



Tomato Late Blight

Symptoms

Leaves: Leaf spots are water-soaked and vary in size from a nickel to a quarter.

Spots appear water-soaked when foliage has been exposed to watering, rain or dew.

Spots dry out quickly and may appear lime-green or even beige.

The spots will be eventually covered with white fungal growth with spores.

Stems: Stems have brown to almost black lesions

Fruit: Fruit will have brown spots similar to stems, rot and become white and fuzzy

Progression: FAST! First symptoms to total plant collapse can occur in as little as a day to a few days. Infected plants were widely distributed throughout the Northeast in 2009 through large scale distributors and big box stores. The cool and wet weather provided very favorable conditions for late blight. Together the infected plants and weather led to widespread impact on tomato.

Disease Dispersal

Spores are easily blown to surrounding areas where they infect tomato, potato, petunia and related weedy plants.

Disposal Procedures

Always work with healthy plants before moving to diseased areas. Pull and dispose of infected plants in plastic bags and put in trash. **DO NOT COMPOST.** Spores will spread from tomato debris (especially fruit). Clean tools in one part bleach to nine parts water. Clean your hands and wash your clothes before returning to tend uninfected plants.

Management

Check your plants often

If your plants show **no signs of blight**, you may spray with the protectant fungicide chlorothalonil (Daconil) to reduce the chances of infection. Follow label directions carefully. Reapply every five to seven days.

Organic growers: copper fungicides are not very effective, nor are home remedies.

Check your plants at least weekly (more often in wet weather); remove, bag and dispose of any infected foliage. If the disease continues to spread, remove the entire plant. Act before

Resistant or Tolerant Varieties: Keep in mind that resistance is not the same as immunity. Resistant plants are more likely to produce in the presence of disease, but may be susceptible to certain strains of late blight. See the following for varieties with some late blight resistance:

High Resistance	Good Resistance	Moderate Resistance
'Black Plum'	'Aunt Ginny's Purple'	'Aunt Ruby's German Green'
'Legend' (a big juicy tomato) (Seed available 2011)	'Big Rainbow'	'Black Krim'
'Matt's Wild Cherry'	'Red Currant'	'Brandywine'
'Mountain Magic' cherry tomato (Seed available 2011)	'Tigarella' ('Mr. Stripey')	'Plum Cluster'
'Plum Regal'		'Pruden's Purple'
'Yellow Currant'		'Red Pearl'
'Yellow Pear'		'Slava'
		'Stupice'

Rotation - Next 4 to 5 Years Rotating crops, especially in a large garden, is a good practice. Plant tomatoes, potatoes or petunias in a different location or in different containers with different soil. Research indicates that although *Phytophthora infestans*, the organism that causes late blight, requires live infected tissue (such as potato tubers left in the soil after harvest) to overwinter in our area, spores could spread from plant debris during the growing season. It is possible that certain strains of *Phytophthora infestans* could combine to produce a persistently aggressive form of the disease capable of wintering over, but this is not known to have yet occurred.

Edible? The fruit is edible if not otherwise rotten. Remove the affected area.

Questions? Call our Diagnostic Lab at 845-429-7085 option 3. You may leave a message at any time – we will return the call at our first opportunity.

Source: Thomas Zitter [Late Blight on Tomato Plants at Local Large Stores in Most States in the Northeast.](http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Tom_LB_OrganicMgt09.html)
http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Tom_LB_OrganicMgt09.html; Suffolk County Cooperative Extension
<http://www.longislandhort.cornell.edu/vegpath/lbmisinfo.pdf>
<http://blogs.cornell.edu/hort/2010/12/avoid-the-late-blight-blues/>

Variety information: Adapted from Performance of Tomatoes for Late Blight (LB) and Early Blight (EB). T.A. Zitter, March 2010

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The information on pest management for New York State contained in this publication is dated April 2010. The user is responsible for obtaining the most up-to-date pest management information. Contact any Cornell Cooperative Extension county office or PMEP (<http://pmez.cce.cornell.edu/>), the Cornell Cooperative Extension pesticide information website. The information herein is no substitute for pesticide labeling. The user is solely responsible for reading and following manufacturer's labeling and instructions.