UCONN
COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES
EXTENSION

Vegetable Pest Alert

August 6, 2022

Stemphylium gray leaf spot of tomato was confirmed this week in CT. The recent hot weather is likely to increase the likelihood of spreading. The optimal temperature for disease development is 77 °F and wet weather conditions. This fungus can survive on crop debris and also can be seed borne. Rotate with non-solanaceous crop for 2-3 years. Dispose the infected crop debris at the end of the season to reduce inoculum for next seasons. Bravo (chlorothalonil), mancozeb, zing (chlorothalonil + zoxamide), and copper products some among the labeled products for this disease control. See this factsheet from the CT Ag Experiment Station for more information on this disease.

Stemphylium Gray Leaf Spot. Early infections are brown/tan on both the upper and lower sides and lesions are irregular in shape with or without yellow halo around them. In the advanced stage of infection, the central area turns gray and spores are noticeable (Photo: S. Ghimire).

Gray mold /botrytis blight of tomato was confirmed in high tunnel tomato this week in CT. This is a common disease of tomato and is particularly damaging in greenhouses or high tunnels where the relative humidity is high. The pathogen infects leaves, stems, petioles, and fruit. Ghost spots (see picture below) develop when the pathogen invades the fruit then ceases growth prior to causing decay; the resulting white to yellow rings make fruit unmarketable.

Keep humidity below 80% by ventilating, pruning, and spacing plants. Avoid wetting the foliage during times when drying is slow. Practice strict sanitation, removing senescent tissues and infected crop debris as it can become airborne and spread. Fungicide rotations and combinations are important because resistance has been reported to several fungicides. See New England Vegetable Management Guide for spray options.

Botrytis/gray mold leaf blight lesion of tomato on the left (photo: S. Ghimire) and ghost spots on the (photo: L. Pundt).

Bacterial wilt on pumpkins was confirmed this week in CT**.** Bacterial wilt is transmitted by cucumber beetles. Cucumber, muskmelon and summer squashes are highly susceptible to wilt, pumpkins and winter squashes are less susceptible, and watermelon is not. Seedlings at the cotyledon and 1- to 3-leaf stage are more susceptible to infection with bacterial wilt than older plants. Thus, it is especially important to keep beetle numbers low before the 5-leaf stage. Use crop rotation to reduce beetle numbers. Adult striped cucumber beetles can overwinter in field edges with this bacterial pathogen in their gut and infect susceptible plants next year. To prevent bacterial wilt in highly susceptible crops such as cucumber, muskmelons, summer squash, and zucchini, treat when there is 1 beetle for every 2 plants. Less wilt-susceptible crops (butternut, watermelon, most pumpkins) will tolerate 1 or 2 beetles per plant without yield losses. Spray within 24 hours after the threshold is reached. Timely and effective early control will prevent the need for sprays during flowering when bees are active in the crop.

Because this bacterium is transmitted systemically by cucumber beetles, copper or any other fungicide sprays are of no value. Rogue infected plants.

Squash vine borers also cause similar wilting of cucurbit plants. Check at the base of the stem for holes or frass, or cut open the stem to check for the squash vine borer larva on a wilted plant.

Bacterial wilt of cucurbit causes sudden wilting of plants. When dipped in water, milky white bacteria oozes streams from a freshly cut stem of the wilted plant (photos: S. Ghimire)

Cross-striped cabbage worm (CSCW): Be on the lookout for CSCW as it has been seen in our area this week. Unlike other caterpillar pests of brassica crops, CSCW eggs are laid in groups, so caterpillars emerge in clusters and can do significant damage quickly. The treatment threshold for CSCW is 5% of plants infested. Use targeted materials to preserve beneficial insects. Bt products (e.g. Dipel, Javelin, Xentari) are the most effective OMRI-listed materials.

Cross-striped cabbage worm eggs are laid in groups, so caterpillars emerge in clusters and can do significant damage quickly (photo: S. Ghimire)

Squash vine borers trap capture was lower this week compared to last week; 15 in a farm Norwich, and 0 in a farm in Berlin.

Corn earworm (CEW). Trap capture was 0.14/night in a farm in Norwich; 1.5/night in Berlin, and 2.9/night in a field in Litchfield.

European corn borers (ECB). This week none of ECB moths was captured in a farm in Norwich; 5 ECB NY, 0 ECB IA and 0 ECB hybrid moths were captured in each trap set in Berlin.

Fall armyworm (FAW): FAW flights are sporadic and unpredictable, and do not necessarily correspond with corn earworm flights, so monitoring with pheromone traps in whorl stage corn is very useful. Feeding damage from caterpillars occurs first in whorl stage corn, deep within the whorl, on leaves and in the newly forming green tassel. In whorl stage corn, caterpillars produce ragged feeding damage to leaves and masses of sawdust-like excrement. As corn matures, larvae burrow into the side of corn ears, leaving behind frass and a large hole, and into the tip, making a mess of the kernels and rendering the ear unmarketable. When full grown, larvae drop to the ground and pupate in the soil. The most effective way to prevent ear damage is to apply controls during whorl and tassel stage. If flights remain high throughout ear development, silk sprays may be needed.

Scout whorl and emerging tassel stage corn by checking 100 plants in groups of 10 or 20 in a V or X pattern across the field. Avoid checking only field edges and select plants at random, not only where you can see damage. A plant is 'infested' if at least one caterpillar is found. If feeding damage is old and no larva is found, the caterpillar may have left the plant to pupate in the soil. If 15% or more of plants are infested with FAW, a control is needed.
In emerging tassels, combine counts for ECB and FAW. For example, if 10% of plants have FAW and 12% have ECB, the combined infestation is 22%, above the 15% threshold.

Continue to be on the lookout for the following pests:

- Cucurbit powdery mildew
- Cucurbit downy mildew
- Bacterial canker on tomatoes
- Black rot in brassica crops
- Early blight, Septoria leaf spot, and leaf mold of tomatoes
- Leaf mold in high tunnel tomatoes
- Brassica flea beetle

Upcoming Webinars on Sun Protective Products

On these hot and dry days we are reminded that farmers, farm workers, landscapers, and gardeners are at a high risk for UV exposure and skin cancer. Effective sunscreen and ultraviolet protective clothing are important tools to help you stay safe while working outdoors.

To learn more about sun protection products and The Skin Cancer Foundation (SCF) Seal of Recommendation, check out the upcoming educational webinar series to be hosted by SCF. Details and registration information for these 30-minute, once monthly webinars can be found at https://webinar.skincancer.org/.

The Sun & Your Skin: What You Need to Know

- Learn how to protect your skin from UV rays
- Understand the dangers of tanning
- Know how to spot skin cancer early
- 5 ways to treat a sunburn
- Free skin cancer screenings are back

2022 ORGANIC CERTIFICATION COST SHARE GRANT PROGRAM
APPLICATIONS OPEN AUGUST 1

The Connecticut Department of Agriculture has received the National Organic Certification Cost Share Program (NOCCSP) Grant from the USDA Farm Service Agency.

Through this grant program, Connecticut certified organic growers and processors can be reimbursed for 50%, up to $500, for the costs of receiving and maintaining USDA organic certification. A list of certified organic growers and processors is available through USDA's Organic INTEGRITY Database at https://organic.ams.usda.gov/integrity.

The program is administered on a first-come, first-served basis until funds are exhausted. **Applications will be accepted August 1, 2022, through October 3, 2022 at 4:00 p.m.**

The amount reimbursed will be 50%, up to $500, of certification costs paid between October 1, 2021 and September 30, 2022.

To apply, please visit the link below for required materials and detailed instructions. Completed applications are to be submitted electronically by October 3, 2022 at 4:00 p.m. If you have any questions, please contact Alison.Grabarz@ct.gov.

More info: https://portal.ct.gov/DOAG/ADaRC/ADaRC/Organic-Certification-Cost-Share-Grant-Program

Food Safety Certification for Specialty Crops Program

Did your specialty crop operation recently incur on-farm food safety program expenses related to obtaining or renewing a food safety certification in calendar years 2022 or 2023? You may be eligible for financial assistance through USDA's Food Safety Certification for Specialty Crops Program (FSCSC).

USDA's Farm Service Agency will accept FSCSC applications for program year 2022 from June 27, 2022, through January 31, 2023. Applications for program year 2023 will be announced at a later date. More info here: https://www.farmers.gov/pandemic-assistance/food-safety?utm_medium=email&utm_source=govdelivery.

This report is prepared by Shuresh Ghimire, UConn Extension. *The information in this document is for educational purposes only. The recommendations contained are based on the best available knowledge at the time of publication. Any reference to commercial products, trade or brand names is for information only, and no endorsement or approval is intended. UConn Extension does not guarantee or warrant the standard of any product referenced or imply approval of the product to the exclusion of others which also may be available. The University of Connecticut, UConn Extension, College of Agriculture, Health and Natural Resources is an equal opportunity program provider.*

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