

## 10 Years of Successes & Learnings for The Bauta Family Initiative on Canadian Seed Security

In 2023, The Bauta Family Initiative on Canadian Seed Security celebrates its 10th anniversary.

Thanks to the contributions from philanthropic foundations across Canada and support from Agriculture and Agri-Food Canada, we have been able to accomplish the following over the the past decade:

- Firmly established a national research network of farmers and seed growers working on over 100 different participatory plant breeding and variety trialing projects annually
- Became the go-to educational resource on seed production, plant breeding, and seed policy analysis for organic and ecological farmers in Canada
- Provided training opportunities through workshops, field days, and webinars for over 5,000 attendees exposing them to the methodologies and practices employed by some of the most innovative seed growers in Canada
- Developed policy publications and training on critical regulatory issues that impact organic and ecological seed producers in Canada
- Established organic and ecological seed demonstration sites across the country with the support of Agriculture and Agri-Food Canada
- Created Canada's first bilingual podcast on organic and ecological seed production: SeedHeads/Les Semeurs
- Helped develop and commercialize farmer-bred varieties of organic red bell pepper and potatoes, and submitted Canada's first farmer-bred varieties of organic wheat, oat, and potato for national evaluation
- Engaged with the Government of Canada to advocate for policy changes that will enable farmer-led seed systems and establish the foundation for the transition towards climate-resilient agriculture

### Regional Successes

The Bauta Initiative is national in scope and works in partnership with mission-aligned non-profits, grassroots organizations, research institutions, and funding partners across the country. Some of the successes of our regional partners over the past three years are highlighted below:

#### ATLANTIC CANADA

##### *Regional seed conservation with Dalhousie University*

In 2014, our Atlantic Canadian program established a regional seed bank at Dalhousie University. Since its establishment, the seed bank has backed up over 250 varieties of regional vegetable and grain seed across Atlantic Canada. Dozens of farmers continue to choose rare varieties every year, indicating their understanding and support of the seed bank's conservation mission. In 2021, the Baie Verte bean and Steeves' Caseknife bean - uncommon and historically significant Maritime varieties – were grown out to be made available to reach hundreds of gardeners and farmers in the region. These varieties were effectively brought back from the brink of extinction and into the hands of the farming public. In 2022, the seed bank in

Atlantic Canada remains a wonderful illustration of how our grow-out programs can support regional biodiversity in very significant ways.

## QUÉBEC AND ONTARIO

### *Strengthening vegetable plant breeding networks in Eastern Canada*

In Ontario and Québec, our demonstration sites profiled the varieties and breeding material of small farmer-led breeding clubs. The following crops have either been trialed or bred by the plant breeding clubs across these two provinces: early-maturing red bell peppers, multi-coloured chili peppers, purple bok choy, yellow beans, early-maturing okra, African eggplant, and early-ripening watermelon. Feedback to help these farmers advance some of their plant breeding material is being gathered at the demonstration sites in each province. Some of the highlights from both breeding clubs are featured on our [website](#) (QC) and through a [video](#) of our demonstration site in Ontario.

## PRAIRIES

### *Facilitating farmer-to-farmer knowledge sharing through PPB Farm Clubs*

Over the past three years, we have adapted the way that the Bauta Initiative and regional partners engage farmers through our participatory plant breeding (PPB) Farm Club model. The model focuses on facilitated collaboration of groups of 15 to 25 farmers to have conversations with researchers, and with each other, about on-farm plant breeding. The format has resulted in rich discussion and many valuable “aha” moments among farmers. The farmer-driven approach has encouraged collective problem-solving, yielding results that farmers may not have been able to achieve on their own. Farming can be isolating, and organic and ecological farmers are often the odd ones out among their peers. Farmers engaged in Farm Clubs over the past three years have stated that doing so creates a sense of community and keeps them motivated to continue with this work:

*“When you're out in the field by yourself, it's kind of a daunting task just to be there and kind of start to question, if all this work is really worth it? [Farm Clubs] validated the work that you're putting into it, to see how much it did affect other people.”*

*“[Collaboration is] what happens when you get a group of farmers together, and researchers...It's a great opportunity to share ideas and to share our experiences and, ultimately, we're sharing those [plant breeding] selections with each other.”*

## BRITISH COLUMBIA

### *FarmFolk CityFolk securing long-term resources for regional programming*

Out of all of the regional partners in Canada, the BC seed program led by FarmFolk CityFolk (FFCF) is the most financially self-sufficient thanks to the relationships FFCF has built with the BC Ministry of Agriculture and regional foundations. Since 2018, FFCF has leveraged national funding provided from the Bauta Initiative to raise over \$500,000 to support regional vegetable seed production research and training in BC. The five years of success of FFCF represents validation of the partnership philosophy of the Bauta Initiative: mobilizing national resources to increase the capacity of regional organizations to engage in seed programming for the long-term.

## National Program Highlights

Our on-farm research projects now regularly involve 75-125 farmers annually and we have become a trusted partner with organic farmers and research institutions to support innovative seed research. We complement these research programs with extensive farmer-to-farmer training programs to facilitate knowledge transfer among growers engaged in our work. In partnership with our regional hubs across the country, our team hosted and supported 186 training events for 5,805 attendees over the past three years. Some of the other highlights from our programs are listed below:

Demonstration Sites: In 2022, the Bauta Initiative established 14 demonstration sites across the country at the following farms and research institutions:

<b><i>Institutional farms:</i></b>	<b><i>Working farms:</i></b>
University of Alberta (Edmonton, AB) Mackenzie Applied Research Station, (Fort Vermilion, AB) University of Manitoba (Carman, MB) University of Toronto, (Scarborough, ON) Bishop's University (Sherbrooke, QC) AAFC Fredericton (Fredericton, NB)	Moose Creek Organic Farm (Oxbow, SK) Abbotsford Seed Farm (Abbotsford, BC) Fertile Ground Farm, (St. Agatha, ON) Patchwork Farms (Senneville, QC) La Radicule (Manseau, QC) Ferme céréalière Paquet (Sainte-Florence, QC) Hayes Farm, (Fredericton, NB) Legacy Garden (Charlottetown, PEI)

The demonstration sites are spaces where people can see, touch, smell, and taste the varieties of grains and vegetables which have the potential to sustain climate-resilient agriculture in their regions. These sites have provided an unprecedented opportunity to engage the agricultural community in learning about the value of farm-saved seed, farmer-led plant breeding, and seed stewardship in organic and ecological farming contexts. Learn more about the demonstration sites at [seedsecurity.ca/engage](https://seedsecurity.ca/engage).

SeedHeads/Les Semeurs Podcast: In 2020, we launched the bilingual [SeedHeads/Les Semeurs Podcast](#). Featuring seed heroes from across the country, the podcast is part storytelling and part technical, delivering the perfect way for Canadian seed growers to connect with each other, from a distance, while harvesting corn or shelling bean pods. Over three seasons, we have published 15 full episodes: 9 English and 6 French. The podcast has been downloaded over 5,800 times. Among our most popular episodes are those featuring Indigenous Educators and Seedkeepers (Tiffany Traverse, Audrey Logan), and those with a focus on technical plant breeding and selection work (Richard Favreau, Annie Richard, Telsing Andrews and Maxime Dufresne-Gagnon.) The podcast is available on all streaming platforms and can be found at [seedsecurity.ca/podcast](https://seedsecurity.ca/podcast).

Online Webinar Series: As part of our ongoing efforts to adapt to the physical distancing restrictions for the pandemic, we launched a free national online webinar series in 2021. We held 8 webinars on plant breeding and seed production with over 400 attendees. In 2022, we

held 4 webinars on plant breeding and seed production with 381 attendees. In 2022 all webinars offered live English-French translation and are available in both languages on SeedChange's YouTube channel: [youtube.com/c/SeedChange](https://youtube.com/c/SeedChange). Throughout our webinar serieses, we conduct in-training evaluations after each webinar: 94% of attendees reported that the quality of the webinars was high and 98% reported increased knowledge as a result of attending the webinars (39% reported a large change in knowledge; 52% moderate; and 7% small).

## **Learnings and Trends**

The following learnings about our project and broader trends in the sector have been identified as key to our program:

### *Increasing awareness of justice, equity, diversity, and inclusion:*

The evolving discourse around racial equity and justice for Indigenous communities has been a strong theme within the sustainable farming movement in Canada since its inception. However, over the past five years, the discourse has intensified and has forced us to rethink how the movement can be more inclusive while also working in solidarity with Indigenous farmers and seed savers. These conversations around equity and Indigenous reconciliation have, and will continue to have, significant implications on how we fundraise for our program, mobilize our resources, and evaluate the impact of our work. Our core team and partners have been meeting on a monthly basis to discuss anti-oppression practices that can be incorporated into the way we do our work.

### *Reflecting on internal capacity limitations and competing farmer demands*

Organizing all components for on-farm and participatory research in time for the beginning of each growing season was even more of a challenge than usual. The window to wrap up the previous season, interpret the data, solicit feedback to inform the next season, and then prepare all of the research materials before the growing season begins is already very short (Jan. - Mar.). Changes in internal and partner capacity, competing demands on farmers, and variable growing seasons due to climate change introduce new challenges every year. We need to continue to strengthen our project management tools and systems to better support our partners in preparing for the field season.

### *Building community and acknowledging the mental well-being of farmers*

Another critical lesson has been around the importance of farmers coming together not only to share agronomic knowledge, but also to support their well-being and mental health (e.g. the 2022 drought in the Prairies has been a real strain for farmers). For instance, at an event at Poplar Bluff Organic Farm in Alberta, a diverse mix of farmers came together and they seemed very energized from being together and learning about radicchio. We need to continue to sharpen our facilitation skills to create supportive and adaptive learning environments that meet the technical and experiential needs of farmers.