

Weeds AR Wild, S3, EP 6

Intro/Outro

Welcome to the Weeds AR Wild podcast series as a part of Arkansas Row Crops radio. My name is Tommy Butts, extension weed scientist for the University of Arkansas System Division of agriculture. And thanks for joining us today for this 6th episode of season three for our podcast series.

Today I'm joined by Dr. Jeremy Ross. Jeremy, you want to say hi to everybody out there listening?

Ross: Hey everybody.

Butts: Nice intro, good job Jeremy. This your first podcast you're doing today?

Ross: Today, yes, today. It's been a long winter.

Butts: So we're going to talk about a few different things today. You know primarily revolving around some of our soybeans that have already been planted out there, you know, if you need a few weed science things, a few economic things, so we're just going to kind of kind of talk about all those early planted soybeans we got out there and then maybe a plan moving forward. So you know one of the first things we wanted to hit on was, you know, the fact that we do have, I think you were telling me before we started this, Jeremy, about a third of the acres already planted do you think in the state is that right?

Ross: Yeah, so I guess you know talking at production meetings for last couple years and talking about early planted beans, you know, right now as of the report that came out yesterday, we're 34% planted on soybeans and so if you look at last year's planting progress it was 11% so we're you know 20 plus percentage ahead of where we were last year and then the five-year average was, is usually, well it from last week or this week is 15% so we're halfway ahead of where we typically are this time of year.

I've had probably more calls from producers saying hey we got some April-planted beans this year than I've had you know ever, and so that's encouraging so I'm really excited to kind of see how some of these beans perform, you know in these April plantings.

Butts: Yeah and I think part of those calls that have been coming in for these April-planted beans is starting to talk about the weed control front and what herbicides we should be using and things like that, particularly from a residual front and I think one of the first things we both wanted to emphasize is residuals are still mandatory.

Ross: Absolutely.

Butts: We need those residuals still. Now we may be can select different residuals a little bit you know depending on our situations and fields and weathers and things but we still need to have some sort of residual out there no matter what. Now especially now that we're moving you know end of April beginning of May here. You know pigweeds are generally later emergers. You know some of those problematic ones we, you know, if we planted end of March beginning of April, you know having a big strong pigweed material in there at that time is not the most crucial because they're not really coming, but now if we're talking trying to lay out some, maybe even overlapping residuals now, or for planting right now at this moment, it's really the heat of the battle for getting some pigweed residuals out there now too. You know in grasses, you know we have some grasses coming up already now too and I think it's going to be a grassy year this year so I would be picking residuals and other products geared towards a lot of grass control as well in our soybean crop, so be aware of that. You know getting the Duals and the Ziduas of the world out there, Outlook can be a decent option, things like that. Those are beneficial for both grasses and pigweed materials. And if we're talking straight residual ahead of you know the, the crop isn't up yet, you know getting some multiple modes of action out there are really important. You know some of the ALS herbicides are great for those bad teaweed fields we got out there anymore in the dicamba systems.

Getting some of the PPO inhibitors out there still for pigweed material, things like that. Metribuzin is a real vital one we need to have in the mix out there. So a lot of those are really pretty critical for our residuals even if it is early planted soybean. Now one of the concerns we do have there though is the injury concerns and I'm sure you and I both gotten a lot of calls on that front, Jeremy. And you can, you can you can take it away, after you know if you have any other added comments but I would just like to stress you know what I like to tell guys is take a vacation for a week or two, you know spray them, we still need them. With the cool weather we've got the wet weather we've got, you know there is a little bit higher chance of some injury from some of those herbicides particularly Fierce, metribuzin, things like that, but they'll grow out of it and the weed control up front greatly trumps that slight injury potential we see there. I don't know if I have any data on it but economically speaking, you know at the end of the year do we ever really acknowledge any yield loss from that little bit of early season, you know ding ups?

Ross: No, we never have and you know and I've looked at data from, you know other states and you know, like you, like you said, you know what little injury you're going to see on the beans is going to be minuscule compared to, you know being able to control those weeds and so especially with the cool temperatures we're getting and the, the wet conditions we're getting, those beans are just kind of struggling coming out of the ground, you know kind of sitting there in that that herbicide level layer, you know and they're just not actively growing and so you know it's taking a little bit of time to come up through that, that herbicide you know, layer just kind of sitting there maybe get a little bit more injury than normal but as long as they're continuing to, to look fine and grow you know they should be fine and there shouldn't be any yield, you know detriment, you know due to that and especially you know if you do lose a few plants along the way you know beans are really good at compensating and as long as you got the adequate stands, you know, if you lose a few here and there you should be fine.

Butts: Yeah I agree and along those lines too is the canopy development part you know we stress a lot for that cultural standpoint for weed control. And one of the best things we can do to enhance soybean canopy development is early season weed control. We show it, you know, in all our research whether it's using PRE residuals, whether it's using other early control strategies. And so even though some of that slight early season herbicide injury may slow up or check up that canopy development a little bit, it doesn't match what early season weed pressure does to canopy development at all. That's, it's such, the weed pressure reduces canopy development to such a much larger extent than that little bit of herbicide injury will, that again you still want those herbicides in there even for the canopy development part and starting to try and shade that ground sooner than later for, for eliminating later season weeds, especially like our pigweeds we just talked about that are later emerging, so very critical there. Along those, you know, along, we kind of touched on it there Jeremy a little bit but the weather concerns right now with the cool wet conditions, I know we both been getting some phone calls on that front from different aspects. One of the things I wanted to kind of pass to you to touch on a little bit is you know when we have a little bit wetter conditions we, you know, and we're a little bit cooler, how some planting practices can kind of play a role both for agronomics but also our weed control efforts and herbicide injury standpoint. So you want to just mention a little bit about our maybe some best practices for planting?

Ross: Absolutely. You know, so you know number one is making sure, you know the soil is right for you know planting. And you know, we've been a little wet and so you know there's some situations where you know farmers maybe try to, you know push it a little bit too fast, you know might be a little bit too wet and we're not getting complete row closure, you know where we're putting those seeds down and so you know if you've got exposed seed you know down in this little trench, you know there's really nothing good that can happen to it. You know you can get the, you know, they can start to swell and then they can dry out just because they're not protected by the soil. You know we see herbicide problems you know with seed that are, you know just kind of sitting there and that exposed trench, you know have birds and different things come through and you know and remove those seed out of the field so, you know we need to slow down you know make sure we're getting good you know the soil to seed contact along with closure of those furrows so that you know we have really good conditions for those, those little seed to come up and they grow. But we have seen some delay in emergence, you know the temperatures are kind of been all over the board. You know we go from 80 degrees and then you know today it's not supposed to get above 60 degrees and so that, that really kind of the causes some little confusion I guess to the soybean plants. And so we've had some issues where emergence have been a little bit slower than you know typically you know for in middle of you know May or June and so you know emphasize really need to have really good you know fungicide seed, the insecticide seed treatments and then probably the next big thing is a inoculants. So I've been talking about inoculants for the last several years. I've already had a couple of calls this year all the guys forgetting to put on inoculants in fields that hadn't had beans in, in years. You know some of these were old cotton fields that they were putting beans in this year. Once the seed is planted in the field and you do not have an inoculant on that seed there's really nothing you can do and so the only option is if you don't have nodulation you

know later in the season the only option is to come back in with some over the top applications of urea. And every time I tell my recommendations you know farmers kind of look at me like I'm crazy but you know if you have no nodulation and you're starting to see nitrogen deficiency prior to flowering, my recommendation is 150 pounds of urea flown on, irrigated in and then two weeks later come back with another 150 pounds. So you're looking at 300 pounds of urea you know to satisfy the nitrogen needs for the soybean plant versus you know if you look at inoculant and you can spend you know maybe \$5 an acre you know and getting that inoculant on that seed and ensuring that you're going to have good nodulation. So you know just kind of be aware of that if you know. I know guys were getting into hurry and they're like you know we got a window to get planted let's get planted but you know if you're going if you've got some fields that haven't had beans in you know the field and at least the last three years, definitely need to look at it those inoculants. And any of the products work. We looked at a whole host of all the products that were available on the market and they all were comparable, you know they all work the same you know we're not seeing any one product outperform the other. Just make sure you get you know a product that's still within the expiration date and then also and I tried to you know give this word of caution, you can't use chlorinated water you know with those inoculants and so just check with your co-op or your seed treater and just make sure that either they're pre-treating that water you know if they're using the city water, it has chlorine in it or using well water where you don't have chlorine in, it because it will it will kill the bacteria and you're pretty much you know not going to have anything on that seed. So that's just some of the some of the things you know I've already had a couple of calls on that this year and just want to kind of re-emphasize that you know we definitely need to have inoculants on those seed if we going into fields that haven't had beans in them.

Butts: So I've got kind of a question and it's kind of two parts it's a little bit on the weed control part but it's also a little bit on the like the inoculation part and things like that. It kind of goes back to planting depth, right? That's always one of the things we talk about a whole lot. You know so on the weed control side, kind of want to hit a little bit, you know especially with cool wet conditions if we plant deeper for some reason, this is why I mentioned this, it's really important to check our depth and make sure we're planting in appropriate depth. You know right now if it's cool wet we happen to accidentally plant a little bit deeper we spray that herbicide on there, there's a lot more chance for either a failed stand or a lot more crop injury to occur in that instance because it's got to go through extra levels of herbicide before it can get out and start kind of growing through it. So planting deeper right now actually is, is worse for us on that herbicide injury front unless you've got something different to kind of you know complement on that one Jeremy, but on the inoculation front I just didn't know, you know, is there a, you know planting depth issue where you know that can help us or hurt us or anything along that front too or anything else agronomically on planting depth front?

Ross: Well, not so much on the inoculants because you know, not going so, going to be under on the seed and it's going to be right there for the roots, but you know planting depth is pretty important you know, you know everybody always talks about how many knuckles deep you know and but you know if you actually talk about the depth you know, an inch you know, no more than two inches and then once you really start getting below 2 inches you know you can

really start seeing you know plants you know struggling trying to come out of the ground especially if it's a little bit tighter soil and it starts to you know get dry and we get a crusting situation you know seems like you know we just don't have the push and the vigor and the seed that we used to have and so you know we really want to make sure you know we're getting that planting depth correct and you know really you know when we start going much more than two, two inches you know deep and you know, on the soil depth, I really start getting a little bit of concern but especially these cool wet conditions you know, you know about that, that, that depth is where we need to be just to make sure we're not going too deep and then the beans are struggling and we have a failed stand and then we had to come back in and replant.

Butts: Yeah, we talked about that canopy development mark too and you know the deeper you plant the longer it takes to get out of the ground you know, the longer you're stressing residual herbicides and the more chance you have for more weeds to pop up before you actually get that soybean plant to start forming canopy, so again that you know checking that depth and making sure it's in that kind of optimal window. Like you said I really kind of like that inch for most situations because it gives you a good chance to kind of pop out of that soil a little quicker and get going from that standpoint. So totally agree. Umm, did you have any other considerations for the early planted soybeans side of it?

Ross: Yeah, just a couple of points you know. So we've got like I mentioned earlier 34% of our acreage planted you know and we're still in April. Just be aware and I've you know tried to hammer this in my production meetings for the last couple of years talking about early plantings is that with early planting you're going to have early harvest and so we've seen you know some bad situations the last few years. If some beans are ready to harvest and we get some weather events you know say a front comes through and it rains for two or three days or we're just not able to get in and get those soybeans harvested you know, you know within a few days when they're ready to harvest we've, we've seen some pretty bad quality issues and what you gain by planting early in yield you could lose that plus more in seed quality if you're not out there you know harvesting those crops those April-planted beans in a timely manner. So just wanted to re-emphasize that, that you know when these beans are ready to go we need to be ready to go even though if you're you know corn is getting pretty close or you got some really early rice that might be coming off we really need to kind of get those beans out of there as quick as we can. And then the other thing that we talked about our potassium rate calculator quite a bit this winter along with our end season tissue sampling. I just wanted to mention that again that you know fertilizer prices have come down a little bit compared to last year but they're still elevated to two years ago. That rate calculator's just you know really good tool to kind of give us our ROI on what our potassium rates need to be on the front end and then we can come back in after R2 and start pulling those tissue samples just to you know see if we do need to apply any more additional potassium, but that's just kind of you know, hopefully most everybody's got their potassium out by now but you know we'll probably do another podcast you know there in the, in the, in this growing season just talking about that tissue sampling, but that was just kind of a couple of things I just want to hit on again.

Butts: Yeah, and just to kind of add on to that real briefly as far as the weed side too with early planted soybean. You know it kind of goes hand in hand with the harvest considerations you just had. Like it's going to move your harvest up a little earlier probably so be aware of that. Same goes for the rest of our weed control efforts throughout the rest of the year. It's going to bump them sooner than we're used to, so don't you know, don't go out and expect it to follow your normal timeline if you've planted earlier than you typically have in the past, follow you know our normal recommendations, you know overlap any residuals after about three weeks you know follow on that you know a couple more weeks with your overlapping POST, scout you know, be persistent with your scouting and find those weeds when they're small and apply when they're small don't just go off the calendar date for your weed control efforts because that's going to change now with this earlier planting scenario this window that's occurred.

Ross: Well it is and as you mentioned, earlier you know your weed emergence are going to be a little bit different you know with the, you know, especially with the cool wet conditions and you know they may be delayed a little bit and so yeah I mean getting out there and putting boots on the ground and actually walking the fields and you know knowing what's coming up and so we know when to get those herbicides out along with you know, you know if you're used to you know scouting for insects and diseases you know we're just going to be earlier on those you know once we get in season with these April planted beans.

Butts: 100 percent. So just kind of go in a slightly different direction there too. You mentioned you know, knowing what's up and what we got up and trying to look at that. We've also had several calls recently on replant considerations you know stuff that where we were saying just doesn't look promising or it looks seems a little bit variable or those kinds of things so we wanted to touch on some replant considerations too. And Jeremy I can let you talk too on this for some of the agronomics but one of the first things I wanted to mention is at least from some of the calls I've gotten is you know at least in my book don't consider replant your first option go to. You know like I think there's a lot of scenarios out there right now where we do have these cool conditions, stuff is slow from popping out of the ground, you know we got to give it an extra minute or so you know if those soybeans are you know only have cotyledon out or something don't you know it's not a great time to take a stand count right at cotyledon stage. You kind of got to let him go a little bit longer and see what our true stand is. And so I think there's a lot of scenarios out there where it may look a little poor right now but they're going to come out of it and just be fine and they're not going to be that that separated in their growth patterns. You know if we start getting 1,2 true leaves or something out there and we got poor stand then we're kind of talking a different scenario. But so right now I think it's kind of given it a little bit of time making sure that we for sure don't have a good stand and then on top of that soybeans are really good at adjusting for some poor stands, you know they'll branch more, they'll do a lot of things and so in a lot of cases I think too we can have a you know a little bit poorer stand but as long as it's kind of consistent across the field those beans can make up for it quite a bit and you know trying to kill off an entire field and then replant is not necessarily always the best option. Maybe we can spot plant, especially if it's still early those growth stages aren't going to be that separated apart and they can they can kind of grow together still even

though there's maybe a you know a few days to a week difference between them. So I don't know if you've got anything to add on that.

Ross: yeah I've already had a few calls you know talking about either failed stands or wanting to reduce to seeding rates you know and so you know again been talking about it at winter meetings you know the last couple of years. So you know my number on a minimum stand is 75,000 plants per acre and so as long as it's a uniform stand at 75,000 plants per acre we can maximize yield and I've got you know lots of data. My counterparts in Mississippi and Louisiana have the same recommendations and so you know but the key part of that is, is uniform, if you've got skips out there then they're two to three foot you know down the row or potholes that are as big as a pickup truck you know those are where you're really gonna have problems. Number one you're not going to have any you know, very few soybeans and those to shade the ground, therefore you're going to have a lot of weed competition and you know it's just going to be a problem throughout the entire season. So again I've already had a few calls on some replants some have been you know lower than that 75,000 but the big question was you know I've had several farmers call and say well we're going to cut down our seeding rate. Just remember that you know if you plant in that you know 140,000 to 130,000 seed per acre range rate, that gives you some cushions some insurance you know and you know unless you just have something totally big disaster happen we should have more than than 75,000 plants per acre and so I can't tell you know what you need to plant to, to get a uniform 75,000 plants up because each lot is going to be a little bit different, soil conditions are going to be a little bit different and so again I mean I, you know I, I encourage ... you know cutting back maybe on your seeding rate a little bit but don't cut back too much where you know kind of shoot yourself in the foot so you know if you've been planting 140,000 maybe cut to 120,000. But you know I've heard you know some farmers say well we'll cut it down to 100. You know that that doesn't give you much leeway. You know you're only looking at 25,000 you know plants give or take you know cushion and so if you look at any normal plantings you know under normal conditions you know on average we're looking at about 20% of what you plant is not gonna come up, so if uh you know you get something on the you know poor germ or you get a crusting situation or something like that and you're planting at these you know a hundred 100,000 plants you know seed per acre, you're your insurance and your cushion is really not there and so that's why it's still encouraged, you know that 120,000 I don't really don't have a problem planting it that, but again we our data is showing between you know somewhere really 120,000 to 160,000 we don't see any kind of yield differences here, it's pretty flat between those seeding rates and so yeah you can save a little bit on the front end but if you cut it too much and then you have a stand failure, now you're behind the eight ball because you know you're delayed in planting you're looking at more equipment you know cost, more labor cost, more seed cost, other things like that and so just don't cut too much just so that you know we get really good stands.

Butts: As part of that too, if we get into that replant scenario and we are looking for options to actually kill off what stand we do have up, you know we've had several calls on that and it's, it's challenging, we're just going to be honest. There's, there's just really not great options with our systems we're currently in today. If we're, if we're talking XtendFlex and we're talking Enlist, you know those two systems are very difficult to, to remove a failed stand or control volunteers of

those in another crop, so it gets really challenging in a hurry. You know one option, it's not a great option, but is to try and flip flop technology so if you had XtendFlex out there you can obviously kill it with with 2,4-D but then you need to plant Enlist beans into that. Vice versa if you were to plant Enlist beans you can kill with dicamba and then you could flip flop there. I know that's not ideal for a lot of people but it is one option kind of out there. Really probably the, the best case scenario is using Gramoxone but more than likely you want to mix you know metribuzin with it and so hopefully you haven't you know had a full shot of Boundary already out there otherwise you kind of are shot in the foot there too as far as adding the metribuzin part in, but the other thing to emphasize here too is again you kind of gotta let that, that stand that you wanna kill get a little bit of size to it you know at least somewhat. You can't if they're just cotyledons out it's not gonna die from getting sprayed on cotyledons. You know even the unifoliates at times are a little bit hit-or-miss, you almost really need kind of a first trifoliolate to get a full kill on it with anything we're spraying there and so again if we're looking at it real early you know trying to spray something out and kill it isn't going to be a great option either. Kind of got to have a leaf on it at least to catch some of that herbicide, suck it in and kill it off from there. So just be aware of that too, very limited options not nothing great life-saving options that we can give you there and again it's got to have a little bit of size to it so that can be a bit challenging as well. Anything else to consider on the replant front there Jeremy? Those are a couple main things I wanted to hit on.

Ross: No. I think we covered most everything but you know if you got any questions you know either call your county agent or give me a call I'll be more glad to come out and walk your field and give you some assessments. But you know it's pretty easy you know again, 75,000 uniform is anything less than that we really start to decline in our maximum yield pretty rapidly.

Butts: That's great. Other notes I wanted to make a make a note of quick. You know we'll probably have another podcast later on with the Weeds AR Wild series to talk about you know programs or post-emergence options in our in our soybean crops but I did want to hit on just a couple of quick notes moving forward in the year. You know as you're making your herbicide plans and weed control plans make sure to have plans this year for grass control. You know I talked about it in county meetings this year a little bit but we had a pretty bad grassy year last year a lot of escapes with the drought you know no matter what crop we're talking about so there's a lot of seed that went back in that seed bank. So just be prepared to be battling grasses. Pick residual herbicides that have grass activity. Pick postemergence options that probably have grass control you know activity. Just be prepared for that. The other thing I wanted to make a note of cause I've already had a couple of calls on this too is like the dicamba front and the dicamba rules this year. You know one of the things I wanted to re-emphasize again, it is an illegal tank mix in Arkansas to mix dicamba and glyphosate together. Now federally it is legal but in the state of Arkansas that is still considered an illegal tank mix so just be aware of that and also just you know outside of the legality standpoint of it we continue to see you know we have some data on it, Larry Steckel has a lot of data on it over there in Tennessee, where that tank mixture is just poor for trying to fully control our grasses and pigweeds for that matter. We see you know kind of an antagonistic interaction there for both pigweed control and grass control when we run that tank mix and so if we can separate those out as much as possible it really

goes a long way even from the weed control front as well as being a legal application then by separating them out. I just wanted to mention that. As far as the rest of the dicamba rules everything else is pretty much business as usual from the past couple of years so still a June 30th cutoff. The buffer zones are have you know as they have been so no other real new changes to our dicamba label on that front so kind of use it as you have in the past couple years kind of thing. So just be aware of that. Um outside of that like I mentioned we'll probably have a podcast later on in the season for more you know postemergence later season we control things. As far as the early season stuff Jeremy did you have anything else you wanted to touch on?

Ross: No, I think we covered just about everything.

Butts: Solid. Well the last couple things I you know I always like to mention some of our outreach efforts so if you haven't please check out our website online for a lot of this you know different updates and publications and things like that from us. Also make sure to pick up your MP44 from your local county extension office or please download it, download it from online. Also just a note there if you downloaded the MP44 before a couple weeks ago basically you know before within the last couple weeks, we did have an error when it got posted online and it was kind of a previous version and so it was it was outdated let's just say that. So if you if you downloaded it within outside of the last two weeks really go back out there and redownload a new copy because it's the most up to date version now is posted online so that'll be better as well there. Also if you haven't signed up for our text service please do that. You just need to text weeds to 501-300-8883 and as always and Jeremy just mentioned it as well you know if you ever have any questions I mean please feel free to get a hold of us get ahold of your local county extension agent they can get ahold of us as well and we can have a chat about whatever problem you might be seeing out there so please feel free to get hold of us. With that I just want to say you know thank you for listening. Thank you Jeremy for joining me today.

Ross: Thanks for inviting me.

Butts: Yeah, you know we got to have you on for at least one a year; it's the token agronomist.

Ross: I was on two or three last year so at least I got one down so far.

Butts: Yeah, that's right well we always just got to have the token soybean agronomist on, that's just the way we operate. So anyway um any last minute uh any last-minute things you want to say either on the extension front or?

Ross: No I'm just excited to see you know a third of our crop planted in April so kind of anxious to see how we how we how we finish up.

Butts: Yeah 100%. And so I guess in the last thank you I just always like to say too is thank you for the continued support from the commodity boards particularly for this one Arkansas Soybean Promotion Board as well as some you know different USDA funds and, and things that

that Jeremy and I are both on so you know a lot of that funding goes to a lot of different sources for us to help do research and extension activities and so it's really important and we're thankful to have that so, thank you on that front. And with that again thank you for your continued support and listening and you know I think we'll sign off from there. So thanks for joining us for this episode of the Weeds AR Wild podcast series on Arkansas Row Crops Radio.

Arkansas Row Crops Radio is a production of the University of Arkansas System Division of Agriculture. For more information, please contact your local county extension agent or visit uaex.uada.edu.