TPM/IPM Weekly Report EXTENSION for Arborists, Landscape Managers & Nursery Managers

Commercial Horticulture

SPECIAL PEST ALERT

June 11, 2025

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Pest Predictive Calendar Phenology Conferences

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Yellow Poplar Weevil: Outbreaks in nurseries Monitor your magnolias, sassafrass, tuliptree (yellow poplar), and sweet bay!

By: Paula Shrewsbury

Monday, June 9th, I was contacted by two nurseries in Frederick County, MD describing extremely high numbers of native yellow poplar weevil (YPW) adults, Odontopus calceatus (Coleoptera: Curculionidae), on magnolias and they were causing significant damage to the newer foliage. This is a new pest to me and as I searched for information, I found reports of YPW in recent days from VA, DC, and OH. This weevil is known to sporadically outbreak. In an article from Penn State Extension on YPW published in 2015, they reported extremely high densities of YPW in PA and the mid-Atlantic, and stated that the level of outbreak then had not been seen since 1968.

Integrated Pest Management for Commercial Horticulture extension.umd.edu/ipm

If you work for a commercial horticultural business in the area, you can report insect, disease, weed or cultural plant problems (include location and insect stage) found in the landscape or nursery to sklick@umd.edu

Host plants of YPW include magnolias, sassafrass, tuliptree (yellow poplar) and sweet bay. YPW's life cycle consists of one generation per year and YPW activity is reported to occur from mid-late May through mid-July. YPW overwinter as adult weevils in the leaf litter under their host plants. In the spring / early summer as the weather warms, adult weevils emerge and feed on the buds and newer foliage of their hosts with their chewing mouthparts, mate, and lay eggs in the mid-vein on the lower leaf surface. Newly hatched larvae chew into the leaf tissue and feed as leaf miners. Multiple leafminers can be found in a single leaf. Larvae pupate within the leaf mine. Adults emerge and use their chewing mouthparts on the end of their long "snout" to feed on

leaves (usually newer, tender leaf tissue), stems, and flowers resulting in crescent-shaped (more or less) brown etching in the tissue. Feeding results in leaf curling and distortion, and premature leaf drop. YPW are reported to cause the most damage during this time. Around mid-July or so YPW adults enter a period of aestivation (summer inactivity) and enter the leaf litter where they overwinter. Areas that are under drought conditions seem to suffer from YPW more.

What else do we know? As of now, I have only seen and had reports of adult weevils being active and their damage, and only on Magnolia in two nurseries. There are high populations of adults, and they are causing lots of damage, and the damage happens quickly.

Monitor hosts of YPW now! Magnolia species / cultivars appear to vary in the amount of YPW adult activity and damage they are receiving. It appears that varieties that still have tender newer foliage are getting it the worse than those with foliage more hardened off. Weevil adults are being seen on non-plant structures (ex. plant poles / signs) and other plants (ex. dogwoods near the magnolias – but I did not see damage on the dogwoods as of Monday).

What do we not know? I am not sure if the YPW adults we are seeing now are the adults that have emerged from overwintering, OR new adults produced this year that will hopefully go into their overwintering stage soon. Because I did not see any leaf mining damage or signs of eggs on the magnolias I looked at, I am leaning towards these being adults that just came out from overwintering. We will have to keep monitoring to determine this for sure.

Management: If you have YPW adults now and their damage, I suggest targeting the adults now to lower their populations and damage. I could not find YPW specifically listed on any chemical control products, though some list adult beetles. Pyrethroids, such as bifenthrin, have been shown to work on the adults. However, pyrethroids are very hard on beneficials and several parasitoids of YPW are known. Try a product that is easier on beneficials. I am not sure how effective it would be but chlorantraniliprole (ex. Acelepryn or Diamid T&O; foliar or soil applied systemic) might work on the adults and the larvae. See the resources below for other listed products.



Yellow poplar weevil, *Odontopus calceatus*, adult. Photo: M.J. Raupp, UMD



Yellow poplar weevil, *Odontopus calceatus*, adult on finger demonstrating the small size of the adult weevil. Photo: P.M. Shrewsbury, UMD



Yellow poplar weevil, *Odontopus calceatus*, adult on magnolia flower. Note feeding damage on flower petal on the right.

Photo: P.M. Shrewsbury, UMD

If you find yellow poplar weevil, please let us know (<u>pshrewsbury@umd.edu</u> and <u>sklick@umd.edu</u>). Please include the host plant, life stage, location and date. Send pictures if possible.

See the resources listed below for more information on yellow poplar weevil life cycle, damage, and management.

https://www.psu.edu/news/agricultural-sciences/story/yellow-poplar-weevil-makes-presence-known-pennsylvania-mid-atlantic

https://bygl.osu.edu/node/2486

https://content.ces.ncsu.edu/yellow-poplar-weevil

https://www.umass.edu/agriculture-food-environment/landscape/publications-resources/insect-mite-guide/odontopus-calceatus



Feeding damage on the leaf of magnolia by a yellow poplar weevil, *Odontopus calceatus*.

Photo: P.M. Shrewsbury, UMD



Feeding damage by adult yellow poplar weevil, *Odontopus calceatus*. Note it is the newer foliage that is damaged.

Photo: P.M. Shrewsbury, UMD



Yellow poplar weevil damage on a southern magnolia leaf found in Fairfax, VA, brought into a garden center. Photo: Terry Hershberger, Merrifield Garden Center

Conferences

June 17, 2025 (afternoon)

IPM Scouts' Diagnostic Session

Location: CMREC, Ellicott City, MD

Registration Information

June 18, 2025

Eastern Shore Pesticide Recertification Conference via Zoom

June 18, 2025

MAA Evening Plant Diagnostic Clinic

Location: Hood College, Frederick, MD

Registration Information

June 24, 2025

Stanton A. Symposium and Lab Dedication

Location: CMREC, 4240 Folly Quarter Road, Ellicott City, MD 21042

Co-Sponsors: University of Maryland Extension and Maryland, Nursery, Landscape, and Greenhouse

Association (MNLGA)

MNLGA is handling the registration for this symposium.

June 27, 2025

Pesticide Recertification Conference

Location: Montgomery County Extension Office, Derwood, MD

Registration information

July 24, 2025

MNLGA Growers Day at North Creek Nurseries

Program and Registration Information

September 11, 2025

MNLGA Field Day

Location: Raemelton Farm, Adamstown, MD

October 29, 2025

FALCAN Truck and Trailer Safety Seminar

Location: Urbana Fire Hall, Urbana, MD

Commercial Ornamental IPM Information http://extension.umd.edu/ipm

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