



Season 5 Episode 15 — New Specialists Join the Team

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Announcer

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

Scott Graham

Hey, everybody, welcome to the Alabama Crops Report podcast. Simer, we got an exciting episode today.

Simer Virk

Yeah. Two brand new specialists.

Scott Graham

Yeah, we got Doctor Josh Lee and Doctor Chandler Greuner. We're 13 days into the job for Josh. Yep. And five day, four days for Chandler. So, guys. Hey, how y'all settling in?

Josh Lee

We're doing good. Hit the ground running. So, excited to be here. And, looking forward to being here for a while.

Simer Virk

So, drinking from the fire hose on all the information.

Josh Lee

Oh yeah. That fire hose got a lot of pressure, but trying to take baby sips, baby sips.

Chandler Greuner

Yep. Same here. Just kind of getting acclimated a little bit. So I have a little background in extension, but you know, learning a new system, kind of figuring out everything, and the different issues here in Alabama.

Scott Graham

Is it hotter here than where you were?

Chandler Greuner

Way hotter. I was previously located about 60 minutes south of Canada.

Simer Virk

Oh wow.

Chandler Greuner

And so it was pretty cold. And so the temperature out right now is about ten degrees warmer than it ever would get there.

Scott Graham

Yeah, and it's actually not that bad right now, Simer.

Simer Virk

Yeah. I think this is not bad.

Scott Graham

88 (degrees).

Simer Virk

Oh hey. As long as it's not above 90 or above 95.

Scott Graham

Yeah. Of course, Chandler, you did, you're from Missouri. Correct?

Chandler Greuner

So, yeah. So, a little bit of background on me. So, I grew up in Missouri, and I went to the University of Missouri for undergrad. Then I went to the University of Arkansas for my master's degree. And then I did my PhD at Georgia. So, I spent four years at Georgia, one year at North Dakota State University. But, I was at a research center called, North Central Research Extension Center in Minot, North Dakota.

Chandler Greuner

So, like I said, about an hour south of Canada, about 2.5 hours away from Montana.

Scott Graham

You weren't, you weren't really up there long enough to get unacclimated.

Chandler Greuner

I did one winter and that was it.

Scott Graham

Yeah. Yeah. Then, Josh, you're a South Georgia boy.

Josh Lee

I'm a South Georgia boy. That's true. I grew up in Perry, but just above South Georgia. But I lived in Tifton for a good while, so.

Scott Graham

Yeah.

Scott Graham

Well, we sure are excited to have y'all on. Simer. I don't think we have any big agenda with this episode.

Simer Virk

No, I think this is a great opportunity to introduce our two new extension specialists. And, you know, I'm excited about the other thing I'm excited about, we have more people now to get on the podcast.

Scott Graham

That's right. Yeah, yeah, yeah, that's exactly right.

Simer Virk

I think one thing I know, you kind of gave a little quick on your degrees and stuff. It would be good for our audience to tell what area are they here and their extension responsibilities and stuff like that.

Josh Lee

Sure. So I'll go ahead and start. So, I'm hired as the extension cotton specialist here at Auburn University. Just a quick background since Chandler gave his, I'll give a quick brush-up on mine. So I attended Abraham Baldwin Agricultural College in Tifton, where I earned my bachelor's in agricultural focus and crop production. In that time, I worked for a crop consultant, which really fueled my interest in large-scale row crop production, which led me into a cotton interest.

Josh Lee

With that, I was a student worker at the University of Georgia, Tifton campus, and that led me into a master's program, where I focused in the area of cotton physiology. From there, I didn't have enough schools, I guess. And, I got I decided to pursue a PhD program in that PhD program I focused on the areas of cotton agronomics, cotton physiology, and irrigation management.

Josh Lee

So, a good, wide variety of stuff. And I'm really looking forward to applying what I learned, you know, during college and all my experiences here to the growers and producers of cotton in Alabama.

Simer Virk

Right.

Chandler Greuner

Yeah. So, just a little more detail about my background. So like I said, I went to the University of Missouri. So, my background is in plant science, and then my master's is in soil fertility. And then my PhD mixed soil fertility, soil health, and soil conservation together.

Simer Virk

Do you work with Matt?

Chandler Greuner

And so my PhD advisor is Dr. Levi. And so my main project kind of focused around living mulch and using that continual perennial groundcover. So that's a lot of my background, kind of some of the interest I actually have working here.

Simer Virk

Okay. Interestingly, I overlapped with both of y'all during my time in Tifton. I know you and I interacted a lot, Josh.

Josh Lee

Oh yeah.

Simer Virk

Even so, Josh is in the same lab as my wife. She did.

Scott Graham

Oh okay.

Josh Lee

Oh yeah,

Simer Virk

And the same doctor, John Snyder, and I actually, Matt Levi and I, we advised students together, actually, and worked on some projects together.

Simer Virk

I guess we just never crossed paths, you know, while I was there. I've seen your project, though, in Midville when I was there, in cotton.

Scott Graham

And so, Josh, I think we can all guess you're going to focus on cotton.

Josh Lee

Of course.

Scott Graham

Right.

Josh Lee

Oh yeah.

Scott Graham

Chandler, what, you're all row crops and maybe some other stuff as well.

Chandler Greuner

So yeah, anything with soil. So, primarily row crops and then a little bit of urban and stuff like that. And some questions come up about that. You know some there's some urban gardeners that like to use some soil health practices. So I'll kind of cover some of that information. But my main focus would be row crops, cover crops, and then also my soil fertility background.

Chandler Greuner

I have a strong interest in soil fertility, like some of the nutrients I'm interested in is like potassium, phosphorus, sulfur, and some of them, one's, not as much, you know, thought about, but, you know, growing issues that are popping up out there. And so sulfur is kind of one of the things it's kind of tough to test in the soil.

Chandler Greuner

You can't actually properly test it through a soil test; you get a number, but it's not going to always be super reflective of what's actually available and what's there for the plant. So I have some strong interest starting next year of doing sulfur trials out there for various crops. So we can kind of understand some of them rates so we can do that

Chandler Greuner

classical agronomy, putting different rates out there, figuring out what rate we need for different ones and working with Eros and some others. And so different crops like that. And then also working with

Josh over here with cotton projects and stuff like that. I know there's a lot of interest there with some nutrients and then some of that living mulch like I mentioned, like we worked on in Georgia, it's been worked on for maybe almost 20 years over there from different aspects of it, but bringing some of that over here to Alabama, kind of adapting to the system here.

Simer Virk

See, one thing I, you know, I don't, maybe it's so hard, but I don't know how people did it back in the day. Every state you hear about their fertility recommendation stuff, they're like, oh that was done 20 years ago, 30 years ago. Whoever did it, did it right. The work and all that. And maybe that generation was tougher or whatever, you know, that did it, and they're like, here's what it is.

Simer Virk

And now we're finding out with the newer cultivars are probably soil. Topsoil has changed in a way, eroded, not eroded, in parts of the field. Other environmental factors that we may not be seeing the same response or something, right. I think there's like need to almost refine or redefine all the ranges of the fertility and all that, but it's just like everyone I hear about.

Simer Virk

They're like, it's just so much work, you know, I guess. Is that is that true? And what is, I guess my question, what does it take to really do all that is like five years of research and then you can say, hey, we have these updated for Alabama or?

Chandler Greuner

So, yeah. So if you think about like Alabama we have black belt soils. We have coastal plain soils, we have Piedmont soils. So each one of them can have a little bit different than how much organic matter like that topsoil that you're talking about. How much topsoil is there. So that's going to be influential into how much nutrients are currently present and how much it can hold the holding capacity.

Chandler Greuner

And then so that when you fertilize, how much is going to stay there, how much is already there, how much is gonna be tied up, how much will be available at the right time? So, all that's playing into it. So, that kind of helps, you know, influence the numbers you need a little bit. And so sometimes people like, oh I've got good organic matter.

Chandler Greuner

So, maybe they can kind of count on being held a little bit better. But if you're on that sandy coastal plain soil, it's like you're in need a little bit higher rates because it's not going to be held in place. So, in order to step by step, to go out there and kind of make them rates. So, some of that work I was doing my first job after my PhD was doing sulfur.

Chandler Greuner

And so there we can't test the soil as well. So, for sulfur, we purely just got to go out there and put different rates. We do soil samples just so we kind of know what's going on, but we don't get the full perspective. And then we know organic matter, soil texture. And it's going to take multiple years of data, 3 or 4 years of data.

Chandler Greuner

And then we got to get multiple locations. So, if we go to every experimental station plus do some on farm field trials, cover across the state, you know, I could have a couple of grad students helping me.

Simer Virk

Man, you're going to need a bunch of student workers.

Scott Graham

Yeah, yeah, yeah.

Chandler Greuner

So it's a long process.

Scott Graham

We had a little project last year looking at nitrogen rates, and how it impacts insect populations in cotton, and, embarrassed to say, it never crossed my mind to soil sample before. And so we had no differences based on our nitrogen. And then we got to asking, oh yeah, we had corn there last year, and I was like, yeah, well, we probably had a little too much residual nitrogen out there then.

Scott Graham

So, that's to say. Yeah, it is, it is really complicated. It's not as much as, you know, every, every field ain't going to be the exact same or whatever.

Chandler Greuner

So, the great part about Auburn here is you've got some of them, you know, the colors rotation, and stuff like that, where they've actually depleted some of those nutrients. And so, like phosphorus and potassium and sulfur, you kind of need areas that have been depleted. Sometimes it takes, you know, 10, 20, 30 years to deplete it down to where you can actually get that nice curve.

Chandler Greuner

So, you can see low, medium, and high because, like you're talking about nitrogen like phosphorus, and potassium, may already be at a medium rate. And it's like you're never going to get that low number where a farmer may be facing that on their field, that low number. And you know, we don't have a good recommendation for them because we didn't have that soil sample.

Chandler Greuner

So the great thing about Auburn here is they had the foresight to start establishing that stuff years ago and keep it going. So now I have that opportunity to go out there and start working with that stuff to help with, you know, adding some more numbers in there. And they do update them numbers every so often. They have been updating them, but it just takes a lot of work to keep them going.

Chandler Greuner

And then, you know, there's, over time, we've changed from replacement to just profitability models. We've changed our models. And like how much do you care? Like if you think about simple nitrogen, like, are you just trying to purely replace everything you're using, or are you just trying to get a maximum yield, you know, profitability versus yield. So with Urea going up and up in price.

Chandler Greuner

There is a tipping point that might be different than maximum yield, like maximum profit tipping point. So that might be a different number. So that's another you know updates that can go into the model is how do you want to model. Do you want to do it based on the price of fertilizer? Or, do you want to do it based on max yield?

Chandler Greuner

You might get another two bushel, but if you spent, you know, extra 20 or 30 bucks in nitrogen, it's like that wasn't worth it at all.

Simer Virk

Yeah. Are you going to focus on, some main row crops or is it or kind of your area is just like all crops or even forages or other stuff, or what is kind of your cropping?

Chandler Greuner

So, I want to kind of divide into two directions. So, like soil fertility, nutrient cycling. And that'll focus on like cotton, peanuts, corn, soybeans. I would like to do a little bit of a...

Simer Virk

So, row crops.

Chandler Greuner

Row crops, and sesame and some of them other little minor crops help get them some recommendations where they may be lacking in some of the areas that are relevant here in Alabama, but then also do a little bit of like, forage and cover crops and some of that other brought in together as like another area. And that would be where some of that horticulture and stuff and some of that land where it's not, you know, it's that extra 2 or 3 acres you have in the field that you're not using for everything.

Chandler Greuner

Can we put a full season cover crop out there that gets you some kind of value and actually is helping build that soil? Why are you not using it for cash crop? Is it because it's got an issue? Let's see if we can improve that soil and turn it into good profitable land for you.

Simer Virk

Josh, what all crops are you going to work on?

Josh Lee

I'm the cotton specialist. So we're we're we're going. I got a favorite crop, so.

Simer Virk

You can't pick, right?

Josh Lee

I can't pick. I got a favorite. So, definitely going to be working in cotton. So, looking forward to that.

Simer Virk

What are some of the things you're going to focus on?

Scott Graham

I know one thing.

Simer Virk

Okay.

Scott Graham

I want to hear if he says it though.

Josh Lee

Can I say it?

Scott Graham

Yeah.

Josh Lee

All right. Well, I'm definitely working on this, and we're going to work on this Jassid, I'm going to try to figure this thing out. This is, week, you know, getting out, starting as a new specialist. This has been a it's been a steep learning curve here.

Simer Virk

Yeah.

Josh Lee

And, it's been interesting.

Josh Lee

It's been really fun. I appreciate, you know, Scott, you letting me ride with you and letting me learn as much as I can.

Scott Graham

Yeah.

Josh Lee

So, that's probably definitely one of the areas of focus of course. But just in general, while I was at Georgia, I did have some opportunities to work on some deer damage projects. So, I know that's a big thing for growers, especially here in Alabama.

Josh Lee

With deer damage. So, I've got a few ideas and hoping to implement those, along with working with some plant growth regulator work, mainly looking at timings, rates, and maybe introduce some different products. I've had some folks ask, you know, what if I use this, you know, this plant growth regulator versus that one trying to make some good recommendations.

Josh Lee

And, you know, it's a little bit hard on these growth regulators. It's really dependent on many factors. And I wish I could sit here and give you a silver bullet answer on how much rate to put. But it's really dependent on the system. With that, you know, I'm going to be traveling around the state, so I'm going to learn more and work more with producers and sort of and listen in and see what their their needs are and address their needs with projects that are meaningful and impactful.

Simer Virk

Okay. Great. Great. Well, we're excited to have you, both of y'all. You know, contributing not just to, you know, our Alabama agriculture, but also being part of our agronomy team. I think you both bring, bring some of the things we're missing right now, you know, especially collaboration-wise and all that. And I have found since I moved, I was, last year, this around time I was a new person, you know, in a way.

Simer Virk

But I found our team to be very engaging and productive in a way. You know, you can really have a good time while working and being able to get out, visit growers, and being able to learn and and our growers also, right, like they're awesome to work with.

Scott Graham

Oh yeah.

Simer Virk

I did a bunch of on farm trial this year for my stuff. And every grower you work with like they're like, yeah, just come and whatever you want to do, you do.

Scott Graham

Sometimes they want to do more than you can do.

Simer Virk

Yeah. Then you can do. Yeah, so.

Scott Graham

And we've been it's been 2 or 3 years since Audrey Gamble went into research and teaching I think. So, we've had a big gap there with you Chandler, and we're excited to finally have you here. And, know you're going to do a lot. And then Josh, I guess Steve Brown it's been a year now over a little over a year since he, he stepped down.

Scott Graham

So, yeah, these are two, in my opinion, very, very critical positions. For our extension team. And so we're glad that you two are here and that you're going to be taking leadership on some stuff for sure.

Simer Virk

Yeah. What's the very short-term goal? What's what's for the rest of the year.

Josh Lee

For the rest of the year for me would be learning everything I can about the Jassid. Thanks to Scott.
Thank you, Scott.

Scott Graham

You're Welcome.

Josh Lee

And, working on defoliation trials, so.

Simer Virk

Yeah, because you still have time.

Josh Lee

Yeah.

Simer Virk

To put those on.

Josh Lee

Yeah. So, working on those going to get some rates, and that kind of stuff, and some products.
Reaching out to folks and trying to put a couple several trials across the state of Alabama and get some data out of there before the end of the season.

Simer Virk

Gotcha. Chandler?

Chandler Greuner

So for me, it'll be visiting farmers and county or not county agents, but region agents and different people like that and kind of seeing what their needs are. I know soil fertility has been, that's already been brought to me. My first, you know, 3 or 4 days here, like sulfur, potassium, nitrogen rates like that. I know that's been brought to me.

Chandler Greuner

And so, some of cover crop dynamics and others, there were some questions. But then, kind of diving a little bit deeper, what exactly is that? Which crops are the most important? And then setting up them trials and getting everything kind of rolling for the springtime. As for me, a lot of that's spring-applied nutrients, and so getting that all kind of running and then also we will be building out the soil health demonstration trailer.

Chandler Greuner

So, I've had one previously at my job and so I'll be bringing one to Alabama. And so this would contain, like water, wind erosion, soil fertility. Like you know, we can actually take plants around, show rooting structures and how it's impacted by different nutrients and stuff like that. So getting the truck and the trailer and all that set up this fall.

Chandler Greuner

And so that way in the springtime, we get the fine tuning done with that. So next summer, when field days roll around, we'll be able to roll out all the field days, and we'll be able to do pop up field days at different farmer's fields throughout the season, showing trials that we've, I've set up. We can go out there and have different producers see these things and we can bring it to you.

Chandler Greuner

You don't have to worry about trying to come and find us. We can go in different areas throughout the state and bring you some of these demonstrations that sometimes may be challenging for you to get to. Maybe the timing doesn't work out for you to make that field day. We're going to look at and make some additional stops along the way for setups.

Scott Graham

I remember seeing some of that, in your, when you interviewed. That was really cool stuff. That was neat. So, I'm glad you're going to do that here. That's, you know, one thing I always get jealous of with insects, and like field days and stuff, is like, you can't see them.

Simer Virk

Just take some insects with you, man.

Scott Graham

No, no, no, but you can't see them. You know, you can see these.

Simer Virk

You don't want to spread them, right?

Scott Graham

No, you do not. You do not. But you can see weeds, you can see nitrogen stuff or where cover crops, and, you know, help with, with, you know, moisture or whatever. But you don't see bugs unless you walk out in the field. Nobody wants to do that in August. Trust me. I've asked them. But. So I'm glad you're going to bring that that.

Scott Graham

That's pretty cool. And Josh, he doesn't know it, but he's going to help on the Jassids, too, because we've got to figure out what cover crops they like and don't like.

Josh Lee

Oh, yeah, that'll be part of the trailer for sure.

Chandler Greuner

Yeah, yeah. The trailer will be a great resource because we could, you know, me and Josh, can roll out to a field. We can talk about that. We'll have, you know, big TV on there so we can blow up pictures of these insects so people can see them a little better, if they're having a hard time, and they don't want to walk out in the field.

Chandler Greuner

We'll have, you know, big canopy tents, get you under the shade so you don't have to cook out there in the sun.

Scott Graham

Yeah. Yeah. Well, that's what I told them at the, at the field day at Tennessee Valley. David Harkins asked me. He said, "You bring a tent to put out your stop." I said, "Ain't no shade in the cotton field. You just got to stand in the sun and bear with it."

Simer Virk

Yeah. So you both are in the crop and soil science department. Are your profiles up yet?

Josh Lee

Yep. They're getting there now.

Simer Virk

Okay.

Josh Lee

We're still in the process of getting everything...

Simer Virk

I was going to say, people, people may, someone listening is like, I've got a cotton question for Josh and the soil fertility for Chandler, you know, and they might want to do some Google search and find out what your phone and email and all that is.

Josh Lee

Sure. I'm sure that we can put this below the podcast to just in time's sake.

Simer Virk

Okay.

Josh Lee

I'm sure that we can do that. People can reach out if they have questions for sure.

Simer Virk

Okay, Scott, what else you want to cover?

Scott Graham

Uh...

Simer Virk

Got any burning questions for them?

Scott Graham

I should have prepared some fun questions so we could get to know their personalities a little bit better.

Simer Virk

Should we do a, what do they do? The fast speed rounds.

Scott Graham

The speed dating or whatever?

Simer Virk

Ask a question, you've got to answer.

Scott Graham

Rapid fire.

Simer Virk

Rapid fire.

Scott Graham

First thing that comes to your mind.

Simer Virk

Josh, which crop you like the most?

Josh Lee

Cotton. Easy.

Scott Graham

Chandler. Which crop you like the most?

Chandler Greuner

Actually, cotton also.

Josh Lee

Aye.

Scott Graham

Okay, okay, good. We're going to get along. Just good.

Simer Virk

We're going to need some cotton plates to put on our vehicles now.

Scott Graham

Yeah.

Simer Virk

You can't back off.

Scott Graham

That's right.

Simer Virk

You know once you said that, you got to show it.

Scott Graham

That's right.

Scott Graham

Just got another picture of Jassids in a new field that we hadn't found them in yet. There we go. This is, we might just mention that real quickly. I don't know when this will come out. But we're recording this on Thursday, August the 21st. Which August 20th will go down as, Jassid day, for the day that will live in infamy.

Scott Graham

But, we're we're dealing with this thing. If you're listening to this and working cotton in South Alabama, you're probably aware of it by now. But this is an invasive insect that showed up this year, and it's it's, starting to really show up now in Alabama. It's in over 40 counties in Georgia. But just know we're working on it, and hopefully we know a lot more when this comes out than we do today when we're talking Simer.

Scott Graham

But this is...

Simer Virk

As of now, what, what are some of the recommendations?

Scott Graham

I hesitate to even say.

Simer Virk

Okay.

Scott Graham

I mean, Josh has heard me say this probably 15 times today, since we rode to Brewton this morning. But, I mean, sometimes it changes by the hour. What we're recommending when somebody else gets some observations from a trial in or or, you know, we get phone calls from, from somebody who did something and it did or didn't work.

Scott Graham

And it's a very dynamic thing. And it makes me hesitate to really put out anything, in terms of management recommendations, because you don't want to be wrong the next day. But, you know, as far as what we're looking for, it's a little bitty critter, 1 to 2mm in length. There's a lot of different leaf hoppers out there.

Scott Graham

Potato leaf hoppers, one that people have seen. It looks very similar, except it's got, two black dots on its, wings. The adult does. Immatures do not. But they look similar to the adult. Just no wings. But they, damage symptoms look like potassium deficiency. They look like spider mites. They look like some kind of weird herbicide.

Scott Graham

Something going on out there. And then you start flipping, leaves over in the upper five nodes of the, canopy, and they're just everywhere. So it's not good Simer.

Simer Virk

It's not good.

Scott Graham

It's not good.

Simer Virk

All right, well, I think what we can do, since you said you'll have more information over the next 2 or 4 weeks.

Scott Graham

Or tomorrow.

Simer Virk

Yeah.

Simer Virk

As needed.

Scott Graham

So we're we're putting information up on, on Facebook on the Alabama crops, Facebook page. The Wiregrass Agronomy Facebook page is putting information out. I'm putting it on mine. The Alabama, Alabama Insects blog, putting up stuff there and the Syngenta Pest Patrol hotline. So we're trying to put out and as we learn new, new, things that we don't think will change that much, we're, we're updating it.

Scott Graham

If you find it in your, county, please reach out to your local extension agent and let them know we're trying to track just where all this thing is. I suspect it's in more places than we know than we know right now. So that's that's my my PSA.

Simer Virk

Okay, well, the other thing, if, so you guys are going to be going around the state this fall and early spring. So, if you guys see our new specialist, please make sure to come say hi to them. Tell tell them what do you you want them to work on? You know, that's, it's always good. And that's one thing I love, by extension, in a way, is, you know, when you're talking to farmers and certainly they say something and you're on the way right back home, you're thinking about a project, you know.

Scott Graham

Yep.

Simer Virk

Because that's why we do the research we do is to solve some of those problems.

Scott Graham

You know, some of our research counterparts can spend a 30 year career on one thing. Yeah. And we're doing 14 things in the day. You know it's it's it's just different. But it's nice that you know what we do is guided by the farmers and the consultants and scouts or whoever's out there in the industry, seeing what's happening in the real world every day.

Simer Virk

Yeah. All right.

Scott Graham

Well, anything else guys? Any other, parting shots before we hop off here?

Josh Lee

I think we're okay. Just. Just glad to be here and looking forward to meeting everybody and or, you know, getting around to the state, looking forward to these conversations and these interactions.

Simer Virk

And we'll like they said, we'll have the information hopefully in our, podcast note and their email and phone number. So, that way if anybody's going there, they can, if they want to contact or reach out to them. They can reach out to them.

Scott Graham

Yeah, all right guys we appreciate your time. Always good to visit and again excited you two were here Chandler and Josh. And I guess we'll be back with another episode soon. Thanks.

Announcer

The Alabama Crops Report Podcast is a production of the Alabama Cooperative Extension System.