The Week in Vegetables

A quick reminder to those who receive this in your email every week: I hope you find it educational and it gives you an interest in looking more closely at what’s happening out there. If you are a home gardener, please read on, but bear in mind that most readers are looking for control options because they grow for at least some part of their livelihood. Then again, if you grow 100 tomato plants to put up 80 quarts of “gravy” for your pasta all year, then by all means, look into the sorts of control measures that professional growers use, ‘cause that’s a lotta gravy! Otherwise, pick off those squash bug eggs, knock those potato beetles into a pan of soapy water, squish the caterpillars on your broccoli, pick off lower leaves that have disease...

Diseases to watch for:

Again, be prepared fo Downy mildew of cucurbits. Sightings have now been confirmed in confirmed in MI, OH, NY and Ontario. This week’s Veg Notes from UMass has an excellent survey of materials by Meg McGrath of Cornell in Long Island: http://ag.umass.edu/vegetable/newsletters. No sign of Basil Downy Mildew... yet. Meg also has a good article on BDM here: http://vegetablemdonline.ppath.cornell.edu/NewsArticles/BasilDowny.html#Report. This is recommended reading if Basil is (or has been) an important component of your crop mix. There are great pictures, too. I saw a very heavy case of cercospora leaf spot (see picture below) on beets this week. The conditions have been perfect for it: warm temperatures, high humidity, and periods of wet leaves. The pathogen survives on lambsquarters, crop residue, and as sclerotia in the soil. A three year rotation is recommended, but spores can be spread by wind-driven rain so distance is important. Also, weed out the lambsquarters! Protectant fungicides, including copper products, can be effective. Veriticillium wilt (V. dahlia) was seen on eggplant in a high tunnel this week (see picture below). Remember that if you don’t rotate your nightshades, especially tomato and eggplant in tunnels, you run the risk of infection by both this and Fusarium oxysporium. This is why we see more and more tomatoes and eggplants being grafted onto roots which resist these diseases.

Production idea: Do you grow fall cole crops (broccoli, cauliflower, cabbage, kale, collard)? Now is the time to try growing your transplants in a well tended nursery bed. Using your Earthway, Jang, or other walk-behind seeder, plant 20 foot rows of these, about 8 inches between rows. Thinning is not necessary as long as they aren’t too densely planted. Keep them weeded and make sure the flea beetles and various caterpillars don’t destroy them (summer-weight row cover is easy, but pay attention to the weeds!). When they reach 4 to 6 leaves, carefully dig them out with a fork and move them to prepared field beds at the appropriate spacing. They easily recover from the bit of root damage incurred from digging, and the plants will be stout and strong.
Insect pests to watch for:

Three-line potato beetles (adults and larvae) out in force on tomatillos and ground cherries. If your plants are small, you might want to control them; once these plant species get into serious growing, though, they usually can grow through any damage.

There are European corn borers in sweet corn, but the numbers are low—hard to find them in the fields I scouted in Little Compton and Richmond. At this stage, especially pre-silking, no treatment should be necessary.

Diamond-back moth larvae and pupae were seen on broccoli, along with a few imported cabbage worms. Vigilance and appropriately timed sprays of B.t. kurstaki or aizawi takes care of these guys. So far, I haven’t seen a lot of caterpillar pressure on cole crops this year.

Potato leafhopper nymphs are now VERY abundant in beans and potatoes. Not so much in eggplant, which is good, but they will get theirs, too. Hopper burn can really debilitate plants, and I’ve often seen it happen unnecessarily.

I saw a very effective use of insecticidal soap on potato aphids on tomatoes in a high tunnel. The third treatment did the trick, according to the grower, but he also made sure to close up the tunnel in the evening right after spraying. The longer it takes for the residue to dry, the more effective the kill.

Finally, it was THE ATTACK OF THE SALT MARSH CATERPILLARS at a farm in Johnston (starring Takashi Shimura). These gregarious critters feed on broccoli, onions, peas, and more. They are an occasional pest, but they can really do a job with their characteristic one-sided feeding (see picture.) If you are spraying B.t. for other caterpillars, it should be effective on these as well.

Finally, for diseases, leaf mold is beginning to show up in high tunnels. #1: KEEP THE HUMIDITY DOWN, and this applies to powdery mildew as well: roll up the sides, open the ends, don’t let thick hedges of weeds grow on the outside of the base boards. Also: PRUNE, and reduce planti/stem density. Finally, keep up with your trellising.

Salt marsh caterpillars, left. European corn borer on a corn tassel, below left. Diamond back moth cocoon on a cabbage leaf, below right.