

ORNAMENTALS

• H O T L I N E •

August 14, 2020

INSECTS

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TULIPTREE and MAGNOLIA scale (*Toumeyella liriodendra* and *Neolecanium cornuparvum*), are similar and are pests to trees in the Magnolia family, but tuliptree scale occasionally feeds on lindens, and magnolia scale on Virginia creeper.

Female tuliptree scales are grayish-green to pinkish-orange mottled with black and their crawlers are active from 2016 to 3212 [2860 peak] GDD50 and can range from 2-7 mm. Female magnolia scales are pinkish-orange to brownish, smooth and are often covered with a white mealy wax until their crawlers emerge starting around 2075 to 3247 [2746 peak] GDD50. Female magnolia scales are about 12 mm. To scout for crawler activity place double-sided sticky tape around branches with swollen females producing honeydew.

They feed on phloem, sucking sap and other nutrients out. Large infestations have been reported killing younger trees but there are very few reports of older trees being killed. The sugary waste excreted can drop onto leaves and branches where black sooty mold will grow, which can weaken a plant's ability to photosynthesize correctly. An abundance of ants, flies, bees and wasps on trees may indicate scale presence because they feed on the honeydew. Yellowing leaves, premature leaf-drop and branch dieback might also indicate the presence of these scale.

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DISEASES

Jill Pollok
Plant Diagnostician

CHRYSANTHEMUM WILT DISEASES. Chrysanthemum are susceptible to Fusarium wilt caused by the fungus *Fusarium oxysporum* f. sp. *chrysanthemi*, which is specific to Chrysanthemum species. Symptoms include stunting, wilting, leaf yellowing, and brown vascular discoloration. This disease might be confused as water stress or root rot, however, roots appear healthy and symptoms can be one sided or in sections, whereas a root disease usually affects the whole plant and would cause discolored roots. This fungus can spread through contaminated soil, containers, plant materials, and vegetative cuttings. Infected soil is difficult to control: this pathogen creates resting structures that survive in soil for years and are stimulated to germinate by root exudates and favorable temperatures above 75°F. To control, use culture-indexed cuttings, apply nitrate nitrogen fertilizer, raise the soil pH, and

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Issue 21

What's Hot!

We have ended the summer drought with a series of deluges - it is still hot, though.

Fall webworm nests continue to become more prevalent. Break up the nest to allow predators access to the webworms.

Spotted lanternfly adult activity increasing.

Scout newly installed small diameter trees for signs of bark beetle attack. Second generation activity usually starts about now. Use ethanol traps to discover emergence.

Cicada killers are active and scaring homeowners. Eurpan hornet activity will increase soon as we get closer to fall.

Hotline in going on vacation for a week (along with me)! Look for the next issue on August 28.



Magnolia scale. Photo credit: B. Kunkel

For more information

on pests and practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:



Garden Line	831-8862
(for home gardeners only)	
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303

View more photos at <http://extension.udel.edu/ornamentals/>

COOPERATIVE EXTENSION

Diseases (continued)

drench with fungicides preventatively, especially if the disease was an issue previously. Fungicides with activity against Fusarium include Pageant Intrinsic, Heritage, those with thiophanate methyl (Cleary's 3336 among others), and Medallion. Cornell Research trials found that these cultivars did not develop Fusarium wilt symptoms when inoculated: 'Bernadette', 'Bethany', 'Diana', 'Mary', 'Mildred', 'Mouria', 'Novare', 'Castor' and 'Sundance'.

Pythium root rot also causes wilt symptoms in chrysanthemum. This soilborne pathogen will cause aboveground wilting and eventual death. Unlike symptoms of Fusarium wilt, roots appear brown and weak, and pull apart easily. When progressed, a dark stem lesion forms at the plant base. Check roots periodically for root health and color. This pathogen can survive in soil for many years and spreads through contaminated soil, tools, and by workers. Follow good sanitation practices. Ensure growing media is well drained, avoid overwatering or standing water, and avoid excess nitrogen and phosphorus. Treat plants preventatively with fungicides containing: etridiazole (Truban, Banol and Banrot), cyazofamid (Segway O), and mefanoaxam (Subdue MAXX). Note that there has been documented resistance to mefanoaxam in Pythium spp.

Insects (continued)

Several parasites and parasitic wasps provide biological control of these scales. During crawler activity, you may use horticultural oil, insecticidal soap, or insect growth regulators (Talus or Distance) as insecticide options. Systemic insecticides such as imidacloprid or dinotefuran can be applied as foliar applications, but better control is obtained as soil drenches. Apply soil drenches prior to crawler emergence to improve efficacy. Altus is a newer product available that should provide control of these scales. Prune off highly infested branches or use a scrub brush to brush the scales off.

Editor: Susan Barton
Extension Horticulturist

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COOPERATIVE
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**GROWING
DEGREE DAYS**
AS OF August 11, 2020

- Swarthmore College (Delaware County, PA) 2422 ('19 = 2665)
- Fischer Greenhouse (New Castle County, DE) = 2343 ('19 =2673)
- Research & Education Center - Gorgetown (Sussex County, DE) = 2522 ('19 =2855)



Fusarium wilt symptoms in chrysanthemum. Photo credit: N. Gregory



Overwintering magnolia scale. Photo credit: B. Kunkel