Vegetable Crops IPM Update, Week Ending 10/09/13

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Note: The blacklight network is to be shut down for the season. Only traps considered essential to individual farm sites will be maintained until those crops are finished. No further maps will be produced this season. Additional IPM updates will appear as pest conditions warrant.

Kris Holmstrom and Joseph Ingerson-Mahar would like to acknowledge the invaluable assistance of the following IPM technicians for their efforts in gathering insect and disease information from around the state. Without their help, much of the information in these updates would be unobtainable in a timely fashion:
Tonia Broen
Bernadette Eichinger
Donna Larsen
Prabhjot Sidhu
Dan Petela
Ryan Tirrell
Kathryn Wilkinson

Sweet Corn

European corn borer (ECB) adult activity has decreased to extremely low levels. There are too few catches at this point to register a map image. This pest should pose little threat to sweet corn for the remainder of the season.

The highest nightly ECB catches for the previous week are as follows:

Centerton	1	Milford	1	Sergeantsville	1
Griggstown	1	Morristown	1		
Lawrenceville	1	Newton	1		

Warmer evenings over the weekend resulted in a moderate increase in **corn earworm moth (CEW)** numbers, particularly in the northern counties. This activity may continue to rise and fall with fluctuations in temperature. Overall, New Jersey is experiencing a moderate late season population at this time, and it is high enough to cause damage if not managed properly.

Blacklight: The highest **blacklight** catches are in the northern third of the state (see CEW Blacklight Map). In this blacklight-based map, the blue area relates to a 4-5-day silk spray schedule and green areas represent a 3 day silk spray schedule. In general, where 3 day zones exist within larger 4-5 day areas, it is advisable to defer to the more conservative schedule. **Note:** Colder night temperatures forecast for this week will suppress moth activity. The map image reflects catches including those from much warmer nights. As such, suggested silk spray schedules below are less conservative than those indicated by the map.

The highest nightly CEW **blacklight** catches for the previous week are as follows:

Hackettstown	6	Morristown	4	Little York	2
Chester	4	Flanders	3	Long Valley	2
Hammonton	4	Newton	3	Sergeantsville	2
Medford	4	Port Colden	3	Tabernacle	2

Silking Spray Schedules*:
South –4-5 days
Central – 4-5 days
North – 4-5 days
* Note: These are general recommendations. Local trap catches may indicate some variation in the frequency of insecticide applications to silking corn.

Tomatoes

Late blight has been appearing on more tomatoes in northern areas of the state. These occurrences remain isolated, but all growers should include fungicides with specific activity against late blight (if not already doing so) with their regular protectant program immediately. Consult the *2013 Commercial Vegetable Production Recommendations* for labeled materials.

Pepper Weevil

Despite the oscillation between cooler and warmer temperatures, the number of pepper weevils caught in traps continues to increase. Over 3,000 weevils were trapped on one card in less than 2 days at a field that had had a season long infestation. The numbers will remain high until a killing frost and the adults run out of food.

A new infestation was found at another farm in Gloucester County this week. The farmer probably experienced little loss due to the late infestation.

At this point, further insecticidal applications are questionable and probably not economically viable for attempting to control pepper weevil.

Brown Marmorated Stinkbug (BMSB)

BMSB adult catches have ceased as this pest begins to seek overwintering sites. The threat of further injury to peppers is unlikely from this point on.

The link for the Vegetable IPM Map Archive is:
http://www.pestmanagement.rutgers.edu/IPM/Vegetable/Pest%20Maps/maparchive.htm
This site contains all current pest maps as well as those from previous years, back to 1999.

Cole Crops

Warmer weather of the previous week has resulted in increased infestations from caterpillar pests of cole crops. The primary pest at this time is **imported cabbage worm**

(ICW), although fields that have received insecticide applications for this pest frequently have residual **diamondback moth (DBM)** infestations. It is important to identify DBM correctly, because if they are present, synthetic pyrethroid insecticides may not provide acceptable control. DBM are generally less than ½" in length, while ICW can grow to approx. 1 ½", and are covered in fine hairs. Scout plantings weekly. Check 5 consecutive plants each in 10 random locations throughout the planting, paying particular attention to the innermost leaves where ICW often feed. Consider treating if caterpillars are found on 10% or more plants that are in the 0-9 true leaf stage. From 9-leaf to the early head stage (in broccoli, cauliflower and cabbage) infestations up to 20% may be tolerated. Once heads begin to form, a 5% threshold should be observed to protect the marketable portion of the plant. For leafy greens such as collards and kale, 10% plants infested is the threshold throughout.

Diamondback moth larva (top), and imported cabbageworm (bottom).

Crucifer downy mildew has appeared on broccoli and collard plantings in northern NJ. This fungal infection can cause significant damage to all foliage, and is particularly problematic on leafy greens because of the direct injury to the marketable portion of the plant. Crucifer downy mildew is characterized by yellow lesions on the upper leaf surface, with pale lavender colored sporulation below. Be sure to inspect plantings weekly for the appearance of this disease. Longer periods of leaf wetness favor the development of this disease. Consult the *2013 Commercial Vegetable Production Recommendations* for fungicides and rates.

Hawaiian Beet Webworm Update (HBWW)

HBWW adults are still present on New Jersey farms. This pest favors beet foliage, as well as spinach and Swiss chard. Amaranths (both cultivated, and pigweed) are also hosts. Adults (a small moth – see photo) are appearing in more sites each week. IPM personnel have encountered large adult populations in Cumberland, Monmouth, Salem and Somerset counties. As yet, only limited damage has occurred in host crops. Larvae can damage foliage and produce webbing on the underside of leaves. Several years ago we had a large population of this pest in early autumn, with infestations resulting in significant damage to spinach, beet and chard fields.