

Do we expect continued Late Blight problems in 2010?????

We hope not, but there is no way of knowing for sure. It depends on what the weather does and whether the disease gets an early start in Pennsylvania.

Late blight is not known to over winter in Pennsylvania except in infected potato tubers. In most years late blight is not a serious problem here. However in 2009 we had a perfect combination of events that led to the worst late blight epidemic that I have ever seen. First the disease was widely distributed early in the season on infected tomato plants that were sold to home gardeners throughout the northeast by large retailers. Then the cool, wet weather made perfect conditions for disease development. Spores can blow for many miles, land on a wet tomato or potato leaf and start a new infection. So the disease quickly spread from one garden to another throughout the northeast.

On the bright side the disease only survives the winter here in living plant tissue – potato tubers. So, like the Pittsburgh Pirates, we start with a clean slate at the beginning of the season and high hopes for a great year. On the other hand there is probably a greater than average risk of late blight in 2010 due to the extent of the disease last year and risk that the disease will get an early start from infected potato volunteers.

There is nothing that you can treat the soil with to control late blight before the garden is planted. Since the disease only survives in living tissue, it should not be present unless there are some of last year's potato tubers around. The most important thing to remember: **Do not ever allow volunteers to grow from potato tubers left in the ground or in waste/compost piles - because they could be a source of the disease early in the season. Plant only certified seed potatoes** if you grow potatoes – **do not plant saved tubers from last year.** Hopefully we will never again see the combination of events that led to the late blight epidemic of 2009 but it is always wise to be vigilant.

Once the garden is planted, infections can be prevented by regular spraying with fungicides containing chlorothalonil or mancozeb but applications must begin before the disease gets started and continue through the growing season every 5 – 10 days, depending on weather. Copper based fungicides can also be used but are not as effective so must be sprayed even more often. However copper based fungicides are about the only proven effective materials accepted by organic growers.

Home Garden late blight fungicide recommendations:

(If disease is known to be present in Pennsylvania)

Spray protectant fungicides at least every 7 days as long as plants are producing.

Active ingredients:

Trade Names:

Chlorothalonil

Daconil

Fung-onil

Ortho Max Vegetable Disease Control

Others?

Mancozeb

Mancozeb flowable

Manzate 200

Others?

Copper Sulfate

Copper Hydroxide

And other copper based products

Chlorothalonil preferred once harvest begins because it can be sprayed up to day of harvest.

Mancozeb cannot be sprayed within 7 days of harvest – check label.

Fungicides are protective – they do not cure established infections. They are effective when used before the disease is established on the plant or in the garden. All plant surfaces must be covered. Also they need to be on the plant and dry before conditions favor disease germination – before rain wets the leaves.

Use all pesticides strictly according to label directions.

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