

## INSECTS

August 21, 2015

Brian Kunkel Ornamental IPM Specialist

TULIPTREE AND MAGNOLIA SCALE are two soft scales that are very difficult to tell apart. Typically, host plant preference is an easy way to distinguish closely related scale species. Both species feed on tuliptree and magnolia trees but tuliptree scale occasionally feeds on lindens, and magnolia scale on Virginia creeper. Both species overwinter as second instars and resume feeding in the spring. Their feeding results in copious amounts of honeydew and sooty mold from July through August. Emily and I have been scouting the landscape recently and have only found swollen females so far.

Crawlers could be active now and it is not unusual for their crawler activity to occur this late in the summer. They are one of our largest soft scales and only have one generation per year. Ants, wasps, flies, and bees might be seen on or around infested trees taking advantage of the sugar-filled honeydew. Female tuliptree scales are grayish-green to pinkish-orange mottled with black and their crawlers are active from 2016 to 3212 [2860 peak] GDD<sub>50</sub>. 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] GDD<sub>50</sub>. One method to scout for crawler activity is to place double-sided sticky tape around branches with swollen females producing honeydew. The small dark-red colored crawlers become stuck when they try and crawl across the tape in search of new feeding sites. Weekly inspection and replacement when necessary will reveal when crawler densities are high. (Continued)

## DISEASES

Nancy Gregory Plant Diagnostician

INVASIVE SPECIES include plants, insect pests, and pathogens. Cooperative Extension personnel, Master Gardeners, USDA, State Department of Agriculture, landscapers, growers, and home gardeners may be the first to notice the unusual and invasive. Contact someone if you find something you don't recognize or something in greater numbers or in an unusual location. Early communication is key to detection!

MULBERRY WEED or hairy crabweed (*Fatoua villosa*) is an invasive exotic Asian species in the Mulberry family (Moraceae). First reported in Louisiana in 1964, the weed has spread to many Eastern States, as far north as Michigan and Delaware, where it was identified in 2013. It is also present on the West Coast, in Washington and California. Mulberry weed is an herbaceous erect annual with papery, heart-shaped, alternate leaves and densely pubescent (hairy) stems. The flowers are clusters produced in midsummer and fall, light green cymes with no true petals, and seeds (Continued)

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# What's Hot!

Delaware Invasive Species Council 2015 Annual Meeting, October 21, 2015, DE Ag Museum, Dover DE. Register at https://disc2015.eventbrite.com.



Tulip tree scale. Photo credit: Brian Kunkel



Mulberry weed. Photo credit: Nancy Gregory

# For more information

on pests & 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 pictures at http://sites.udel.edu/	

## UNIVERSITY OF DELAWARE

### COOPERATIVE EXTENSION

ornamentals/

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#### Diseases (Continued)

that are forcibly expelled. The spread of Fatoua villosa can be attributed to it being found in horticultural material and nursery stock. It is also likely to spread through purchased top soil that contains seeds. It grows easily in disturbed areas and is problematic in agricultural fields, greenhouses and gardens. Remove mulberry weed from garden beds or containers and discard in the trash; do not compost nearby. The plant produces great numbers of seeds, so it should be treated with herbicide or rogued out before it sets seed. A two to three inch layer of mulch can prevent most seed germination, as can pre-emergent herbicides.

Editor: Susan Barton

Extension Horticulturist

#### Insects (Continued)

Numerous natural enemies, including a predaceous caterpillar, attack both scale species but sometimes they are unable to keep scale populations suppressed. Horticultural oil, insecticidal soap, Distance (IGR) or Talus (IGR) are available for controlling crawlers of both scales. Imidacloprid or other neonicotinoids are available for use but apply earlier in the summer so there is enough time for the product to move through the plant. Use tree injections of emamectin benzoate, imidacloprid, or dinotefuran especially where traffic safety is a concern. You can apply pyrethroids during crawler activity; however they frequently have a greater impact on the natural enemies.



Honeydew drop. Photo credit: Brian Kunkel

