A series of seed crop trials are getting underway at locations in southwestern B.C. with the aim of reducing local farmers' extreme reliance on imported vegetable seed.
While B.C. produces vegetable crops worth almost $3 billion, almost all the seed is imported, which leaves us vulnerable to seed crop failures abroad and reliant on strains of plants not bred to thrive in local growing conditions, said Alexandra Lyon, lead researcher for the three-year B.C. Seed Security program, based at the Centre for Sustainable Foods Systems at the University of B.C.

“This is a real food security issue,” she said. “To have a resilient food system, we need more diversified production and reduce our dependency on seed production that is really very concentrated in a few places.”

The mild winters in southwestern B.C. and Vancouver Island may well provide local farmers a valuable ecological niche for successful seed production, a crop that can be far more lucrative than vegetables especially as demand for organic seed continues to rise, she said. One of the world’s most productive seed-growing regions is the Skagit Valley, just across the border in Washington state.

In the B.C. trials, farmers are working with about 75 strains — including at least a dozen varieties each of spinach, beets and kale — and 15 different vegetables in all.

“Most people don’t realize that B.C. farmers are largely unable to source B.C.-grown seed for their crops,” said Chris Thoreau, B.C. Seed Security program coordinator at FarmFolk CityFolk. “There is a huge opportunity for developing regionally-adapted seeds that thrive in our conditions.”

Experimentation comes at a cost to participating farmers, but they are keen to improve their crops.

Chilliwack farmer Dan Oostenbrink has 1,500 beets planted for seed in an area that would have produced about 1,000 kilos of beets for market.
“What we are looking for is a locally adapted seed,” he said. “What we want to do is take a seed that works well and advance it to create something that will work in our wet conditions, resist pests and give us a high yield.”

Unlike vegetables that are harvested after a single growing season, many seeds require two years to form, making them vulnerable to weather and disease while over-wintering.

“In many regions, extra effort is required to take that vegetable crop to a seed crop,” said Lyon. “A farm that produces a good vegetable crop could have problems getting a good seed crop.”

A farmer must forgo two vegetable crops to harvest a single seed crop, which adds financial risk and opportunity cost. Harvesting seed on a commercial scale may also require specialized harvesting equipment, threshers and new skills. Many of the farmers who grow seed for their own use are using low-tech hand processing.
“It takes a leap to get to the next level,” Lyon said. “Vegetable seeds require a fair amount of processing to clean and sort the seeds, so that can be a significant expense when you scale up.”

UBC will host trials of organically grown seed, while the University of the Fraser Valley will oversee conventional seed trials on a local farm.

The project is a collaboration among FarmFolk CityFolk, the Centre for Sustainable Food Systems and the Bauta Family Initiative on Canadian Seed Security, with funding from Agriculture and Agri-Food Canada and the B.C. Ministry of Agriculture and Whole Foods Market.

rshore@postmedia.com