

## Entomology Weekly Review - June 14, 2023

Indiana Department of Natural Resources sent this bulletin at 06/14/2023 07:25 AM EDT



## Weekly Review for June 14, 2023

This informal report by the Division of Entomology & Plant Pathology is a commentary on insects, diseases, and curiosities division staff encounter on a week-to-week basis. Comments and questions about this report are welcome and can be sent to your respective Inspector.

[Our Website](#)  
[Inspector Territories](#)

### Announcements

Congratulations to Vincent Burkle, the new assistant director of the Division of Entomology & Plant Pathology (DEPP). This is a new position for DEPP, so there will be some adjustments to duties as we figure things out. Vince will remain the northeast area inspector for the time being.

Continuing with more staffing announcements, we are hiring for a [nursery inspector in the Vincennes area](#). If you or someone you know might be interested, we encourage you to apply.

**Jared Spokowsky (Nursery Inspector & Compliance Officer) - [Jspokowsky@dnr.IN.gov](mailto:Jspokowsky@dnr.IN.gov)**

This past week I had a number of calls regarding possible American foulbrood (AFB). Fortunately, none of them turned out to be AFB, but one of them was European foulbrood (EFB). EFB can cause similar symptoms to AFB in the form of spotty brood patterns and sometimes a strong “foul” odor. In this case there was not much of a smell but right off the bat I noticed a lot of twisted and discolored larvae.

I also didn't see much in the way of perforated cappings, which you see a lot in AFB. With AFB the larvae will die after the cell has been capped while with EFB the larvae almost always die before the cell is capped. If you suspect you may have a problem, take a twig or toothpick and scramble up the

contents of a diseased cell. If you can slowly pull the twig out and a string of liquid will “rope” out an inch or more then that is an indicator that you may be dealing with AFB. However, if the contents don’t rope out then you are most likely dealing with EFB.

Treating for EFB often involves feeding the colony and possibly giving some healthy brood frames to the colony to boost the population and stimulate cleaning of the hive. You can also treat with the antibiotic Terramycin, which will require a veterinarian feed directive (VFD) to purchase.

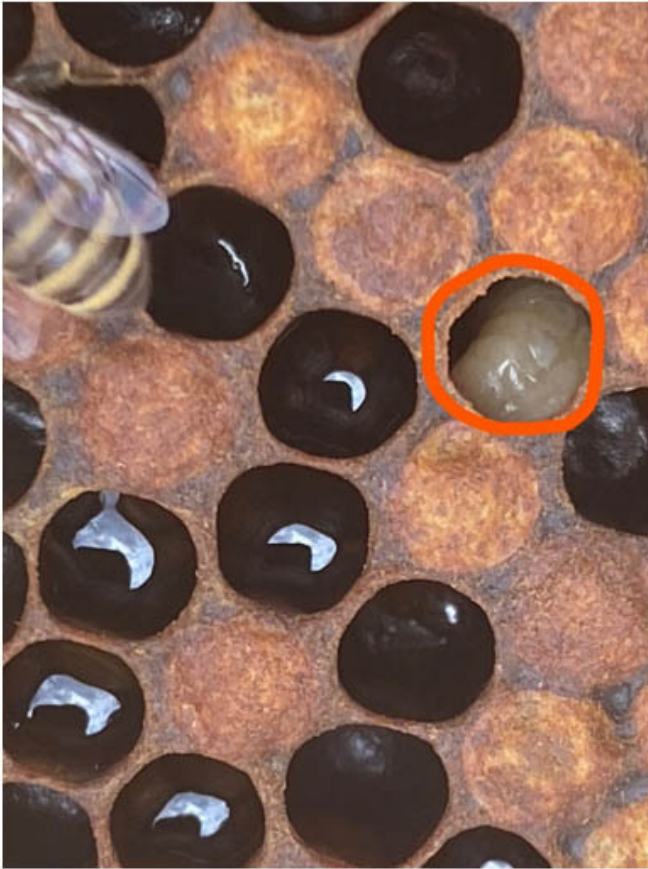


Photo 1 - EFB showing twisted larvae



Photo 2 - EFB showing off-color larvae and contaminated brood food



Photo 3 - EFB showing dead larvae slumped in the cell

**Vince Burkle (Nursery Inspector & Compliance Officer) - [VBurkle@dnr.IN.gov](mailto:VBurkle@dnr.IN.gov)**

Bagworms have hatched in Allen County. While inspecting last Thursday, June 8, newly hatched bagworms were found feeding on Black Hills spruce and white pine. The bags were about 1/8-inch long and very difficult to see. The optimum time to spray for bagworms is between hatch and the Fourth of July because caterpillars are small and can be managed with less product.

I also found hawthorn pod gall midge affecting the foliage on 'Winter King' hawthorn. The midges lay their eggs on the buds in the spring and the maggots live and feed inside the protective gall. The galls don't cause any serious damage to hawthorn, but heavily infested trees can have a lot of deformed leaves which can be unattractive.



Photo 4 and 5 – Bagworm and feeding damage



Photo 6 – Hawthorn pod gall midge



Photo 7 – Hawthorn pod gall midge maggot

**Ren Hall (Nursery Inspector & Compliance Officer) - [RHall@dnr.IN.gov](mailto:RHall@dnr.IN.gov)**

A couple weeks ago I found some yellowwood trees with an infestation of two different scale insects on the bark: calico scales and Japanese maple scales. I also found flatheaded appletree borer damage on a dogwood with significant dieback of the tree. There were several areas on the trunk of this tree where feeding damage from the larvae and exit holes from the adult beetles were found. Stressed trees are more prone to flatheaded appletree borer damage and damage can be severe enough to girdle the tree.



Photo 8 - Scale insects (calico scale and Japanese maple scale) on yellowwood



Photo 9 and 10 - Flatheaded appletree borer on dogwood

**Kallie Bontrager (Nursery Inspector & Compliance Officer) - [KBontrager@dnr.IN.gov](mailto:KBontrager@dnr.IN.gov)**

I had a chance to do some nursery inspections this last week. Aphids were in abundance on many plants including crabapple, spireas, willow, and monarda to name a few. I found a population of spiny witch hazel gall aphid on its typical host, river birch. Oyster shell scale was causing damage on weeping willow, quaking aspen, and red maple. Finally, I found a unique pest/host combination of what I think is fall webworm on hosta.



Photo 11 – Oystershell scale



Photo 12 – Spiny witch hazel gall aphid on river birch



Photo 13 – Possible fall webworm on hosta

**Kristy Stultz (Nursery Inspector & Compliance Officer) - [KStultz@dnr.IN.gov](mailto:KStultz@dnr.IN.gov)**

I continue to see lots of blue spruce with *Rhizosphaera* infections. If you're growing field stock or even if it's just in your own front yard, you want to manage this disease. If you don't treat or manage it in other ways like removing heavily infested trees and possibly pruning out infested branches to reduce inoculum, it will continue to spread and eventually you'll lose the healthy trees as well. I've seen a lot of good-looking trees turn into skeletons because the original infected tree wasn't removed.

With all the cottonwood seeds falling around central Indiana, I had to look a little closer when I saw



some cottony white spots on eastern white pine trees. Upon closer observation, it became obvious that it was actually pine bark adelgid. Fortunately, in this case, treatment probably isn't warranted since trees are not showing any signs of decline. There are several natural predators like lady beetle larvae that feed on the adelgids in warm weather. That being said, the trees will still be monitored.

Other lovely things I saw this week include whitefly and aphids aplenty. Whiteflies are sap suckers that feed on the underside of leaves. Larger populations can cause yellowing of leaves and eventual death. They also excrete honeydew like their cousins, the aphids.



Photo 14 - Unmanaged infected material is a source of infection for healthy trees

**Ken Cote (Nursery Inspector & Compliance Officer) - [KCote@dnr.IN.gov](mailto:KCote@dnr.IN.gov)**

(Report from June 6 – ed.) Conditions are getting very dry in my region. I have only had 0.15 inches of rain in the last two weeks at my house. The relative humidity has also been surprisingly low. Many plants are just starting to recover from the spring freeze and winter injury. However, the additional stress being caused by the lack of rain is setting up many plants for secondary pest and diseases. Boxwoods in my region have suffered serious winter injury and, in some cases, do not seem to be growing out of the damage. I have not encountered any boxwood blight but have encountered symptoms that look similar to it. Purdue University has confirmed *Fusarium* cankers, *Volutella*, and *Macrophoma* leaf spot on samples I have submitted to the lab.



Photo 15 - Declining boxwoods with *Volutella* and winter injury, not boxwood blight

Some atlas cedars are beginning to grow out of their winter injury, but many have not made it. The cultivar 'Hortsman's Dwarf' did not make it on my property. I am starting to see feeding injury from red-headed flea beetle. Look for Swiss cheese like damage on foliage. Recently I found viral symptoms on peonies and bleeding hearts. The pathogen was confirmed as Tobacco Rattle Virus (TRV) by Purdue University. This is a frequent problem I find on many types of perennials. I have not seen as much Hosta Virus X (HVX) lately. I have seen some ambrosia beetle activity on stressed plants and evidence of infestations on flowering dogwood and Yoshino cherry. Look for small, perfectly round exit holes that are 1-2 mm in diameter. You may also see tube like frass spikes coming out of infested trees. Ambrosia beetle can attach to both healthy or stressed trees and there are numerous deciduous hosts.



Photo 16 - Red headed flea beetle injury



Photo 17 - Confirmed TRV on bleeding heart



Photo 18 - Probably ambrosia beetle exit hole on Yoshino cherry

**Angela Rust (Nursery Inspector & Compliance Officer) - [ARust@dnr.IN.gov](mailto:ARust@dnr.IN.gov)**

I have included a photo this week of suspected chemical injury to geranium. This can happen by using the wrong tank mix, not having contents well mixed, or when there are poor drying conditions and droplets concentrate as they evaporate. The other two photos show horseradish with a confirmed potyvirus. The chlorotic ringspots, chlorotic mottling and discoloration are common symptoms of viral infections. This genus of plant viruses is a large one and a majority of these can be spread by aphids. The best means of management is to destroy infected plants since many of these viruses have a large host range and can cause poor plant growth. This may have significant impact on yields of vegetables and fruits.



Photo 19 – Suspected chemical injury on geranium



Photo 20 and 21 – Potyvirus on horseradish

**No reports this week**

**Megan Abraham (Division Director & State Entomologist) - [MAbraham@dnr.IN.gov](mailto:MAbraham@dnr.IN.gov)**

**Eric Biddinger (Nursery Inspector & Compliance Officer) - [EBiddinger@dnr.IN.gov](mailto:EBiddinger@dnr.IN.gov)**

**Eric Bitner (Nursery Inspector & Compliance Officer)** - [EBitner@dnr.IN.gov](mailto:EBitner@dnr.IN.gov)

**Phil Marshall (State Forest Health Specialist)** - [PMarshall@dnr.IN.gov](mailto:PMarshall@dnr.IN.gov)

**Caydee Terrell (Nursery Inspector & Compliance Officer)** - [CTerrell@dnr.IN.gov](mailto:CTerrell@dnr.IN.gov)

**Diane Turner (Nursery Inspector & Compliance Officer)** – [DTurner2@dnr.IN.gov](mailto:DTurner2@dnr.IN.gov)

---

Having trouble viewing this email? [View it as a Web page.](#)



---

[Unsubscribe](#) | [Help](#) | [Contact Us](#)

Powered by



[Privacy Policy](#) | [Cookie Statement](#) | [Help](#)