In a Nutshell
Northern Ontario faces specific challenges compared to other parts of the province when it comes to seed production, including late springs and early frosts (as early as end of August), followed with a wet fall.

The demand for lettuce and greens seed is high, but these growing conditions make producing lettuce seed outdoors very difficult. This means that northern seed producers cannot produce regionally adapted varieties.

As a potential solution to lettuce seed production in northern Ontario, Peggy compared seed production in a hoop house and uncovered.

Key Findings
• In the hoop house, Peggy grew sellable lettuce seed from 4 of 5 varieties, and sales of the seeds would recoup hoop house material costs in 2.21 years.
• When grown uncovered, none of the 5 varieties produced viable seed.

RESULTS
• There was no viable seed produced from any of the lettuce varieties grown uncovered.
• This is compared to the hoop house, where 4 of the 5 varieties produced viable seed, with a 8% chance (P=0.08) the seed produced is due to chance and not the fact that it was protected.

TAKE HOME MESSAGE
Hoop houses appear to be an effective way to grow lettuce seed in northern Ontario.

There was variation in the weight of seed production from the five lettuces tested. The differences match Peggy’s observations from previous years but will need to be validated with additional replicates in future years.

Even with paying off hoop house materials in 2.21 years, this data tells Peggy that selling lettuce seed wholesale by weight is not going to be profitable. Based on a suggestion from High Mowing Seeds, Peggy will try pricing by seed count for greater profit. She can do this in future years by calibrating the weight or volume of 1,000 lettuce seeds.

Peggy will also evaluate the return on investment of the more wind-resistant steel frame to avoid the destruction by winds experienced this year. Specifically, she’s thinking of using one of her existing Hanley caterpillar tunnels with a taller gothic peak, and forcing sides up high to allow for sufficient ventilation. Since lettuce plants are ~ 4’ tall at seed set, Peggy must be able to keep good air flow so the seeds don’t overheat.

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