

Weeds AR Wild Podcast, S3 Ep11: Early Season Cotton Issues

[00:01] Intro/Outro

Arkansas Row Crops Radio, providing up to date information and timely recommendations on row crop production in Arkansas.

[00:11] Tom Barber

Welcome to the Weeds AR Wild podcast series as a part of Arkansas Row Crops Radio. This is Tom Barber, extension weed scientist with the University of Arkansas System Division of Agriculture. And today I'm joined by Dr. Ben Thrash, who's an extension entomologist with the U of A Division of Ag. Morning, Ben.

[00:28] Ben Thrash

Good morning, Tom, how's it going?

[00:30] Tom Barber

All right. Thanks for coming and being a part of the podcast this time I think this is episode 11 in our series three of the Weeds AR Wild podcast or season three. So, thanks for being here. And you know, when I look back at this season and how it's gone, it's been some ups and downs. But we're going to talk cotton today and a lot of our cotton was planted in a pretty small window somewhere around between the first and tenth of May, you know, this year. And so, it's all kind of around the same stages growth stage wise and I think some of us are getting the same calls on, you know, what can I mix? We've got weeds we want to control, we got Thrips we need to control. I think the thrips are pretty bad this year, so Ben I just want to turn it over to you and kind of give us an update on what you're seeing on thrips.

[01:22] Ben Thrash

Yeah. So thrips, you know, they started out pretty light earlier this year and some of the earlier planted cotton, I think avoided a lot of this thrips issue, but some of it really didn't. Our later planted stuff, like I planted some cotton I think around the 15th of June down at Tiller, and the thrips have just hopped on that stuff and they are thick. I mean, they're killing my cotton in my untreated plots. So it's bad in some areas, but it sounds like we got a wide mixture of cotton growth stages out there. I guess some people have squares that they say they've been seen on some cotton and then some people are still treating for thrips. So, you know, a wide variation out there. But, you know, as far as thrips control goes, we've been seeing good control with Intrepid Edge overall. But the problem is we got really high thrips numbers right now and we're getting reinfested really quickly. And that product really doesn't have any residual control to speak of. And what me and Tom have been talking about a little bit this morning is that with that product, it's imperative that you get good coverage with Intrepid Edge and that means you got to have like a non-ionic surfactant with it to improve your coverage or a crop oil even helps a lot. And then you really can't be using really coarse nozzles. It can make a dramatic difference in how much control you're getting of those thrips. But then also we were talking a little bit about herbicide mixtures.

[03:10] Tom Barber

Right. And so, you know, and it's across the board on that too, I think, Ben, you know, and so believe it or not, it's still hard to talk some farmers into spraying pres because I still remember back in the old days when all we did was use pres and ding cotton up, but with our pigweed populations now, I mean, it's just I mean, it's something we have to do and we just have to accept what, you know, little, a lot of times early season injury that we get and that injury can be is dependent on rate, is dependent on soil type, it can be dependent on what we use, when we catch the rain, if we catch a rain. And so, there's a lot of variables out there that, you know, determine whether or not we injure our cotton from it. I think for the most part, with all the work we've done, we kind of tweaked the rights to where we can pick a pretty good right for a soil type of without getting tremendous injury that, you know, requires us to replant or something like that. But still, we, you know, it's always a possibility, I guess that we're going to injure cotton. And any time the cotton is stressed, what we've seen over the years, whether it's from herbicide injury or something else, you know, you know, thrips tend to want to jump on that stress card or it seems like they're more evident on that stressed cotton anyway. And so, you know, inevitably we've got weeds to that we need to kill. We've got thrips that we may want to kill. And a lot of growers want to mix all that into one herbicide application or pesticide application, I guess I should say. And so and want to know how bad that's going to beat up their cotton. And so that's the question I'm getting a lot right now. You know, in my opinion on that being as always being number one on the weeds side, we need to take care of, of, you know, the most prominent weed out there. You know, worry about making a mixture through that. But once if we mix, you know, Roundup and Liberty and Dual or Sequence and Liberty or some combination of Warrant, Liberty, Roundup, or Outlook, Liberty, Roundup, you know, we tend to burn the cotton pretty bad depending on environmental conditions, with just those three. And so, when we throw an insecticide in on top of that, it makes it that much worse.

[05:36] Ben Thrash

Yeah, some of those herbicide or insecticides, like Orthene and Bidrin and stuff, they seem to really heat up some of those herbicide mixtures, whereas Intrepid Edge really doesn't do that, which is a benefit with that. Also, you know, something I just thought about, we're starting to have some pop up showers here and there and the rainfastness on Intrepid Edge is a lot better than with Acephate in particular. Acephate you almost, you need at least 12 hours in order to get good efficacy out of that, of a rain free period. So just kind of keep that in mind. But when we're talking about injuring your cotton, too. Well, seems like I've got several pictures of some really beat up cotton. And it's not just herbicides, it's not just thrips. It's a combination of both of those plus sand blasting and just being dry weather. I mean, you know, this cotton seems to not be growing off good, where you can't get water across it especially right now.

[06:43] Tom Barber

Yeah, you know, you hate to talk about watering cotton before it even starts squaring good. But yeah, I mean, in some cases, just the moisture is gone. We've had a north wind for three weeks, it seems like, and just low humidity. You know, for the most part, I think the humidity is starting to climb up now. But just real dry conditions, as most of you know. And if you haven't caught a pop up shower, oh, I've walk some cotton yesterday that had been watered like two or three days ago. What you could tell a difference where that water had run just in the amount it was able to grow. And so, you know, going back to the stress on stress, I mean, the drought, that we're in and I call it a drought, I guess officially we're not in a drought, but it's pretty dry. You know, the dry weather that we're in right now is is another

factor that's increasing that stress on our young cotton plants. You know, going back to what to mix, I mean, you know, couple of things, right now. I get a lot of questions on residuals and should we even put them out because of the dry weather? I mean, you know, number one, these residuals won't be activated without a rainfall. They will. Or irrigation, you know, overheated irrigation is best. If we're watering down every other middle we're going to barely activate it, probably on the sides of the bed and may get activation in the furrows, and that's about it. And so if we water and so is it worth it or not I think that you know, if you can get to where you can water, you know at least run some water down every middle at some point in time, in furrow irrigation., it may be worth it just to keep the middle's clean, but I definitely wouldn't throw all the mixture together all at once. I think I would separate it out, especially on this cotton that that is struggling right now. I'd put something in the post-emergence wise to take care of the weeds and then you know Intrepid Edge or whatever y'all are recommending on on the thrips side of things just to try to reduce the amount of added stress, I guess on this cotton that's not growing off very well. Yeah. So, but you know, it's, it's tough decision to make because I want the residual out there. I mean, I definitely think we need the residual out there because we might get lucky and catch rain. And if it rains the weeds are coming. But at the same time, you know, with the conditions we're in now, these residuals will sit there. I will say they'll sit there 10 to 14 days. And, you know, before we can get them activated, most of them will and still get activity from them. But I think, you know, on the cotton that I've been getting pictures of, which is always bad cotton, I mean, I never get pictures of good looking cotton. So I'm kind of biased on what we're talking about today because most of my stuff that I'm making recommendations on now through pictures anyway, they look pretty rough. But if it's stressed, if it's not growing, if we're not getting that two, three nodes a day, you know, you might want to just separate that out and make two applications. I know that cost more money and time, but at the end of the day, I think the cotton will grow off better and just attack that. I mean, if it's a tremendous thrips problem, you know, attack the thrips first if we need to. But the other thing on the control and weed side and going back to the dry weather, I'm getting a lot of pictures of suspected of you know whether it's Liberty, Dicamba, 2,4-D not working real good on pigweed populations of you know the 2,4-D would be the Enlist One, but when it's dry like this, you know, it's like grasses in rice. We're having tremendous time killing grass rice now due to the dry conditions. Pigweed is no different, you know in the dry weather there we're having any of these auxin herbicides require the plant to be actively growing in order to get a good control or kill on it. And so if it's not actively growing, we're not going to like our results from our herbicide application a lot of time. So keep that in mind. We may, again, water earlier, especially on cotton than we normally like to this year just to keep it growing and be able to make good management, you know, decisions and get effectiveness out of our weed control and, and helps with our insecticides, probably. Now you mentioned surfactants you know I know if we're putting, or you did before we started this, if we're putting Intrepid Edge or one of these thrips materials out with Roundup that's loaded or Liberty's loaded I guess but if it's not loaded, you'd need to add that surfactant to it.

[11:25] Ben Thrash

Absolutely. Yeah. Roundup or Liberty or something. One of the other herbicides that they've got a particularly high surfactant load in it, you don't need to add any more surfactant to it. That's an important point. So just keep that in mind. You don't need to add anything extra to those products. And I don't know, I've got a couple of phone calls asking me about some herbicides if they had enough surfactant in it. And I'm not an expert on all the all the herbicides, but I know Roundup and Liberty have plenty in there. But, you know, you're talking about the drought or how dry is anyway, everybody just

keep in mind you know once all these weeds and stuff start to drying down ditches and turnrows and everything around there, those bugs, any bugs that are out in the ditches and all those areas, they're going to start moving to the only thing that's green in order to survive, which in a lot of cases is one of your crop fields. And so, you know, it can make insect pressure, especially along the edges of fields, a lot worse in these dry situations. You know, spider mites, we've got spider mites moving into fields right now. They've really been moving in there, seems like for about a week or so, people have started picking up on some spider mites. And a lot of this, I mean would even be on like two-leaf cotton guys are having to spray spider mites, so just keep that in mind. Check those field edges for where you know a lot of insects could be moving in from alternate host around the field.

[13:12] Tom Barber

One thing I didn't tell you before we started this, Ben, so one of those fields I told you I walked yesterday that had some pretty thrips injury along with some herbicide injury. I, I was looking at plants and I found just random plants that would be covered with aphids. All right. I mean, it wasn't widespread is just like I found the needle in the haystack with the aphids underneath on this real small cotton. And I'm just not used to seeing aphids, I guess, on small cotton like that. And so anyway, I don't know if that's something that's starting to be an issue, I haven't seen it anywhere else, just in one field, so I don't know.

[13:47] Ben Thrash

Know. Yeah, I think it's just extremely common. We'll see it from time to time. I tell you, I had some plots last year that started having aphids on them and you know, this dry weather kind of conducive for them to proliferate. So, you know, be on the lookout for that as well.

[14:08] Tom Barber

Well, it's, it's definitely tough when you don't catch right every now and then to keep that cotton growing. And I think that's the key to all of this is just keep the cotton growing. We need it to grow so we can canopy and compete with the weeds. We need moisture to help us with weed control, you know, the better it's growing, you know, that doesn't really count for plant bugs and some other things and insect pests. I know, but at least for the thrips, we could outgrow at least that thrip stage, you know, if we can just get the cotton going now. And one other thing, we're getting to a point where we're putting a lot of fertilizer out on this cotton, and one thing we've looked at a lot, you know, we mentioned separate residuals. So, you know, if we're in our second herbicide application, you know, we might could do something like a, you know, a Dicamba before the cutoff date or a Liberty, Roundup or Liberty, just depending on what we need for the situation or what weeds we have in the field and then come back on our fertilizer with Zidua. And we've looked at that for the last two or three years now. We just put our first treatments of that out this week. And so, you know, what we've seen in our data, I know Larry's been on the podcast talking about this as well. It looks like a good way for us to get a good pigweed residual on our cotton acres in a fairly easy way if we can get the fertilizer coated. And so we need at least 250 pounds of material fertilizer to get us good enough coverage is what we've seen. But, you know, we still use that same rate of Zidua, the 3.25 ounces of Zidua equivalent on the acre. So, but by doing it that way, we still have to get a rain to activate it, we have to have a rain to get fertilizer in the ground. And so that's another instance where I've seen over the years where we may have had water every row just to get all our fertilizer activated, if you will, or in the soil solution. And so if we're doing that, we're also going to get the Zidua activated and the active in Zidua we've said for last several years is

pyroxasulfon and it's very active in our pigweed p_ Barberopulations here in Arkansas. So if we can get it on the cotton acres, I think it will help us out. That's one application method to get it out. You know I've seen and walked behind some people that's tried to put it over the top and we don't want to do that. And Ben and I talked a little bit about some weird things we're seeing, you know, and with the cotton aborting terminals and you know, it's got just a weird look. The petioles are stretched out and stacking, not really growing out right. Well, just some isolated incidences, I'll say. And I have made that happen by or I've caused that on our plots by putting Zidua over the top. And so I'm not saying that's the case with all of these fields. I'm just saying, you know, if we put the wrong mix over the top, that causes a lot of injury, that could be a result, I think, of what we're seeing and I can't prove that 100%. But, but that's just some injury that we've seen in our plots when we've done that. So that's why I say be careful with these mixtures of, you know, we don't want to put anything with pyroxasulfone in it over the top of our cotton. We need to get it down below the terminal, but any time we mess with that terminal, whether it's burning it real bad, you know, I know plant bugs can blank it out, right Ben? And the thrips can get in there and mill around and really mess up our terminals, herbicide drift can do it, herbicide contamination.

[17:50] Ben Thrash

Sand blasting.

[17:51]

Sand blasting, yeah. Anything that physically messes with that terminal can cause some of the some of the problems I think we're seeing. So I think it's important to just make sure as we're moving from crop to crop we clean out our tanks well. I know, I know we're used to this and we but a lot of times we get in a big hurry and sometimes we might forget to really do a good cleaning job on those spray tanks. And so, seeing some of that, walking around, seeing a lot of off target movement with ALS herbicides right now. And so, I just say be careful now when you're spraying rice, peanuts is another one that we may be putting some Cadre on soon on acres that can do that. And so just be careful moving from peanuts to cotton with that because you can flat take out a cotton stand pretty quick with a Cadre herbicide. So, and a lot of our rice herbicides are pretty rough on cotton.

[18:48] Ben Thrash

So we're talking about the rice herbicides earlier and we were talking about how weedy this crop is because we couldn't get any of the pre-emerge activated and Nick wanted me to plug everybody, to let them know that you know, that there could be a lot of rice stink bugs on this barnyard grass, you know, later on that's just going to be waiting for rice to head out later this year. So everybody kind of keep that in mind.

[19:15] Tom Barber

Yeah. And I think at the end of the day, we probably just need a new group of weed scientists because we just do a piss poor job of controlling weeds in general and not in the state of Arkansas, but barnyard grass and rice we're not going to focus on a lot of that today. I know that was talked about, I think, last week. But with the drought conditions, it's just hard, man. It's just hard, hard to get anything under control. We got to have actively growing weeds. So with that, we'll thank everybody for listening. Will take Ben for joining us today on the podcast. I don't know if you've been on before.

[19:48] Ben Thrash

I don't think so.

[19:48] Tom Barber

You all kind of have your own deal going on. But we appreciate you coming over here from time to time and good discussion this morning. And well thank all our listeners for joining in for this episode of The Weeds AR Wild podcast series on Arkansas Row Crops Radio.

[20:06] Intro/Outro

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