

**2017 ACORN Conference & Trade Show
Best Western Glengarry - Truro, NS**

Workshop Title:

Seed Quality Assessments for Small-Scale Seed Producers

Speaker:

Mel Sylvestre

Executive Summary:

Mel describes how BC Seed Trials created a program that tests for quality seed. Mel explains the program's timeline, who is involved in the program, and who the program is best suited for.

This workshop is in continuation from two other conference workshops from Mel Sylvestre: "Canada's Seed Regulations: What do Vegetable Seed Producers Need to Know" and "Quality Assurance Practices for Vegetable Seed Crops".

Detailed Notes:

Mel initiated British Columbia (BC) Seed Trials as a seed co-op and as a seed company because they wanted to have quality seed.

What is quality seed? What does it mean in practice and in the field?

From 2006 to 2014, Mel and her BC Seed Trials team surveyed market gardeners to find out why they preferred to buy their seed from larger, non-local seed companies compared to local. The survey found that quality was one of the reasons for that. The Seed Quality Assessment can be used by local or small-scale seed producers as a tool for them to market their seeds by improving their seeds quality.

In 2016, Alex Lyon, a post-doctoral student, joined UBC Farm team as a lead researcher for BC Seed Trials.

In 2017, guidelines and a template were made and tried by 5 vegetable seed producers. In 2018, the Seed Quality Assessment will be available to everyone.

The program is comparing varieties grown in different places. It's not only comparing which variety is the best, it is comparing methods and climate and which of the same varieties are doing best and where.

Field layout:

The trials are randomized so that the plantings capture the soil anomalies. 3-5 traits are picked during each assessment. As you walk down the bed, depending on the length, capture 3-5 places along the bed to stop and within a distance of 3-5 feet, take note which is the best between the 2 beds. If they are the same, then they cancel out and neither gets a check mark. Allow a space for producers to write more about why, if they

had more to say than just a checkmark. Before heading into the field, have a plan of which traits you want to look for because as you walk along the bed, you will see many more than 5 different traits to look for and end up with more than 5 traits, which can become complicated.

The assessment, by BC Seed Trials, was blind (farmers name covered) so that it is an unbiased assessment.

With larger crops, you would walk the row and stop and record one trait at a time. In smaller crops, you could more easily focus and then record all the traits at the same point. However, should different traits be recorded at the same spot in the field? Or would this be helpful so traits can be correlated (there is still debate on this)? When focusing on recording one trait at a time, you can have it in your mind what to look for instead of having more than one trait to look for in your mind. When the trails are available online, they are posted without saying what the 'best' variety is, but instead, it tells you what they observe so you can make an informed decision.

This program is for small and medium seed producers who would like to test their seeds for quality beyond seed testing such as germination and purity. The assessment takes a small amount of time and provides companies with the peace of mind to offer high-quality seeds and can highlight the areas needing improvement. Farmers rely on high-quality seeds to make a living. Seed security should come as quality seed security.