**Haskap Breeding**

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**Lonicera caerulea** L. is a circumpolar species found near wetlands of boreal forests. It is not found in Alaska, BC, Yukon or Norway. We are extensively using the 4 subspecies listed below.

**Germplasm**

We started collecting *Lonicera caerulea* varieties in 1997 and breeding in 2002. In 2007 we began gathering ssp. *villosa* across Canada. Today, we have the world’s most diverse germplasm collection and largest breeding program for this crop.

- **ssp. villosa**
- **ssp. edulis**
- **ssp. emphyllocalyx**
- **ssp. kamchatca**

**Germplasm Study**

For over a decade we have observed and experimented with germplasm from Russia, Japan & Kurile Islands. We have identified superior selections to use in breeding. Our Canadian collection is fairly new & requires more study.

**Crossing Strategy**

Each subspecies has unique & valuable attributes that we are incorporating into future varieties. Some key positive traits:

- **J** = large berries, upright bushes, flavour
- **K** = high sugar content, disease resistant
- **R** = early uniform ripening, high yields, flavour
- **C** = adapted to Canadian soils and weather

**Selection Criteria**

- **Top priority** is Flavour
  - Best ones: like raspberry + blueberry + unique zing
  - Bad ones: bitter or grassy or bland

- **2nd priority** is Adapted to machinery
  - Bushes: Upright and spreading to fit harvester, high yield
  - Berries: durable, roundish, uniform ripening, will not drop off early but comes off easily for a harvester.

- **Other priorities**
  - Disease resistance & plant vigour
  - Early, mid & late ripening varieties
  - High levels of antioxidants and other healthy chemicals

**2nd Generation Hybrids**

Since obtaining research funding from the Sask. Ag. in 2007 we’ve grown over 20,000 hybrid seedlings, but we plant only the most vigourous seedlings. We are seeing many interesting combinations of features, including odd berry shapes and hybrid vigour. We expect release greatly improved varieties in the years to come.

More info: [www.fruit.usask.ca](http://www.fruit.usask.ca)  [www.haskap.ca](http://www.haskap.ca)

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