Weeds AR Wild S3 Ep19. Italian ryegrass (9/20/2023)

[00:01] Intro/Outro

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

[00:12] Tom Barber

Hello and 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. I believe this is episode 19 of our Weeds AR Wild podcast for 2023. And today the topic that we're going to tackle is Italian ryegrass management. This topic has become a really important topic and a really hot topic over the last two or three years, especially in Arkansas and I've asked two extension weed specialists to join me today, two excellent extension weed specialist colleagues of mine, Dr. Jason Bond from Mississippi State. Jason, how are we doing this morning?

[00:54] Jason Bond

I'm good, Tom. Good to see you.

[00:55] Tom Barber

Licking your wounds from that tough... actually, both the teams that I root for in football lost pretty big this weekend, so. Yeah, I'm depressed, I guess.

[01:05] Jason Bond

Well, you're not new at it. How about that?

[01:09] Tom Barber

That's right. I'm used to it. So we're we're good.

[01:12] Jason Bond

If you're an Alabama fan, that would be something completely new for you.

[01:17] Tom Barber

That's right. And the other one is Dr. Charlie Cahoon from North Carolina State University. Charlie, thank you for joining us this morning.

[01:25] Charlie Cahoon

Yeah, thanks for having me on. And y'all are welcome to start rooting for the Wolfpack and really get welcome to the world of mediocrity.

[01:33] Tom Barber

We're used to it as hog fans. You know, Jason, I still tell everybody that I was sitting in the stands the day that we got beat by the Citadel, so I don't think it's got quite that bad yet.

[01:44] Jason Bond

No, that was the bottom of the barrel right there.

[01:50] Tom Barber

That's right. Well, I really appreciate you guys taking time to visit with us this morning on our podcast. And I know both of y'all joined us in Little Rock last January discussing ryegrass management at the Arkansas Crop Management Conference and we really appreciated y'all doing that, got a lot of positive feedback for y'all coming over, so I'm sure there will be future opportunities if you just like, you know, traveling to Little Rock in the dead of winter. We've got some beautiful scenery around here that time, so I'm sure we'd love to have you back to come to that meeting. That was really good. Appreciate y'all joining me there. So just to kick out this topic, you know, when we look back at that presentation and I looked back at the slides this morning just to refresh my memory, but Charlie, you kind of started it started it off. And you talked a little bit about Paraquat resistance and the resistance issues you were seeing in North Carolina with Italian ryegrass. Can you kind of give us a little update on that, please?

[02:54] Charlie Cahoon

Yeah, absolutely. So I'll kind of briefly go back to the beginning. A lot of our issues stem from the part of the state that we plant a lot of winter small grains and we selected ALS resistant ryegrass, ACCase resistant ryegrass with Hoelon resistance. And then we selected for glyphosate resistance in our burn down applications. And that was probably ten, 15 years ago. And then here a couple of years back in the fall of 2020, we got alerted to a field where a grower had gone out in the fall in October with some really beautiful weather for a fall application of a herbicide with some Paraquat. And he missed some really small ryegrass with Paraquat. And so we started investigating digging into that issue with Wes and I here at NC State and we confirm that we have Paraquat resistant ryegrass and one biotype in particular survived a 32x rate of Paraquat know at about four inch ryegrass. So that's 1024 fluid ounces of Paraquat. And, you know, didn't even touch it, really burn up the tips of the leaves and that's about it in the greenhouse where we typically have, you know, phenomenal control compared to outside of the greenhouse. And so the even bigger issue than that is we have that history of ALS and ACCase resistance. We got glyphosate resistance 10, 15 years ago and now we have some bio types that are three and four way resistant. So Paraquat, Glyphosate, ALS and ACCase. So we are dealing with some bio types that we really have no option for post emergence control on now.

[04:40] Tom Barber

Wow. So how, how widespread do you think, do you feel that is across your state?

[04:45] Charlie Cahoon

So thankfully the Paraquat resistance seems to be fairly confined to the southern Piedmont. So if you look at North Carolina and you're familiar with North Carolina around Charlotte, the counties that kind of are on the eastern side of Charlotte, southeastern side of Charlotte, those are where we have this four way resistant bio type. We have widespread glyphosate resistance across the state, but we have not seen the Paraquat resistance in the eastern part of the state. So thankfully it seems fairly contained. But for those guys and that that Southern Piedmont, it has become their number one weed issue. And they have some problems with palmer pig weed. But it's really risen to the top of the board in terms of management.

[05:29] Tom Barber

Wow. Yeah. Okay. Dr. Bond, what about Mississippi? What kind of resistance issues are popping up there? I know you mentioned Clethodim resistance pretty recently.

[05:41] Jason Bond

Yeah, you know. So we're, I guess the founder of the feast on ryegrass resistance in our part of the country. So we've done the I guess the ALS resistance goes all the way back to the nineties and that was actually I can't even remember. It was a roadside herbicide is what is listed I guess what those populations were screened against. And then Hoelon for sure. Widespread Hoelon resistance. And I really don't have a concept of how widespread it is, but that's definitely would be an issue, you know, with that family of herbicides. So that would Hoelon naturally. But then Fusilade and Assure and the other products that have quizalofop and so then whatever year it was 04, 05 was when we discovered the glyphosate resistant. So that was right before I got here and pretty much been dealing with it ever since. Most of ours I would say is glyphosate resistant and Hoelon resistant. A smaller percentage of it would be glyphosate, ALS, and Hoelon resistant. Probably depends on where you're standing in the state in the northwest corner of Mississippi is pretty much all delta alluvial floodplain, so a lot of multiple resistance there. You go to some of the other bigger crop production areas in the state and you might not see as much multiple resistance, but we don't. They give the examples of PowerFlex and Osprey, which were two wheat herbicides, were both commercialized about the same time. We've never used either of those to any great extent for ryegrass control, great herbicides, but our ryegrass, it was already out of the barn by the time those were introduced to the market. So we've never relied on those really to manage our ryegrass. There's some Axial resistance. So that's the third family of ACCase inhibitors, if you count the fops and the dems, which is Celthodim, the main ACCase that we've used for ryegrass control over the years and then pinoxaden is the active in Axial. And so we have some of that too. To my knowledge, that's limited in kind of extreme northwest Mississippi is where that's located. But we haven't had enough wheat in the past ten or 12 years to really get a good handle on how our populations respond to the wheat herbicides.

[08:28] Tom Barber

Yeah. And we still have a smattering of wheat here in there and in Arkansas. And, and I agree with your comment there on the on the Axial. I think it has become more hit or miss in a lot of fields where we're using it to control ryegrass in wheat. And I think for Arkansas, it pretty much echoes what you see and just a little delayed probably in from Mississippi there adjacent. I mean, obviously the glyphosate is widespread. The Hoelon resistance I worked on 20 years ago in graduate school or 20 plus years ago.

[09:01] Jason Bond

Yeah, it was longer than that.

[09:02] Tom Barber

Yeah, we're getting old, but you know, the ALS for us is puzzling because we'll have it in some areas. And in some areas they're still able to control it with, you know, Rimsulfuron or the Steadfast Q or something like that. If they're trying to, you know, spray it in the winter or whatever ahead of corn. And so I don't know, it's it's just scattered on our ALS. I'd say we're probably 50/50 on that. Our Celthodim resistance, though, is for the most part confined to southern Arkansas and just across the river from you there, Jason. But it is pretty highly resistant in that area. We're not doing much good with Clethodim in some of those fields. And so, you know, really and I know this is a longtime recommendation back in the Dan Poston days and maybe earlier than that, Jason, I'm not sure in Mississippi, but residuals have for sure become our number one method to control this and number one recommendation, I guess. And so, you know, when we talk about residuals and putting them out in the fall, we, you know, we struggle a little bit because we're worried about cost at that time. A lot of folks don't want to spend any money on

herbicides then. A lot of people just want to wait and see where they have a problem and then spray. But the issue is in emergence of this ryegrass and so, you know, we have such a long window, it seems to me, any more of emergence patterns and I wanted to talk about that a little bit. And just, you know, how has the emergence pattern of ryegrass changed over time? Charlie, I believe you all have some data over in North Carolina we'll talk about then I'll kick it to you Jason.

[10:55] Jason Bond

Okay.

[10:56] Charlie Cahoon

Yeah. So my colleague and I've been working on ryegrass and Wes has got some pretty cool preliminary research or preliminary data kind of in response to just seeing a shift in the state where, you know, we typically think about a, you know, a big flush of ryegrass in the fall and then when it starts to warm back up in the spring, we have, you know, a flush is kind of typically how we thought about it, but we started noticing more and more problems with with ryegrass and coming up in the spring. And so Wes did a really cool study where he collected seed from plants that emerged in the fall and plants that emerged in the spring. And then he planted them at different locations and looked at their emergence patterns. And for the most part, the majority of the seed that were collected from a mother plant that emerged in the fall, those seeds emerged in the fall. And then majority of the seeds that were collected from a mother plant that emerged in the spring. So it was kind of like whatever that mother plant did, the next generation followed suit with when they were going to emerge. And I think that's kind of played out from what we've kind of seen from complaints and also kind of just noticed in in some observations.

[12:12] Tom Barber

Hey, good stuff. Jason, what about your experiences with that?

[12:18] Jason Bond

Well, you do this stuff long enough, Tom, you got a lot of observations that yeah, you know, maybe they're true, maybe they're not data wise. But so we've seen it. I've seen it up as early as July in and those would be on hurricane years. So when you get that extended period of cloudy weather, cooler weather, not necessarily cool but cooler and you get moisture. So the two things naturally you got to have for seed germinate, you got to have moisture and you got to have the temperature right. So if you look at the old literature on ryegrass, it's going to say something like when the temperature is consistently below 90 degrees for seven, eight, ten days, that's when you're going to see it. And so in years where we do get those rainy periods in August due to tropical weather we can get it up. Now if it turns back dry and you know, we get September, October are completely dry, that a lot of that stuff is probably going to die and not cause us any problems. So the general rule of thumb is it's probably going to start coming up around here sometime around the 1st of October and that would be selectively over a ten year period you take last year right here at Stoneville, we went from like the middle of August to November the seventh or eighth or something, it was completely dry, we didn't get a drop of rain. So we had no ryegrass that came up that whole period. The temperatures were right, but we didn't have the moisture for it. In other places we got some rains and it flushed on up. So, you know, that kind of earlyish fall and when we've gone and monitored emergence, we have always observed a big fall flush that cuts off sometime around the middle part of December. And then if we get a spring flush, it's going to pick back up and start germinating again ballpark in mid-February. And that's just putting everything

together and putting a calendar date to it rather than a temperature. But what I've seen and we were talking about earlier, Tom, that the last few years I feel like we are shifting more to a spring emergence. And I won't say we have more spring emergence than we have a fall emergence, but I think we've got more spring emergence now than what we've had in years past. But if you think about it I mean, we have been hammering this stuff with early treatments. Some years, it's earlier than others. You know, we get our residuals out in the fall like we had the last couple of years, years where we don't get that out early, maybe December or January. It just depends on whatever hand the weather deals us. But I feel like now we're shifting more to where we see more coming up in the spring window. Generally easier to kill kind of like horseweed, we always talk about similar concepts with horseweed, that's definitely not a blanket statement because timing is super critical with that but, so yeah I would say anywhere between now and the middle of March really is where we see some populations at least.

[15:42] Tom Barber

Now I agree with that 100%. And it is such a moving target, you know, because we on our recommendations, we recommend fall residuals. I mean, that's been the standard recommendation for many, many years now. But when you talk about, well, when do I put that fall residual out, it becomes a little more convoluted. It I guess, I mean, it just becomes a little more difficult to get that timing perfect. And so, you know, as a general rule of thumb, I think this is a good opportunity, a good discussion point for us to move into the timing of these fall residuals. And then we'll talk about products here a little later. But, you know, I hear you say, well, October one, a lot of years for y'all, for us, it may shift a couple of weeks. I don't know. It depends on what part of the state we're farming in. And Charlie, for y'all over, there might be a completely different time, but. But do we need to key this on temperature? Or do we need to key it, I know everybody talks about calendar dates a lot working on temperature. I'll talk about temperature a lot, but really it depends on when we get the crops out I think a lot of times and there's a lot we can't do until that, you know, harvest is complete or that, you know, don't have the resources to do anything until the harvest is complete.

[17:02] Jason Bond

Well, I think you answered your question, Tom. Yeah. We've talked about this, you know, different groups of people over the years. But this fall timing or really even post-harvest timing, it's every man for himself, really. If you think about weed control in the spring burn down aside but once we get to a crop, you know, you pick a crop but everybody kind of runs the same series of steps. You know, the weather's going to break, it's going to warm up dry up and we're going to get the crop in and then spray it. Whether that's pre or early post-treatment, when you get to August and we start harvesting and then it's really all over the board, you know, it's crop mix on the farm. It's how spread out the fields are. Is the guy farming in one big block or is he spread out across two or three counties or how much labor does he have, how much harvest equipment does he have? Just there's no way to put it in a box that I've ever found in that carries on up to where we are now getting into ryegrass time. Because we got corn and soybean guys, they may be mostly done in and doing field work, but then you got maybe a guy's corn in cotton, he's got his corn out. But, you know, yeah, he hadn't picked a stalk of cotton yet. And then the beans, you know, of course we have a much broader harvest window for the beans. And so it's just it's all over the board. So I've kind of stayed with that explanation I've always had, which is wait till the 15th of October, check the ten day forecast if you've got an imminent rain, that big 90% chance of a four or five inch rain, you better go ahead and do it because you might not ever get back in that field, particularly if it's heavier texture soil. If it's October the 15th and there's no rain in the ten day forecast wait and the

later you wait, the better off you're going to be from strictly considering weed control. So if you could wait till the halfway through December, that would be beautiful. And we've had that in areas the last couple of years, just what the weather dictated, whether it was too dry early and had to wait or it got wet, dried back up, various different reasons why we've had some go out in December. But you know, me or you or Charlie sitting here telling the guy, man, if you wait till December, you're going to be better off, well that's not going to work because more often than not where we are, you're not going to be able to do that. The weather's going to turn on you sometime in November. And so you better have it done regardless of what the weed control is. And then the the other part of that, moving from that October into November, you know, it's labor and it's deer hunting and it's duck hunting and it's everything else. It's all things considered. You know, guys are just worn out by that point. They don't want to do anything else. And I don't either. So, there's just a lot that plays into these treatments that if we could simplify it, I think we would. But I don't think the circumstances allow us to simplify it more than we already have.

[20:27] Tom Barber

I agree. I think it's, you know, everyone has to make the decision on when the right time is for their farm and their past experiences. I would say and Charlie y'all might have a completely different opinion on timing because if you can't kill it with anything, once it's up, you're in trouble before you even get started there.

[20:47] Charlie Cahoon

Yeah, I mean, that's exactly right. And to be honest with you, our we're way behind on adoption of all residuals. I mean, we're way behind you because we just we've had...

[20:57] Jason Bond

You're way behind us on adoption of flat ground, too.

[21:00] Charlie Cahoon

That's right. Yeah. I mean, where we're having a lot of our ryegrass issues, we got a lot of topography and we can't have bare ground all winter. And so those guys are, especially now, are in quite a predicament with this ryegrass that we have no post option for any particular spot. So you know, what we've been doing is for those guys in the Southern Piedmont that don't have a post option, we're trying to get them to do something before the ryegrass comes up. And, you know, we're erring on the side of caution and being early because, again, if it comes up, we don't have an option. So, you know, the other part of that is, well, if we put a residual out there and that's it, then that grounds fallow and we're going to have lose all of our topsoil. So we we've done some interesting work with incorporating those fall residuals with a cover crop. And we've seen really promising results from the cover crop in suppressing that ryegrass, cereal rye in particular. And now I'm going to give you some caveats here. We know we were pushing the envelope on saying, right, we were putting 80, 90 pounds of cereal rye to the acre. We were planting early. We're putting a little fertility on it, trying to maximize its competition with that ryegrass. And then we put our residuals on right behind the drill. And our data says that the cover crop was more important than the fall residual. But you know, what I've been telling our growers is, you know, we could maybe plant our cover crop and wait for it to come up and spike. And then we could put our residual and spike to safen it a little bit to our cover crop. And then preferably, you know, we could hold that residual control of ryegrass a little longer and give another competitive advantage to our cover crop versus the ryegrass. So that's been something we've had to work through, you know, and, you know, kind of specifically for this Paraquat resistant ryegrass and hopefully y'all's guys don't get to that point. But I

hear that it's in Louisiana, so it's fairly close and hopefully y'all can keep it out of Mississippi and Arkansas.

[23:10] Tom Barber

Yeah, well, Charlie, I know this last fall we did some of that planting date stuff with our cereal rye and looking at how it affected the ryegrass emergence. And as Jason said earlier, it was one of the driest falls we've had in a really long time. And I had my first 2 cover crop planting dates basically came up and died because they ran out of moisture and so we didn't get a lot of data with that. But I will say that later cover crop, even though the ryegrass came up at the same time, we kind of missed our window to put our residuals out because that was the first rain we got basically in the fall. And it all came up at the same time. But the numbers were we had ryegrass coming up, even though it wasn't very big, or cereal, rye and ryegrass competition, even though the cereal wasn't very big, we still reduced the numbers of ryegrass emergence. And so or at least it was a lot better than just the bare ground plot next, right beside it. But I agree with you. I mean, we've got a lot of growers that like putting cover crops in to help us with pigweed, especially in a cotton system and I think we're going to have to look at earlier planting, if we can, on the cereal rye and then coming back with one of our residuals once we get to spiking or one leaf or something like that to help us with the ryegrass issues. And so we've got to I guess we have a big project looking at that, Charlie, kind of a beltwide project looking at cover crops and ryegrass. So hopefully some good data will be the result of that project and we can get some answers from that standpoint. But when we get back. we've talked about timing. We're going to get into products that we recommend in the fall for residual control. But let's talk a little bit about field prep and we got a lot of questions based on your point last year, Jason, that it was so dry. We've got a lot of field work done, have a lot of powder beds out there basically that aren't really firmed up. How do you think that affects our soil residuals when we talk about ryegrass control?

[25:24] Jason Bond

Well you see Tom often putting that residual treatment on a fluffy bed or fluffy seed bed. Majority of ours is going to be bedded. When you get to January, February, often you'll see just a fringe of grain down the shoulder of each row, and that's basically where that bed settled. And you ended up with seed above the layer of the herbicide. I will say that this past year, I expected to see more of that. I expected to see more green in January and February just because it stayed dry for so long and guys got tired of waiting and they went ahead and put their treatments out on unsettled bales a lot of times. And then when they did get incorporated, maybe it laid there longer than we would have wanted it to, but it really that really worked pretty good. You know, in 22, 23, there have been years past where, you know, I've seen pretty widespread what I described to you about the that bad settling. And so again, every farm is unique. Therefore, the steps you're going to go through are unique. But in a perfect world, just thinking about weed control, if we could get that bed hipped and then a good settling rain on it and then put the treatment out, that would be ideal. That's also dependent on, you know, the later you get. That's more of a roll of the dice and that's, a lot of times we don't see as much fall residual behind cotton just because of the nature of the harvest date and getting that field worked back up. We do, percentage of acres wise, less field work behind in cotton than we do for sure our grain crops and then maybe even rice, too, percent of acres just because of the harvest date.

[27:26] Tom Barber

Yeah well and I you know, I just know I got that question a lot last year and I'm with you. I'd rather that seedbed be firm before we put the herbicide out, but a lot of times we don't we don't have that as an

option. I mean, we just kind of have to after roll with the punches and I think getting it out on loose soil is probably getting better than not getting it out at all.

[27:47] Jason Bond

And oh yeah, absolutely.

[27:50] Tom Barber

You know, we just have to make our decisions.

[27:52] Jason Bond

Contrast, if you contrast that to the springs of like 19, 20 and 21, particularly 19 and 20, when the fall of 2018 and 19 were so wet and we basically didn't get any field work done. I mean, there was some in places, but collectively we had very little fieldwork get done. Therefore we were locked into doing field work in the spring, you know, tillage work. So we had very little fall residual herbicide go out those two falls and we paid for that ryegrass was hard to control by the time we got there. It is hard to disc up too, once you get it dry enough in the spring that you can run a disc, you got a lot of root ball out there and it's you got to try to turn over and get chopped up and all of that in the spring. So it's a it's a tough, tough hill to climb in the spring disking it.

[28:52] Tom Barber

Right. And so we know with reserve potential resistance issues, the fact that if we wait till the spring to do anything, we're you know, we're starting behind the season already. We know based on some work you've done in Mississippi, Jason, that yield loss, especially with the early planted grass crops like corn and rice, can occur or does occur if you plant into it. And so, you know, the key here is we've got to do something for us in the Mid-South with the early planting dates especially, we have to do something in the fall. And I feel, Charlie, like in a lot of y'all situation, y'all are there too. You're in a little different situation because you just don't you don't have the topography we have and the soil erosion is a bigger issue over there. But for us in the Mid-South, we have to get a handle on it now. And so let's talk about products. You know, we've talked about timing, which product, what's your first go to, Jason? I'll turn it to you first. What's your first go to product for fall residual ryegrass control?

[30:00] Jason Bond

Metolachlor just for accessibility and price and performance, too. I mean it has performed well for us over the years but there's a lot of choices there on products depending on the crop plan and I know we don't always know that but on corn and beans or something with metribuzin in it is even better in my opinion, because we're probably more than likely we're going to need Paraquat in the fall residual treatment and then you get to synergism with metribuzin in that treatment. So I like that metolachlor and metribuzin you know, traditionally that's Boundary, but there's a lot of retail products that have those same active ingredients in it. You know, if we're just comparing residual control of Italian ryegrass, tit for tat among metolachlor, Zidua or anything with pyroxasulfone, which is an active ingredient in Zidua, so also you got the Anthem products from FMC would be included there and Command. Command is excellent. We haven't used a lot of Command for ryegrass. We have started to over the past few years we have a 24-C for it now and it's the only treatment that we can safely apply in the fall and plant rice into the following spring. So where a guy knows what he's going to plant, I think you can tailor a little bit more. But you know, the Dual or Metolachlor or Zidua, those are no-goes in front of rice. You still you might get away with it, but you also might not get away with it. And not getting away with it is going to be ugly.

[31:51] Tom Barber

That's right. So on your, if you're just going to S-MOC or S-Metolachlor, do you like a pint and a third? A pint and a third to me seems to be like a pretty good rate. You think that's good or you think we should go higher than that?

[32:04] Jason Bond

Well, you know, bump it up for soil texture, on a heavier clay soil we go up to a pint and two thirds and or I'll say maybe a pint and a half. I don't know if we do much, one, one and two thirds, but pint and a half for sure. But I think Tom, if you knew the rate of every field that got treated, it's going to fall somewhere between a pint, a pint and a third. I think that pint rate is just ingrained in people's heads from the, you know, in crop applications. And so they bring it on into the fall, too. But it's going to be it's going to fall somewhere in that low pint rate, you know, 1 to 1.3.

[32:44] Tom Barber

Yes. All right. Well, I agree with all of that for sure. That's our top ones in our work and I will say there's probably a lot of Warrant that goes out or has in the past, but Warrant, Prowl, and Treflan as far as products I've evaluated over time seem to be the you know, ones providing less control and we don't ever seem to make it with any of those, you know, at any length of time at all.

[33:11] Jason Bond

Treflan is, you know, year in and year out. If you just did the same treatments over and over and over again, it would break out a half a step behind or the Dual and Zidua products but it's solid but we just can't incorporate it. We don't have the equipment to incorporate Treflan. Warrant, we got a master student just finishing up, we looked at his data in the past couple of weeks, Warrant just won't do it for us that capsule won't release or timely enough. The active ingredient, acetochlor, is solid, but the formulation is not for what we need to do on ryegrass.

[33:59] Charlie Cahoon

Yeah, that's exactly. I looked at it when I was still in Virginia, Warrant, and I put it out pre-emergent on wheat and it was safe to the wheat, but it didn't control ryegrass. So I mean, that goes back to those capsules I think for sure. And and so we're like I said before, we're following y'all's leads on residual control. But what I'm worried about is most of our folks are talking about a group 15. So the S-Metolachlor and the pyroxasulfone in the form of Zidua or Anthem Flex. But what we're really worried about is, you know, we're using Zidua and Anthem Flex on a predominant, you know, a lot of our small grain acres for ryegrass control. And we're we also use them a lot in our rotational crops. We're, it's just a matter of time before we have ryegrass resistance to that mode of action, which is really, really scary when you couple it with, you know, our four, you know, three and four way resistant populations to Paraquat, glyphosate, ALS and ACCase herbicides. So yeah, we're, we're extremely worried about losing that valuable chemistry.

[35:05] Tom Barber

Yeah. Now I agree, it seems to be the solve-all around now for a lot of different things for us. And and you mentioned the Command, Jason, and we did some of that work as well. And I'm just surprised at how broad spectrum the control of Command is. I think it's it it's amazing for me and I get a lot of questions about can we put Valor in or not, you know, with our ryegrass material. And I always say, sure you can, because it is a very cheap option for broadleaf control, I guess, through the fall and winter, but it's not a strong ryegrass material and I just want to get that on record here.

[35:42] Jason Bond

So if you put if you put Dual and Valor out side by side and you just consider ryegrass and henbit which would be our two, probably driver weeds over the last five years for winter annuals Valor's going to do serviceable for a while on ryegrass and Dual is going to be serviceable for a while henbit and that's probably going to be the first one to break or both of those. So it's not a zero, but it's also not something that you're going to go and put either one of those out or the other species by itself. But it's a cheap enough mix that, you know, if you are looking for broad spectrum control and then that's it. But the thing that I've started saying more time that I didn't say for years and years was you don't need a fall residual on every acre because we tease Charlie about topography, but we can lose a lot of soil too. And we definitely don't want to get into committing to re hipping stuff in the spring if we can help it. So I think tailor that application to where you need it in that it's going to take some more record keeping so you know where the ryegrass is, but don't do it on every field if you can help it. And particularly on sandier ground because naturally the sandier it is, the more soil you're going to move around in the wintertime if it's bare ground.

[37:13] Tom Barber

And to be honest, we have some fields some guys could just ring around the outside with residuals and be alright because it seems to be moving in from the edge just about every time where we start having the issues.

[37:24] Jason Bond

A kicker about ryegrass like for corn for us, we still list it as a second worst weed for corn. That's probably debatable between it and pig weed because we've got better options right now in corn for pig weed than we do for ryegrass. But the difference between ryegrass and pig weed is if you let a bunch of pig weed go to seed one year, your grandkids get pig weeds, right? Ryegrass one, it makes fewer seed. And two, I don't think the seed last as long in the soil and I don't have any data to back that up that's just observations. But the guys that we have that have got real aggressive with it, man, in two or three years they can back way off on it to the point I can take you across the highway out here where multiple fields where years ago we had very, very good weed control plots. Those guys don't even treat grass anymore.

[38:32] Tom Barber

Yeah, I remember those being a pasture.

[38:33] Jason Bond

Not because we had plots there. They just, they got serious about controlling it and got rid of it.

[38:39] Tom Barber

I remember when Poston was working on some of those fields that I just thought they ought to just start cutting them for hay, be a little better off. A lot better decision.

[38:47] Charlie Cahoon

Yeah. And your observation is in line with I had to look it up, you know, because I was just curious. And what I found in the literature was, you know, 16, 17 months so it that backs up exactly what you're saying, Jason. If you can control it for 2 to 3 seasons, you should be in a lot better shape.

[39:06] Tom Barber

Well, that's encouraging anyway, and that's really encouraging that if we can step out here and get in front of it for a couple of years, that may be all we need to set us back at a manageable level. Well, guys, we're wrap, we're getting close to about 30 minutes or a little over on our podcast here. We probably need to wrap it up. If y'all can think of, you know, a key take home message, I think we're probably all in unison in this. But do you have any comments to wrap up or a key take home message for our listeners out there on ryegrass management? Charlie, we'll start with you.

[39:40] Charlie Cahoon

Yeah, one thing I think we kind of missed and so I'll bring it up is, you know, if we if we do miss it in the fall and we're dealing with in spring, you need to get it early. If Paraquat is still working, man, it's got to be small, favorable environmental conditions, the right adjuvants, etc.. You got to hit you got to hit everything right to get consistent control of ryegrass. And one of the points that Jason brought up at that meeting that we all spoke at in Little Rock is, I mean, you're capping control out maybe 90, 95% everything you do wrong brings it down another 5 to 10%. And that's exactly what we see here in North Carolina. So we've got to, you know, be diligent about knowing where it's at, how big it is, the environmental conditions, what we're putting in the tank with it, rate, etc., and just got to be get it as quick as we can.

[40:33] Tom Barber

Good. That's exactly right. Good, good, good points. Jason?

[40:38] Jason Bond

So Charlie is right. I mean, the post stuff that we have is not 100% to start with. So everything he said is accurate. So my addition to that, Tom, would be the Italian ryegrass, palmer, barnyard grass. All of those top five weeds that we deal with. The easiest time to control a weed is before it ever comes out of the ground. There's definitely caveats to that. But you know in the context of this one, in the Delta? Hammer it. Hammer it.

[41:14] Tom Barber

Great points yeah agree 100% with everything else that I really don't have a lot to add other than just encourage our listeners who are out there that are dealing with ryegrass, you know, now's the time to get it on your mind. I know we're harvesting. We're still trying to get all our crops out of the field. But, you know, this is going to be on us, pretty quick within another month anyway, maybe two weeks, depending on what the weather does. And so we just need to get it on our mind and get a game plan and just be dedicated to doing something from a residual standpoint and getting our residuals out to control this ryegrass population. Well, Charlie and Jason, I really appreciate you all joining me today on the podcast. Great info. I always like getting y'all involved. Y'all are, always bring a lot to the conversation and have a lot of excellent data in each of your respective states. And we just appreciate your participation on the podcast today, fellas.

[42:10] Charlie Cahoon

Appreciate you having us on.

[42:12] Jason Bond Yeah, thanks to all.

[42:13] Tom Barber

Yeah. And obviously we want to thank all our listeners for tuning in to the Weeds AR Wild podcast series on Arkansas Row Crops Radio.

[42:23] Intro/Outro

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