

Summer Pests

Tue, 7/20 12:01PM 16:01

SUMMARY KEYWORDS

tree, japanese beetles, ash trees, laura, populations, sample, insecticides, aphids, problem, ash, insects, pests, honeydew, insect, ant, plant, treatment, feeding, emerald ash borer, bit

SPEAKERS

Speaker 3, Christa Hartsook, Laura Iles

- C** Christa Hartsook 00:15
Hello, and welcome to the Small Farms Podcast, a production of the Small Farms Program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life. In this episode I visit with Laura Iles, Director of the Plant & Insect Diagnostic Clinic at Iowa State University, and discuss summer pests. I'm Christa Hartsook, Small Farms Program Coordinator, and we hope you enjoy the show. Laura, welcome. Thanks for being back.
- L** Laura Iles 00:44
Thank you for having me.
- C** Christa Hartsook 00:45
So today, we're talking about some problematic summer insects that are out there. And I know you're getting a lot of calls at the clinic. Let's start out with Japanese beetles. We're kind of coming up on the season. How can we identify when we are seeing these pests in our area?
- L** Laura Iles 01:03
Right, so Japanese beetles are a scarab beetle, they look a little bit like June beetles. In general, they will be iridescent. And the key is though will have like about little white dots along the side. But to be honest, you know, usually Japanese beetles are in a group and usually they are causing quite a bit of feeding damage. So usually, it's not hard to identify them.
- C** Christa Hartsook 01:27
You're going to know when you've got them

L Laura Iles 01:29
Usually, you know. If you're asking, you might not have.

C Christa Hartsook 01:33
So let's talk a little bit about that the image itself, Laura, what are we going to see in our plants?

L Laura Iles 01:38
Right, so Japanese beetle adults, which are what we are seeing feed on a lot of different species of plants, and they can also cause harm and you know, soybeans, field crops, they can feed on corn silks, so it's certainly other specialty crops, grapes, things like that in the home landscape. You know, we get a lot of phone calls. Linden trees are one of their favorites, birch trees, bald cypress and they're kind of not picky, a lot of the crab apples, things like that. So you really see these kind of lace, lacy-like damage, they usually don't eat the leaf veins until it will look very lacy, and they will cause a lot of damage pretty rapidly.

C Christa Hartsook 02:19
So let's talk then about control, Laura, what are options or what can we do.

L Laura Iles 02:24
Right. So the control options are there's and it's kind of hard to predict, you know how bad they're going to be, you know, is a season going to be worse than others. The only benefit of a drought is Japanese beetles spend their immature stages under the soil and things like drought and very cold freezing temperatures in the winter can reduce populations. So we're really not sure how high of populations we're going to see this year. So there's a little bit of wait and see and they might not be a problem for you. Hand picking is always mentioned. That's okay. And a small number of you know, maybe plants in your garden that becomes pretty much a full time hobby at that point, just living with the damage for most full sized trees. You know, even in field situations, it's often kind of isolated in certain areas. And then unfortunately, insecticide sprays are pretty much our only option. We have systemic insecticides can be used on non-fruit trees and things like that, you do have to read those labels correctly. Things like linden trees, which are a big favorite of the Japanese beetles - products available to homeowners aren't allowed to be used on linden trees, because they're big pollinating trees as well. So we always have to keep in mind that these systemic insecticides can affect pollinators as well.

C Christa Hartsook 03:39
Absolutely a good point for our listeners to remember. Laura, if we move on a little bit, I know emerald ash borer continues to kind of expand across the state, where are we at in terms of that expansion? And what kind of damage do they do to our ash trees?

L Laura Iles 03:55

So yes, they are continuing to expand, I should have looked up, we're either at 77 or 78 counties of our 99 counties now infested. It's really just the northwest corner of Iowa that's not infested yet. And certainly, many of us are currently observing, you know, the damage they cause, which is that they kill ash trees. And I know here in central Iowa, when you drive around, if you see a dead tree, it's probably an ash tree. And that's probably due to emerald ash borer. So these insects start feeding at the the top of the tree and it takes several years for them to kill a tree. So they start feeding at the top and killing those limbs. Especially with the green ash, you'll see a lot of leaf output kind of right in the middle of the tree. I call it kind of the ash bush at that point. And so you see a lot of leaves right there, or the ash is just trying to put out leaves and photosynthesize and do what it needs to do, but usually three to four years to kill a larger tree and so they really they have such high populations that they kill any untreated ash trees.

C Christa Hartsook 04:58

So Laura, let's talk about that a little bit. Are there options for us to kind of save those trees? Or is removal early on even before an infestation really the best method of control?

L Laura Iles 05:11

Right? So that's a great question. And there's not that there's no easy answer to that. So treatment is, is very effective. So you can treat smaller trees less than 20 inches diameter at breast height with insecticides that you can pour around. As trees get larger, you will work with a professional arborist to do injections. And now the price of that can range but you know, roughly, you know, \$10 per diameter inch, but it varies a great deal across the state. So the treatments are effective, but depending on what they're using, it has to be done usually every other year. And so that cost every other year does add up, and we don't we're a long ways away from low populations of emerald ash borer, we can start backing off on those insecticide treatments maybe stop, I don't know, it's just never going to be a time when we're not going to be having to treat those trees to protect them. So it becomes you know, it's a little bit when it's a personal tree, it's you know, what, what does this mean, to my shade? To you know, does it have personal meaning to me? You know, those sorts of things are things are out weighing against kind of the cost. Again, we're really talking like healthy trees, if the tree is otherwise in really good health, if the tree is already in poor health or having branch diabetic, you know, we do lean towards that it may be a sign to be a good candidate for treatment. But when you move into, you know, cities having to make decisions, you know, golf courses, other places, if you own several hundred ash trees, your your math becomes different because initially treatment is cheaper, but overall long term treatment will add up. So oftentimes, it's a kind of a mixed thing. Some trees will be initially removed, but they were in poor health. And then you can get new trees established to maybe treat some trees for a while to kind of protect them, protect that canopy, whether or not you're planning to remove them at some point. But yeah, there's really no one answer to that. And unfortunately, that's just not a problem that's going to go away.

C Christa Hartsook 07:17

Laura, this might be a little bit of a silly question, but does the emerald ash borer only affect ash trees and all types of ash tree?

L Laura Iles 07:25

L Laura Iles 07:25

Right, so all types of ash tree so green ash, autumn purple ash, are very common ash trees in Iowa, all species of ash, also the white fringe tree, which is just it's a lovely plant, but not terribly common in the landscape. And I do see some of them. So that is also reported host. Mountain Ash is not related to the ash are not affected. So really, yeah, those those ash trees.

C Christa Hartsook 07:50

Okay, awesome. Let's move on to another popular pest that we seem to find across Iowa in the summers. And I know it's been abnormally dry. So that kind of gives the impression that aphid pressure is just higher this year than normal. Are you seeing that? Is that the case?

L Laura Iles 08:08

Yes, we're getting a lot of reports of well, mostly even honey bees. So even tiny little insects, we've got many, many different species, they feed on, you know, all sorts of plants in our yard. But people usually notice it when they're feeding on their trees. And they notice this because they produce a lot of repellent. Honeydew, which is a very polite term for insect poop, that basically rains down out of the tree. So you think about them, they put their little mouthparts into the tree, it's like a little straw, you're sucking in all that that tree sap, they're trying to get out those sugars but they have to consume a lot. And there's a lot of that honeydew produced which, you know, falls to the ground, falls on other leaves. It'll be a really shiny if you've ever had a houseplant with, you know, aphids you certainly know this shiny, and then you can get city mold on it during kind of black. So yeah, that's kind of what we observed when we have an aphid problem.

C Christa Hartsook 09:06

And so do you think the dry weather is contributing to that? Are we just adding more pressure than normal?

L Laura Iles 09:13

Yeah, so that's a little bit of kind of two parts of the dry weather. So yes, it you know, rain and wind and things like that knock aphids off the trees and help produce populations that way. But also rain really helps just wash off at honeydew especially before city mold gets going and so I think it's like a little bit of a two prong sword with the dry weather where we really noticed the aphids more.

C Christa Hartsook 09:37

Sure, sure. So what are our control methods there, Laura?

L Laura Iles 09:42

Right so aphid control for the most part in trees and things like that a large tree there's really no control option. Trying to spray large tree is very difficult. There's a lot of natural enemies all the lady beetles,

lacewings, parasites, and things like that will help get populations under control so certainly a large tree, we recommend you don't park beneath it, it can very difficult to get honeydew off your car and I understand it's, you know, irritating if you have, you know, your back porch or something like that underneath a tree, but usually you do get some rain and wind and things like that probably be reduced. In a garden situation, on a smaller plant, so face insecticides work well, and things like that, and you know, usually aren't quite as harmful to the natural enemies, all those lady beetles and aphids, so and you know, I enjoy them on my ornamental plants. It's like a whole little world because you have the aphids and have predators and you know, see the person who bought so it's like a whole ecosystem. People will stop and just kind of watch them.

C

Christa Hartsook 10:48

Sure, sure. Observe nature at it right out your back door there. Yeah, Laura out of curiosity, does the dry weather kind of contribute then to other insects? Kind of create those optimal conditions for them?

L

Laura Iles 11:01

Right, so one of the other insects, it's a mite, the two spotted spider mite is often we will get big outbreaks in dry, dry weather. And it's actually because populations are usually controlled by the fungus, and then dry weather. We don't get that that fungus doesn't do well. And then we'll get very high populations of the two spotted spider mites. So you know, and white flies are another insect pests that we tend to associate a little more with greenhouses and things like that. But we're getting reports of white fly on, you know, some of the vegetable crops and things like that. So yeah, we'll start to see some of those pests a little bit more, you know, and sometimes they are really influenced by the weather, and we'll see pretty typical. But yeah, insect populations are always hard to predict.

C

Christa Hartsook 11:49

Yes, absolutely. I noticed this year in particular, I'm having an ant problem. Have you heard a lot of calls and complaints on that?

L

Laura Iles 11:56

You know, we just recently got a lot of kind of interest because the pavement ants swarmed. And they tend to kind of swarm at the same time. So swarming is when like an ant colony is reproducing. So, an ant colonies, they're clones are all sisters, and they're all basically the same. And so they reproduce by making kings and queens that literally leave and start a whole new colony. And so it's a lot of winged ants, and they're very attracted to lights at night and things like that. And so yeah, I've definitely observed, you know, we've gotten a lot of samples of wing dance and things like that. And so I had the unfortunate experience of having my garage door open pretty early in the morning and the lights on and and all over in the garage and on our cars and things like that it was a little kind of apocalyptic.

C

Christa Hartsook 12:46

It was a little much to deal with that early in the morning.

L Laura Iles 12:49

Yeah, 4:00am is not when I want to deal with that.

C Christa Hartsook 12:51

No, no, not at all. Laura, I know, we've talked about it before, but let's kind of give our listeners a reminder about the Plant and Insect Diagnostic Clinic and what you can do there.

L Laura Iles 13:01

Right, so the Plant and Insect Diagnostic Clinic is part of Iowa State University's Extension program. So we're an extension unit. And we're where someone if they have a question about why their plant is dying, a disease, they need, you know, corn or soybean tested for, you know, nematodes, you know, what is this insect? Now, we're kind of that that place to come to, and that we can help, you know, often times we solicit photos from people, you know, tree problems and things like that we start with photos. And then we can have a sample submitted, many insects and most diseases, you need a sample and then it comes into the lab. And then we of course have, you know, the microscopes, the thing that we can see the features that we need to make those identification, the, you know, ways to play and isolate the fungi and the bacteria and things like that. And then we provide that diagnosis, what the disease is or the insect is, and why we think it's causing a problem, what are the management options, you know, this year and then in the future to try to prevent that problem?

C Christa Hartsook 14:05

Absolutely. It's a great service. And I know one I've taken advantage of for some different tree issues that we've had over the years. So I appreciate the fact that it's here and it's readily available. How can clients then get ahold of you? Or what is the process for sending in a sample or contacting?

L Laura Iles 14:22

Right. So probably the best place to start is at our website, clinic.ipm.iastate.edu, and we have information there on how to submit different samples. We have lots of photos of like, what's a good sample and what's a bad sample? You know, and certainly give us a call 515-294-0581 because depending on the type of plant or the problem that we suspect it can be pretty different samples so we like it when people get in touch with us if they're unsure what they need to submit, so we get a good sample and a good answer as quickly as possible.

C Christa Hartsook 14:57

Absolutely. Is there anything else that we need to talk about Laura, or anything else you want to make sure we let our listeners know?



L Laura Iles 15:03

I think, you know, as the summer goes on and with insect problems in particular, you know, it's always a bit especially with the ornamentals, you know, assess do I need you the pesticide on this, you know, will this improve the look of the tree, of the plant, and, you know, we just always say, if you're not sure what the problem is, before you do a treatment that may not be necessary, you know, get in touch with extension, it's not just us in the diagnostic lab, you know, the county offices, also have great expertise, you know, really, if you're not sure, reach out that someone will be there to help as best as they can.

C Christa Hartsook 15:41

Awesome. Thanks so much for being on Laura. We appreciate it.

L Laura Iles 15:43

Thank you.

S Speaker 3 15:44

This program is brought to you by Iowa State University Extension and Outreach. This institution is an equal opportunity provider for the full non-discrimination statement or accommodation inquires, go to www.extension.iastate.edu/diversity/ext.