

**[00:01] Intro/Outro**

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

**[00:15] 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. This is going to be the first episode in season four of the Weeds AR Wild podcast and the previous three seasons I think we've had some great success. I've had some good feedback from agents and consultants and farmers out in the state. And so we're looking for hot topics for this season to discuss as we move forward. But for the first episode, I've got my fellow weed scientists, Dr. Bob Scott and Dr. Jason Norsworthy joining me today. And we're going to discuss a whole range of issues. So, fellas, welcome to the program. And how's everybody doing on this April Fools Day?

**[01:03] Bob Scott**

Doing all right, Tom. And I'll start out by saying it's good to be back in the weed science fold.

**[01:09] Tom Barber**

Yeah, that's right. We can talk openly now since you're not our boss anymore.

**[01:13] Bob Scott**

Yeah, but you're my boss at the moment, so.

**[01:15] Jason Norsworthy**

Yeah, it's good to get the year started, Tom. And I'm looking forward to talking about some of the topics. You know, as you mentioned, the phone has started to ring and I'm looking forward to hopefully this in this episode starting to address some of the questions that we've been getting.

**[01:32] Tom Barber**

Well, all right. So on that let's just let's kick it off. I know a lot of us has been fielding some calls on burn down. Obviously, you know, we're just now the 1st of April and as normal, everybody feels like they're a couple of weeks behind already. It's like from a farmers standpoint. So I know the the planters started rolling this past Friday for the most part, but we're still getting a lot of questions on burn down right before planting. And probably the number one issue with that is ryegrass. And so when we talk about glyphosate resistant ryegrass, there's a lot of questions that come to mind. You know, programs, what rates, formulations, tank mixtures and important key plant back intervals. So I think we'll just start with talking about general recommendations and what we've been talking about through the winter has been, you know, if the ryegrass has over wintered and it's getting to a point where we've got a lot of tillers on it and it's a big clump of ryegrass generally I tend to move away from a Clethodim or Select based herbicide program just because, number one, it seems to take a lot to Select rate when the plant gets that big to to kill it and then two, Paraquat plus the PS II inhibitor is much quicker and seems to be more effective on those larger ryegrass plants. But when we go back to Select rates and and tank mixtures, what kind of calls have you all been getting I guess and and what kind of rates are we recommending if we're going to go to the Select or Clethodim route?

**[03:16] Jason Norsworthy**

You know, I think that I think what you just touched on there, I think rate is one of the questions. How much does it take to kill it? And, you know, if you are going to go with Select today based on the size of that ryegrass, I'm going to tell you, you can't cut back on rate. You're going to have to use the full rate. Select Max. That's going to be 16 ounces of that product. I think you can go a little bit higher on some of the generics, but Select Max that's where you're going to be. And you know, with that, it's going to take every bit of two weeks, if not three weeks to actually kill that that ryegrass. And so with that, I just I think there's probably better options. There's like you said, the Paraquat's a better option at this time. The other problem I run into, you know, folks are not going to want to put out Select at this point and sit for essentially a month, waiting on planting corn, waiting on planting rice. And so along those same lines, the next question, when we start talking about Select, or ask questions about Select rate is how soon can I go behind that and plant rice or can I plant corn? And the answer to that is there's a month plant back at that full rate. And I just want to caution everyone and let them understand that that plant back is real. We've done a lot of work where we've gone in and tried to plant 14 days behind that. And more often than not, you're you're going to fail to get a stand. So if plant back is a concern for you. That's another reason to push you back over to the Paraquat, Paraquat Atrazine, Paraquat, Metribuzin and Paraquat Direx depending on what you're looking at putting in the field behind it.

**[05:05] Bob Scott**

Yeah. And going back to what you said before, Tom, about the size and kind of switching over to that Paraquat PS II. I've only been back in the office for a couple of weeks now, been to a couple of fields and, and actually sampled one of the fields where we we weren't able to get it with Select and I feel like it was probably just too big. And so a couple things, you know, that puts you a little bit behind on your burn down and trying to get in there and plant. But it also means a later application now trying to come and clean that up with Paraquat and whichever PS II. I don't know which one they're using because I'm not sure what they were pulling back in the field, but say it was Metribuzin for beans. So that just doubled the cost of that that burn down going back in we probably should have been at Paraquat first in that in that particular field. So just one of those things to watch out for.

**[05:59] Tom Barber**

Well, and I know I've got a lot of questions on the rate of Select in the MP 44 and of course we can't put every generic version of Select in the MP 44 but you know, Select Max, we do have it in there. I did increase the rate, it does go up to 32 ounces in the MP 44. That's really a perennial grass rate. But the whole idea there is to to show the range, I guess, of what we do have to work with on some fallow ground. And then also when we get to some of these generics like Section Three, for example, it doesn't distinguish as much on the rate of Clethodim for perennial and non-perennial grasses. And so it just goes up to that equivalent 32 ounces. And so if you are still using Select number one or a Clethodim, know what formulation it is, know how it is formulated, whether it's a one pound like Select Max or a two pound or a three pound like this Section Three to get your rate correct on that application. And then the other thing I get a lot of questions on is I guess it's in the corn taking out a failed stand of corn section in the MP 44 and where we have a reduced right of Select where we can plant back in seven days. That is not a rate that we recommend for ryegrass control. That is just a right to take out a corn stand. So and that's the only time we can replant within that 30 day window. And every year I walk fields, especially on our sandier soils, where we have an issue with the planting too quick behind that Select application like

Jason was saying, two weeks or, or whatever, I see it every year. So it's real, just be mindful of that. And then the other thing, if we're definitely set on Select or Clethodim, I'd say just watch the antagonism when we move in the auxin tank mixtures, whether that's dicamba or 2,4-D, especially those two I think especially as that ryegrass plant grows and is larger, we're going to see some reduced efficacy in those in those situations. So main story on ryegrass now for most of our fields were probably in that Paraquat recommendation as far as what we would recommend, if you all agree with that, and then putting a PS II inhibitor with it, if it's beans, that can be Metribuzin and technically, I guess we can do that in front of corn as well. If it's cotton, it could be Diuron or Cotoran and something like that. For rice, unfortunately, we really don't have one.

**[08:38] Bob Scott**

And we're not really talking about a full rate there, right?

**[08:41] Tom Barber**

Right. Yeah. So we're saying like three ounces of Metribuzin, right, is equivalent. We could do it with a pint of atrazine in front of corn. Pint of diuron or less or even, ten ounces or so. And so yes. Doesn't have to be a full rate. But anything else on ryegrass.

**[09:00] Jason Norsworthy**

Well, one thing I'd just like to say about ryegrass is this is kind of going back to where we started here is, you know, I think most of our growers south of I-40, they've had ryegrass now for many years. Our growers that are north of I-40, this is tending to be a new weed for them in terms of burn down. And I just want to caution everyone, if you have ryegrass in your field, you better make the assumption that it's glyphosate resistant. We have a little bit that's susceptible out there but most of it is going to be resistant to glyphosate. And I think that you just get behind the eight ball when you go out there and you start spraying this stuff with glyphosate. It's going to get big on you because glyphosate generally is not is not effective. And then the last thing that I want to say on ryegrass, we've got to do a better job of keeping this stuff from going to seed and not only seed in the field, but I think seed on the edge of the fields. I've seen that where it's creeping into our fields from these field margins. Just like any other weed, it's going to become problematic if we if we let it go, obviously.

**[10:12] Bob Scott**

One other quick thing, I guess I would mention is there was some fall residuals that went out this year, Jason, for ryegrass. Dual being one of those and I think in Jared Hardke's last newsletter, he pointed out that it is not safe to plant rice, you know, back into those fields. And that applies to several of the chloroacetamide type products or group, remind me, group 15.

**[10:42] Jason Norsworthy**

Group 15 herbicides. You know, I would agree with that, Bob. And I will tell you that we didn't we've done a lot of work with all applications. If you put out Zidua in the fall, if you put out Dual in the fall, there's, I would not want to plant rice behind that. More often than not, you're going to fail to get a stand if you put those out in the fall.

**[11:07] Bob Scott**

And I guess finally on this subject of ryegrass and breaking through these burn down programs, you're interested in or have the ability to test these, right? Correct? Not only progress, but maybe annual bluegrass. We haven't talked about that one yet.

**[11:26] Jason Norsworthy**

Ryegrass, annual bluegrass, any of these grasses, I don't want to go and test for glyphosate resistance, folks. We have glyphosate resistance everywhere. You better make the assumption it's kind of like the pig weed, all pig weeds resistant glad to see today make the assumption all ryegrass is resistant to glyphosate. But if for some reason an individual had failure of Clethodim, Select, I'd be more than happy to test that. All you need to do is, you need to get. I would, I want to see 10 to 15 clumps that you collect seed from. You get those, you're going to make sure that they're mature seed from those. Get as many panicles from those clumps as you as you can. Put those in paper sacks once they have dried down, take them to your county agent. Your county agent has a herbicide resistance form. We need to know where they were collected from, preferably GPS coordinates. Also want to know what was sprayed on that population. Send it in to me and then I'd be more than happy to test for Clethodim. And I'm going to kind of jump ahead here. We'll talk some about annual blue grass, but we're starting to see some failure of glyphosate on annual blue grass. I'd be more than happy to test that. Now when folks call me and I've had several consultants call over issues like this this spring, I want to remind everyone, I'm not asking, do not allow this stuff to go to seed in the field so that you can get a sample. The last thing you want to do is be spreading Clethodim resistant ryegrass, glyphosate resistant blue grass, do everything you can to kill it. But before you make that final application, if you want to dig up some clumps and put them in a five gallon bucket, bring them to your house, grow them out so you can get a seed sample again, I'd be more than happy to test, but I would not set aside a small area in the field and let it grow out because again, if it is resistant, you're going to have a significant, significant problem the coming year if this stuff goes to seed.

**[13:32] Tom Barber**

Absolutely. Yes, that's great advice. And I think that, you know, if we have a miss on blue grass from glyphosate, really the next best thing is probably Paraquat, is what I've been telling most folks do y'all have a better...?

**[13:47] Jason Norsworthy**

That's what I've been telling, I've had some folks ask me about using some ALS herbicides. We have not had a chance to to test these. I think Paraquat is the sure one. You know, the glyphosate resistant Poa that we have up in in Poinsette County, I haven't sprayed it yet with with Paraquat but going out today that's what I would do. I'd go Paraquat and again I'd put a PS II herbicide in it. It's just going to make Paraquat a better product.

**[14:17] Bob Scott**

I'm going to tell you, it's a little bit farming ugly too. But, you know, there's been some work done in rice and beans, both, I believe it a little bit of fertilizer, mainly in rice with the nitrogen can overcome any competition from what's left of that annual bluegrass. But it is kind of an eyesore out there, and it will hurt yields if it's thick as hair on a dog's back.

**[14:40] Tom Barber**

Well, and it's hard sometimes if we're in a system where we're re-hipping or conditioning our beds that they're huge clumps, you know, you know, it can kind of clog the system or make our beds uneven. And so I think, you know, if it is really big, that can cause some of those issues. So best to get out there and probably make another application to kill it if we can, because we don't ever know when we're going to get back in the field.

**[15:09] Jason Norsworthy**

But the one thing, though, again, just about bluegrass as well as ryegrass, just Tom, you've already you touched on it. But I want to reiterate is: When you start placing other herbicides in the tank, if you've got Clethodim that you're going after this and even some of the ALS herbicides, you start mixing things together. We have a tendency to start missing grasses and hence again the value, I think of going out with Paraquat is going to be a lot more forgiving. You don't have a tank, you don't have antagonism with Paraquat like you do with other herbicides. But I'll get calls, folks willing to take mix glyphosate and mix Paraquat. When you take mix dicamba and take mix Paraquat and maybe there are some scenarios where we need to tank mix those. But in general, if you take a systemic herbicide and you mix it with a contact herbicide, you're going to reduce the activity of that systemic herbicide.

**[16:11] Tom Barber**

Great points. Great points. All right. That's by my notes for wrapping up, burn down. Anything else that we left off. It could be anything. All right. So another hot topic of late and this has been a conversation over the last at least week to ten days is, you know, whether it's the lack of availability of approved dicamba formulations or, in certain areas of the state, we're hearing a lot of reports from last year of reduced activity or lack of results when using dicamba on pig weed. But I've had a lot of discussions over, like I said, the last ten days with growers and consultants and everyone about shifting back to more of a glufosinate-based program or Liberty-based program. And so a lot of questions have been coming up. And, you know, it doesn't seem that long to me, guys, but you know what? I know if we're not using things, we forget about the setups we need and we forget about the best management practices. But one thing we know for sure and we're probably going to repeat every time we do one of these programs is we need to change our nozzle set up if we're going back to a glufosinate based system. So the TTIs are out in my mind. If we're talking about Liberty or glufosinate. Comments?

**[17:37] Jason Norsworthy**

I would agree with you, totally on that, Dr. Barber, it's I mean, you're going to give up you're going to give up 20, 30 percentage points of weed control. If you go to, if you keep that TTI on there. And I know it's it's a challenge to go in there and start changing those nozzles, rotating from one to another. But I don't see where you have an option of doing anything other than moving to it. You basically have to have a medium to coarse droplet size, you know, AIXRs, I don't want to have any, that's going to in the most in most instances that's going to produce a coarse droplet. I don't want to be any larger than that. The other thing you've got to remember about glufosinate that herbicide, I don't think with it being a contact herbicide, it's not as forgiving. And what I mean by that is once you start getting weeds out there, five, six inches in size, pig weed and, you know, grasses are probably kind of the Achilles heel at times of glufosinate. And when you start stretching that from a weed size standpoint, you're going to see a lot more failures if you don't have that droplet spectrum optimized and you need to make sure you're running a running a full rate and you're running those on on small weeds. I think if we take a look at

glufosinate today, it's safe to say you mentioned dicamba. But I will tell you all the auxin herbicides as well as glufosinate, you know, we're seeing some slippage in in all of these herbicides. It's just the nature of when you use them year after year after year, the performance of those herbicides begin to diminish over time. And we need to be mindful of that. And for that reason, we need to make sure we're doing everything possible to ensure that we optimize the level of weed control that we're going to get from a timing standpoint. Need to make sure we have residuals in the tank when we come over the top with glufosinate and we're spraying small weeds.

**[19:44] Bob Scott**

I agree 100%. I think that was a mistake. You know, if you look back several years back when we introduced or when we reintroduced Liberty Link or glufosinate tolerant, soybeans, everybody was used to farming with Roundup. And I think the first kind of inclination was to try to use it in that same way. And so we saw a lot of failures right out of the gate that I think can be attributed to weeds size and, you know, things like nozzle selection and GPA and stuff like that. So we don't to make those same mistakes again. If you've been in a dicamba based program and dicamba, Roundup to those program for the last couple of years and you're switching to Liberty. It's a different herbicide. It has different requirements in order to be successful.

**[20:31] Jason Norsworthy**

But the other thing that I would just state about glufosinate and I you know, that's a generic herbicide today. There's a lot of formulations out there. I don't claim to have sprayed all of them. The ones that I have sprayed, I will tell you at times they can differ in terms of activity. Some are better than others, some are more injurious to crops than others. You know, Dr. Barber, when you talk and XtendFlex cotton and you got one, two leaf cotton out there and you start coming over the top with glufosinate, it's the, it's tolerance at times is somewhat questionable to glufosinate early and you know we like to overlay these residual herbicides and you start putting some things like Metolachlor in there or Warrant in there. I mean your your product of choice to tank mix to try to lay that residual down. You can have some, some issues. And so I just I want to remind everyone that you probably need to make sure that you've got a good glufosinate formulation that you feel comfortable with, that you've worked with in the past. All these formulations are beginning also to differ. We're going to start seeing these L-isomer forms that are starting that are going to come to the market if they're not here. I don't know whether some is going to be available this year, but if they're not this year, you're going to see them here in the next year or two. I know we got Surmise 5 out there today, which is completely different than the old Surmise formulation. If you're not careful, then you go out and spray Surmise 5 at a quart per acre over the top of XtendFlex cotton, you may be replanting XtendFlex cotton if that cotton was small.

**[22:19] Tom Barber**

Yeah. And I've already had that question this year already about Surmise 5. And so for those that don't know it is a heavy formulation of glufosinate by double I guess. And so a normal standard what we call standard Liberty generic glufosinate was 2.34?

**[22:42] Jason Norsworthy**

2.34, that's right.

**[22:43] Tom Barber**

And so the Surmise 5 is double that it's 4.68 I guess. And so a quart of liberty is a standard rate. But a quart or Surmise 5 is a 2x rate. And if you put that with Metolachlor or Outlook and put it over the top of cotton, that's two or three leaf, you might not be able to roll that cotton out the next day. We laugh about it, but don't get caught, you know, without knowing what you're putting out. And so it's not going to be funny if you call me and you've done that. So it's going to be serious and just know what you're spraying. And you know, one of those different isomers like you were talking about, Jason, you know, Liberty Ultra, I haven't heard, you know, where there's going to be a lot of that available or not. I know there's going to be several of those coming down the pipe in the future by 2025 anyway. So you know, and in all our program we look at cotton and we talk about XtendFlex cotton, and if dicamba is in that first application, a lot of our best programs include a dicamba early, followed by glufosinate in that second, you know, over the top application. And so I think, you know, with with the lack of available formulations for dicamba and for those that don't know what we're talking about there, of course, there was a court that vacated the labels back in February, but we're able to use the existing product that was in the the chain of supply chain of XtendiMax and Enginia and Tavium. And so when those are out, we're done. And so, you know, if we're got an Xtend soybean out there, we might be in trouble at that point if we don't have an option to spray over the top of straight Xtends. So that's another thing to keep in mind. There's probably too late in the game to change the seed that you've got now, but XtendFlex would be much better than it then Xtend. And so it gives you more options over the top. Anything else on glufosinate? You know I have my points here, changing from TTIs to course nozzles, at least course like you mentioned the AIXRs or if we increase pressure a little bit, we can bust up those droplets a little bit more to spray glufosinate. GPA is your friend and 15 to 20 GPA spraying during banking hours. You know what that is right? 9 to 5 or so, including AMS, like you said, make sure you know which glufosinate you're spraying. And most importantly, with any of these systems, start with the robust, effective residual program. And so we can't leave it without saying that anything left out on there. Bob, any comments?

**[25:41] Bob Scott**

No, I think you got it.

**[25:42] Tom Barber**

All right.

**[25:43] Jason Norsworthy**

I think you're spot on.

**[25:45] Tom Barber**

All right. Let's talk a little bit about rice. I bet there's rice going in the ground. Matter of fact, I know there is right now, today as we speak. So anything y'all are hearing on the rice side of things.

**[25:58] Jason Norsworthy**

Folks are planting. You're right about that. I've had some folks I've had some phone calls with folks, folks planting, and everyone knows where I am on rice. It's let's start over acre with Clomazone down at planting I like to put Facet or Quinclorac, QuinStar, any of those Quinclorac products with the Clomazone. Just as a reminder, we touched on it here with the glufosinate, QuinStar, if you go with it

that's a completely different formulation than Facet. You got a 4 pound material with QuinStar. It's a 1.5 pound material with Facet. And so just make sure that you're matching your use rate with that actual product for that soil texture. The reason I like Quinclorac down at planting is, we've got a tremendous amount of Quinclorac resistant barnyard grass out there today. We have no activity on it. post-emergence. We still get activity, own it preemergence. I like to wait, when I put my pre out I tell folks, let's wait until it rains. As soon as it rains, let's think about getting another residual out. You know, that might be seven days. That may be ten days before you catch a rainfall. But as soon as you get a rainfall, it's get a plane back in the field. If you can. Let's get one of those delayed pres out, a Prowl, a Bolero, something where we're overlaying those residual herbicides trying to get into that early post application. I don't want to sit there and wait, especially if I have dry conditions and I have a flush before I get that Clomazone or that Facet activated. I'm going to have to come in earlier, sooner rather than later with that post emergence herbicide and try to clean up those those barnyard grass plants. Another reason that I like to put some Bolero is a lot of fields out there today we've got annual sedge in. Better than 50% of that annual sedge is resistant to the ALS chemistry. I like to get in front of it with Bolero. Folks complain about me making that recommendation. They say That's expensive. My response is you go to flood with rice flat sedge, barnyard grass in the field. You talk about expensive. You're going to start running through \$100 bills like there was no tomorrow. If you've got grass in your field or sedge in your field when you go to flood. So that's just kind of where I am in terms of getting the season started off right.

**[28:29] Bob Scott**

I've been really pleased, Jason, with the calls I've gotten. I've had at least three or four rice consultants call that I know cover quite a few acres if you add up the acres that they're involved on. And I like this change in philosophy that there's been over using a lot of residuals on the front end and overlapping your pre emergence products. I feel like you know I kind of came up in an era where it was let's see how cheap we can get by with. Let's use the lowest rate of Command and see what's left. And, you know, whoever spends the least amount of money wins. But with the resistance problems that we have now and that's probably part of the reason why we have the resistance problems we have, is some of those decisions like that that were made. A lot of guys are going out with just what you said. I talked to one guy the other day. He had his Command and his Facet rates down to the ounce that he felt comfortable with on a little bit lighter soil, he knew exactly what rates he was going to go out with pre, he was planning on coming back at the first sign of grass or the first time that he felt like he could get back in there with a Rice Beaux, followed by Prowl. So he was definitely overlapping. That's five modes of action before that rice, you know, really starts to tiller. And so that's a very good resistance management program. That's, that should be clean. That's a similar program, I don't know about you guys, but if I have a weed free trial that I want to keep weed free, you just look at herbicide tolerance or something in rice, that's pretty close to what we do out in our plots. So it's good. It's refreshing to get calls from this many consultants that are thinking along these lines and, y'all have obviously done some education or or maybe the weeds have educated us over the last few years since I've been away in administration. But it's good when the first few calls back are positive like that. Don't mind taking those.

**[30:37] Tom Barber**

All right. Well, what else we need to talk about on this episode? I know we've got several planned. And just for those that are listening, if you have any ideas of future podcasts, any topics that we need to cover, you always email us or text us. Let us know what you want to hear. But I know, like I said, we've



got a lot of planters rolling planting and corn, beans and rice all at once. It always amazes me how we can plant the state of Arkansas in like ten days. We need ten days and we can get the bulk of our crop planted. So it's always amazing to me.

**[31:14] Jason Norsworthy**

And as a result of that, Dr. Barber we'll be back here a month, month and a half now talking about off target movement herbicides from one field to another.

**[31:23] Tom Barber**

Everybody pay attention to the prevailing winds, especially when they blow out of the north because that seems to catch us all by surprise. So anyway, we're not going to have any of that this year. Dr. Norsworthy. We're going to do a good job all around, making applications. So we're going we're going to go with that. Well, guys, thanks for joining me today. Like I said, we've got a full schedule planned and I know we'll be hearing more about rice and corn to come in the very near future, wishing everyone out there safe planting season. And want to thank all our listeners for tuning in to this first episode of Season four of the Weeds AR Wild podcast series on Arkansas Row Crops Radio.

**[32:03] Intro/Outro**

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