Season 2 Episode 7 – Crops Roundtable

July 1, 2022

Speaker 1:

The Alabama Crops Report Podcast, your trusted information source for Alabama agriculture.

Scott Graham:

Hey, everybody, welcome in to another episode of the Alabama Crops Report Podcast. We've got the entomology plant pathology department here, extension department here. We're going to do a little different episode this week. We're going to kind of do a round table discussion, just talking about insect pest, diseases of corn, cotton, maybe peanuts and soybean as well. Just give you an update of what we're seeing, the phone calls that we're getting right now. Just try to keep everybody up to date. So I'll let everybody go around and say who they are and then what their responsibilities are. So I'm Scott Graham, cotton, soybean, peanut entomologist.

Katelyn Kesheimer:

I'm Katelyn Kesheimer extension entomologist and I work in grain crop. So corn, wheat, and sorghum. I also do pastures and hay fields as well as turf, stored grain, and hemp. So a lot of bugs.

Amanda Sheer:

And I'm Amanda Sheer I have a mouthful just like Caitlin, but I work on the disease side. I do cotton, peanuts, small grains, and I also have ornamentals in turf.

Ed Sikora:

And I'm Ed Sikora extension plant pathologist, working with corn and soybeans. I also do fruit and vegetables.

Katelyn Kesheimer:

And you'll notice that Dr. Sikora is a repeat guest. We had him on a couple times before, you may remember was the tallest man in Illinois.

Ed Sikora:

In Bonneville.

Katelyn Kesheimer:

In Bonneville, Illinois. So welcome back, Ed.

Ed Sikora:

Thank you, ma'am. Appreciate it.

Scott Graham:

Tallest man in this room too.

Ed Sikora:

I think.

Scott Graham:

As we're sitting here, as we're recording, today's June the 13th. So we've got projections now for basically it's potentially the hottest week of the year, certainly to date, but maybe all year, hopefully all year anyway. But so that can place some effect with diseases that we're seeing, insects that speeds them up and stuff like that. So we wanted to come in and kind of talk a little bit about that and we'll start with corn and what Ed's seeing around the state, some, some updates and things that he's got for us. So Ed, what we need to be looking for right now?

Ed Sikora:

Thanks Scott, one disease I'm most concerned with is Southern Corn Leaf Rust. Bob Kim, right over in Georgia, they've picked it up in three or four counties in south Georgia. It's also been spotted in north Florida. So I'm concerned about growers and especially in southeast Alabama and south Alabama in general, that's a significant disease. That's a tropical rust blows on in, and we've been picking it up, at least they've been picking it up, about a week to two early than they have in past year. So growers with corn reaching tasseling or, about that point need to consider a fungicide about this time to protect our crop, because it can be a significant problem.

Scott Graham:

And so is that primarily in the southern part of the state? Are we worried in southeast for southwest or?

Ed Sikora:

Right now it's in south Georgia, north at Florida. So I'm most concerned about that wiregrass region, where we have corn, but weather conditions in the Mobile area, Baldwin county could also be under alerts. We've seen rust there over the years. Central Alabama, north Alabama, I'd say right now they could kind of like a wait-and-see type scenario. I haven't seen it yet in Alabama, but that doesn't mean it's not there. So, growers, I would say with corn at tasseling or near that growth stage, irrigated corn would be at a higher likelihood to get it. And usually, single fungicide application around tasseling or just a little bit past that point would be good. A lot of good fungicides out there to use, hopefully, growers have scouts or are using a scout or scouting their fields looking for this problem.

One problem is, Southern Corn Rust is a disease that we'll normally see mid to upper canopy and it causes, it gets its name rust, because you had a rust-type spore. It reminds me of your shirts here, these orange pustules on the upper leaf service, but it can be confused with Common Leaf Rust, which causes reddish-brown pustules on the upper leaf surface and the lower leaf surface. And that's usually in the mid to lower canopy and they can be easily confused in the field and oftentimes you need a diagnostician to separate them out.

Scott Graham:

So Southern Rust is in the upper portion of the canopy, you said?

Ed Sikora:

Central to upper proportion.

Scott Graham:

So they're both central to upper proportion, or did I get confused?

Ed Sikora:

You got confused. Southern Rust would be in the mid to upper canopy. Common Rust would be in the lower canopy.

Katelyn Kesheimer:

And what did you tell me last year when I saw some potential rust, you said to rub it off and it made a mark on my shirt, then it's rust. So that apply to both Common and Southern Rust? If the spores come off.

Ed Sikora:

Yeah, that's right. That's right.

Katelyn Kesheimer:

Is that a good tool for people to at least get in the ballpark of a rusty sort of situation?

Ed Sikora:

It's helpful. If you have a white shirt on, you rub it on your shirt, you could see that the rust pustules on your shirt. Give you some idea that you might need to call somebody. I wouldn't go with that Southern Rust. Because you might have a dirty leaf.

Scott Graham:

In terms of fungicide choice or control. Is there a difference between the two? Is it important to know which rust you have for controls or?

Ed Sikora:

Excellent question. With common rust, it's not one that we need to spray for. Most of our hybrids are resistant to it. So when you see it, it's sort of like, ah, we got Common Rust. You're going to see that every year. But with Southern Rust, that's the one where you need to protect because the disease goes crazy. I mean you could see a hundred-bushel loss on high-yielding corn. So if you have a crop that's going to yield well that you want to protect, you need to think about a fungicide. I'd go with a fungicide with a dual-mode of action. Some of the products, I have a little list here, but things like Trivapro, Headline AMP, Veltyma, Aproach Prima, Stratego YLD. These are all good products applied in a timely manner will give you control. And there's among others that are available. And sometimes depending on weather conditions a second application, maybe three weeks later might be necessary, especially if you want to protect a solid crop.

Katelyn Kesheimer:

Can we talk a little bit about tank mixing with a fungicide and insecticide because as we're approaching tassel, I imagine we'll have to make some stink bug applications. And can we tank-mix insecticides with fungicides at this growth stage that will help control both stink bugs and rust?

Ed Sikora:

That's a really good question. I hope you could answer

Katelyn Kesheimer:

Oh yeah. The answer is yes. I think, no, the answer is yes. And I just wanted to talk about that being a possibility because as we are approaching tassel across the state, we're harvesting wheat and what that means is we're taking away all the stink bugs current homes and wheat, and now they're going to move over into corn. And so I've started picking up some stink bugs, especially in the southern part of the state. And so tank mixing at tassel, your fungicide plus insecticide can save you a pass through the field to control stink bugs.

Ed Sikora:

I think that's always a good reason to read the label.

Scott Graham:

So Ed, you mentioned that you may need a follow-up application a couple of weeks after your initial spray. Is that something where you're just still seeing rust in the field and I'm a bug man, right? So I'm very much see bug, kill bug, come back bug, still there, spray again. Is that how this is with rust? Are we going to eliminate it from the field with a spray? Do you have a percent control you're looking at and then how do I know I need to treat again?

Ed Sikora:

Yeah, it's a wandering question I guess. And I have a wandering answer for you, but it's normally about three weeks later, depending on what project you use first. If you still have high disease pressure in that field or a neighboring field, you might want to come in with a second application. I would go with a cheaper product just because of prices of various inputs this year is tough. So I'd go with a cheaper product two to three weeks later, depending on the first product you use. And it might be more related to weather conditions if we have a lot of moisture, rainfall, if you're irrigating, you might want to go with that second application. Again, it's sort of up to the grower depending on what that crop is worth to him.

Scott Graham:

Sure, sure. And speaking of looking input costs and stuff, diesel fuel obviously has gone up a lot so far this year. So Katelyn, as we know, corn is basically a trap crop for us. So is that a good time that pre tassel time to throw in insecticide for stink bugs?

Katelyn Kesheimer:

Yeah, now that would be a great time to think about stink bug control. So across the state, we are harvesting wheat, which means we are pushing all the stink bugs into the closest corn fields. And so even if you cannot see the stink bugs, there's a very good chance that they're there in your field. If you've just harvested wheat or your neighbor has. And this is a great time before corn hits tassel and we do a lot of damage from stink bugs, is to throw an insecticide with your fungicide application. And at this point, I'm way less concerned with what you spray. Just the fact that you are spraying on time and getting good coverage for those stink bugs that are hiding in the leaf collars. So your average rate of any cheaper generic pyrethrin will take care of stink bugs at this stage.

Scott Graham:

And one thing you mentioned there, which we see in cotton too, is stink bugs are hard to find. I mean, they're very difficult to find in any field really. And maybe this isn't good IPM, so maybe our guy will cut this out, I don't know. But we pretty much, there's a very, very high likelihood if we spray corn in Alabama around tasseling, we're going to see a benefit out of that.

Katelyn Kesheimer:

Yes, absolutely.

Scott Graham:

And like I said, that may not be IPM to not scout news thresholds, which y'all have a new threshold for it. And it's very scientific and confusing to me.

Katelyn Kesheimer:

And I will say as much as we have thresholds and practice IPM stink bugs are very, very sneaky in the field. They hide in the leaf collars. They drop down to the field when you're scouting for them. I've scouted extensively for stink bugs and I will see zero and then see feeding damage at the end. And same with growers. They'll tell me they live in their corn fields all summer. Don't see a single one. And then they see that very characteristic kernel damage once the corn develops. And so if you have the budget and you're going out with a fungicide, then it will make good sense to throw in a cheap pyrethrin throw to take care of stink bugs.

Scott Graham:

Just a funny aside, if you remember last year, we had our meeting with our, all the entomologists across the US. And some of our colleagues had decided that stink bugs leave the field during the day and they come back in and they're only in there at night. And that just goes to show how difficult they can be to find in the field. So really if you haven't sprayed by tasseling, I think it helps. And part of why I'm so pro that, is I can't prove it, but it's got to help cotton as well. All, all these things I mentioned when I kind of set this up, that corn is a trap crop, and I meant that kind of jokingly, but it really is for cotton. 95% of the stink bugs, probably that we've got in the state are going to move from cotton, from corn into cotton. So if we can do a good job of killing them in corn now, maybe that relieves some pressure off of us in cotton later in the year.

Katelyn Kesheimer:

I knew that's where you were going with this. So if I can do my job in corn, then your job in cotton might be a little bit easier.

Ed Sikora:

Yep. With the Southern Rust, some of these corn diseases, I mentioned spraying at tasseling or shortly thereafter, but you want to get ahead of the disease. So it has to be before the disease shows up or shortly thereafter. But if the disease is already there and you're trying to attack an establish disease, it's going to be problematic, probably like with stink bugs and some of your other insect problems, I would say.

Amanda Sheer:

And I was actually going to ask you that Ed, because especially with cotton diseases, when we get later in the season, like with target spot, when you have more than 25 to 30% defoliation, you're not going to be able to

rescue that crop with a fungicide. So I was curious with rust, if you let it go too long, you're not scouting, you're probably going to end up in more trouble than anything.

Ed Sikora:

I've seen that a lot with soybean rust. We're not talking soybeans yet, but that's my favorite disease. But when we see it halfway up to canopy, I just tell the growers don't spray, because you're just throwing dollar bills into the field and not going to get any bang for your buck.

Amanda Sheer:

This is not the year to do that.

Ed Sikora:

No, no. What about cotton?

Amanda Sheer:

With cotton? We're still pretty early. So you know, not as far along as corn, but you know, some of them have already gone in the ground were probably even 40 days to 45 days after planting in some areas or even longer. The only thing that I've really heard since it's been dryer, it's been hot, it can be a problem in irrigated cotton as well, is fusarium wilt. It basically attacks cotton at any stage. And at the seedling stage, it may just show up as like a sudden wilting of the leaves. It'll attack the roots. It's a soil-born pathogen. So it affects that water, nutrient uptake. And unfortunately, if you're seeing it right now, there's not much we can do for it. It's just planning for next year. Because, the furrows already closed. You kind of want to minimize nematode pressure, because just any damage to those roots just increases your risk for fusarium.

And crop rotation, so if you're already seeing pressure with fusarium wilt, it only really goes mainly the cotton, but it can hang out in the soil for, for several years, it's pretty stable. So you really want to rotate next year away from cotton, even going into peanuts or corn, any other crop essentially will really help. But unfortunately, if you're seeing a lot of stand issues, sometimes if it's excessive, you'll have to replant. So it's kind of doom and gloom in cotton right now. If you have fusarium wilt, unfortunately it's not like rust where you can kind of rescue it with a fungicide.

Scott Graham:

Do you have much experience with seed treatments? Do they provide any control or is this something we've got to kind of plan? Because you said plan for it in the future and use infer or fungicide.

Amanda Sheer:

So it's mainly doing infer nematicides, seed treatments, but it's mainly just using clean seed. So it can be transmitted into a field via seed. So you want to make sure you have good quality seed going into that next field

season. So, oftentimes those premium-treated cotton seeds will do really well. If there's any growers that save seed at all, if it's been infected with fusarium, you definitely don't want to use it again next year.

Scott Graham:

You know, on the insect side it's been a really heavy thrips year. Still getting calls on thrips. This morning, in fact about, "I got some cotton that's up to the fifth or sixth true leaf stage. Do I, should I spray it?" And typically we'd say no, but this year we have seen fields, both research plots and commercial fields with the seed treatment that I would've sprayed for thrips at the fifth or six true leaf stage, which is very, very uncommon, just been a phenomenal thrips year. With that, most of our app plant treatments really haven't provided the control that we need. But we've got some cases where we've pulled seedlings out of the field, in a commercial field and taken them into the lab and counted thrips. And our threshold is one to two per plant and we're finding 30 to 40 per plant.

I mean, you really can't expect hardly anything to stand up against that. So just phenomenal thrips pressure in some places. We're starting to get into square now for a good bit of our cotton. So we're kind of turning, hopefully turning the page to plant bugs so far have not been as bad as they were last year. We have gotten a couple of reports the last week about plant bugs moving in the fields. But really most of the folks we're talking to when we asked they haven't really started seeing them yet. So still trying to get folks to monitor square attention, make sure we're maintaining at least 80% of the squares on the, in the upper two or three nodes of the canopy. But that's, seeing some spider mites here and there with this hot weather we've got now, there's really potential for them to blow up on us. So that's another reason not to spray if we don't have to because you can, you can cause issues there, but that's pretty much what's been going on in cotton from an insect side.

Amanda Sheer:

Yeah. And just to add to that, with the hot temperatures you mentioned with spraying, I've seen a lot of herbicide damage where they're trying to control for leaves. So a lot of burn in addition to that thrips damage. And so it's just kind of a perfect recipe for disaster right now.

Ed Sikora:

Amanda, can I ask you another question? Scott mentioned thrips and you work with peanuts. Are, are you seeing an increase in tomato spotted wilt virus on peanuts? We're seeing it on tomatoes in the wiregrass area. I was just curious if it's a crossover.

Amanda Sheer:

So I haven't done my thrips ratings yet, but I would imagine, so Scott may be able to mention about thrips flights, if we have a year like we did last year, where we have heavy pressure, I imagine we're going to start seeing some stunting, maybe some chlorosis of some of those leaves. But then a lot of the symptoms won't show up till a little bit later in July and that's where we'll get kind of a clearer picture, but I don't know how much damage you're seeing in peanuts right now.

Scott Graham:

So we've got several trials out this year. If you look at the peanut RX model, which gives you your risk of planning, of infection of the virus. Earlier planning dates you're at a much higher risk. And our April, late April planted peanuts were just hammered with thrips. And my guess is we started to see a little bit of virus in it. And my guess is in the next week or two, we're going to see a lot of virus in those plots. We got a test where we're looking at planning dates and varieties. And as our planning dates get later, the thrips pressure was much lighter. In fact, we planted our last one, two weeks ago. So, we'll see what that one looks like. But you know, we had a lot of thrips this year in peanut fields and if we didn't Thimet is the only product that's really been able to reduce incidents of the virus. And we don't use a lot of Thimet in Alabama like they do in Georgia. And that's part of why Georgia tends to have a little bit less incidents than we do in Alabama. So I don't know, but my guess is we're going to have a good bit of virus this year.

Amanda Sheer:

And just to follow up with Thimet versus imidacloprid, neither one really prevent the thrips from feeding. So it's quick and it's not quick enough to prevent the transmission of the virus, but Thimet, induces some of a defense response in the plant. So that's why you get a reduction in tomato spotted wilt incidents. So even with the imidacloprid, if you get adequate thrips control, it doesn't always equate to controlling tomato spotted wilt virus and reducing that incidence. But Thimet is a little bit better in terms of that, because it adds that additional like kind of boost essentially. And in terms of, diseases and peanuts, we're really just getting started, but in the season, but I'm getting really worried about what these hot temperatures that we mentioned at the start of the episode, when you're getting above 90 and into the hundreds, I think wiregrass area Headland is scheduled to be in at a hundred degrees for the high a couple days next week.

I'm really worried about white mold and peanuts. Normally in Alabama, we have to worry about leaf spot and that's mainly what we talk about. Georgia has always has historically had a little bit more pressure of white mold, but when we have a hot dry year and you're irrigating your peanuts, you're more at risk for white mold. So growers should definitely be aggressive in their program this year and make sure, at 45 days after planting, they're either using Pyrax or minimum at six fluid ounces, you could even raise it to eight fluid ounces. Lactis is another good product, or even mixing in Tebuconazole at 7.2 fluid ounces with a leaf spot product can really help with that. But continue to be vigilant and aggressive as you're going throughout the season. Because when white mold starts, it'll start in little isolated hits throughout the field and it'll quickly move down the row if it's really conducive for disease and just like fusarium, it's another one, that's a soil borne pathogen. So you want to be timely in your fungicide applications with that one. So unlike fusarium, we can't do too much. We can still do stuff for white mold.

Katelyn Kesheimer:

Since we're talking about the weather, I'll jump in and briefly talk about our 2021 celebrity fall armyworms, because it's hot and dry this week, we had a bunch of rain recently. So we're looking at a lot of lush, green lawns and fields. We've started picking up some fall armyworm feeding in corn, some egg masses all the way up in north Alabama. So as this hot dry weather continues, what that means is a lot of things slow down. So natural

enemies, predatory insects, rodents, birds, and that allows the caterpillar eggs to survive and will have more survival of fall armyworm. And so the conditions, if we have a lot of wet weather, green grass followed by drought and heat, then that's just perfect for a fall armyworm. And so if you have already started scouting be on the lookout, because they can tear up a field pretty quickly.

Scott Graham:

And you know, the good news there, Katelyn is that last year when this whole thing blew up, we started hearing about it in Texas. What first week of May, second week of May, something like that. And they were saying, "Hey, pyrethroids aren't doing anything." We haven't heard that this year.

Katelyn Kesheimer:

No we haven't. And so I think what we need to do is just stay vigilant. And if we see armyworms at threshold, then we need to treat, but I don't expect any major resistance issues or control failures as long as we're on time. And I think we're going to have a hot dry summer. We're still in a La Nina year. And so it may get very difficult if populations get high, but we should see good control if we use the right product at the right time.

Scott Graham:

Yep. Yep. So, I haven't gotten any calls, but my recommendation on fall armyworms would be treat them like normal. Like last year didn't happen.

Katelyn Kesheimer:

Yes. Yep. I would treat them like normal. I don't think we're going to have a historic year. We might have a little bit higher than average, depending on the weather and what the storms and hurricanes look like, but you know, be prepared and we have good products that work from insect growth regulators, to pyrethoids, and a lot of systemics. And so if you have questions, I'm sure we can cover that in the later episode in more depth.

Scott Graham:

But, hopefully we won't need to.

Katelyn Kesheimer:

Yes. Fingers crossed.

Scott Graham:

All right. So that's going to do it for today's episode of the Alabama Crops Report Podcast. As always, we appreciate our, all of our listeners out there and if we can ever do anything to ever help, please don't hesitate to reach out and let us know.

Speaker 1:

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