Hey, Wyoming. [MUSIC] Welcome to the Lawn and Garden podcast with the University of Wyoming Extension specialist Jeff Edwards and co-host Jerry Erschabeck. Originally aired on KGOS & KERM in Torrington, join Jeff, Jerry, and all their special guests as they talk all things gardening in the great state of Wyoming. From plant variants to weather events to pesticides and pollinators, our Lawn and Garden podcasts helps you improve your home garden as well as your small acreage. So let's welcome Jeff Edwards and Jerry Erschabeck.

Good morning everybody. I'm Jeff Edwards for the KERM Lawn and Garden program, along with, uh, Jerry Erschabeck. Hopefully, he'll be in and out today. I think he's been having some technical problems, but our guest today is Katherine Wisner from Laramie County Extension. She's the horticulturist there in Cheyenne. Good morning, Katherine. How are you?

Good morning, Jeff. Doing great. How about yourself?

I'm doing very well, thank you. You know, it's a funny thing, I- I have to actually mentally go through the county [LAUGHTER] and figure things out. [LAUGHTER] It just takes makes me a while to get going. So, uh, Katherine has been with us in the past, and, uh, we've got a laundry list of things that we'd like to get through today. But before we get started, let's take a few minutes and listen to our sponsors. [MUSIC]

This summer Wyoming First Lady, Jennie Gordon's Wyoming Hunger Initiative is insulin nutrition program. And the University of Wyoming Extension are partnering to launch a program called Grow a Little Extra. We invite you to join us and growing a little extra to donate fresh produce to local anti-hunger organizations that support our neighbors facing food insecurity. Stop by your local extension office to pick up your free seeds or donate extra from your garden harvest. For more information, visit www.nohungerwyo.org/grow.

Good morning again, everybody. This is Jeff Edwards and Jerry Erschabeck for the KGOS KERM, Lawn and Garden program. We're back with Katherine Wisner. Glad to have you join us, Jerry, How you doing today?

Hey, I'm doing really, really good. So, um, just for warning everybody, I have some technical difficulties. [LAUGHTER]

We'll work through them and if you happen to disappear, we'll just keep going without you until you log back in. How does that sound?

Yeah, sounds good.

Okay. All right. Um, so Katherine, you know, it's, uh, it's the- what I consider kind of the data the summer, right, we're on the tail end of summer. It's been hot, it's been smokey. You know, the nice break thing though is that the mornings had been kinda refreshing in the 50s and it's nice to get out and go for a walk before the scorching of the sun. But those temperatures and things like that are kind of affecting things in our gardens right now. Do you wanna address some of those things?

Yeah. Absolutely, Jeff. So we actually had to go back a little ways to when it actually started to get really, really hot. You know, jumped way up into the 90s, some places hit 100 to 100 plus. And so for everybody who's a vegetable gardener, they saw a lot of things stop, stopped growing. Just the- the plants shut down, they don't like that extreme heat. [NOISE]

Everything is extreme heat. [LAUGHTER]

I was in a vegetable garden last night and the snow peas were still going crazy. Oh, powdery mildew were still going crazy, and-

Okay.

Yeah. So, [LAUGHTER] um, but tomatoes, oh, I have just- I've heard more people just kinda cry about their tomatoes. And- and mine included, they have- when it got really, really hot out, they shut down. So they start bloom and blooms. They kept growing, so you kept seeing length, leaves, leaf size. And it wasn't until it cooled down that you started to see the blossom starting to come back on, and that's just a function of the heat. So anything above 95 degrees and tomatoes get really unhappy, and they just stop.

Yeah, Jerry has mentioned, uh, this morning that he and all of his friends, and I harassed him how many friends he had, but, er, all of them were complaining that they weren't having tomatoes. Is that correct Jerry?

That is correct. And you kno [NOISE] w, all four of my friends said, "Hey, [LAUGHTER] I've been trouble with tomatoes." [LAUGHTER] But, you know, I need a larger sampling I think. And so some people will want to say, "Hey, look at my tomatoes, look how good mine are doing." But our tomatoes aren't doing well at all. We have small ones-

Yeah. I have a lot of small ones too. The worst thing you can do is fertilize with Miracle-Gro right now. Miracle-Gro is so high in nitrogen. So if you fertilize with the high-end nit- again, when you look at a bag or box of fertilizer, there's three numbers on that package. First number is always gonna be nitrogen, and nitrogen tells a plant to grow and grow a lot. There's a lot of other functions, but the important thing in a vegetable garden is that it- it tells a plant to grow excessively. And that excessive growth is also really sweet and tender and soft and succulent, and aphids just love over-fertilized plants. It doesn't matter whether it's a tomato or a pepper or your columbine or lupins or whatever, you will have an insect invasion if you over-fertilize your plants. So the worst thing you can do right now is to fertilize with a high nitrogen fertilizer. So just put the Miracle-Gro away, spray that on your petunia or something, but let's keep it off your- your vegetables. And then the second number on that- that package is phosphorus. And phosphorous is a vegetable gardener's best friend because that's what tells a plant, put down deep strong roots for trees. Tells a plant to put on flowers. Well, I love flowers, especially when you're trying to do bees. And then it tells a plant to put on fruit. So it's very important but

phosphorus needs a little bit of nitrogen, not a lot in order to work. Last number's potassium. Very, very salty, very high in salts, can lead some problems in the garden. However, tomatoes need it. So you need to have a fertilizer that's got all three of the numbers, but not in high amounts. And sometimes, it's a house plant food that you find that fits that bill. And so I always look for a fertilizer that's got 5, 10, 5 as the numbers, and that's what I work with. Even if I have- this time of the year, applying it to the soil is a little too late. We're what? Five weeks maybe out from our first frost.

Only use if we're lucky. I- I've heard this week that, um, the western side of the state could be experiencing freezing temperatures first in the mornings. [LAUGHTER].

Well-.

That's just wrong. [LAUGHTER] That's just wrong.

If you're talking like Star Valley and Jackson, yeah, that doesn't surprise me at all. If-

They're- they're- they're done. [LAUGHTER]

They're- they're done. They have a 30-day growing season. If they're lucky.

Yeah.

Yeah. So it's a really tough area to grow, but you wanna be careful with that fertilizer and- even if it's a house plant for who cares what the marketing smoke and mirrors are on that package? What's important is those three numbers, and you turn the side panel, and you read the ingredients, you look for the micro- micro micronutrients. So I don't care, I- I use Hyponex, house plant food in my vegetable garden sometimes just to give those plants a boost. I don't care what- I don't care what the box marketing says, all I care about is those numbers. So that's what I will use. So this time of the year, you might need to- you're going to need to apply it to the foliage, which I know sounds kind of weird, but the plant will take that nutrient- those nutrients up to their leaves. So in college, I used to try to sleep on my books thinking I could take knowledge up osmotically like a leaf could, but I- since they can't photosynthesize, I guess that was a lost cause. So anyway, uh, plants can do that. You can spray fertilizer on their leaves and they will take it up and they will reward you. And so that's what you need to do this time of the year.

So how would you- um, I guess you're looking for a liquid fertilizer to begin with. But if you can't find a liquid fertilizer and you've found another dried product that has the number combination that's you're interested in but you'd like to do a foliar feed. Is that allowed?

Read- read the label. [LAUGHTER]

Oh, you threw that back at me, didn't you? [LAUGHTER]

I did, Jeff. I did. [LAUGHTER] I know who I'm talking to you. [LAUGHTER]

Well, Katherine, you- haven't you said before that, uh, wheat ger- not wheat germ. We buy it at the- at the sh- at the, uh, commercial store.

Alfalfa pellets.

Alfalfa pellets and you've made your own fertilizer out of that by soaking- soaking some and then you just- you just strain it and then spray it, right?

Yeah, you can try that. They are so low in nitrogen and just- it's just trace elements. And- and the whole idea behind the alfalfa tea, is really, you're feeding the soil. And the soil is going to be teeming with microorganisms and they're going to take that stuff that you just fed the soil and take it- hand it off to the plant. So there's a middleman involved in that. And- and in this case, you have to skip the middleman and just go direct. And that's why foliar feeding changes. Changes those rules a little bit. And I- I hate get heavy handed with fertilizer because it does cause some prob- it can cause some problems. But in this case, we're so close to the end of the season, and- and I'm like everybody else, I'm looking at my tomato plants and they're huge and they're- they're- no fruit on, [inaudible 00:10:29] just now blowing [LAUGHTER] [inaudible 00:10:31] I was really looking forward to canning. I don't think that's going to happen this year unless I go buy tomatoes. So, you know, foliar feed your plants. And if it's a dry product, read the label, see if it's even feasible or possible or even allowed by the manufacturer. Sometimes you can't because it's just the long formulation of nitrogen and you'll end up burning the plant. So you've gotta be really careful with dry fertilizers and trying to make them into a wettable, sprayable fertilizer. And- and again, [NOISE] read the label because the label's going to tell you a lot, a lot more than I can right now. And it- it'll let you know whether you can spray 'em or not, but again, it's just a function of the heat. It got hot out real early again. It shut the plants down. Now, it got a little cool out again. [inaudible 00:11:27] Oh yeah, I like cool. And so now they're grown again. So it's- it's- it's really kinda of difficult trying to chase the weather and predict the weather. You know, last year in 2020, we had a freeze on September 8th.We went from 60 degrees to 20. Right? I'm still seeing problems from that. Not necessarily in the [inaudible 00:11:51] but certainly on trees [OVERLAPPING] and some shrubs. I mean, if you look at some of the cottonwoods, you can really see the damage that was caused by that freeze last year.

Yeah. I've- I've been seeing some trees in Lingle that, you know, that- not- otherwise normally they should be healthy and fine. And they're spontaneously dead.

Yeah.

And spontaneously losing a large limb. I mean, we see that going back and forth to Guernsey and looking at- looking more at the older trees, some of the older trees are just starting to die and disappear. And then if they've been there for awhile, large chunks of them are falling off.

Yeah. Cottonwoods are notorious for that. They have this thing called sudden limb drop syndrome. And, in the ho- arboriculture industry really doesn't know- so for

those of you who don't know, arboriculture is the study of trees. They don't know what's causing it, they think it might be fungal related, but they really don't know. And [inaudible 00:12:57] weather-related. So the whether really rules us. If it's been hot and dry out and then the humidity goes up, little rainstorm comes through and the humidity goes back up to like 60 percent or something, that's when you start to see cottonwoods just drop limbs. Sudden limb drop syndrome. We don't know why or how, but it's- its certainly a problem and it creates a lot of hazard, especially if you park your car under a cottonwood tree. That- that's a real big risk.

Need to avoid that.

So I have- I- it could be a 110 out and I will not park under a cottonwood tree ever. [LAUGHTER] 'cause I know what they can do.

We came home from camping one summer and a cottonwood had dropped its limb on our electric line. And we wonder why we didn't have electricity, got to looking around and, holy cow. So yeah, pretty dangerous activity sometimes.

Yeah. For sure. So older cottonwoods really become a high hazard tree. As much as we hate to remove those big old cottonwoods because they supply so much shade, they really need to be removed. If you look at it from a high hazard standpoint, it's- it's pretty considerable issue. Replace it with something that's- don't replace it with another cottonwood, but replace it with something that's going to give you a lot of shade. There's a lot of good trees out there and you guys down in Torrington, you're a banana belt, you can grow all sorts of fun things that I can't grow up here in Cheyenne. So you're really quite- quite blessed to be in that area. So, yeah, the weather kind of- can rule us sometimes. And that's- that's a little frustrating. Got hot up too early, really impacted or vegetable gardens. Got a little cool out again, now it's hot again, you get cooler. It's su- its challenging to do this gardening thing.

Katherine, you said that we live here in- in a- a banana belt. We -we've been driving by and looking at walnut trees.

Yeah.

And some walnut trees, gosh darn, their fruit are really big. And even one of the older ones, their- their fruit is really small. But the one in particular that is still growing, it got pushed over by a downdraft. And when I say pushed over, it is laying on the ground.

Wow. Wow.

So it was an easy pushover. So the- the- the soil didn't- I mean, the roots didn't get ripped right out, but they had put more soil onto the root ball, and that tree has survived and is growing horizontally. And it is fruiting as well. Their fruit are real small, it- its a black walnut tree. But I- I find that so amazing. I drive by it every so often just to look at it.

Wow. That's a- that's kind of a Japanese technique, I see the Japanese do that too.

Kinda bonsai, big trees.

On purpose.

Yeah on purpose. Yeah.

On purpose. But this thing is laying down on its side and-

Still growing.

And still growing, leafing out- it's, it's still a viable tree. They've been bringing - they'd been asked, ''Hey, I've got a chainsaw, you want me to help you take that out?'' Nope. Nope. It's- it's still our tree.

Wow. So the- the wood from a walnut tree is extremely valuable. Uh, so if they ever do remove it, I hope they take that into consideration, the value of the wood and- and be- be kind to how they make the cuts. [OVERLAPPING]

Its takes a logger for you- for, for something like that.

Yea.

And so on.

Yeah. Oh, yeah. That, that one I've [OVERLAPPING] is very, very valuable.

I've got a neighbor that has, uh, cut down some walnut trees and made a sliding- sliding door. A- it's like a sliding barn door. It is absolutely beautiful.

It's- it's to hear it didn't go to waste.

Oh no, no, no. He's- he's- he's quite a- he's quite an art- artist.

So, uh, Jerry, you know, you've -you seem to have a list of things that you'd like to cover today as well. Uh, what was something on your mind that you'd want to talk about?

Hey, we have people bringing in peaches.

Really?

Yeah.

It's- it's the season.

It is the season. And so, uh, peaches from, uh, Colorado, I think in the Palisade area, uh, wondering, hey, how do you guys treat your peaches?

Uh, Ca- canned peaches. I mean, I'll eat them fresh until I don't want anymore. And then canning them if you have excess, uh, and eating them or consuming them in the winter time are a really nice treat.

Yeah. You'd should do the canning method, Katherine?

You know? I freeze 'em. And it's- it's just- it's a little more convenient. The- the only problem with freezing is that they don't hold their shape and they get a little kinda weird.

Bad? [LAUGHTER]

Yeah.

Pancake [bleep]? [LAUGHTER]

[inaudible 00:18:02] yeah, pretty much. But they still are really good for doing cobblers and peach red. I'll make you a lot of quick reds using frozen peaches in the winter and that's always very tasty. So yeah.

So- so do you use, uh, sure fresh and sugar?

Uh huh, yeah.

As you freeze?

Yeah, absolutely. Little vinegar in there, some sure fresh.

Vinegar?

Vinegar [OVERLAPPING]

Yeah. I want to raise the pH. I want to pull the pH up a little bit and it helps keep them from browning or, sorry, not vinegar but a citric acid- citric acid.

Lemon juice?

Citric- lemon juice.

[LAUGHTER]

Yeah, lemon juice. I'll put lemon juice in there.

And other stuff?

[LAUGHTER]

Yeah. Now you can-

All right.

- you can have fun with it.

All right. Good. Well, that's interesting to know. And sweet corn, do you guys put up sweetcorn or no?

Oh yeah.

I do. Yes. I just got five dozen years of sweetcorn. I blanched it, I cooled it. Getting that heat off is really important. I cut it off the cob and now it's cooling in the refrigerator and then I'll do pressure canning with it since it's a vegetable. It has to be pressure canned. Yeah.

Now, uh, blanching, is- is it just bring your water to boil and then put them in for two minutes?

Pretty much. You just want to stop the enzymes from continuing to break down the product and trying to decompose it before you get to use it. So you- blanching just stops a lot of things from happening, helps it last longer. [OVERLAPPING]

Yeah, So we're just the opposite, Katherine. We do not can corn but we do freeze corn.

Yeah.

Because it's easier and more convenient [LAUGHTER]

Yes [LAUGHTER]

Yes, we freeze corn. But, um, my neighbor was saying, "Hey, we don't have to cook it for eight minutes, we just need to blanch it." And so he, you know, he was being told, his sister I think, told him, "You're- you're cooking your corn, way too long."

Yeah. So are people-you know corn's kind of a personal thing. Do you like it a little chewy or?

We call that long in the tooth.

[LAUGHTER] No, starchy. [LAUGHTER].

Starchy. Starchy. I don't-

My- my dad- my dad liked it really, really, really young and I'm like God there's no flavor. You know in the mid- mid season but not long in the tooth.

Yeah, Not- not really excessively chewy and starchy. You still have to have some of the sweetness to it, right?

Yeah, we think that that's field corn when it's chewy.

[LAUGHTER] It should be field corn when it's chewy.

[LAUGHTER]

Right. Yeah. Yeah. So- so I- when I picked it last night, so I picked it at six o'clock and by eight o'clock it has all been shucked, it was all blanched, it was all cooling in- in the sink with some ice and by nine o'clock it was all off the cob and back in the

refrigerator cooling yet again. So I've wasted no time processing this and I think that's really an important key to corn. I like my corn sweet and soft not starchy and chewy. That's not fun. By the time- from the time you harvest it to the time you process it has got to be really, really short.

Right.

Now we've got better varieties than we did 20 years ago and 30 years ago, and so they hold that sugar longer but there used to be a joke about sweetcorn that you had to have the pot boiling in the field and as soon as you harvested, you had to shuck it and throw it in a pot and boil it before the sugars turn to starch. But we have sweet corn now that's a lot more stable with the sugars, so it has a longer shelf life to it, which is why you sit in the grocery store little bit more frequently. So holding those vegetables for any length of period time is not a good idea. You know, you want to have everything planned out for that day. So you want to harvest those- those tomatoes or that corn or those peas or beans and you want to have everything lined up in the kitchen. You want to have all the tools you need. You want to have ice if you need it, and you want to get that field heat off right away. You want to stop that breakdown. And so cool it promptly, and have everything lined up to start processing and- and I like to freezer too for corn because you can stuff it in that bag and smash it fat- flat like a pancake and they all stack up nice and neat. They don't take up much room.

Yeah. It freezes really nicely.

[OVERLAPPING] it freezes nicely indeed. And so whatever method you go for freezing or pressure canning for your corn it's, um-

Katherine, have you or any of your coworkers noticed that the flaps, the canning lids are hard to find?

Yes.

Yeah.

And I'm starting to see more pop-up in stores, but there was such a rush on it last year. It's like everybody- everybody is- even if they had never canned in their life decided they wanted to can and so lids became a sparse commodity, jars, everything. You couldn't find anything.

Yeah.

And an Important thing is you do not want to reuse those lids. If you use the lid last year and, you know, you popped it off, that goes in the recycling bin. You don't- you can't rely on that- that little rubber seal still being viable to can it again and the last thing you want to do is go to all that work of canning whether it's pressure canning or hot water bath canning or seam canning or whatever you're using, you want that lid to seal tight and when you take that- that rim off and you check your lid, you want that lid to be there. So don't go to all that trouble and time and effort and have a lid

fail because you reused last year's lid.

Nobody- nobody needs botulism.

Oh.

[LAUGHTER]

Gosh. Yeah. No.

Along with a wide variety of other things. So yeah.

Yeah. It gets pretty exotic in that jar if the lid breaks and you don't no- notice it.

Yeah.

Yeah, No.

So isn't, uh, isn't one of the kind of the telltale signs of botulism in canned goods is the lid is now bulging outwards and it's poppy so you push down on the lid and it actually will traverse maybe a half inch and pop?

So it- it may not necessarily mean botulism, but it means something is wrong in that particular container.

And maybe not eat it.

Oh, not maybe [OVERLAPPING] there's no ifs, ands or buts. Do not eat it [LAUGHTER]

Yeah. This tastes funny. You taste it. No, thanks. [LAUGHTER]

No, no that goes right into the trash can. It goes on the curb. You don't even want that in your house.

Yeah.

yeah.

Don't mess with that kind of stuff. [OVERLAPPING]

Yeah. If the lid is doing weird things like bulging out that is definitely not a good sign and, you know, is it botulism? Yeah, who knows? It could be some other bacteria or fermentation going on in there and you definitely don't want to mess with that [LAUGHTER].

Bad news all the way around.

Yeah. Definitely.

Bulging cans, bulging lids, those types of things, avoid them. Hey, um, I think we're about halfway through our program. It's probably the appropriate time to take a break and listen to our sponsors and we'll be back right after this.

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Hey, everybody. This is Jeff Edwards and Jerry Erschabeck for the Lawn and Garden program. Welcome back. Our guest today is Katherine Wisner, and we've been talking about a wide variety of things from canning to how to fertilize your tomatoes correctly and things like that. Katherine, how would you like to start the second half of our program off?

Well, I kind of like to start it off where we ended but I'd just like to toss out again how important food safety is when you're canning or preserving any sort of food and- and that when pull it out of the garden it should be washed with soapy water, rinsed, cooled immediately and have everything lined up and ready to go for canning or freezing whatever you're going to do. But have a plan, have everything laid out so that there's nothing sitting on the counter over time because time is not your friend when it comes to food safety. So don't make yourself sick, don't make anyone else sick, and by all means, there's a lot of information out there on canning and the University of Wyoming does have some brochures and publications. All you do is just type into a search engine, University of Wyoming Extension Publications. It'll come up right to our website. And then if you type into the search canning, it'll take you right to the canning guide for Wyoming. And it's a great resource, it's a great little book that was put out. Still valid, all information still valid. If you don't want to mess with that then the Ball canning guides are the best. You always want to respect when you're canning, the altitude you're at.

Yes.

Because that changes how much time you have for your hot water bath or your steam bath canning. And then on dial gauge pressure canners you want to have those lids tested and you can take them to the extension office and have them tested and make sure you know what- what the pressure actually is. And anytime you pressure can, in your pressure canning books, they'll have what- what that number should be so don't guess at that. Real important to time- [OVERLAPPING]

There should be some tables, Katherine, that will show people their elevation and length of time to boil and those types of things, right?

Oh, yeah, absolutely. And so if you've got, you know, some cool technology, like I had this great Dick- Dick Tracy watch and it has an altimeter on it so I know exactly what my altitude is wherever I'm at. And then my iPhone has got an altimeter on it and my iPad's got an altimeter on it. I mean, I always know exactly what my altitude is [LAUGHTER] even if I don't need to know it. So there are some great technology out there that- that helps you on that. If not, call the extension office and ask them, someone there will know

Yeah.

and can help you on it, but- but every recipe is going to have how long you need to can it. But again, respect that your elevation because we're not at sea level [LAUGHTER] if you haven't noticed we're not at sea level anymore and- and so that changes the time. So again, I just- I just- food safety with canning is just huge and it's- it's easy to do, it's fun to do. I've done jams, jellies, chutneys, vegetables. The only thing I have never canned is meat but everything- everything else easy to do. Fun- fun stuff.

So if, uh, you want canned things contact, Katherine [LAUGHTER] Yeah [LAUGHTER]

[LAUGHTER] And that's fine. That's absolutely fine. I have- I have all the resources in my office and I'll actually be teaching a canning class in September for one of the gardening clubs in Cheyenne. That'll be a proper canning class.

You have room for the both of us?

Send me an email [LAUGHTER]. If there's room, see Wisner.

Okay.

You do yo.edu. [LAUGHTER] Yep.

Katherine, my mom used to can meats and then my- my cousins from Omaha would come out and, uh, go antelope hunting or deer hunting or whatever they were doing and they would come to our house and it was like they haven't- hadn't gotten fed for like a week. Oh, Betty, this is so good. And we'd have pancakes and eggs. And, you know, I- I mean, we- I grew up on meat. I didn't care for the canned meat. They loved it. Can we take one of those home with us? Absolutely. [LAUGHTER] You got.

Jerry, I don't know if you noticed or not, but Katherine physically winced when you- when you mentioned canning meat.

I saw- I saw that. [LAUGHTER] Now, hey, there's people that like mincemeat pie and I'm not one of those. Uh, every other kind of pie but mincemeat.

Jerry, mincemeat pie is actually a raisin pie with rum in it.

Only in the United States.

You're kidding. [LAUGHTER]

A true mincemeat pie is just really raisins and some- some fruit in there that's been marinated and usually has a little bit of rum in it. And so mincemeat pie has absolutely no- no red meat in it or- or white meat or anything. It's- it's just- it's a rais- it's essentially a raisin pie.

[OVERLAPPING] Thank you so much.

It depends on the cook, Katherine. It depends on the cook. [LAUGHTER]

I don't do- yeah, I don't do stake and kidney pie. That's-

You know, I- I- I- think we'll probably get some calls on that one because, uh, it- it depends on who is actually making it, whether or not they put, uh, meat in it. So, um, traditionally, at my house, minced meat is the fruit and rum and raisin type pie, but I have had in other's homes the version that also has meat in it. So it just kind of depends on the source.

All right. Well, I like all those things independently. [LAUGHTER]

Stirred together, huh? [LAUGHTER]

Yeah. Independently they're fine.

Hey, Jerry, you mentioned earlier that you wanted to talk about the possibility of discussing blossom end rot, maybe some sun-scald things. How about if we go into that right now?

You bet.

Okay. So jumping back to growing vegetables instead of processing them, that's great. So sun-scald. Peppers. Peppers like shade. I know that sounds kind of like counterproductive to everything you read in a book, but once they start putting on their fruit, the peppers or chilies, depending upon where you come from, they need some shade, and you can supply that with some floating row cover, which is a non-woven real like gossamer type material or you can get some- an old sheet or something to cover them, like a tent over them in the afternoon. But peppers are real prone to sun-scald. And so you'll see one side of them that's- that's sunken in and brown and just looks off and a sunburn. So a little shade in the afternoon goes a long ways for pepper. So appreciate it and they'll reward you for that little bit of shade. And then, so jumping back to tomatoes, blossom end rot, that's usually a function of water. Here in Wyoming, we have plenty of calcium in our soils. And so the whole calcium uptake thing is kind of a complicated mechanism. And the plant actually needs to be actively growing with the plant hormone auxin available for the plant to process and utilize calcium. So that should happen back when it was young and growing or even if it's still growing, it should be taking up plenty of calcium. And so I don't ever worry about that in our soils. However, it's- blossom end rot is usually a function of water and consistent watering. And again, all your vegetables, none of them are drought-tolerant. They want lots and lots of water. You- you're just not going to really over water a vegetable garden. So that consistent watering is key. That's really, really important. And I promote timers for vegetable gardeners and put a timer on. Timer goes on, goes off. It's reliable and not reliable. I- I forget- I forget to turn it off, I forget to turn it on, but my timer doesn't. And so it saves me a lot of time, it saves me a lot of water because it comes on. It remembers and I don't. [LAUGHTER]. And you can go on vacations, leave for the weekend and your timer is still working. And- and that's really huge. That's really huge in my book. So tomato

blossom end rot, really function of water. And it happens when it doesn't get enough water and the plant gets little droughty, then also when it gets too much water, then it goes back into drought. And so the plant just really doesn't know what to do, and so it produces blossom end rot. So it's a whole watering function for tomatoes. And again, at this time of the year, water is really critical where it's so hot out and it's dry. Like seven percent humidity, again, it's- it's dry. It is except- exceptionally dry out. So the water is- water is crucial. Keep the weeds down. Weeds usually carry a lot of pathogens with them. They're a host plant for a whole bunch of things. Insects love to hang out in them and then hop over to your vegetable plants and then go back home to that weed. So keeping the weeds down is important. I looked at a vegetable garden last night and she still had snow peas in the garden, but they were full of powdery mildew. I guarantee you that is not good eats when your snow peas get powdery mildew on them.

Yeah.

That's- that's pretty icky, [LAUGHTER] to say the least. You cannot wash that off. That powdery mildew has embedded itself into the tissue of the snow pea and you're not going to scrub it off. No matter how much you scrub or soak, it's not coming off, and it's going to be really a bad- bad thing to eat.

Well, and not only that, it's a reservoir for spread to other plants in your garden. So-

Yeah.

-if- when those types of things start happening, they need to be yanked out, removed.

Yes.

Gotten out of there.

Yanked out, thrown away. I don't even put them in the compost pile. I just take them and- and put them in a bag and they go in the trash.

Yeah.

So- and snow peas stress really, really easily with heat. And that's one reason why they get the- the powdery mildew, is because they're stressed and that stress just weakens them. And so now they're really susceptible to a whole bunch of things like- like powdery mildew, but yeah, they really should have been yanked a month ago.

So when people are looking at- [OVERLAPPING] when people are looking at varieties, Katherine, can they find varieties of things that are tolerant or resistant to powdery mildew or downy mildew?

Well, the good news is we don't have downy mildew here. Thank you. That's one blessing about being at seven percent humidity.

Yeah.

We don't- we don't have to fight that monster. There really isn't any varieties of snow peas or sugar peas that are going to be re- resistant to powdery mildew. And it is just a stress thing with them and the heat is the stressor. So if you can find a way to keep them cool like roam in your basement or something, [LAUGHTER], I- I think they would still get stressed, but that's- that's the trigger for them, is that heat.

So you're saying keeping them at 50 degrees for the entire growing season would be best?

Oh, yeah, they'd be happy. If you can figure that out, I want to come live with you because that's my happy temperature. [LAUGHTER]

Would that be in a- would that be in a root cellar with a- a grow light?

Probably, yeah.

Yeah.

That at least. Yeah.

Natural light would be best.

Yeah. [LAUGHTER] Yeah. [LAUGHTER] Yeah. They, uh, they- he's, you know, so the vegetables come either as cool season or they like early, early spring, and- and late fall or they come as warm season where they want it hot out and- and they like that heat. So cool season vegetables are gonna be your snow peas, your, um, fava beans, broccoli, cauliflower, cabbage, kale, mustards. Those are all cool season and so they don't like it when it gets hot out and so they do weird things like get powdery mildew. And- and unfortunately, I- all you can do is pull them. There's no- nothing you can spray on them. Nothing can take care of that because that- that powdery mildew has embedded itself into the-

Yeah.

-flesh of that fruit. This Hickey, don't eat it. Throw it away. [LAUGHTER] So if they were bulging cans, throw away.

Yeah, throw it away.

Yeah.

Um, can I- can I throw something at both of you?

Please.

A friend- a friend of mine called and said-

Wait a mi- wait a minute. Was this one of the four or was this another one?

Oh, no, wait, this is another one. [LAUGHTER] Um, said, uh, "Hey, you know, we, uh, we grow a- a big garden." I said, "Yeah." She says, "We, uh, we grow over 100

different pumpkins and we- we give away pumpkins like crazy so that, you know." She- but she said, "My problem is, I've tried to grow giant pumpkins for four years. The first year, I did really well. I had a contender. The second year, third year, and fourth year, they acted like they were failing to thrive. Yell- uh, get up there, they got yellowed and- and just started dying off almost like they were maybe iron deficient. And the rest of the garden is fine. Grow pumpkins to- enough to give away." I- I thought it was a seed issue. And so I- I don't know. What do you guys think?

[OVERLAPPING] And the first thing I-

In different areas of the garden and all that sort of thing, so she rotated as well.

Okay. So my- my first question is always gonna be, what did you amend the soil with? Did you- did you over love your soil with- with too much manure? Because that- that's kinda what it sounds like to me, is that- is that there's overly amended with manures. And again, you know, that's where my soapbox is, is manures can really set you back very, very fast and it can help the salt level, and pumpkins are real sens- pumpkins, green beans, and whole bunch of vegetables are real sensitive to salts and manure is very, very salty. Not much NPK in it. It adds organic matter, a little bit of phosphorus,. Not much nitrogen, but the salts on it are- are- can be breathtaking and so you can make your salt pretty toxic with manures. And I think my first question is, what did she amend the soil with? What is she fertilizing with? How is she watering? Those are all really important questions. And- and so to try to answer that without knowing those three is hard.

Yeah. But-

But-

-on the other end of it, I have 100 pumpkins to give away. Yeah. I mean, she grows enough pumpkins that she has like 100, 110 pumpkins to give away. It's- it's just the giant pumpkin seed that she's having trouble with.

Yeah. There- there is a whole group in Wyoming that specialize in just growing giant pumpkins. And I think there's someone in your neck of the woods that does that.

Yup.

And that's- that is a specialty. That's- that's fiddly. That's very fiddly. [LAUGHTER]

It's a fiddly bit.

Yeah. And- and there are some people they- that do have very good job at it, but yeah, I was just curious that she grows so many other pumpkins, but the giant pumpkin is the one that just doesn't grow for her.

You don't have a good answer, Jerry?

No good answers. All right. Well, [OVERLAPPING] I just thought I throw that out.

Okay. [OVERLAPPING]

Yeah. I- I have more questions then I- then I can help you with an answer, so I'm sorry-

Yeah.

-but I don't- I don't know where she moved that pumpkin to in her- in her garden. I don't know how she's fixed the soil, I don't what the watering is. I- I doubt it's the seed. I really, really doubt it's the seed.

Okay.

Yeah. Because if it was [OVERLAPPING] bad s- it was bad seed, it just wouldn't have- it would never have germinated in the first place.

Okay. So something in the growing phase?

Right.

Nutrients, water.

What she do with the soil. It was the soil over loved. [LAUGHTER]

More questions.

And I s- yeah. And I seen that. I- I got a soil test report back from some guys who are trynna do giant pumpkins and they had severely over loved their pumpkin patch. They had gone out into the neighbor's pasture and picked up cow patties and- [LAUGHTER] and then amended their soil- their vegetable patch with those cow patties. And- and the soil report came back, was just off the charts with the see- with the pH and the soils and it was just too toxic to grow anything and so-

[OVERLAPPING] We're going to be doing that again. [LAUGHTER]

Yeah. Stop picking up cow patties. Leave them out there in the pasture. [LAUGHTER]

Just wrong. [OVERLAPPING]

My- my dad kinda did a similar thing with sawdust. Uh, went to a sawmill and just loaded the garden with sawdust one year. And I think it might have taken three or four years for the- for things to recover from that just because there wasn't- it takes nitrogen for that sawdust to break down so it was robbing nitrogen from the garden and things weren't producing like they should. And- and so it was- it was a little too hot, some people might say. [LAUGHTER]

It was hot for the moment, then it got really cold, and once [OVERLAPPING] it gets cold, it was the dark side of the moon. [LAUGHTER]

Things happen. We do things.

Yeah, we do things.

Uh, unfortunate.

Yeah.

So d- are you, uh, are you thinking about next year already? Are you thinking about something new for next year?

You know, I am and I- and unfortunately, the summer just turned out to be way too busy and I didn't get around to doing what I really wanted to do. But I have a garden patch- fairly large garden path that I want to start doing cut flowers in. I- I wanna try raising flowers for the- the cut flower market and see- see how that goes. But that- that's kind of just a long-term project. I wanna do a lot of perennials because I don't wanna keep replacing and putting in expensive annuals.

You see ex market for that in Cheyenne, Katherine?

Um, there might be. I haven't really [OVERLAPPING] exported. Even if I just do it for myself and the benefit of my bees and the native bees, that's- that's fine by me, but I'd like to see what it takes and how to do it. And- and that way, if someone else wants to do it, I can say here- here's my experience.

[OVERLAPPING] Yeah. And I know there's- there's- I know that there's some interests around the state in that type of production. It's just a matter of getting it started and figuring out where the markets are.

There's a [OVERLAPPING] young woman that comes to our farmer's market that grows gladiolus and sunflowers and other cut flowers and she does really well with them. She, uh, she's always- and who doesn't like a gladiolus?

Jerry, the other- the other day I watched the program and it- it made me think of you. It was on hydrangeas.

Oh, as a matter of fact, that's what I'm thinking about for next year.

Not- not [inaudible 00:46:14], but it was on hydrangeas. [LAUGHTER]

Hydrangeas. Yeah, I've got that word down now to it. [LAUGHTER] My wife keeps calling them Hydrangealas. So um, it's hard.

[LAUGHTER] You've got to be able to switch back and forth.

Yeah. I know what you're talking about. So what do they say about them?

It was just an interesting program about an individual who, uh, grows them on the East Coast and the different varieties and the number that they are producing there. And in Wyoming, we don't have the best conditions for growing them, but we still can.

So I've found a box of Miracid that, that I happen to have. Katherine, you're shaking your head.

So Miracid is, again it's a lot, it- it's the type of nitrogen that it is and it is an acidifying nitrogen. It's fast release nitrogen, it's 30 percent nitrogen. And if you want insect problems, go ahead and use that. You have fewer five problems. So it's [NOISE] I'd be careful with it. If there's better ways so-

You have- you have choked Katherine up, Jerry. [LAUGHTER]

And maybe that's a good thing. I don't know.

You punched a bu- you punched a button there. [LAUGHTER] I don't know.

But it- but it begets the problem. How do you make your soil more acidic? Because hydrangeas like acidic soil.

Okay.

More acidic.

Okay. So don't- do not- do not reach for the Miracid, leave it on the shelf and go [NOISE] evil stuff.

Right?

Instead, trying to change the soil pH is exceptionally difficult thing to do. And once you stop fiddling with the soil pH, it will go back to what it was originally. So if you had a pH of 7.5 and you somehow managed to get it down to 6.5, that'd be amazing, but soon as you stop, it will just jump right back to where it was. So if you're trying to grow specialty plants and I'm going to throw blueberries in there too, because I get a lot of people that want to grow blueberries and fail. And then the big box stores sure like to sell blueberries among other things like azaleas, rhododendrons, I don't know what they think we are here, but the best way to do that is to get some peat moss.

Um, we're suckers, Katherine, people think they can grow them so they buy them. [LAUGHTER]

Well, yeah, I know.

Yeah. [NOISE]

I know. Uh, uh, and it's like get a big bag of peat moss and you can either bury the bag of peat moss or do it in containers. But you're going to put in everything that loves acid soil like your blueberries, rhododendrons, azaleas, which I see salt here all the time, in Cheyenne. And you need to do a- put a drip system on that bale of peat moss, don't ever let it dry out and you're gonna plant directly into that bag of peat moss.

And you need to acidify your water somehow.

Little vinegar. Little- a little tiny bit of vinegar. So if you're hand watering, just put like a tablespoon of water- of er, vinegar into your watering can that all you need. Don't take much. So the plants that like that- that pH around 5.5, 4.5 or pH here of 7.5, sometimes higher [OVERLAPPING]

We're lucky.

Yeah. So just because it says it's a Zone 5 and you live in Zone 5, doesn't mean it's a one size fits all plant. You know, if you- if you read the label, [LAUGHTER] read the label and it says likes moist acidic soil, it's not a plant for us here in Wyoming. And- and I know that kinda makes everyone disappointed because who doesn't want to have their own blueberry shrubs and pick blueberries for Sunday morning pancake breakfast. Oh, My God, that's high on my list, but I don't try to grow blueberries. [LAUGHTER]

Buy them.

Buy them from Oregon. [LAUGHTER]

I buy them frozen in a bag, and then I go with that. [LAUGHTER]

There- there are ways around that. Yes.

But I thought it would just be- just really fun to grow a hydrangea and have- it may be even for one or two seasons, uh, but I think I know the way to do it now, is in one of those big blue lick tubs with peat moss.

Yeah, peat moss and [OVERLAPPING]

My own soil- soil conditions.

Yeah.

Yeah. A- and then make, you know, by all means mix in a little good potting soil, not your garden soil, but some good potting soil. Not miracle growth potting soil but some good potting soil. [LAUGHTER] And- and some- and a lot of peat moss. You should be okay.

Yeah.

But they- they don't like the wind. You guys don't have the wind problem we do here in Cheyenne.

Oh, wait a minute, the wind blow's here.

Does it?

Oh, yeah. [LAUGHTER] We have wind.

I'm- I'm disappointed. I thought you guys were in like a little valley and wind just went over the top of you. [LAUGHTER]

It's not entirely happy valley but we're close. It's- it's uh, the wind does blow.

Yeah. So they don't like the wind. They dry out very, very quickly. All those acid-loving, soil-loving, acid-loving soil plants, [LAUGHTER] I love- they don't like the wind blowing on them. So you've got to either color them or drag them into the garage or some- some shelter to protect them from the wind. Put a garbage can over the top of it or something, but don't- the wind- the wind will dry them out and kill them.

Look, Jerry and that lick planter tub that you are thinking about using, you also need to build a platform that roles, that you can sit it on so you can move it in and out of places.

Uh, good- good point. You know, [LAUGHTER] uh, there are hydrangeas at Mitchell, Nebraska. And we drive by them and we go, "Oh, man." And one is planted on the east side of a- a nice large house, and the other one is planted on the north side of like an apartment house, not an apartment house like an office building. And they grow and they're greenish. And then they turn to a more of a pale white.

Yeah. They- they will grow here, but it's not like what you would expect as if they were growing on the east or west coast.

There's- there's where you get the colors, correct?

Right.

Right.

So we only get maybe just a- a- a partial color.

Okay.

But honestly, you know why? I would like to do that.

Try it, give it a try and let us know.

All right.

You're a bad one.

Be curious.

You're a bad one. [LAUGHTER]

Yeah. [OVERLAPPING]

Hey, uh, we are getting close to our time I believe. Uh, Jerry, is there something going on in the county this week that we need to let folks know about?

Well, I don't know about next- oh yeah, there is. And we possibly need to sing happy birthday to Yoda. Yoda is turning 100 years old tomorrow.

Okay.

All right I- I'll start. Ha- no we won't.

[LAUGHTER] Please don't.

Please don't. Uh, and the Yoda Swim Club is going to have a meal at 12 ish or whatever, but there's a big celebration, 9: 00_ 1:00, so happy birthday Yoda. Will want to talk about the [inaudible 00:53:50] field day again, August 25th, three o'clock.

Yes. Save the dates.

There's a- there's a six o'clock dinner. Is that for anybody?

Anybody can come, but we would appreciate you RSVP-ing. The phone number is 3078372000, and so we can get a good headcount and know how many folks are going to be there so we can fix the appropriate amount of food. So yeah, anybody is welcome to come. I'll be there, be talking about the geodesic tunnel, geodesic dome tunnel that we built. So, uh, we have a- an orchard, uh, demonstration orchard. The Brian [inaudible 00:54:27] will be there talking about as well. And we just done a lot of things in the last couple of years trying to improve the facility and hopefully, people will come out and take a look.

All right. Well, that's all I've got for today. Thank you so much for listening.

Thanks, Katherine for being here.

Thanks for having me. I appreciate it. Always fun. Bye guys.

Okay, everybody enjoy your weekend and get out and grow something.

[MUSIC] You've been listening to Lawn and Garden with the University of Wyoming Extension specialist, Jeff Edwards and co-host Jerry Erschabeck. Listen each week for details on new event and how to make your garden flourish. Good day and happy gardening.