



Season 3 Episode 1 – Weather Impacts on 2023 Crop Season

March 3, 2023

Speaker 1:

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

Katelyn:

Hi, and welcome into another episode of the Alabama Crops Report podcast. I'm your host, Katelyn Kesheimer.

Amanda:

And I'm your other host, Amanda Sheer. And we're excited to be kicking off the start of 2023 releasing more podcast episodes. And today we have Eros Francisco, our grain agronomist. How are you doing today, Eros?

Eros:

I'm pretty good. How are you?

Amanda:

Doing good. So I kind of wanted to get started with some weather related questions for you. My main question, since I haven't seen you too much is we had several days in December where we were in many parts of Alabama where we didn't get above freezing. Was our grain crop severely impacted from that? Have you seen any freeze damage there or in any areas?

Eros:

Oh definitely. There was some damage done in December with that cold that we had. Oats were the most impacted ones, the most damaged. Perhaps oat fields will not do very well this spring or not do at all. Wheat fields are okay. I have visited wheat fields in North Alabama. They're looking pretty good so far. Some ones are suffering with nitrogen deficiency, which is probably related to not getting any nitrogen applications so far yet, or with the amount of rain that we had over December and January. Soils are pretty much wet right now. So yeah, oats are the most impacted ones so far and there is some variation regarding varieties of barley or [inaudible 00:01:55] kale, but which is fine.

Katelyn:

And staying on the topic of weather, before we actually hit record, you were telling us about some growing degree days and the differences we've seen this year and last year. And can you revisit that and talk to us what that means about the wheat crops and maybe kind of moving forward and spring planting season?

Eros:

Sure. So I was doing a comparison '22 versus '23 so far. So in January we had last year 115 degree days for corn, which is 50 degrees basil temperature versus 196. So 115 versus 196 in January. February so far we have 145 '23 versus 121 '22.

Amanda:

For the whole month of February in 2022?

Eros:

Yes.

Amanda:

So what I'm hearing is-

Eros:

Up to today.

Katelyn:

And so we are much warmer.

Eros:

We are much warmer in '23. So thinking about much warmer means insects are going to be perhaps a higher pressure this year. Some diseases may overcome warmer temperatures. Weeds are going to be a problem in some fields, so we got to pay attention to burn downs before corn planting or soybean planting. Two three

inches are not two, three feet. So with science 101, the earlier you apply, the herbicide works better. Regarding wheat, it's developing very fast.

So we are seeing six, four, fives, even six already. So it means the plants are growing much faster than they were supposed to. So for instance, Auburn recommendation for nitrogen application in wheat is up to the beginning of the spring, which is a month away. And so far I have seen some field suffering with nitrogen deficiency, which kind of seems that the plants are demanding nitrogen from the ground and perhaps the ground is not delivering that amount that they need. So we need to be very careful about nitrogen application. Don't apply too much if the plants are growing very fast, because lodging situations may occur. So we will have to study case by case to see if wheat is going to require a lot of nitrogen or less nitrogen as compared to last year.

Amanda:

And growers have to be careful too with not applying too much nitrogen because that kind of increases the canopy and the density of the plants. And so that can increase your risk for a lot of foliar diseases in wheat and of course other grains moving forward. But then too little stresses out the plant and then leaves them susceptible. So it's really hard to get that nice middle ground there. But yeah, they're going to have to take it definitely case by case.

Eros:

And also evaluate the potential of each field. Some fields may require more nitrogen because they are deficient in nitrogen. Some will have already a soil fertility which is very high based on previous crops or previous nitrogen application. So we are going to evaluate each one case by case to see.

Katelyn:

Well you said my favorite word was insects. And as we do have warm weather, we know that insects kind of wake up earlier with these higher temperatures. They start moving and feeding and reproducing a little bit faster. And so we've started picking up small pockets of aphids on wheat. And as this warm weather continues, we'll see increase in English grain aphid and so something to keep an eye out and probably also on a case by case basis, especially because as they can spread barley yellow dwarf virus, which I know is up your alley
Amanda.

Amanda:

Yes. And so far, even though we've started to see the aphids start moving, I haven't seen any symptoms so far in the grain crops that I have surveyed, but it's definitely something we're going to have to keep an eye on. And also because they're maturing a little bit quicker too, we may see some of those symptoms a little bit earlier on. Are there anything that growers can do right now for aphid management, Katelyn?

Katelyn:

I would say if you haven't been scouting, at least get out there and look at your plants. We do have two species, bird cherry oat aphid and English grain aphid. And the smaller bird cherry oat aphids are going to be hiding at the base of the plant near the soil line. But if you get down and look at some plants, you'll see these dark green black dots that are aphids, and so keep an eye out for them and like Amanda said with the symptoms. And then treating for aphids is probably going to be on a case by case basis. What are you know looking to make? How spread is the disease already in the field? Because we don't have rescue treatments for the disease, we can only prevent the aphids from moving around and vectoring it. And so anything else we want to add about our winter grains, Eros, before we start talking about maybe corn planting soon?

Eros:

Well I think as you said, pay attention to insects. We may start to see some damage of insects when the temperatures really rise up next week or so. So pay attention if the insect populations are increasing or at least are there. Be active regarding any insecticide or threshold that is necessary to applications. Nitrogen, as I said, is something that you need to be careful based on the history of your fields. Your yield potential or expectations and study case by case. If necessary, give us a call and we'll discuss.

Amanda:

That was a great grain crop update Eros, and we really appreciate that. And I know a lot of our listeners are probably also curious about the corn outlook for this year, what they need to consider in terms of planting, and what you kind of forecast the corn outlook for 2023.

Eros:

Well I hope that 2023 is not going to follow 2022 based on weather. What we saw last year was a pretty big hit on corn yields in north Alabama and some parts of central Alabama as well. The south was okay. Very good rainfall and temperatures. So yields were better in the south and not so okay in the north.

Katelyn:

Yeah, those hundred degree temperatures in May last year with no rain in sight were rough.

Eros:

Plus no rains at all for almost 45 days from June 1st to July 15th if I recall correctly. So that was not a good year for corn yield. Perhaps this year, and what we saw in the beginning of the year was a weather prediction that there is a 50% chance that [inaudible 00:09:06] stays active until the end of March and 70% chance that we are going to see a neutral phase after March, which means normal conditions, normal rains, normal temperatures. So that's my hope that we see normal conditions again for 2023 regarding environment conditions for corn yield.

Katelyn:

So what are some things growers can do now? I mean, we can look at the outlook and we can look at the weather, but that's out of our control. But what things as we're getting ready for planting now can we do to reduce our risk as much as possible?

Eros:

Sure. I think the first situation now is to evaluate weed pressure in your field. If we consider March 15th as a starting point for corn planting, we are a month away. So that's the time that we have to consider regarding burn downs or considering start doing burn downs for weeds. So based on the temperatures that we have already discussed, weeds are going to be evolving or growing very fast this week. The prediction for this week are temperatures above sixties, 65, even seventies. So that is going to put a lot of pressure on weeds. So pay attention to weeds and get your hybrids ready if you don't. Well growers so far they have already acquired their seeds, but if you are still pursuing a hybrid to feed one or two fields that you have not decided yet, check our variety testing website. We have a lot of data showing the best varieties for different regions in the state.

Hybrid represents 25, 20% of corn yield. So that's a very significant portion of your yield. If you need to discuss anything, give us a call. We can discuss corn hybrids. Planting date, we did have a trial last year regarding planting dates and I know that the early the best or the better for corn yields, but one thing that I heard last week was the vortex that we are seeing up in the stratosphere, it started spinning in a different direction. Don't quote me right on that. I heard from a guy that was paying attention to weather last week and perhaps this spinning to a different direction may throw some cold weather in March for us in Alabama. So if that comes to be true, I wouldn't start planting corn before that happens. So let's wait until we are sure that temperatures are back to normal or to spring temperatures. And then between March 15th to April 1st to start seeding the best fields.

Katelyn:

And on the insect side too, we see less pressure, less damage, better yield when we plant on time if not early in many cases. And so it sounds like this is a year we just got to stay on top of the weather and what sort of pressures and inputs we need on each of our farms to stay on top of it.

Eros:

And another point that I always in my presentations I make this point is nitrogen represents 26% of corn yield.

Katelyn:

I have heard you say that before.

Eros:

Yes. So I make that point very clear in my presentations to farmers. Our recommendation is around 30% of nitrogen rate in planting time. And the rest divided in two, let's say 60% at V6. And for some irrigated fields, if you want to play like 25% or 30% of the nitrogen rate at tasseling because you can't apply nitrogen with your

irrigation system, that's fine. But I would say the early the better. For nitrogen applications, we seen good results with nitrogen applied up to V6. So that's another thing that impacts yield very much for corn. So nitrogen applications. Don't delay too much if you are not in the irrigated system.

Amanda:

So Eros, staying on the topic of nitrogen and just in general kind of fertilizer inputs, a big concern last year was that increase in cost there in terms of those inputs. How's kind of the outlook for 2023?

Eros:

It has decreased a little bit. The price has decreased a little bit as compared to last year. It's still high if we compare to the history of the nitrogen prices. The same thing for phosphorous and potassium, but nitrogen is the most important one regarding corn production. Commodity prices has come down a little bit as well. It peaked last year around October or earlier. Now it is a little bit down as compared to previous prices, peak prices. So as every year, growers need to balance inputs and outputs in every field. Nitrogen is the most important one. So we cannot afford to not apply nitrogen. At least you have to apply some based on your yield expectations regarding your fields, the quality of your crop, and also the weather prediction. If weather is predicting very good temperatures and rainfall in the summer, so that's time to apply nitrogen because it's going to make the difference. If we have a context of not good rainfalls or temperatures predicted in the summer, maybe cut back some of your nitrogen. So that's a balance that every year we have to decide.

Katelyn:

Well, Eros, thanks so much for joining us today and sharing your expertise. Any last thoughts you want to leave before? I'm sure you'll join us soon.

Eros:

Well, I just want to say thank you for inviting me to be here today. It's always a pleasure to participate in the Alabama podcast and I wish our growers the best spring.

Amanda:

Thank you so much Eros for your time. We always appreciate having you on the podcast. So that ends our time today on this episode of the Alabama Crop Support Podcast. As always, if we can ever be of any help to anybody, don't hesitate to reach out.

Speaker 1:

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