This is a late blight (LB) alert for all of Western NY!
If you think you may have late blight please contact Carol MacNeil at 585-313-8796, John Gibbons at 585-394-3977 x405, or other Cornell Vegetable Program staff ASAP.

LB was confirmed in several potato fields in Erie County this week, in addition to being confirmed in two parts of Long Island during the past week, and in central PA yesterday. The Erie County samples have just been determined by Bill Fry’s Cornell lab to be US-23, aggressive on both potatoes and tomatoes, and sensitive to mefenoxam fungicides (Ridomil, other labeled products). Note: mefenoxam is not a miracle product, though it is better than any other LB fungicide since it is fully systemic. Once 5% of foliage is infected with LB no fungicide can totally stop it. Mefenoxam and other LB fungicides are much more effective than protectant products like chlorothalonil, mancozeb and copper, however. In all these cases the fields are being managed conventionally and had been sprayed with fungicides. Initial PA and Erie Co. infection had probably occurred 2+ weeks ago. In Erie County the disease was more severe next to a tree row, a protected, more humid environment. In central PA the grower had planted his own saved seed, and the farm had LB last year.

This week’s wet weather has been extremely favorable for LB development. It takes several days for a new LB lesion/infection site to become visible, however, so we expect a jump in detections during the next week. In cloudy, humid weather LB spores can be carried up to 30 miles on winds. Check and destroy any remaining potato cull piles now!

What potato and tomato growers need to do NOW:

1) **Inspect crops for symptoms.** Focus on areas that might not have gotten good spray coverage, because the plants are right next to the spray drive row or at the end of the spray boom. Insufficient spray coverage can occur on the row near the end of the boom when some rows were spaced a little further apart than intended during planting. Observe where spray goes while making applications. Also inspect high spots in a field as these can ‘catch’ LB spore clouds. [Also be sure to check low spots and protected areas, as near trees, where conditions stay wet longer.] In the past these have been where symptoms were first found. [See the attached photos, or go to: http://www.longislandhort.cornell.edu/vegpath/photos/index.htm and scroll down to Potato or Tomato late blight.]

2) **Report observations of late blight ASAP!** Foliage/stems with symptoms are needed to determine what strain of LB is present, which is important because strains differ in sensitivity to mefenoxam fungicides, aggressiveness on host plants (some develop better on potato, others on tomato), and mating type (if both types occur together spores able to overwinter may be produced). [Contact Carol MacNeil at 585-313-8796, John Gibbons at 585-394-3977 x405, or other Cornell Vegetable Program staff.]

3) **Managing late blight when found.** If there are small “hot spots” with severely affected plants pull them out of the ground, put in a garbage bag, or drop in place in a pile, then cover with a tarp. [If larger areas are affected kill with a fast-acting herbicide like Gramoxone. Repeat, to be sure to kill all foliage in the hotspot.] Reducing the amount of LB inoculum by destroying “hot spots” can greatly improve ability to manage LB in the rest of the crop, and in the neighborhood. For affected fields/farms, and on neighboring farms, Revus or RevusTop is a good choice now while plants are actively growing because it can move well through leaf tissue. RevusTop is also good for managing early blight. Previcur Flex is a good choice for protecting stem tissue, which is especially important with tomatoes. Curzate or Tanos is a good choice.
when conditions recently (previous day, maybe two) were very favorable for infection (overcast with rain or high humidity), and it was near the end of the spray interval, because their active ingredient has some kickback activity [unless weather has been very warm]. They should be used in a tank mix with another targeted fungicide or followed by an application of another fungicide in 3 – 4 days as they have limited residual activity. Other fungicides to consider include Ranman, Presidio (only tomatoes), and Gavel. Ridomil is not recommended unless the pathogen strain in the field is confirmed to be sensitive to this fungicide, and it should be applied only once because of concern that resistance will develop.

4) Protectant fungicides like chlorothalonil and mancozeb provide good control applied on a preventive schedule and so are good choices for crops where LB has not been found. [Approved copper fungicides are recommended protectants on organic farms.] (edited by C. MacNeil, CVP)