

Organic Agriculture

Tue, Jan 17, 2023 11:28AM 18:25

SUMMARY KEYWORDS


organic, kathleen, christa, crop, iowa, crop rotation, certification, weed management, farm, weeds, conventional, iowa state, organic farmers, usda, premium, soybeans, acres, production, paperwork, organic agriculture

SPEAKERS


Dr. Kathleen Delate, Christa Hartsook

- C** Christa Hartsook 00:15
Hello, and welcome to the small farms podcast, a prediction of the small farms program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life. In this episode I visit with Dr. Kathleen Delate, ISU agronomy and horticulture professor and ISU Extension and Outreach organic agriculture specialist to talk about organic production. I'm Christa Hartsook, small farms program coordinator. And we hope you enjoy the show. Kathleen, welcome back. It's great to have you.
- D** Dr. Kathleen Delate 00:48
It's great to be back, Christa. Thanks for having me,
- C** Christa Hartsook 00:50
Kathleen, let's start out by talking about the definition of organic farming because there is a true definition for that from USDA.
- D** Dr. Kathleen Delate 00:59
Correct. I'll tell you what the definition is, according to USDA, and then I'll translate it according to USDA. Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It's based on minimum use of all farm inputs, and on management practices that restore and maintain or enhance ecological harmony. The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people. So as you can hear, that's a very positive definition. People want to know right away, what does that translate to as far as practices and it basically is farming without chemicals, synthetic


chemicals. So in lieu of using synthetic fertilizers, for example, organic farmers will use crop rotations, compost, composted manure, and cover crops. And in lieu of using synthetic chemicals for pest management, they'll use preventative measures and organic compliant treatments. So in general, it's farming according to nature, if you talk to organic farmers,

 Christa Hartsook 02:17

that makes sense. Kathleen, are there opportunities in organic agriculture that maybe aren't available in conventional farming?

 Dr. Kathleen Delate 02:25

Well, right off the bat, I can think that if you become certified organic, and sell your crops as a product as certified organic, you will obtain an organic price premium. And just looking at corn and soybeans that ranges from two to three times higher than conventional prices. That's a great opportunity.

 Christa Hartsook 02:47

Very significant for our growers,

 Dr. Kathleen Delate 02:49

right. And with vegetables that can go all the way up to a 400% price premium, depending on the season, and the availability of the crop like organic asparagus, or up to 400% of conventional.


 Christa Hartsook 03:03

Wow, that's amazing. Kathleen, I know COVID-19 has kind of forced us all to take a look at things a little differently. Are we seeing different trends or impacts as a result of the virus in organic demand?

 03:18

What I'm hearing Christa from organic producers is they have never faced such high demand for the products. And that's a really great thing, especially for smaller producers. And that's the other benefit of organic is you can get into smaller markets, a lot of local markets will directly buy organic products from you. According to one survey, a organic sales increased by 22% in March during the COVID. So there's definitely a high demand for organic and local I would say right now.


 Christa Hartsook 03:51

 Christa Hartsook 03:51

Kathleen can you talk to me a little bit about that actual transition process? We can't just go out one day and declare we are now organic. There's an actual process to kind of walk through what does that look like for our producers?

 04:04


Sure. Well, the first thing I'll tell someone that's interested in transitioning is they should contact a certification agency. And since I work for the state, I promote the state and the state of Iowa has the Organic Program at IDLS Iowa Department of Ag and land stewardship. And Maury Wills is in charge of that program. You can contact his office, tell them you're interested in transitioning and they will walk you through what's necessary. The first thing is you have to keep records of everything you've applied to that field that's going into transition. If for example, you're transitioning an alfalfa field, which we did at our research plots when I came to Iowa State, there were no chemicals applied so we could transition it rather quickly. If you have if you're transitioning a conventional field, it will take three years before you'll be able to sell your crop as certified organic. And during that three year period. You can't use any synthetic fertilizers, pesticides, fungicides, herbicides, etc. So maintaining records is critical, because in the third year of transition, you'll line up your inspection and inspector that's accredited with USDA will come out and look at your records, walk your fields with you ask you a lot of questions, and then determine if you qualify for certification. And it's not odious, it's just somewhat time consuming the first time you go through it, I actually just filed my certification papers for Neely- Kinyon Farm and it took me about five hours to put all the paperwork together. So, you know, I tell people, it's like doing your taxes. But hopefully at the end, you'll reap the premium as opposed to having to pay

 Christa Hartsook 05:49

absolutely a little bit of paperwork trade off for that, that increased price premium is a pretty big thing.

 Dr. Kathleen Delate 05:54

Right.


 Christa Hartsook 05:55

Kathleen, is there a difference between the labels of certified organic and just utilizing organic practices?

 Dr. Kathleen Delate 06:03

Yes, according to the USDA, you are not allowed to label your product as organic unless it's certified organic. Now, at a local market, or you know, the producer or producer knows you, they can say to you, I have used organic practices, but the safest way to get around it is to


label your produce is chemical free, because that's not restricted by USDA. So that's what I recommend to people just in case they don't have to deal with the legalities. Now, when you buy products, there's different labels, all the products that say organic must have certified organic ingredients in them. But you might see a box of cereal that says made with organic oats, for example. So the other ingredients may not be organic in it, the label needs to tell all but you'll know that everything in there isn't 100% organic.

 Christa Hartsook 06:57

That makes sense that certification process then Kathleen is that on an annual basis that we would do that and certify those acres.

 07:04


Yes, you would have to do apply every year, to your certification agency. And there are many certification agencies operating in Iowa on our Iowa State organic ag webpage, you can find a listing of the other certifying agents, I just use IDLS as an example, because I worked for the state and I'm also on their board. So I monitor how they're proceeding. And I highly recommend them. So check with them. And you'll have to do your paperwork every year. Fortunately, if you have your paperwork in your computer, you can just pull it up and update it for the current year because you have to say what your crop rotation is every year. And you need to provide that information. And also, if you're using any additional organic compliant treatments, because they will vet those, they will make sure that those are 100% Organic compliant before they will approve your certification.

 Christa Hartsook 07:56

Kathleen, we're keeping these records, you know, we're utilizing a certifying agent, I'm assuming there's a cost then to be able to, you know, employ all of these types of people and keep these records. What does it look like on an annual basis to certify fields organic.

 08:14

So with IDs, I can only tell you them? Sure, on the most there are two set fees. One is your fee for application. And that runs about \$150, then there's the fee for inspection. And that will depend on several factors, they send out the inspector so he or she will charge you when they come. And then your certification is based on your acres of specific crops. So vegetables, for example, I can't say the exact amount but they're more expensive per acre, because in general, you tend, you tend to grow less acres of vegetables, while you know corn and soybeans will be it's not that expensive.

 Christa Hartsook 08:57

Okay, makes sense. Kathleen organic production, you know, as we've highlighted, goes through obviously, different protocols throughout the growing season than our conventionally grown crops. What should farmers really expect both good and bad from going through a conventional

crops. what should farmers really expect both good and bad from going through a conventional versus an organic production cycle?



09:18

Right, it is imperative that you probably either attend sessions read up, talk to other organic farmers so that you'll learn the processes it makes a lot easier. That's what I did when I arrived here immediately met with a group of organic farmers and said, What do you use? First of all, you have to use organic seed. So you have to make sure that you can source organic seed which you better start doing that and December, maybe January there was a run on organic seed this year, and it can't be treated. So you have to make sure you ask for it. Well, if it's organic, it's not going to be treated but occasionally they run out of the game. See you can get an exemption to use conventional but it can't be treated. Okay, so that'll be another consideration. And of course, no genetically modified seeds, a lot of inorganic, and then what equipment will you need. It's like going back to your grandfather's planning days where you're going to need a rotary hoe. And a row cultivator, your planters basically the same, but you might plant higher populations, because those, the higher the plant population, the more competition against weeds you'll have. So these are all things that you need to learn. And in advance before you get into planting, we all need to think about your crop rotation. Our normal rotation is corn, followed by soybeans, followed by oats mixed with alfalfa, and then a fourth year of alfalfa. And then back to corn. Because that fourth year really helps build up soil quality. Since you can't use chemical fertilizers, you need to really build your soil as you're downwind. And when you harvest, you have to make sure that you're harvesting only organic crops. So you might have to clean out your combine in between, if your neighbor you weren't getting any custom combine that might have had conventional crop in it, they'll have to do a clean out, which is specified by certification companies how to do that. And then when you take it to the elevator, of course has to be an organic elevator and they have specific protocols they have to follow. And when you transport it, it has to be 100% Organic crop in that truck. And there's a truck affidavit for that. So it's very regimented to maintain organic integrity. Some people might find that a little complicated, but I think once you go through it one time, it's not that the other consideration that people might worry about is weed management. Because we have such fertile soils here, we also have very fertile weeds. And knowing that you're going to have to do those crop rotations, and you're going to have all your weed equipment available is really important for weed management, and planning those high populations too. We are now experimenting with organic No Till where you crush your right crop that you plant in the fall with a roller crimper and directly plant your soybeans into that so far, it works about 60% of the time. So we still have to perfect that we are having a field day coming up on it on June 2, that if you go to PFI website, you'll find out about that roller equipping Field Day coming up June 2. So you know there's a lot more challenges in organic but a lot. That's what attracts them is that there are things to keep you interested. And a lot of them are involved in experimentation on their farm, and you reap the benefits by getting number one that premium price at the end of all your work. I've surveyed organic farmers and they report that they can see visibly higher soil quality on their farm when they transition. They also report that their timelines seem to be running a lot clearer from using organic practices. And thirdly, they've reported higher numbers of beneficial insects pollinators on their farm once they've stopped using synthetic chemicals.



Christa Hartsook 13:07

It makes a big difference. I've heard of a lot of different types of weed management too
Kathleen: Yes, assuming there's obviously a lot of different trials and research going on in in

Kathleen, I'm assuming there's obviously a lot of different trials and research going on in managing weeds within organic production.

D

Dr. Kathleen Delate 13:20

Yeah, I forgot to mention flame weeding. There's direct flame weeders. And then there's this machine called a weed zapper. That actually will be demonstrated later on in July and another virtual field day. Okay, so that uses electricity. So you have to be really conscious of what you're doing when you use it. But some farmers are seeing good results with that too.

C

Christa Hartsook 13:43

That's great, what resources would be available for producers who wanted to look into organic production or transitioning their farm into organic production right now, where should they start?



13:56

Well, of course, since we work for Iowa State, I'm going to start with Iowa State. So if you Google Iowa State organic agriculture, you'll be taken to my web page, which has a lot of resources publications, and then over 150 reports on our organic research around the state that folks can read Practical Farmers Iowa, PFI also has a lot of organic information on their website and Iowa Organic Association IOA. They have their own website now. And University Wisconsin has a listserve called Ograin organic grain, primarily looking at organic rain issues. It's a buzz right now with planting issues. And if anybody's interested in getting on that they could contact me and I could connect them with University of Wisconsin.

C

Christa Hartsook 14:41

Okay, great. Kathleen does ISU offer any type of enterprise budgets or specific things that maybe would help producers understand what that potential price premium could be?



14:52

Yes, Dr. Craig Chase has done a great job of following all our operations and returns over 24 years now, so he has quite a body of knowledge on different prices and returns enterprise budgets. So you can get those through the Iowa State Ag decision maker. If you Google that AG decision maker organic will probably take you right to the enterprise budgets. And he's just recently put one together with the latest data. So I really appreciate all his efforts with that, because that'll give you a clearer picture. And you can plug in your own numbers and see what kind of returns you'll get. And I probably didn't mention enough how much you should start looking at contacting your market too. So our website has names of buyers listed in there and are resources that you could call around even now, if you're just thinking about transitioning and ask what the current prices are. And sometimes companies will actually give you

recommendations for varieties too there are some varieties that companies may need. And it's good to check in with them. I bug them occasionally just to see what's going on in the world of organic.

C Christa Hartsook 16:00

Sure that makes sense is a lot of that production then already kind of contracted through a specific buyer, Kathleen, in Iowa.

D Dr. Kathleen Delate 16:07

Good question. Christa. That's another big consideration is the majority of contracts you do in the winter before you actually plant anything. And you're contracting on acres not on yield because you never know what the season will bring. You never know. Try to lock it in. Yes, there's cash markets, but the safest curious way is trying to lock in a contract to interplanting.

C Christa Hartsook 16:33

That makes a lot of sense. Kathleen, what else do we need to talk about today that maybe we've missed?

i 16:38


Well, I have I believe or not, I did have a question from somebody about my organic course that starts in January. If anybody's interested, it's offered both online and we don't know if we'll have it in person. But the radical it'll be in person on campus plus, online for anyone out there in the state that wants to log on and take the organic course. And I'll have information about that posted on the website. I think it starts January 21 2021.

C Christa Hartsook 17:05

Okay, great thing to plug in and great thing for anybody considering this, you know, in the coming years to kind of go through that course, and really gain a more in depth analysis of what organic production could look like.

D Dr. Kathleen Delate 17:16


And we also have our Iowa organic conference in November, that we hold it at the University of Iowa because the majority of organic farms on the east side of the state we're talking, it may be virtual, we're hoping that we'll be able to get at least part of it inside. Iowa City's ready to host us but they're also looking at new rules as far as social distancing, mask wearing, etc. So we will keep you posted on that. But it's generally the Monday before Thanksgiving.

 Christa Hartsook 17:46


Okay, that sounds great. Kathleen, can you give us that organic webpage one more time for your specific site if anybody was looking for more information,

 17:55

what I do by myself is just go to Google type in Iowa State University organic Ag, and it takes it right to my website.

 Christa Hartsook 18:03

Perfect. That's what we need to know. Thanks so much for being on.

 Dr. Kathleen Delate 18:07

Thank you Christa for having me.

 18:08

This program is brought to you by Iowa State University Extension and Outreach. This institution is an equal opportunity provider for the full non discrimination statement or accommodation inquiries go to [www dot extension dot iastate.edu/diversity/ext](http://www.extension.iastate.edu/diversity/ext)