

Pest Update

Pest Alerts 8/27/15

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

Brassica: <u>Cabbage aphids</u> and <u>onion thrips</u> pressure remains high and these pests seem to be driving spray programs in MA, while caterpillar pests are low in fields that have been making regular insecticide applications to control any of the aforementioned insect pests. In Washington Co. RI and Windsor Co. VT lepidopteran pests (<u>imported cabbage worm</u>, and <u>diamondback moth</u>) were at threshold in multiple brassica crops. Also found in large numbers in Windsor Co. VT were the pupa of the imported cabbage worm parasitoid *Cotesia Rubecula*. Learn to identify the difference between the parasitoid pupae and the pupae of diamond back moth (photo). Read more about identifying beneficials in this weeks article. Tip burn was observed in cauliflower in a field without irrigation–this disorder is caused by calcium deficiency, which is often a result of low soil moisture and high humidity. Some broccoli crops have suffered from buttoning caused by high temperatures during head formation. Flea beetle are present and can limit yield and can spread diseases such as Alternaria leaf spot and black rot. Control if damage to cotyledons or seedlings is stunting growth, or if damage to greens will reduce marketability.

Sweet corn: The second flight of **European corn borer** has been fairly slow so far across the state. **Corn earworm** trap captures have spiked however, and a spray interval of 4 days is called for in most locations. Good control depends on getting good coverage of the silks with directed sprays to the ear zone. If maximum daily temperature is below 85°F for 2-3 days, spray intervals may be extended by one day. Continue treatments until 5-7 days before final harvest, or until silk is completely dry and brown. See article earlier this season on <u>Corn Earworm Management</u>. **Fall armyworm** captures have been low and are not driving corn sprays at this time. Although <u>Northern corn leaf blight</u> has not been confirmed by the UMass Diagnostic Lab, many sweet corn fields are beginning to look scorched. One grower reports better tolerance to leaf blights with his varieties: Nirvana, Eden and SV1580. Consult your seed company representative for more information. Plant corn in sites with good air circulation and control weeds to decrease humidity. Scout fields regularly for disease symptoms. Plow under crop debris. A one year rotation out of corn is recommended for fields with a history of NCLB. In no-till systems, a rotation of at least two years is recommended.

Cucurbits: <u>Cucurbit downy mildew</u> was newly confirmed in VT AND in RI this week and is now found throughout New England. Growers who want to continue harvesting their cucumbers into the fall will want to use materials with short re-entry while still rotating between active ingredients for resistance management. Squash and pumpkins that still have green fruit may need to kept alive to bring them to maturity. Materials with good efficacy and a 12hr REI or less include (with FRAC codes following): Zampro (45+40), Ranman (21), Presidio (43), and Revus (40). <u>Powdery mildew</u> pressure is variable in

fields scouted this week. One new variety Butterkin (Butternut and pumpkin) appears to tolerate powdery mildew pressure better than Waltham butternut in the same field.

Solanaceous: Potato foliage is going down quickly on many organic farms. At this time of year it can be hard to tell if this is caused by any one disease or another or just natural senescence of plants. If this describes your potato fields try to make sure that you don't have late blight present, as it can affect the tubers, but otherwise it is late enough in the season that tubers are probably mature enough and there's no cause for alarm. Another case of bacterial canker caused by *Clavibacter michiganensis* subsp. *michiganensis* on pepper was confirmed in MA this week. On pepper this bacterial disease causes light brown, raised lesions on the leaves but does not appear to cause systemic disease (stem lesions and cankers, as in tomato) in peppers, it may serve as a source of inoculum for tomatoes, which are highly susceptible to the disease and often produced in the same greenhouse as peppers or planted in adjacent fields.