

Growing Peach Trees in Iowa

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SPEAKERS

Small Farms, Diana Cochran



Small Farms 00:00

Welcome to the small farms podcast, a production of the small farms program at Iowa State University Extension and Outreach. In this episode, I talk with Diana Cochran, Assistant Professor of horticulture at Iowa State University and fruit specialists for ISU Extension and Outreach about peach tree farming in a high tunnel and how it can apply to small farmers. So Diana, can you just tell me a little bit about your research you're doing with high tunnels and peach trees?



Diana Cochran 00:23

Yeah, so it's, um, we planted last year. So essentially, it's kind of an ongoing project. And we're trying to determine if it is feasible, if it's something that is kind of economical for, for growers. And I was specifically because, you know, everybody likes a fresh peach off the tree. But in Iowa, we can expect about a good crop every one to four, one out of every four or five years. And so because of that, it's like we're trying to look at different ways that we could potentially grow peaches, and the issue with them is the frost in the spring. And so they usually are flowering and then we have that spring frost come through. And so that's why I kind of started looking at high tunnels because people have been growing peaches in high tunnels in China for a long time, people have been doing research in other parts of the states as well. So this year, so last year, I Well, it started about a year and a half ago, when I had to specially order the peach tree, so they wanted a certain root stock, one that's supposed to be pretty cold tolerant Bailey's root stock is the one I'm using. It's one that's not used, you know, as much commercially anymore, because a lot of peach grown regions have a lot of issues with nematodes. So usually they use root stocks that are tolerant for nematodes. And so it's I had to get it especially ordered or grafted onto it. And so that was about a year and a half before I could get the trees. Okay, so I got the trees last year. And then essentially, we got I have a 42 foot wide by 96 foot high tunnel gothic style, I think it's about 15 feet tall. It's a pretty large structure, it's our largest high tunnel out at the farm now. And then so I put basically, two peach cultivars in there and two neck during cultivars, and I repeated the same field planting but in the field without a high tunnel, so that we could essentially, you know, compare the two and in to look at, you know, is it feasible, you know, from a production standpoint, as well as

economically on that production standpoint. And so again, it just got planted last year, so it's going to be kind of a something we're looking at. So far, we've seen a lot of differences with the ones grown in the tunnel versus the ones in the field, they had a lot more growth on them in the high tunnel is definitely some light quality. That was different in the tunnel versus not. And so that's something we're looking at, too. So I have data loggers that are essentially looking at light, you know, soil temperatures so moisture and different things. And, and so we can have a good comparison and figure out if it is something that's, you know, feasible because I talked to growers that they know that they only get a peach crop every one or four or five, one out of every four or five years. And they're still planting peaches, even if their peach trees die, right. You know, five years, they're like, Well, for us, it still makes sense because everybody likes that fresh peach. So it'd be great if we didn't have to replace peaches every three or four years. No kidding. And we could have a crop more reliably.



Small Farms 03:10

Sure, So you mentioned you have a gothic style high tunnel. Is there a reason you chose Gothic over I believe the other ones Quonset?



03:16

Yeah. is basically the height. Okay, so with the peaches, there are some available dwarfing rootstocks, but they're not as easily available. So there's coming more. There's been some, I guess, efforts breeding efforts to look at, you know, dwarfing rootstocks for peach trees, but they're, it's just hard to find, okay. And so it was one of those, I knew that that was gonna be one of my issues. So I didn't want height to be, you know, limiting. So I went with the Gothic style, so that I could, you know, try to I mean, obviously, I'm not trying to grow them 15 feet tall, but I just wanted to add there to be enough. And it means that the sides are, you know, kind of taller, instead of that quonset so they get that little height on the side.



Small Farms 03:53

Okay. So what type of application Do you think that you could see in the future for maybe some small farmers or our listeners to apply this on their farm?



04:01

Well, I think it's, you know, I mean, if you're, if they have a high tunnel, if they're thinking about getting a high tunnel, I think the key is to look at what crops you can, you know, grow in a high tunnel that are going to be profitable versus something, you don't want to grow something that's outside the high or gruesome than in a high tunnel, if you can grow it just as well outside the high tunnels. So that's kind of where you have to juggle, especially when you're looking at perennial fruit, fruit crops. Because for us, it's like strawberries grow really well in the high tunnel but you have to kind of look at that and say, well, what's the difference of me growing them in the field versus in the tunnel? Is that going to suit my market? Is that feasible for me and my operation? Sure. And this the same thing with the peaches, it's like, okay, you know, some places in you know, in southern Iowa, they grow peaches, you know, they're in a warmer

climates. So they have a little bit more reliability with peaches, but they still have issues. So it's just one of those you have to look at it for your operation and determine is this something you can do? I know that there's a few people that grow a couple like they have maybe three or four peach trees in their high tunnel, and they work on they get peaches off of them. But you know, it's obviously something that is kind of, you know, we have to look into and it's definitely you would, you would want to train them in more of a V shaped pattern shop, not just the open center. That's the other thing that you know. So there's some training things that you would want to look at, if you're going to do peaches in a high tunnel. But again, you just have to look at your operation, what you're trying to get out of it. I think everybody should go plant peaches in high tunnel, not necessarily right now. But I think, you know, it's just something to, for people to, you know, if they want to do something, they can experiment on their own and look at something and see how it works for them. And is it feasible? I mean, if I was in South Carolina, it would not be feasible for me to grow peaches in a high tunnel, probably right, you know, versus here, where, again, we have the issues of spring frost. Yeah.



Small Farms 05:41

So there's just a lot of different options, depending on the farm, and everyone can customize to their own operation.



Diana Cochran 05:46

Yeah, exactly.



Small Farms 05:48

So do you have a certain time when you expect to publish some data from your research at all?



05:52

Well, I mean, it will be going each year, in a sense. So last year, again, like we put it in, so we did, I did write up a little report for the Iowa State demonstration farms website. So the horticulture Research Farm report, there's one available, and again, it just talks about the basics of what we did, okay, you know, what plants we put in the spacing, and kind of the plot and then each year, I'll have an update, you know, until then we you know, within, I mean, it takes, you know, three or four or four or five years to get a crop for the for the tree to mature. So once we have that, then I'll start getting more data and more peer reviewed articles and more extension pubs. But I'd say for the next couple years, it'll be mostly geared towards, you know, the farm reports, which will be a nice place, so you can look at kind of preliminary data and see how things are going. And so that's published online, every year. And as well as I mean, I just gave a talk at the Iowa Fruit and Vegetable Growers Association, on growing peaches in high tunnel, and so everyone's in so, you know, I will update at that venue as well, over the time, so



Small Farms 06:54



Small Farms 06:51

awesome. So do you have a website or anything we can direct our listeners to, to kind of keep up on this?



06:58

Um, so I mean, I kind of have a website. I mean, I'm in the Horticulture Department. So you can look me up that way Dianac at ia state.edu. I also am in charge. So I work with grapes as well. So I'm in charge of the Iowa State viticulture website. So you can go there. But that's right now it's mostly viticulture related information, but you can find my contact information certainly there as well. And so that's kind of where the information now again, if you went to the Iowa State Research and Demonstration farms, so yes, if you went to their website, and then looked at the horticulture research form, you can find some of the form the farm report, so it would be on hops as well as grapes as well as the peach study, as well as a root site trial, and then other people's projects as well. So vegetable production and, and some turfgrass research as well, and the hort farm and then there's obviously a lot of research reports on other farms as well. So



Small Farms 07:51

there's always information coming from extension. Yeah, very myself. That's a good thing. Yeah. Do you have anything else you want to add?



07:56

I don't think so. I think that just covers it and be a stay tuned to project. Yeah, because it's one of those that we just kind of have to you know, we'll be looking at together and we have our field day, August 7, which we will be looking at, you know, so people can if they come there for August 7 uhm will show them the peaches in high tunnel and kind of update there so they can kind of see what's going on.



Small Farms 08:15

Perfect. Well thank you for being on the show today. We really appreciate you taking your time to be with us.



Diana Cochran 08:20

Very well. Thank you.



Small Farms 08:21

This podcast will be available on our website@[www.extension.ia state.edu/small Farms](http://www.extension.ia.state.edu/small%20Farms). Thank you for listening

