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PENNSYLVANIA VEGETABLE MARKETING & RESEARCH PROGRAM

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Pennsylvania Vegetable IPM Weekly Update

August 29, 2019

Sorry we forgot to include these Current Issues in the Update!

The information supplied in these Updates is from Penn State Extension Specialists and Educators.
These Updates are a service of the Pennsylvania Vegetable Marketing and Research Program which, in cooperation with the Pennsylvania Vegetable Growers Association, supports vegetable research at Penn State University and other institutions.

Current Issues updates

Dr. Beth Gugino, Extension Vegetable Pathologist, Penn State University

General conditions: The season is slowly starting to wind down with many growers focused on harvest. Many of the common pests and diseases such as powdery mildew and cucumber beetles are being observed in production fields. With the forecasted cooler evening temperatures comes more extended dew periods and increased disease pressure on late harvested and fall crops.

INSECT PEST UPDATE

Cucumber beetles continue to remain active in cucurbit fields. High populations will scar fruit. Adults in the field now are the ones that will overwinter. Cleaning up fields to minimize cucurbit resources could help reduce overwintering survival of cucumber beetles. **Sweet corn trap counts** are increasing in most of the state. **Corn earworm** captures are high throughout the eastern and southern portions of the state, and in Erie. The southwestern counties are more variable: some are relatively low, but some are also increasing. **Fall armyworm captures** are also rising – this is occurring in Erie, and southwestern and central part of PA (Indiana, Blair, Centre counties). Reliance on pyrethroids for corn earworm is causing problems – pyrethroid resistance typically increases as the season progresses. **Two-spotted spider mite** has shown up in field tomatoes and is commonly found in watermelon at this time of year. We expect emergence of **Allium leafminer** adults in about 3 weeks.

VEGETABLE DISEASE UPDATE

The cooler temperatures common this time of year favor **late blight.** Late blight has now been confirmed on tomato in Erie, Indiana, Clinton and Centre counties on tomato and on potato in Erie county earlier in the season. Reports have been from both home gardens and commercial production fields including high tunnels. All reports have been genotyped as US-23. Be on the lookout and vigilantly scouting for **Alternaria leaf spot on fall planted brassica crops** including broccoli, cauliflower, Brussels sprouts, etc. Many crops were hit hard last year so timing fungicides with the onset of symptoms is important. **Powdery mildew** is running rampant on many cucurbit crops and pressure from **downy mildew** continuing to increase. Downy mildew is now confirmed on cucumber, cantaloupe, processing pumpkin and jack-o-lantern pumpkin in Pennsylvania. There are also an increasing number of reports on cucumber in Michigan and also now Ohio. So, the western part of the state is at increasing risk. Although field production may be winding down, fall cucumbers are being grown in an increasing number of high tunnels. These crops even from a young age will be susceptible due to the high pressure. Maintaining a regular spray program even under the high tunnel will be important. Products like Ranman (FRAC 21) are labelled for use in a greenhouse and therefore high tunnel but should be rotated with other FRAC codes such as Previcur Flex (FRAC 28) for resistance management.

Concentric ringspot characteristic of Alternaria leaf spot on brassicas. Photo credit: Beth Gugino.

BERRY UPDATE

Foliar diseases including **powdery mildew**, **common leaf spot** and **leaf scorch** continue to be problematic on strawberry. Group 3, 7, 11 and 13 fungicides have effectiveness on powdery mildew, but be sure to rotate chemistries to minimize resistance development. **Fruit anthracnose** on day-neutral strawberries is still being reported. **Strawberry rootworm adults**, which are small 1/8" brown beetles with mottled markings, are continuing to feed on strawberry foliage in established plantings causing the leaves to be riddled with small holes and will continue to do so throughout Fall. Populations are highest in older plantings. The adults are most active at night, and quickly fall to the soil and hide when foliage is disturbed, making them difficult to detect. Broad-spectrum insecticides are effective, but spray applications should be made in the evening when adults are more likely to be exposed. **Spotted wing drosophila** numbers continue to increase in fall raspberries and blackberries; frequent and very thorough harvest can be of assistance, but chemical insecticide sprays are essentially a necessity to avoid having larvae in fruit.

Leaf curling and discoloration caused by powdery mildew on 'Seascape' strawberry. Photo credit: Kathy Demchak.