SEEDHEADS TRANSCRIPT

Episode 16:
EVALISA McILLFATERICK & MANISH KUSHWAHA
English

SeedHeads is produced for audio listening and we encourage you to listen to the recording if you're able to, because it will include sounds and inflection that aren't included in the transcript. This transcript was generated by a combination of speech recognition software, human transcribers, and translators, and it may contain errors. Please check the audio if you have questions about content.

{music}

Steph: Hello! Welcome to SeedHeads, the cross-pollinating podcast where our Canadian seed heroes tell their stories, share their how-to tips, and talk about the seeds they love. I'm your host, Steph Benoit, coming to you from Ottawa, Ontario, on the traditional, unceded territory of the Algonquin Anishnaabe people.

{music}

Steph: We have a really fun episode for you today. I recently had the chance to talk to two seed growers who are working on a collaborative northern watermelon breeding project. Evalisa McIllfaterick is a vegetable seed and vegetable grower, and the owner operator of Root Cellar Gardens, near Thunder Bay, Ontario, which is the traditional territory of the Anishnaabe. It is now also the Treaty Territory of the Fort William First Nation, signatories to the Robinson Superior Treaty of 1850. Manish Kushwaha is a seed grower and owner of Gaia Organic Seeds in Ottawa, Ontario, on the traditional territory of the Algonquin Anishnaabe People. For the past few years, Evalisa and Manish have been working with growers across Ontario to develop a delicious, reliable watermelon that thrives in northern Ontario. In this episode we talk about landrace breeding, the "22 watermelon variety" cross that started it all, making seed saving and breeding more accessible, connecting to nature through plant breeding, the search for the elusive mango melon, and so much more. Talking with Evalisa and

Manish really energized my passion for this topic. I hope you also enjoy their infectious enthusiasm and love for what they do. Thanks for listening.

Evalisa: Manish, I'm so excited to come in a, I guess it's like next week actually, week and a half because, remember, I took that picture, I was like, "This one's going to be the mango melon."

Manish: That row is growing, has lots of watermelons. I'm hoping they are two weeks, so in two weeks, maybe they'll get big enough and they're harvestable.

Evalisa: Oh, my gosh. I hope you have really warm days and nights until then.

Manish: Fingers crossed. I'm excited.

Evalisa: Totally. I can't wait to see.

Steph: Oh, my gosh. Well, thank you both for making the time to be here this evening. It's so great to have you both on the call and so excited about this project, and coming with so much energy and so much enthusiasm. It's really, really a treat.

Evalisa: It's super fun to get to be here, Steph. Thanks for being curious about this.

Manish: Thank you, Steph. I'm very excited to talk about the watermelon and share all the stories. [chuckles]

Steph: You both already started before I even hit record, you were sharing information or you were catching each other up on how each of your watermelons are doing. Can we first start with a little how is everyone's watermelon patch doing right now recording here in early September?

Evalisa: Well, my watermelons are all harvested. We got really close to frost maybe four or five nights ago. It didn't actually hit but I pulled everything just in case because it was looking like it was going to be really cold, and the harvest was great. We had a cool summer but the melon still managed to produce, and so far so good. They've been super tasty, some new disease problems popping up but overall, things were great. They're so diverse. I just love the difference in all of them.

Manish: Did the sweetness change from last year?

Evalisa: I think that there may be on the whole slightly less sweet this year.

Manish: Okay, I see.

Evalisa: I'm guessing that that's maybe just because of the cold nights and cooler weather, but not to say we haven't had some super sweet ones, which is great.

Manish: My watermelons I just checked like a few days ago and everything is full of watermelons. All the patches I have like maybe six places where I have watermelons, and the main patch where I have watermelons from EY and from Catherine, and for myself, and that one is full of watermelons. I was tracking the history of which one is doing the best and I did approximate count. Eva, yours has the most amount of watermelons and they are bigger in size as compared to other ones.

This is very exciting because taking your watermelon where you have adapted to your climate and then bringing it back here, and then seeing how it would do and it is performing best. This is my dream to like readapt, to regrow whatever is from different places and see what the effect is. In some ways, amazing to see that, yes, my intuitions of like, "Yes, it'll perform well," and it makes me even more excited that we need to regrow in different climate zones, same species, same varieties to see the benefit of what it can produce into the farm. Yes.

Steph: Oh, my gosh, I'm very excited--

Evalisa: I love that.

Steph: Very excited to hear that there is a lot of success coming from both of your fields. Eva, I was hoping that you could, we got right into it but take us back and tell us a little bit about the inspiration for this project and why you became interested in growing a cold-tolerant northern growing variety of watermelon.

Evalisa: I guess it comes back to just how I'd been, and I still do, think a lot about resilience and regionally adapted seed, had been and still I'm, super curious about seed breeding. I heard this great interview with a landrace breeder named Joseph Lofthouse, who has had a lot of success developing and working with landraces in his climate in Utah, which is really challenging for vegetable production. Just hearing him describe the process he went through and I'd never even heard of landrace breeding, so hearing a bit about what that was, it just I loved the idea.

It sounded something I could try myself and that might really work for our climate, which is really not necessarily one that seeds are typically bred for, really short seasons, typically cooler nights, even if we get some warm temperatures in the summer. Watermelon specifically had been a crop that I would love to grow but had never had consistent result with despite having tried a bunch of varieties. I heard that interview and I thought about the watermelons, and I thought this might be really fun, and that's where the grain began.

Steph: Then Manish, how did you get involved early on?

Manish: I think I was growing watermelon on my own. I had few varieties I was growing just to grow. This was like taking of my seed journey. It was 2019 when it maybe seven different kinds of watermelon. Then somebody else was doing watermelon as well. They shared some of their seeds that they had requested from GenBank in US and some from other growers in the region. Overall, I had 20 varieties of watermelon growing that season. and I just saved the seeds from that population.

The inspiration was, I have always been growing different diversity of watermelons. I wanted to see what it'll give me and in terms, because I had these diverse genes from different shapes, different size, different color, different taste tastiness and I just wanted to see what it'll do next generation. For me, it was mostly curiosity and learning about seeds more. Then we went to-- me and Eva met at EFAO conference and it was Rebecca who introduced us to both of us because we are talking about watermelon. It was like a seed meeting to talk about different varieties or things.

Evalisa: Yes, Rebecca said you two talk to each other. [chuckles] Just crossed a ton of watermelons and Eva you want to start a watermelon landrace? The following spring, I got some of, he sent me some of those seeds seed and those are the ones I've been working with ever since.

Steph: Oh, my gosh. That's so cool. Then you roped in a few other farmers as well. This is not just a project that just involves the two of you anymore.

Evalisa: Yes, totally. It evolved to become a farmer led research project through the EFAO, which has been great because it's meant some organizational support. They're super good at just keeping us all talking to each other and touching base, and taking notes, and formalizing things in a really beneficial way. We now have another grower in Manish's area and two other growers up in my area. I guess there's five of us at this point.

Steph: Nice. What does that process look like in terms of farmer saving seeds on their own farm? Are you sharing them at all between farms? What's the goal at this point in the process?

Manish: I think we have been very open in terms of what-- we have a very broad goal. People can choose at their farm what to produce and select for. I just shared the seeds but I'm selecting my own generations for my selection, and I have like five different selection that I've done so far. I'm choosing to regrow a population which has select diversity from all these farmers, actually just from

EY and the one nearby. Hopefully I can get more selection from the other farmers in Northway and see what can happen.

Evalisa: Overall, I would say that the project goal is to develop an early ripening delicious melon that we can all reliably grow in our various locations in the ways that we grow them. We're all different. Some farms are seed producing farms, some are market gardens. I do a bit of both and so we all do things differently with different overall goals and capacities. We just really wanted to let each farm figure, make the selections to produce a melon that works or a me population that works well for them.

We have shared some seeds across the sites, but also, we're curious to see as we replant our own seeds each year, how the different populations develop and change.

Steph: That is super interesting given the really different climates that you're growing these all in. When we were speaking before, or actually just emailing back and forth while this idea for an episode was being cooked up, Evalisa, you said that one of the most exciting parts of this project is its collaborative nature. I was just wondering if you wanted to add to that at all.

Evalisa: I think ultimately, the collaborativeness of this project makes it way better than it would be if we were all trying to do something like this on our own. It's also way more fun and way more interesting. Even just from the get go, Manish sent me seeds. If I had had to do an initial cross myself, I probably would've spent years agonizing over how to do that and what seeds do I source. I feel we all just have different strengths and skills, and knowledge bases, and we're able to share that and help each other in this broadly shared goal. I think also we're all very curious about this and specific things in general too.

Again, there is one other thing I was thinking about. Oh, just how we're all so different and how we do things and what we know, and so are the melons. I think of this as a collaboration between all these different farm sites, but also, we're really collaborating with these plants, because we're not telling them what to do. We're saving seeds from the ones that seem happiest to be growing in our gardens and planting those out next year. They're doing their thing and telling us maybe what they need or what works for them, or what doesn't. I really love that element of it too.

Steph: I love the way that you described that of collaborating with the melons as well. I think something that I've observed from talking with you both in this episode and just in separate conversations, is that you both seem to have a lot of respect for the magic of seed breeding or that little bit of unpredictability of the seeds coming with their own genetic background and in some ways, their own

agency to how they're going to grow out and all of that. Maybe, Manish, you can talk a little bit about how seed breeding is a way that you get to connect with nature.

Manish: The whole thing about seeds is why I started doing this was to find a connection with nature. It has been a journey since then to what does it mean to relate to nature. How do I relate to nature and what does it mean? In my own life when I was choosing seed work to be my life purpose, it came from a place of a culmination of all I have been in my life.

I was a software engineer before my previous seed-saving life and that work wasn't meaningful to me. It's switching from that and finding something which is meaningful, and selecting something which also relates to my own history of where my parents have been seed saves in their life. It is a culmination of everything that's happening to me.

When I started this in my first year, I had three plots of all kinds of things you can think of. Cauliflower, cabbage, carrots, anything you can think of. I planted it even apple tree and I don't know, some random things. That's how it starts. In one of these plots I planted just beans, and these are beans from the Bulk Barn. I applied them as a food crop. I didn't expect to save seeds from them, but I did save seeds and I got across from previous generations that it may have crossed. That cross was a beautiful amazing bean, a purple cosmic looking.

For me, that was a gift from nature. That's my relationship that I choose to perceive that. That was like, "Okay, that's amazing." That made me excited to see what more is possible in this exploration. That inspired me to try watermelon and try melon and try melon and see what else nature would give me in that context. That has been my relationship.

Steph: I think something else that you both have touched on is seed breeding can seem really intimidating, perhaps. It's something that has a very exact science and there's people who have the knowledge to do that and then there's everyone else. I love this idea of chipping away at that ivory tower that sometimes seed breeding is kept on. That anyone who grows food can grow seeds. Allowing that a little bit of experimentation and exploration of that. I think, Evalisa, that was one of the reasons you said you were interested in breeding a landrace specifically. Can you talk a little bit more about that?

Evalisa: After listening to Joseph's description and doing a little bit more reading about it, I loved how approachable this seed-breeding technique seemed. Essentially land landrace seed breeding is millennia old, and it's how food crops were initially domesticated. Folks saved seeds from the plants that they liked the best, and they replanted them the next year.

That's essentially what we're doing in this project. What landrace breeding is, is it's taking the seeds from the plants that you like the best, and you get to be the decider of what that means. What is the best or what's your favorite, and replanting them and not worrying about things like uniformity. Really, the parameters just get to be your own. Then it also just lets the plants do their thing. It gives them the freedom to thrive and maybe they need to have slightly bigger leaves or slightly smaller flowers or whatever those adaptations are that the plants need. They have still that genetic diversity.

Like you said earlier, they have the agency to make those changes and adapt as needed. As a technique that's really approachable, you don't need to worry about cross-pollination or necessarily minimum populations in the same way. You don't need to be taking really minute intricate measurements and detailed observations at every step along the way to make sure that you're not hand-pollinating. There's a lot of these more daunting, time-consuming, really valuable in other contexts, but to do what we wanted to do, this was a way to do it without needing to do all of that.

As somebody that doesn't have a background in seed breeding, landrace breeding seemed much less daunting, and so much room for curiosity. Just like Manish said, with his beans, he just let that funny bean plant be and save those seeds, and didn't go, "Oh, you are different. You get rowed out." He can replant those beans and keep following that curious thread through the garden and through time. It feels like there's just more room to play and explore, which to me, felt less intimidating.

Steph: Yes, absolutely.

Manish: Nature is evolving continuously. There's no stop to where it will stop. It's as human explorers the essence of that adventure, I think we can know what's happening with nature. It's if we are observant of-- I think that's how we can relate deeply and commune with nature. I just let the stories see where the story is evolving. As much as conscious breeders, we can choose and select, but it's we do that and that's okay in some context, but in the context of how we relate to our food, I think there's more we can do and that's how we have always done it.

The institutions we have of breeding and this breeder job, it came after, but we have been doing breeding for generations and millennia. We selected from wild mustard, all these species of broccoli and cauliflower and kale and whatnot. We can still keep doing that. We don't have to stop, we don't have to assign a person or a job to do this job. We can still keep selecting and keep learning the story of how it's evolving conditionally. We have to make it obvious. It is obvious. It's like how we have been programmed to see breeding as something like a specialized

skills that can be, but we can also can be as something very basic. Like, “Hey, if you are observant to nature, it'll teach us.”

Evalisa: I love the idea of the plants leading us on this adventure. You called it an adventure munition. It's so true, you're on a mango melon adventure. We all are now because of you.

Steph: What is the story to Mango Melon?

Manish: From the selection, when I planted the first generation of coming to watermelons, in that population, I got hundreds of watermelon. That fall was like, I was tasting watermelon one in breakfast, one in lunch, one in--

Steph: Oh my God.

Manish: I tasted watermelon for weeks. Spot the adventure. One of the watermelon tasted like mangoes. I'm from India, I grew up tasting mangoes. We have the best mangos, so it's like I miss mangoes. When I was tasting this watermelon, the texture of this watermelon was just like mango and it tasted like mango. I was like, “Wow, this is amazing. How can it be possible that I can taste mango in a watermelon?” I was really excited to see that it just came out of like, just tasting all different kinds and from the selection, I'm like, “Okay, I want to grow this kind.” The story of watermelon is very sad story for now. You see what it'll evolve to.

The sad story is that year I when I was saving watermelon seed, I hung them with all the watermelons. I had maybe 50 different kinds of watermelons because I was selecting and writing down what each type is, and what are the traits and stuff. Out of all those 50, just like 9, whatever the mouse went to eat that specific seed, it's like, “What?” It happened twice though. I gave those whatever seed because I didn't have time energy to regrow it. The only eight seeds were saved. I saved those eight seeds. I'm like, “Okay, this is very, very sacred seeds for me.”

I saved those seeds. I kept a few and I gave a friend a few, and she grew it. Same thing happened to them. Mouse ate the seeds. I don't have the mango watermelon seed anymore, but I have the pain population. I'm growing out the pain population this year and hoping that the mango watermelon will be found and saved again.

Steph: Oh my God, that is an epic tale. I'm so emotionally invested now, it's like this man's going to find his mango melon.

Evalisa: I love feeling too, up here on part of the hunt for you, Manish? We're all keeping our eyes open for that mango melon to pop out of our populations because we're all working with that same mix.

Steph: That's tragic. I love just even hearing stories like that. It's so fun to be able to put a face and a story and a name to these things that we're eating because food is so much more than just nutrients. Food is joy and culture, and connection, and all of these things. I think both of you have a really strong awareness of that and bring it into your seed breeding, which is so cool to see.

Evalisa: It's really fun. With these melons, every year planting the seeds out and then as opposed to going to the store and buying a pack of great watermelon seeds, but you have the description on the packet, you know how many days to maturity more or less, you know what to expect. With this landrace, but with any landrace, really what you can hope to expect is that it's going to taste good and it's going to do well, and you'll get a stable yield from it. Anything else is like, yes, a surprise and adventure. It keeps you curious and interested, or it keeps me curious and interested.

Manish: I think these stories are very important to share because this is what will make us connect deeply with each other. How we relate with food, because it's like we have lots stories of food. When we think about tomatoes, we think about bland tasting tomato story, that's not the story to remember or I be excited about. I think as a society, we will have to reimagine how we relate to food. We have to reimagine what is food to us? Where does it come from and who is growing it?

I think it is changing in our culture and it'll deepen our understanding of food more. We'll connect more deeply with these stories. I'm very excited to walk on this journey and see other people walk with me, and walk with themselves, and walk with all their customers ever and other people, it's so exciting.

Steph: Evalisa, you were telling me before, or I've caught wind before of your master's thesis. In addition to being a farmer and a producer, you're also a student right now and from what I've understood, farmers, they have a lot of free time. Students also have a lot of free time. It seems like a natural pairing. I was wondering if you could tell us a little bit about your master's thesis and what you're working on because it does relate to this project.

Evalisa: My research is looking at how landrace breeding intersects with health from an eco-social perspective or an eco-social approach to health. An eco-social approach to health is one that considers not just the health of the individual, but the health of communities, the health of human communities, but also non-human communities, plants, animals, even abiotic parts of the planet.

Just recognizing that we are all interconnected and we all influence each other, and that we all depend on each other to be able to be healthy for our own health and wellbeing.

From that perspective, what we need to be healthy right now is a reevaluation of how we think of things and how we do things, and how we see our place in the world, which is a lot of the stuff Manish was just talking about; reimagining how we relate to our food and to nature. I'm curious about how this project ties in with that and how it can support that. Trying to just wedge in a little space in the academic conversation around how, and food, just getting a little word in edgewise about, well, landrace breeding is a really interesting thing that I think can also support these goals. That's what I'm looking at.

Specifically, I'm doing my research on this watermelon project, so it's really fun to get to engage with it really practically, as practically as you can. Literally hands in and on the ground, eating watermelon, like Manish said, morning, noon and night, every day. Many watermelon smoothies.

Steph: Oh my gosh.

Evalisa: Then also approaching it from this more academic perspective and stepping back a few feet and seeing, trying to understand and see the place that this practical work can fit in the world outside of our farms, our seed community, our customers.

Steph: That is so, so cool. A few years ago, I was working for FarmFolk CityFolk out in Vancouver, and they do such awesome work. They do this citizen science seed trial, different varieties of either tomatoes or beets, turnips. The first year that I started working for them, it was watermelons and one of the varieties was Manish's 22 variety mix. It was so funny. This was also an opportunity for a lot of people to collaborate and to give their feedback, and to work with this mix.

Three years later, I'm encountering this in another way, in these watermelon seeds, they managed to weasel their way into my life in a few different ways. It's cool because it speaks to the community of people who are working on these things, and that it is like so much more powerful when there's other folks who aren't involved. That's very, very cool to me.

Evalisa: It's funny you're talking about the seeds weaseling their way around and, I don't know, the funniest thing just happened today on my way home. We have a little self-serve veggie stand at the end of the driveway, and this time of year I load it up with watermelons, and folks get really excited. They come and they get their veggies and they grab a watermelon or whatever they want, and we just have a mailbox that they just throw their payment in whenever they feel like it.

Sometimes folks leave me notes and it's really sweet. Today, I peeked in there and I found this really sweet homemade little envelope package with cutout watermelon pictures from probably like a Safeway catalog taped on, and pink marker. Somebody wrote 'seeds' and then inside was three little packets of seeds, one labeled red, one labeled orange, and one labeled yellow. Some kids down the road had saved their seeds from the melons that they had gotten at the vegetable stand last week or sometime not too long ago, and returned me some seeds.

Steph: Oh my gosh, that is amazing.

Evalisa: It's just the sweetest thing because I think that that wouldn't normally happen. [laughs] It's not an everyday occurrence in my life, at least. I just love to think that these kids down the road are getting engaged with seed saving.

Steph: Yes, literally, you made that connection for them or because of the food that you were able to give them, they saw that these seeds aren't just to be spit out, that these are actually valuable in and of themselves. They hold the whole secret for the whole next generation.

Evalisa: Yes, it was so sweet. The time and attention they took to make these little homemade envelopes for them was just so sweet.

Steph: That's so lovely. You touched on it a little bit before, but I know there's going to be a lot of people interested in really the technical aspects of how you started with this 22-variety cross. I was hoping you could tell me a little bit more about that initial process.

Manish: Yes. I think whenever I think about breeding, I think my view is we should create the platform and let nature do its work. It should minimize our work of hand pollinating. In my objective was just set the platform. I chose the what I did in a way that were very diverse and overall scope in the beginning was very broad. If I think back, I selected about maybe seven open-point native varieties. There were about five or six hybrid and then they were like tetraploids and all the other was diploids. We were hoping to also make some triploids from the population.

That means like diploids are two chromosome, tetraploids are four chromosome and try triploids are three chromosome. Most of the population which are open-border hybrids, they were diploids. My friend who had requested from GenBank were tetraploids population. From those tetraploids, we were hoping to make triploids watermelon, and they were seedless watermelon. We are hoping to have all genetic diversity that is possible with watermelon.

I planted it and then we let nature do the pollination to the bees. Then I wanted to see what diversity came about from that. I had to make sure my neighbors weren't growing watermelon. I had at least a mile separation from where I was growing. I was growing like this at a community farm and I had a one-acre plot there, separate from other people and from that I was able to make sure only these 22 melons were crossing with each other.

Steph: Nice. Yes, there's like one cross that's lived on in a lot of different ways, it seems. It's one big experiment.

Manish: Yes.

Evalisa: They continue to evolve, which is really neat. Manish and I were talking about this evolution of the populations earlier this summer too, because we have such a short growing season up here. I've really been focusing on the selecting and the saving, and planting out seed from the first 25 great tasting melons that I managed to harvest. It occurred to me, I think Manish had already been thinking this way, but that by doing it this way, I'm definitely facilitating the plants or letting the plants evolve to be earlier maturing, but potentially losing some interesting genetics that would show up in later maturing plants.

Really, the difference between the harvest date of the first melon and the last melon is like maybe 10 days up here. I don't know how big a difference that would make, but down in the Ottawa area, they have a longer growing season. Looking forward and thinking about sharing seeds between the sites and possibly just making sure that I get to reintroduce some of those later season genetics that might be lost by our short growing season up here is another really neat thing that we can do because we're working collaboratively. If I was just doing it up here, those genetics that were maybe part of the original population are going to be lost.

Manish: Yes, I'll give an example. In my population, there is one called ancient watermelon. They are very large watermelon. They are grown in the south very much. Because I've planted my watermelon late this year. My watermelon is only getting like 60 days of maturity time. I'm seeing the ancient population is not producing watermelons yet, but they have produced to me in previous generations. I know in my gene pool, there is long watermelons.

I remember the first generation when I was tasting all these watermelon, there was this massive watermelon. It was pink. It didn't get to mature its sweetness. I know there is a gene in my population that will produce a massive watermelon in Ottawa climate, but there isn't enough time. I'm hoping to keep growing and trying to see if I can have that big producing watermelon. I was hoping that big producing watermelon will be produced by Eva in Arizona.

Evalisa: Well, the first year I got a really big one. Not the first year, but the first year I only got 8 melons out of 200 plants. The following year, I got a lot more melons, and one of them was really big. This year, I've noticed that on the whole, the melons are getting smaller. Well, there's less diversity in size, I would say. I got a handful of pretty big round ones, but I didn't get any big oblong or oval ones this year. Anyways, it's just interesting seeing the changes and evolutions.

Manish: Yes. I remember growing David's Cadill watermelon. He gave me his fourth population my first year when I was growing these watermelons. I remember in his population; the size was going down and I noticed the seed size were also going down. I am like maybe there is a dominant gene that is causing it to have small seeds and small watermelon. I'm mindful of that. I do want in my population at least like a big watermelon, or at least there is still genetic diversity. I'll plant them again next year with my parent population and the new population, and we grow it, and then they will recross, and hopefully they will have bigger genes in the population as well.

Steph: It's so fun with this. It's like this never-ending story in a way. I'm already thinking about next year and what are these ones going to look like in 1 season or 3 seasons, or 10 seasons. It's fun to think about the way that the story keeps going.

Evalisa: Yes. I mean, being somebody who knows absolutely nothing about actual watermelon genetics. Basically, I have grade 11 biology from 100 years ago to draw on in terms of the genetic knowledge. It's interesting to see things happening in the population. A few years ago, I also grew, in addition to Manish's cross, I grew a variety of melon that had a yellow and ripe gene in it. The plants would turn yellow, the melons turn yellow when they're ripe. It's really handy because you know when they're ripe.

I didn't love that melon though, so I didn't save any of the seeds from it. Figured there might be some crossing. Figured that also probably wasn't the end of the world. Planted the seeds out the following year, and I didn't have any yellow and ripe. I just was like, “Oh, I guess they didn't cross. They were at opposite ends of the garden. That was enough space.” This year, I had four plants that had melons that turned yellow when they were ripe.

My grade 11 biology tells me that that gene is probably recessive. Then it just showed up this year. It's just neat to see that even after a few years and getting to know the population, new things are popping out. The other thing that happened for the first time this year is I got a white melon, like a white-watched melon, which I hadn't seen yet. I'd never seen before I cut it open and I was like, “Ugh, it's not ripe.” Then I tasted it and I was like, “You're ripe.”

Manish: Nice.

Evalisa: It's just white.

Manish: That's really exciting.

Evalisa: Yes.

Manish: I have five population I'm growing, and one is like red, orange color, one is salmon, one is early from all my population, and one is like white. I'm excited to see what the white will give me. It comes from the citron population that is white. It's a wild watermelon. I'm hoping if it can grow in Northern climate, that's very exciting because it can give us white watermelon.

Evalisa: Yes. That's right. Citron's white plush. I had forgotten about that. That was in the cross, right?

Manish: Yes. Maybe the white watermelon is very recessive or it comes in later maturity time because I had a big watermelon, which was white, but it wasn't sweet. The watermelon wasn't sweet. It only comes in native population when there's longer maturity time for it.

Steph: Do you ever get sick of watermelon?

Manish: I didn't get sick, but it was too much watermelon tasting. [laughs] I'm going to have same this year. You guys are welcome to come and eat the watermelons.

Steph: Ironically enough, I'm not a huge fan of watermelon. I feel a little bad saying that. My grandfather was of the mind that watermelons taste like dirty dish rags, which is so specific. I think he was hurt by a watermelon. Sometimes I agree. I think I just need to try. I haven't met the right melon. I think maybe this fall I'm going to need to come to Manish's farm and then just sample, sample, sample, sample until I find the Steph variety that then you can grow out indefinitely for me, I would be your main customer.

Evalisa: I'm sure he would love that. It's a whole lot of melon for him. I don't know if I could ever get sick of watermelon, but I certainly have more than I can handle.

Steph: Oh my gosh.

Evalisa: It's funny that you mentioned that you're not a huge watermelon fan, because one of the growers who's worked on this project up here is not a fan of

watermelon at all. He says he doesn't have a problem with the flavor, but he is not really a fan of the texture.

Steph: Yes. I would say that's where I stand on it too. The texture sometimes, it has to be so fresh. As soon as it gets like a little bit mealy, I'm like, "Ugh."

Manish: When I was selecting for watermelons, I noticed that in the first population, diverse population, I noticed there were many meaty ones, but that meat was very, what's the word you use?

Steph: Mealy.

Manish: Mealy, yes, mealy. I was selecting for the one with smooth textures and with fresh tasting. My watermelons do have the texture that you may like, so you have to come by. [chuckles]

Steph: Very good. You're really sweetening the deal here. That's awesome.

Manish: That raises a very important question to ask. Who is choosing these varieties and who are these people who have the right to choose what should be on our food plate? It's a very important question to think about because it's like, okay, somebody is controlling food. Somebody is making sure the kind of watermelon they get on our plate. Should we allow that? Should we have the freedom to choose what gets into our table and what it is, and how it's selected.

That's where I think it's important to know there is an option that is by growing and selecting. We can do that in our own garden. It doesn't need to be a complicated process to source. I'm happy to share my seeds. In that context, I think, it's important question to ask how and why, and where it comes from, and can we participate or not.

Evalisa: That's so true, Manish. It's not even an obvious question.

Manish: Yes.

Evalisa: I don't think it's a super obvious thing to think like, “Oh, it could be different. This is all I've ever seen or known, or had access to. Why does Stephanie need to eat mealy watermelons?”

Steph: Why?

Evalisa: Just because they ship well and they hold well at the grocery store.

Manish: Actually, I remember the story now. There was a customer who came by this past plant sale. They were looking for a white watermelon that was citron.

She told me that she, in her culture, the pickle is watermelon, the pickle, the skin of the watermelon. I didn't know about that. That people do that. That they pickle watermelon skin and eat it. She was really excited I had those seeds, and I was growing those seeds. [laughs] That's a story.

Steph: I love this idea of democratizing our food because, in general, I think we're moving so much in the opposite direction, that things are becoming more and more homogenous. As people, we are not super homogenous. We have all of these beautiful quirks and diversities. Without getting too much on my soapbox, it's so beautiful that someone can come along and see something in a plant that someone else might not even notice or care about particularly. For them, it's important, and it's something that is meaningful for them.

I'm definitely with you both in the sense of wanting to open those doors wider and invite people in to just try their hand, and to experiment, and to lean into their curiosity and see where it goes.

Evalisa: It's also just so lovely to think that we're leaving or that anybody can leave room for plants to just be who they need to be, and do what they need to do to thrive. When you're talking about just how everything's becoming so homogenized and uniform, and that uniformity takes a toll. Leaving space for diversity in any context, but we're talking about watermelons in the garden right now, is so valuable. Well, it's also really inspiring because of what comes of it, right?

Manish: Yes. I want to deflect upon the nature of a project it's so diverse. Each of the participants who are participating, they all have different goals. That diversity itself is amazing. The whole collaborative piece, even though there's so much diversity among us, we are able to collaborate in a way which is meaningful for all of us. I think that tells a story of how beautiful it can be to weave this together. Even though we have different taste and different selection processes, and different ways to live life, at the same time, we can work together in a common thread of beautiful-- We can leave this so beautiful.

Steph: This has been really, really great, you two. Thank you so much for all of your insights and for sharing your stories and your knowledge. Conversations like these could make my heart grow a little bit. It's so meaningful to remember why we're doing this work. It's so much more than just the chromosomes and looking at the genetics of this and that, and yield, and vitality and all of these things that are important, but there's like more to it than that. This conversation has really been reinvigorating for me in that way. Thank you, both, so much for taking the time.

Manish: Thanks so much for talking to us. It's very inspiring to share these stories with you and with everybody.

Evalisa: It's been wonderful. It's not all the time that we run into people that we can talk about watermelons with, these ideas with. It's been really nice to have this opportunity.

Steph: Thank you so much and enjoy the rest of your evenings.

Manish: Thank you.

Evalisa: Thanks, Steph.

Steph:
SeedHeads is produced by The Bauta Family Initiative on Canadian Seed Security, a program of SeedChange. SeedChange's main office is located on the traditional unceded territory of the Algonquin Anishnaabeg People. You'll find SeedHeads wherever you find your favourite podcasts. To find episode transcripts and translations, learn more about our programs, and to support seed work in Canada, please visit seedsecurity.ca.