



Tomato late blight and the coming gardening season

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Anyone who grew tomatoes last summer knows what happened. A very contagious plant disease named late blight (the same disease that caused the Irish potato famine) wiped out most of the tomatoes throughout the Northeast. In my job as an Integrated Pest Management (IPM) specialist for Cornell University, I work to help farmers reduce or eliminate pesticides and increase farm profitability. These two things were very hard to do last summer. Most organic growers lost their whole tomato crop while conventional growers used more fungicides than normal to save their tomato crop. What did we learn from all of this?

First of all, through the miracle of modern distribution, late blight was spread via big box stores. All the big box stores had their plants supplied by the same company. While late blight on tomato is no *E. coli* making people sick, most of the recent food scares follow a very similar model. Large industrial agricultural operations with not enough quality control let a small problem balloon up into a big problem. The problem then gets distributed around the country and has a huge impact.

The most frequent question I get is: Will late blight come back in 2010? The answer I give is "maybe." The first thing to know is that late blight needs living tissue to survive. It does not overwinter on tomato seed. You need not worry about late blight overwintering in the soil, on your tomato cages, tomato stakes or on tomato plant debris. You can also be reasonably certain the big box stores will not be selling infected plants like they did in 2009. Cornell University and the IPM program are now working with the plant distributor.

Potatoes are another story. If you had potatoes in your garden last season, late blight can overwinter on saved potato seed or could come back from potato plants that come up in your garden or cull pile. Inspect your potato seed before you plant for black spots on the tubers. Anything that is suspect, do not plant. Any potato plants that come up from un-harvested tubers are also suspect.

The biggest factor determining if we will have late blight again this coming summer is the weather. If we get frequent rains early in the season, than any infected potato plants will easily spread the disease. Think of late blight as a triangle. You need the susceptible host (and we certainly have plenty of susceptible potatoes and tomatoes). You need the pathogen (and we probably will have some left over LB on volunteer potato plants). Lastly, you need the right weather conditions. If it rains like it did last summer, we will again have the right conditions.

Buying local means local plants too!

There used to be many local greenhouse operations growing garden and flower transplants. The high cost of fuel needed to heat the glass houses has put most of those operations out of business. Now, most local vegetable farmers put up plastic hoop houses and grow bedding plants. After a long winter, April and May are lean times for most local farmers. They invest large amounts of money into seed, labor, fuel, fertilizer, gambling they will have a crop to sell later in the summer. Transplants are income for local farmers when they need it most.

Locally grown is a phrase that has increasingly become part of everyone's awareness. There are many reasons for buying locally grown fruits and vegetables. Locally grown food is different. Locally grown food tastes better. It travels fewer miles. It is handled fewer times. You can develop a relationship and learn things from your local farmer. Small local farmers are better able to watch the quality than large, industrial producers. You are supporting your local economy. All of these are good reasons to buy local.

There is no difference between a fruit or vegetable that travels 1500 miles and a plant that travels 1500 miles. Tomato plants found in the big box stores start out as small transplants started in southern states. They are then trucked up to a greenhouse operation here in the New York to be grown out and distributed. While it is nice to grow tomatoes in your garden, the plant has still traveled 1500 miles.

Whether you stop at a farm stand or attend your local farmers market, you can find all the locally grown transplants you need for your garden. When buying at a farm stand or farmers market, you are most likely buying directly from the person who started those plants from seed. Local farmers operate on a smaller scale and can pay close attention to all the details of production that sometimes get lost in big operations.

The warm spring has fooled us into thinking summer is here but don't go and put your frost sensitive plants out too early. The rule of thumb is the middle of May before you can be reasonably sure there will be no frost. And in the end, by purchasing locally grown plants you can feel good and know you are doing the right thing for all the right reasons