Summer Newsletter
(Jun 2024 - Aug 2024)

SOIL, PLANT & PEST CENTER
UTEXTENSION
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

October 10, 2024

Summer 2024 Debriefed:

What a whirlwind; summer is officially over and the 'ber' months have arrived, which means that 2025 is right around the corner! Over the months of June, July, and August, the Soil Plant & Pest Center (SPPC) received a total of 323 samples arriving from 49 counties across Tennessee. Since January, SPPC has received a total of 583 samples all around Tennessee.

SPPC received numerous ornamentals and crop samples from a wide range of submitters. Details regarding samples, submitters, and what to keep an eye out for on your ornamentals and crops are provided later in this newsletter, so keep reading!

In this newsletter you can expect:

Summer 2024 Debriefed

Submitters of Samples and All Counties Serviced

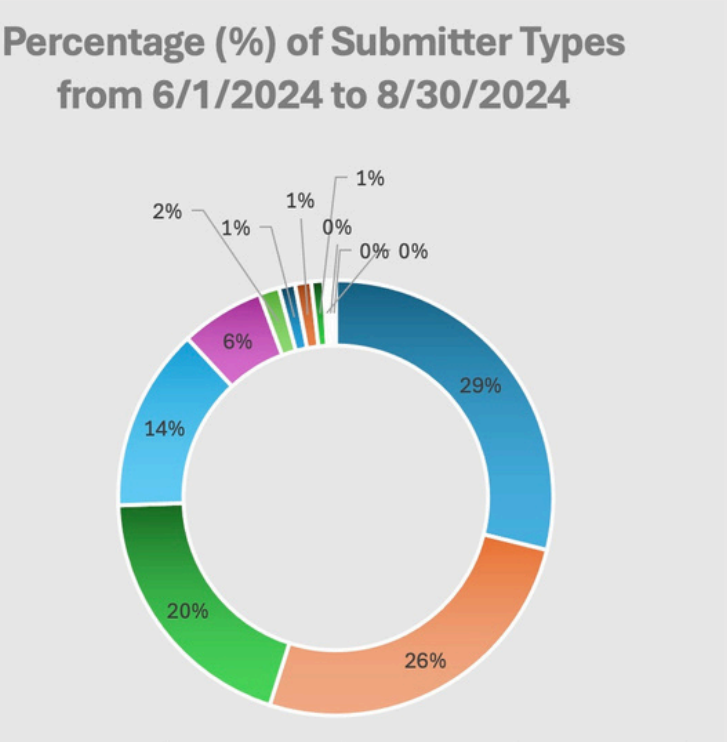
Top 5 Counties Serviced

Top Ornamentals and Garden Samples

Have you seen me?

Who sent samples?

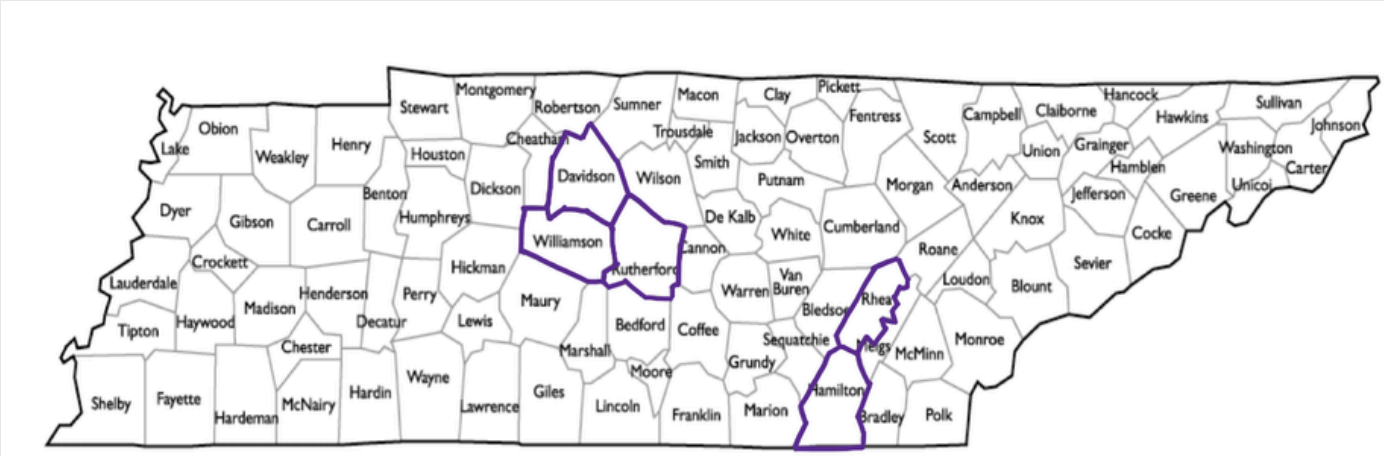
Landscaper (28.8%)
Homeowner (26.0%)
Extension Agent (19.5%)
Botanical Garden (13.6%)
Producer (6.2%)
Extension Staff (1.5%)
Pest Management Professional (1.2%)
Plant Nursery (1.2%)
Grower Mail (<1%)
Diagnostician (<1%)
Extension Faculty (<1%)
Professor (<1%)



Where are the samples from?

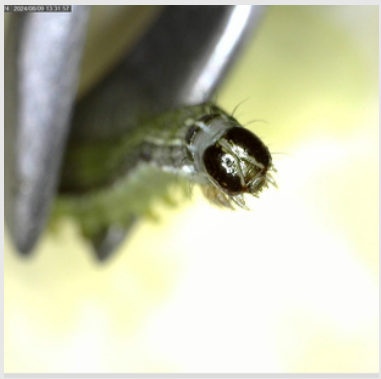
MAP CREDIT: TN.GOV

Top 5 Counties Serviced



MAP CREDIT: TN.GOV

HAVE YOU SEEN ME?



Picture Credit: Celeste Scott, University of Tennessee

Fall Armyworm

Identification: Fall armyworms are lepidopteran insects. The larvae cause damage to turfgrass by feeding on the leaves (foliar feeders). Larvae generally range from 1 to 1.5 inches long depending on growth stage and are greenish to brown with alternating dark and light stripes that run the length of their body. The larva has a dark head capsule marked with a pale, but distinct, inverted “Y”. Often, four black dots may be observed on the back side of each segment and the abdomen.

Host Plant(s): Fall armyworms have a broad host range, but generally prefer lush, well-fertilized grasses. Areas that are newly-planted will be most susceptible.

Damage caused: Although armyworms may be better known as agricultural crop pests, they can be a severe but sporadic pest of turfgrass. When in a group, they may eat the grass down to the ground and cause bare areas in lawns. In the case of heavy infestations, large expanses of turfgrass can be destroyed.

Picture Credit: Midhula Gireesh, University of Tennessee

Woolly Aphid

Identification: Woolly aphids appear as they sound - ‘woolly’ like cotton fluff. This ‘cotton-like appearance’ of the woolly aphid is actually a waxy coating, which helps woolly aphids move through the air (1). Wooly aphids travel via wind, animals, humans, and human transportation - often undetected (1).

Host Plant(s): Different species of woolly aphids feed and overwinter on a wide variety of plants (2). However, specific species of woolly aphids (for example: Hackberry Woolly Aphid) feed on specific plants.

Damage Caused: Woolly aphids have piercing sucking mouthparts, and feed on plant sap. Woolly aphids secrete honeydew which can attract unwanted insects and sooty mold. However, most species of woolly aphids do not cause significant damage.

Picture Credit: Nar Ranabhat, University of Tennessee

Powdery Mildew

Host Plants: Plants commonly affected by powdery mildew include but are not limited to azalea, dogwood, wisteria, delphinium, blueberry, oak, squash, pecan, snapdragon, crabapple, etc (3).

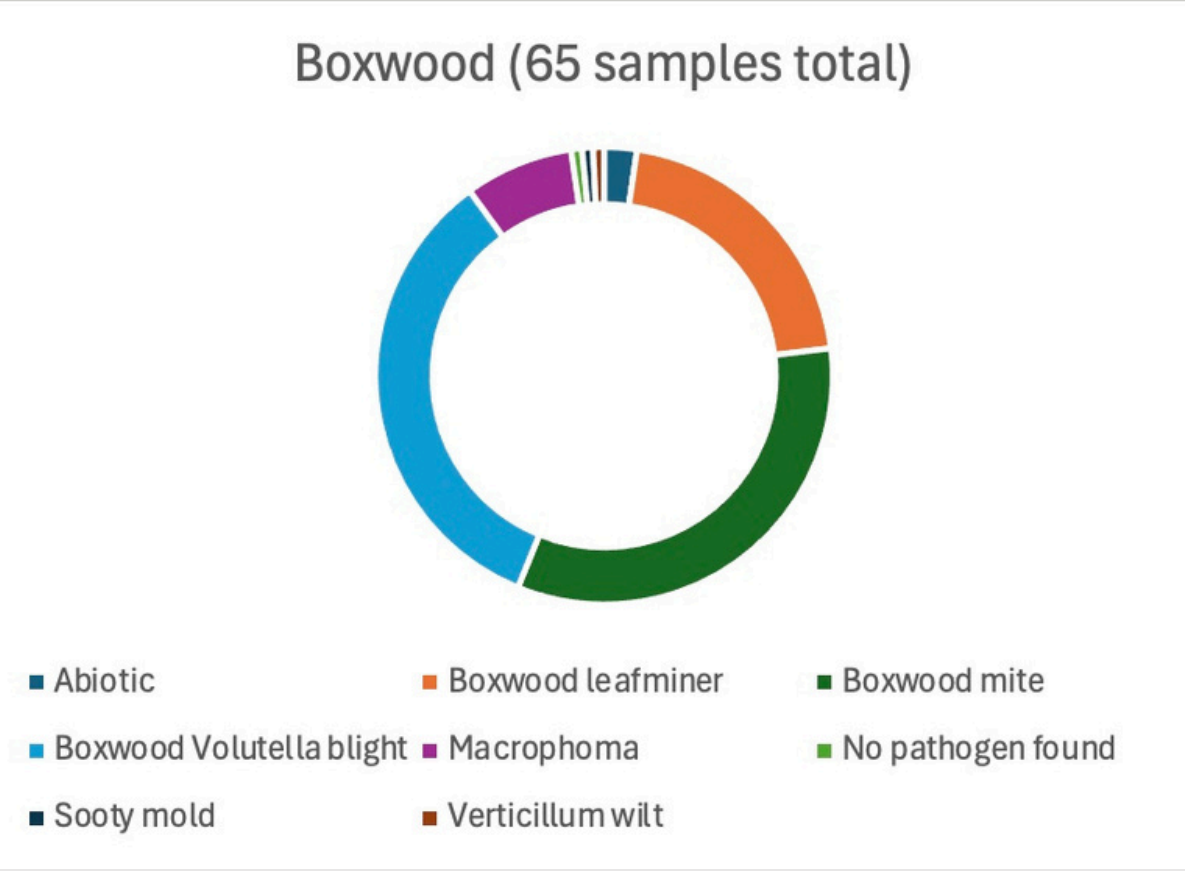
Cause(s): Powdery mildew only reproduces and survives on living plants. This fungus favors and infects plants when there are cooler temperatures at night and a higher relative humidity during the day; anywhere from 65-90 degrees F (3). Powdery mildew can infect other plants through the airborne spores it produces. Other factors that puts plants at risk for becoming infected with powdery mildew includes plants that are grown in full shade and cooler locations (3).

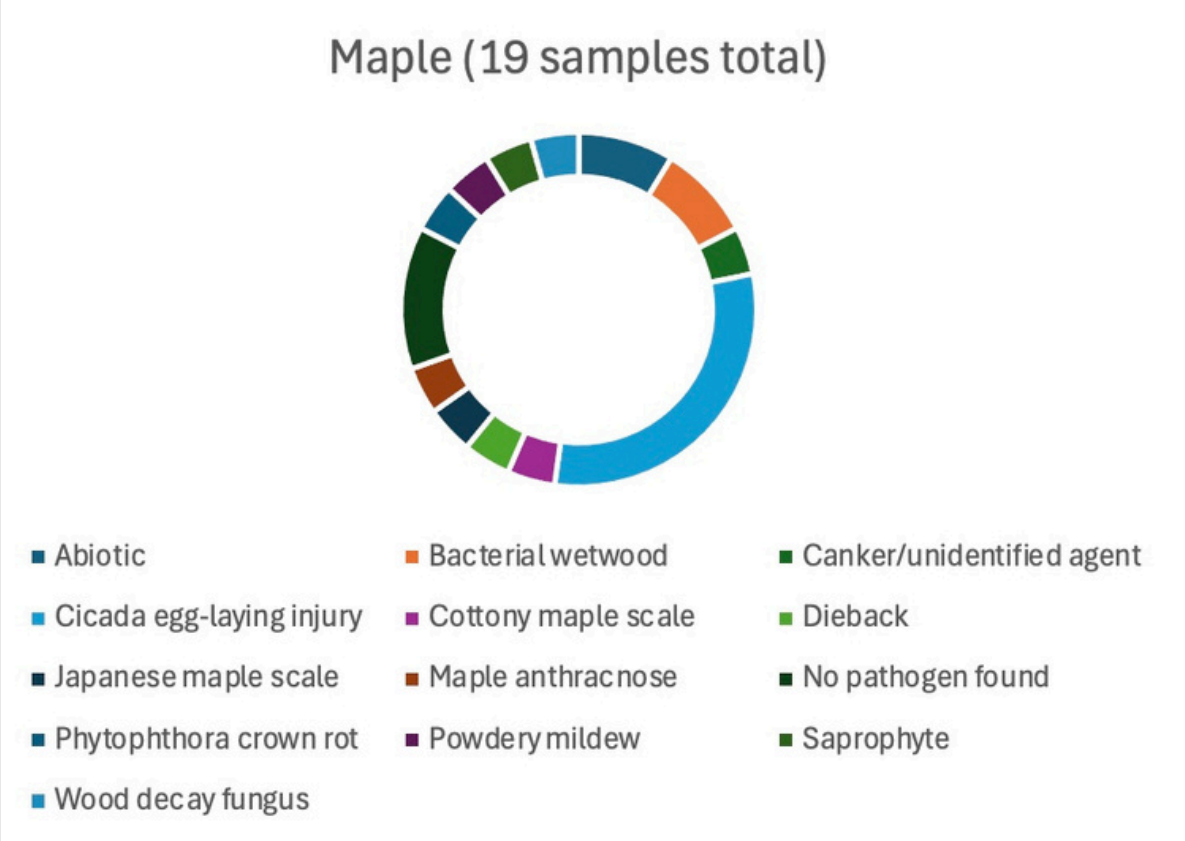
Signs/Symptoms: Powdery mildew produces a grey or white powdery growth of plant foliage, but can also cause abnormal plant growth include leaf curling, twisting, or discoloration (3).

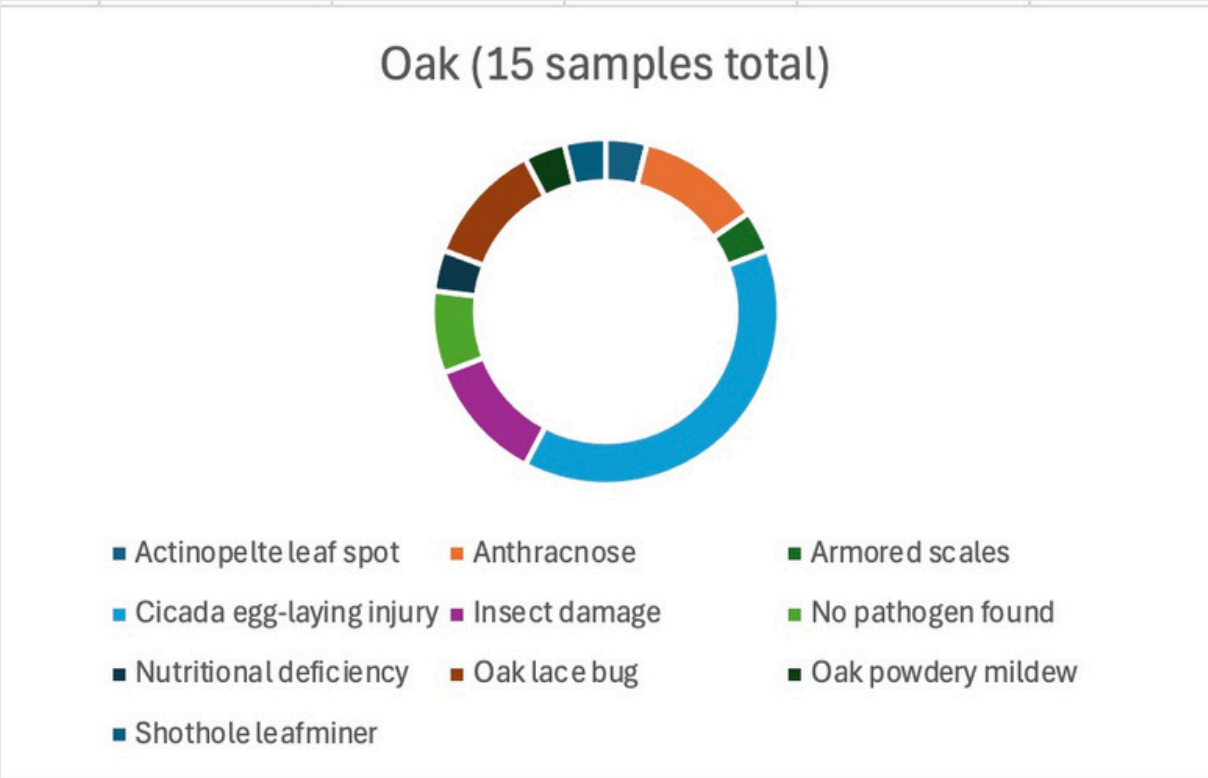
TOP 3 SAMPLES AND THEIR DISEASES/PESTS

"No pathogen found" means that a pathogen was not in the sample brought in. Why?

- The customer would like to ONLY double check if the plant was healthy before they planted it in their garden,
- The part of the plant that did not contain the pathogen was brought in, OR
- The plant has an abiotic/other external issue.




Maple (19 samples total)
Abiotic
Bacterial wetwood
Canker/unidentified agent
Cicada egg-laying injury
Cottony maple scale
Dieback
Japanese maple scale
Maple anthracnose
No pathogen found
Phytophthora crown rot
Powdery mildew
Saprophyte
Wood decay fungus


Oak (15 samples total)
Actinopelte leaf spot
Anthracnose
Armored scales
Cicada egg-laying injury
Insect damage
No pathogen found
Nutritional deficiency
Oak lace bug
Oak powdery mildew
Shothole leafminer

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2. Beers, E. H., S. C. Hoyt, and M. J. Willet. Revised 2010. Eriosoma lanigerum (Hausmann) (Hemiptera: Aphididae). Washington State University. Accessed 09/24/2024. https://treefruit.wsu.edu/crop-protection/opm/woolly-apple-aphid/

3. Ranabhat, N. B., and A. S. Windham. 2024. Powdery Mildew of Ornamentals W1219. UT Extension. Accessed 10/01/2024. https://ornamentalpathologylab.tennessee.edu/publications/.