

## Pest Update

## Pest Alerts, 7/1/2015

<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.

Allium: Onion thrips adults and nymphs were found *last week* near threshold of 1 per leaf in Worcester Co., MA; after treatment with Movento (spirotetramat) only adults were found this week, well below threshold. In Washington Co., RI, thrips were near threshold in an untreated field, but crop is looking healthy. Leek moth damage continues to be present in Chittenden Co., VT, but not in other New England States.

Basil: No new reports of **basil downy mildew** this week after the report in Nassau Co., NY last week.

**Brassica:** <u>Diamondback moth</u> adults and pupae and <u>imported cabbageworm</u> (ICW) eggs and caterpillars found on heading cabbage, kale, broccoli, and recently transplanted brassicas in Worcester Co., MA (mostly ICW eggs) and Washington Co., RI but not above threshold of 1 caterpillar per plant. **Flea beetles**: high pressure last week in many locations scouted, but lower pressure this week.

**Corn:** European corn borer trap captures have gone down this week with some locations reporting zero adults. However, fields scouted in Franklin Co., MA, Washington Co., RI and in NH vary in caterpillar pressure of 0-60% infestations. Scout fields with tasseling and silking corn now and treat at a threshold of 15% infestation. A simple sequential scouting guide is available at the UMass Vegetable program website here: Sweetcorn IPM Guide. Seven corn earworm were captured in Sharon, MA over the weekend when storms swept across the state. This pest has arrived on the winds of southwesterly storms this season, and it is time to put out CEW traps if you have silking corn (see article this issue for more on CEW management). Fall armyworm traps went out in MA last week and will go out this week in RI, VT and NH; none captured yet.

**Cucurbit:** <u>Alternaria leaf spot</u> and <u>scab</u> were diagnosed on 'Goldie' yellow squash 2 weeks ago in Bristol Co., MA; likely seedborne. <u>Gummy stem blight (black rot)</u> was also diagnosed this week in 2 crops by the MA and NH diagnostic labs. The rainy humid weather we are experiencing is conducive to spread of inoculum, in fields which have rapidly expanding leaves creating even more humid canopies. Harvest affected crops last. Fungicides can protect new growth if cucurbits are vining out since they grow quickly this time of year. <u>Cucurbit downy mildew</u> was reported in Erie Co, NY. Track the arrival of this migratory disease at: <u>http://cdm.ipmpipe.org/</u>. Develop your fungicide programs now as this disease can rapidly cause crop losses once it arrives. <u>Striped cucumber beetle</u> numbers are lower this week than last in most locations scouted. <u>Squash vine borer</u> are being captured at record numbers in NH with up to 128 moths per trap in one week. Trap captures vary greatly from one location to the next, so only make treatments based on field scouting or trap captures. Use a threshold of 5 moths per trap in bush varieties and 12 in vining crops. Target sprays to the bases of plants. **Squash Bug** is being reported at low numbers in NH, RI and MA. **Squash beetle** was reported causing damage in Kent Co., RI. This pest has not been reported in other states in New England. It looks a lot like a Mexican bean beetle, and also resembles are large, yellow-orange lady beetle.



Squash beetle in West Cranston. Photo by Jason Valcourt

Solanaceous: All stages of Colorado potato beetle were present in two organically-managed potato fields scouted in Hampshire Co., MA and Washington Co., RI, with numbers of small larvae at or above threshold. In Franklin and Hampshire Cos., MA growers are reporting poor control with organic pyrethrin and spinosad materials on CPB. Resistance management is particularly important with this pest, but organic growers have limited options for rotations. Many growers rely exclusively on spinosad (Entrust) to control CPB because it does tend to be very effective, but overuse will lead to resistance. Spinosad is a great material to use to control the initial flush of 1<sup>st</sup> generation larvae, but do not apply it to the 2<sup>nd</sup> larval generation. Azadirachtin products are recommended as alternatives. Azera is a mix of pyrthrins and azadirachtin, and has been shown to have good efficacy against CPB. Beauveria bassiana (Mycotrol O, Botanigard) is another option. One grower in Frankin Co., MA has had great success with using field rotation. He has yet to see a single CPB in his potato field after moving this year's potatoes to a field about a mile away from last year's – though he has no other potato growers nearby. See the NYS IPM Publication, Organic Production and IPM Guide for Potatoes for more information on managing resistance using organic methods. In eggplant, the threshold for CPB is 2 small or 1 large larvae per plant until fruiting stage. Black Leg was diagnosed at the UMass Disease Diagnostic lab from a sample in Franklin Co., MA. If there are only a few plants affected they can be rogued out of the field. Look for septoria and early blight in tomato. Humid rainy weather will help the spread of these diseases. Fulvia leaf mold and powdery mildew reported in greenhouses and tunnels in RI, NH and VT. Few translaminar materials are available for these pathogens, so residual control is difficult. Oils and bicarbonate stop the spread on surface, but must be applied regularly. Remove foliage to increase airflow. Multiple: Potato leafhopper were fewer in Washington Co., RI this week, but higher pressure was found on potatoes in Worcester Co. and Hampshire Co., MA and in high tunnel eggplant in Merrimack Co., NH. Nymphs found last week on beans in RI, but not yet in MA.