

Pest Update

Pest Alert, Aug 13, 2015

Vegetable scouting sheets can be found on the UMass Extension Vegetable Program website. When not given here, refer to the New England Vegetable Management Guide for scouting thresholds and treatment options.

Allium: Grade out damaged or diseased onions when moving them from their drying/curing environment to storage (32-40°F, 65-70% RH). Damaged bulbs give off moisture, which is favorable for development of diseases in storage. As onions are harvested, onion thrips will begin moving into other nearby host crops such as cucurbits, carrots and brassicas.

Brassica: Onion thrips can be a major pest of brassicas, particularly once their preferred allium hosts are removed from the field. Thrips cause rough, golden or brown scars to form on the underside of open leaves, or produce scars and discolored layers within cabbage heads. Scout fields for this pest, and see article this issue on control of onion thrips in cabbage.

Sweet Corn: The second generation of European corn borer is starting to hatch now, (the beginning of second flight is 1400 GDD; first eggs are 1450 GDD; and egg hatch is 1550 GDD). When moths are active during silking, eggs are laid on leaves near the ear and larvae move directly into the ear by tunneling through the husk or down the silk channel. Corn earworm moths are being captured at low numbers in Western MA, where recommendations are either for no sprays or for 6-day intervals; pressure is higher on the coast where spray intervals are down to 4 days. This is also the case in Southern RI, where trap catches in Kingston have been high, but trap catches in Scituate have been zero. Fall armyworm captures are more varied with a few hot spots around Mass capturing numbers high enough to warrant scouting for this pest and treating at a threshold of 15% combined damage including ECB. No Armyworm moths have been captured in Scituate, while 5 were captured in Kingston. Thousands of blackbirds are causing severe damage in sweetcorn in NH. The key to using scare tactics effectively is to switch between methods (noisemakers, balloons, etc.) and to move them frequently since birds will get accustomed to one scare tactic after another. Scare devices should be in fields one week before harvest through the end of harvest.

Cucurbit: Cucurbit downy mildew was confirmed on "Straight 8" cucumber in Franklin Co., MA but **not in VT or RI** where scouts have also been on the lookout. In MA, if you have not done so already, it is time to switch over to using downy mildew specific materials to protect cucurbits, rotating between classes of fungicides for resistance management. Products with good to excellent efficacy against downy mildew (with FRAC codes) include: Ranman (21), Previcure Flex (28), Revus (40), Presidio (43), or Zampro (45+40). Track occurrence of the disease here: <http://cdm.ipmpipe.org/scripts/map.php>.



Downy mildew on cucumber *A. Radin*

Powdery mildew is still prevalent in many New England states. Mow down older successions after harvest and protect younger plants with fungicides. Effective materials are different from those used against downy mildew. There are many good options for conventional and organic systems including: Torino, Quintec (rated very effective), Group 3 (Procure, Rally, Tebuzol, Folicur, Inspire Super), or Group 7 (Pristine, Fontelis, Luna), as well as Zing!, Milstop, Kaligreen, Sulfur, and Oxidate. Scab was confirmed on summer squash and zucchini in Hampshire Co., MA. If diagnosed in your field, rotate to a non-cucurbit crop for 3 years. Fungicide applications must be applied before fruit formation to be effective.

Solanaceous: Late blight was confirmed in northern ME this week on potato; still no confirmation of the disease in MA or RI although scouting continues. See the MA late blight DSS for preventive spray intervals. Track progression of the disease here: <http://usablight.org/map>.



Late blight on tomato, *A. Radin*. Note the “water-soaked” appearance around the outside of the darker lesion.

Early blight in tomato is prolific at this point and is likely to spread given recent mild, rainy weather, as it prefers high moisture and temperatures of 75–84°F. Adequate fertility is important for managing this

disease, so make sure that the crop has enough N for foliage and fruit production to keep the older leaves healthy. Phoma leaf spot was confirmed on tomato in Hampshire Co., MA this week. Historically a problem in the south, this disease is rarely found in MA. It mostly causes foliar symptoms but can cause fruit rot on green or ripe fruit which can worsen after harvest. This disease enters plants through wounds, and spreads when workers and their tools have disturbed the plants. Harvest symptomatic plants last.

Multiple: Spotted Wing Drosophila trap captures continue to rise, with numbers reaching as high as 266 flies, in one location. While this is a significant increase over last year's counts for this same location and date, it is not representative of the numbers from other trapping locations that are still seeing numbers below (if only barely) the one hundred mark. Continued vigilance in sanitation measures within plantings can help alleviate some of the pressure from this pest. For more detailed information, take a look at the fruit advisor Spotted Wing Drosophila webpage:
<https://extension.umass.edu/fruitadvisor/news/spotted-wing-drosophila-dr...>