Gardening Newsletter

by Linda Gilkeson
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Late Blight, Fruit Fly Alert

Based on emails I have been getting, I thought a quick review of how to approach pest and disease problems would be useful, plus an alert about the 2 most serious pest problems in food garden (IMHO):

The first thing to do when you see something you are concerned about is NOT to remove the odd looking or damaged leaves. This is like caring for a sick friend by reducing their food intake. There are a few exceptions, such as leafminers on chard, beets or spinach, when it is a good idea to remove and destroy the parts of leaves with leafminer tracks to kill larvae that would become the next generation. It is a losing battle to try to control leaf diseases caused by fungi (powdery mildews, downy mildews, rusts) by pulling off leaves during the growing season: the spores are everywhere and blow in the wind so removing leaves only harms the plant by removing leaf area. At the end of the season, collecting and destroying infected leaves or fruit is a good way to remove overwintering sites for spores of some fungi (e.g., apple scab, brown rot of soft fruit).

And just in case you have heard this howler: Removing leaves of tomatoes plants at the end of the season will NOT prevent plants from getting late blight. All that does is turn your plant into a hat-rack, since it can no longer function as a plant (transpiration, the movement of nutrients and water from the soil up through the plant can only happen if there is water evaporating from leaves to "pull" the water up in the stem). More on late blight below, since it could be a more widespread problem this year.

The first thing to do when you are concerned about something on plants is to get a correct identification. If you don't know what the problem is, there is no steps you can take except possibly improve the growing conditions if you can you. More plant problems are caused by something wrong with the growing conditions, than by pests or disease. Sunscald, frost injury, nutrient deficiency, wrong soil pH for the plant, drought, waterlogging, etc. all cause damage and sometimes strange symptoms. For holes in leaves, but no obvious culprit, there are many possibilities (slugs, earwigs, weevils, cutworms, pillbugs, etc.), but without actually seeing who is doing the damage you can't do anything effective. Most of these do their dirty work only after dark so it is well worth going out at dusk with a flashlight and having a look. You can get quite a shock seeing how many earwigs come out to nibble on tender leaves and flower petals!

Two top of mind pest problems right now:

Spotted wing Drosophila: I was sent a photo of a strawberry from a Victoria garden taken June 7th with maggots in it so those @#\$#@#! fruit flies have been busy earlier this year. There goes the theory that early ripening cultivars will avoid damage (in past years, fruit that ripened before mid-July wasn't infested). Put a monitoring trap out right now to see if they are in your yard. You only need one trap since it is just for monitoring and won't catch enough flies to provide control. Use a 500-ml plastic deli or cottage cheese container with a lid (or a similar container). Punch 4 or 5 paper-punch holes around the rim or cut tiny holes about that size; pour in 1-2 cm (1 inch) of apple cider vinegar, snap on the lid and set the trap in the garden near your fruit. Look for drowned fruit flies with a single spot on each wing, which will be male SWD. Fruit flies without spots are either female SWD or other species of fruit flies, but if you do see a SWD male, you can assume the other flies are likely female SWD. Scroll down to the

3rd photo under this link http://www.lindagilkeson.ca/borers.html#95 to see what to trapped SWDs look like.

Covering fruit with insect netting, floating row covers or individual bags is the main option right now for SWD in home gardens: For more info see my archived messages for July 31, 2015 and sources of netting August 28, 2015. There is lots of up to date details in my new publication: *Resilient Gardens 2016: Climate Change, Stress Disorders, Pest Update*. Chorus Frog farm stand on Salt Spring is selling the 'right stuff' insect netting by the meter, for covering blueberries, strawberries, etc.

<u>Late blight on tomatoes</u>: Tomatoes were largely uninfected for the last 2 dry summers. Late blight showed up so late last fall that most people didn't see it in their gardens. But this year we have had several spells of rain or drizzle in the last couple of weeks and more is forecast for this week. Uncovered tomatoes are at risk from late blight infections, which in some wet, cool years, can strike in June. Once infected plant progress total collapse very quickly and there is nothing you can do about it. See: http://www.lindagilkeson.ca/foliage.html#143

Making sure leaves don't get wet is the most effective way to avoid late blight. This works: Grow plants in pots under the overhang of a roof; cover garden plants with a clear plastic roof of some kind. A very successful design is a high tunnel employed by many gardeners: tall enough to allow tomatoes to reach full height, but open all around the sides and both ends for good ventilation. In low tunnels and in greenhouses with poor ventilation, condensation inside wets the leaves; I have seen tomatoes in those conditions get late blight even earlier than outdoor plants. Always use irrigation methods that do not wet the leaves. Unfortunately, some people have installed micro-irrigation systems that spray water onto the beds, which is very bad news for tomatoes, onions, garlic, beans, etc. because regularly wetting leaves promotes destructive leaf diseases. For vegetables, the best micro-irrigation systems are those with emitters, drippers or small holes punched along the length of the tubes. Soaker hoses are good too, such as the professional soaker hose from Lee Valley Tools (cheap hoses are a poor investment because they clog easily and may not take your water pressure).

My speaking schedule for 2016 and 2017 is fully booked (!). Check the calendar on my web site http://lindagilkeson.ca/ for talks, workshops and gardening classes in your area, also for book sales (including my newest: *Resilient Gardens 2016: Climate Change, Stress Disorders, Pest Update*) and hundreds of colour photos of pests, diseases and disorders to help you identify problems.