



Cornell University

## Late Blight: Corrections of Misinformation

Prepared by Margaret Tuttle McGrath, Department of Plant Pathology and Plant-Microbe Biology, Cornell University, Long Island Horticultural Research and Extension Center, Riverhead, NY

**Note: additional information will be added to this page as the need arises.**

### **1. All the rainy weather this June in the northeastern US is why late blight developed.**

The rain did make conditions very favorable for this disease; but, weather is #2 on the blame list. The weather can be perfect for disease, but if the pathogen is not present, you will **not have the disease**.

That is the usual situation in the northeast. Late blight normally occurs sporadically. For example, over the previous 20 years late blight has occurred 4 times on Long Island, N.Y. The pathogen can only survive over winter in the north in living plant tissue: potato tubers. (Affected plants in greenhouses is another possible source). It can also be dispersed as wind-blown spores, which is the suspected source for late season outbreaks.

Late blight usually has first been seen on Long Island during August to October. Late blight occurs more regularly in major potato growing areas.

### **2. Eggplant is also affected by late blight and is at risk.**

Eggplant, and also pepper, are described as being “occasionally mildly affected.” A search of the literature turned up no report of late blight occurring on these crops over the past 50 years ago. There have been no reports this year of late blight occurring on eggplant. Eggplant is not considered at imminent risk of developing late blight such that a preventive fungicide program would be warranted as with tomato and potato. However, it is prudent to periodically inspect eggplant for possible symptoms.

### **3. Celery is susceptible to late blight.**

Celery is affected by a disease called “late blight,” but it is caused by an entirely different pathogen, *Septoria apii*, which is related to the pathogen that causes Septoria leaf spot in tomato.

**4. *Phytophthora infestans* is another name for late blight.**

*Phytophthora infestans* is the name of the pathogen that causes late blight. It is not another name for the disease.

**5. The fungus is called late blight.**

First the pathogen is not a true fungus. It is “fungus-like.” Second the pathogen’s Latin name is *Phytophthora infestans*. The disease it causes is called late blight.

**6. There are two pathogen strains: tomato and potato.**

There are more than two strains. Some are more aggressive on potato or on tomato (e.g. more late blight develops on one plant type when equally exposed to the pathogen) while other strains are fairly similar in the severity of late blight that they cause on tomato and potato.

There appears to be two strains occurring this year. One strain has been occurring on potato the past few years in major potato production areas. A second strain was found on garden center plants and in farms over a broader area.

This is preliminary information based on examination of a small number of “individuals” (isolates) of the pathogen. New strains can arise as a result of sexual reproduction, which this pathogen is not thought to be able to do in the northeastern U.S. due to lack of presence of both of the pathogen’s equivalent of male and female.