.788.8450; Lewis 315.376.5270; and St Lawrence 315.379.9192.

More information about late blight and color photographs can be found at:
www.hort.cornell.edu/lateblight

PESTICIDE DISCLAIMER: Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, human errors are still possible. The recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide.



Photograph of Late Blight Infected green tomato

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