UCONN EXTENSION Vegetable Pest Alert

Updates and Scouting Reports from the Field

What to be on the lookout for...

Diseases of Garlic

Fusarium Basal Rot

Fusarium is a fungal pathogen that exists in soils worldwide. The disease is often present, but some years has a more significant and economic impact than others. It favors highly humid conditions when temperatures are between 68-86°F.

Fusarium causes dark soft rot of garlic bulbs and neck tissue. Common symptoms include:

- Stunted plants with yellow foliage and poor bulb development
- Plants with tip burn, yellow and collapsed foliage
- Plants pull up easily from the soil, few to no roots remain attached
- · Firm brown rot begins at the basal plate and moves up the bulb
- · White, fluffy fungal growth may be present in humid conditions

Incidence of this disease increases with injury by onion maggots or other insects. The pathogen is disseminated in seed, soil, infected debris, and irrigation water. Excess soil nitrogen favors infection. Leeks and onions are also susceptible to this pathogen. Four-year rotations to non-susceptible crops may minimize losses.

Purple Blotch

Another fungal infection to be on the lookout for is purple blotch. It is caused by the fungus Alternaria porri which thrives in warm temperatures (77-85°F) and humid conditions.

Purple streaking and weak root systems are symptoms associated with Fusarium rot. Photo: Ed Kurtz, bugwood.org.

Onion crop displaying symptoms of fusarium. This includes wilting leaves that are turning yellow to brown from the tip down. Photo: Howard F. Schwartz, Colorado State University, Bugwood.org







June 20, 2025



Purple blotch symptoms appearing on the older leaves of a leek crop. Photo: G. Higgins, UMass Extension.

Purple blotch often begins on older leaves. Long durations of leaf wetness (over 16 hours) will lead to lesions.Symptoms appear as small, sunken, watersoaked lesions with light centers. These lesions grow as the disease progresses, turning purple to brown, similar in appearance to an elongated bull's eye. Younger leaves will become more susceptible as the bulb matures.

The economic impact of this disease is significant. Yield is likely to be reduced due to undersized bulbs. Diseased bulbs may also rot in storage. Pathogen free seed, proper plant spacing, and regular weeding is important to allow for air circulation is key to managing this disease. Remove or plow under any plant debris, deeply burying any infected material. Rotate that growing space out of alliums for at least three years. Rotate fungicides throughout the growing season.

Consult the New England Vegetable Management Guide for more information on <u>disease control</u> <u>options for garlic</u> and other alliums.

Leafy Spots on Tomatoes

Early Blight and Septoria Leaf Spot are very destructive of tomato crops. These diseases may occur together, and both may be seed-borne. Plow under plant debris after harvest. Rotate away from tomatoes for at least 2 years. Provide optimum nutrition throughout the season. If planting in an area with a history of either disease, begin fungicide applications before disease is evident, usually when first fruits are half grown.

Bacterial Speck can also be seed borne. Use hot-water treated seeds to avoid introducing any of these diseases through seeds. Symptoms of bacterial specks first appear and are most common on younger leaves, but can appear first on older leaves. Leaf spots appear water-soaked, dark brown to black, sometimes with a yellow halo and typically small (up to ¼ in wide). As the disease progresses, spots coalesce forming large, irregular brown areas. Margins of leaves can be brown, sometimes extending down into the leaf forming a wedge of brown tissue.



Early blight, caused by *Alternaria solani*, caused dark brown concentric rings to form on these tomato leaves. Photo: Cornell Cooperative Extension.



Bacterial specks are dark brown to black, sometimes with a yellow halo. Specks can coalesce to form large, irregular brown areas. Photo: Cornell Cooperative Extension.



Bacterial speck on tomato fruit. Photo: Gary E. Valad, University of Florida.

Tortoise Beetles

Adult tortoise beetles are ¼ inch, oval-shaped beetles that look like miniature turtles encased in translucent membranes. The larvae of these beetles are flat, typically the same color as the leaf they are feeding on, and carrying their own frass and debris on their back as a way of protecting and disguising themselves. Tortoise beetles feed and cause foliar damage on plants in the *Convolvulaceae* family (morning glories, bind weeds, etc) and *Solanaceae* family (potatoes, ground cherries tomatoes, and peppers), however not typically to the extent of causing enough damage to impact yield. Their distinctive feed holes are round, irregular, and scattered across the leaf.

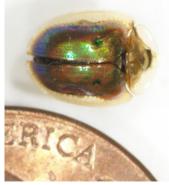
While intervention is not typically necessary and plants usually outgrow the damage without yield loss, if the population of tortoise beetles is very high, you can consider using an insecticide that will <u>protect your crop against chewing insects</u>.



Tortoise beetle larva with pile of frass on its back. Photo: G. Dill, UMaine Extension.



Clavate Tortoise Beetle. Photo: G. Dill, UMaine Extension.



Golden Tortoise Beetle. Photo C.D. Armstrong, UMaine Extension.

Continue to be on the lookout for the following:

Sweet Corn Pests Spinach and Beet Leafminers Colorado Potato Beetle Striped and Spotted Cucumber Beetles Brassica and Solanaceous Flea Beetles Cabbage Maggot Onion Thrips Squash Bugs Tarnished Plant Bugs Potato Leafhoppers

See Previous Pest Alert Messages On Our Website



WAGE AND HOUR DIVISION U.S. DEPARTMENT OF LABOR

Virtual Agricultural Labor Webinar

Join us online for a full day of informative panels on agricultural labor from federal and state enforcement agencies. Topics will include H-2A program requirements and best compliance practices.

FREE! Register here

Wed, June 25 9:30 AM-4:30 PM CT



SMALL FARM



New or existing tools to re/design?

Considering infrastructure improvements for energy use, water/waste management?

Incorporating data analytics for farm management?

Students in the College of Engineering and College of Agriculture, Health and Natural Resources want to help! We are offering financial and technical support for selected projects starting in Fall 2025. Help support the training of our students and we will help make your idea a reality.

LOOKING FOR INFRASTRUCTURE AND ENVIRONMNETAL IMPACT IDEAS!

DUE JULY 15TH

UCONN LICO

Must be a production farmer located in Connecticut with at least 1 year of production experience operating their own farm business.

GROUND

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Contact Information

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Stay in touch with us

- Share what you see: We're here to assist with identification, management strategies, and guidance on best practices. Send us a photo/message via text at 959-929-1031.
- Facebook Group: UConn Extension moderates a private Facebook group specifically for commercial vegetable producers. It is a space to share photos of insects and diseases you find in your fields, ask questions, share ideas, and stay engaged with growers across the state. Click here to join: "UConn Extension Vegetable IPM"
- Schedule a Consultation: Would you benefit from meeting with an Extension Specialist at your farm to provide insight on pest or disease identification, management strategies, and more? If so, please contact our Vegetable Extension Specialist, Shuresh Ghimire, to set up a farm visit. Contact him at shuresh.ghimire@uconn.edu or 860-870-6933.

Thank you for reading!

This report was prepared by Nicole Davidow, Outreach Coordinator, and Shuresh Ghimire, Commercial Vegetable Specialist, UConn Extension.

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