

# New Haskap Varieties from the University of Saskatchewan

*Note: we are calling these varieties 'Haskap' because our Japanese cooperators considered them to be of high enough quality to be used in the Japanese market. Also, these varieties have ancestors from the Kuril Islands which were once part of Japan.*

**'Tundra'** may be the variety best suited for commercial production at this time (2007). Tundra's fruits were firm enough to withstand commercial harvesting and sorting at the University of Saskatchewan, yet tender enough to melt in the mouth. Firmness is a rather rare trait especially for large fruited blue honeysuckles. Ranking at almost the top for flavour and fruit size the shape of its fruit was deemed acceptable for the Japanese market. Its fruit is at least 50% larger than blue honeysuckles currently available in Canada. Its firmness and the fact that this variety does not 'bleed' from the stem end when picked could make this variety especially suited for Individually Quick Frozen (IQF) processing.



**'Borealis'** has the distinction of having the best tasting and largest fruit size in our breeding program as of 2007. (However, there were many good tasting haskap varieties and it was hard to decide) Its fruits were usually twice the size of any of the 35 Russian varieties in our collection of similar age. (Most varieties of haskap/blue honeysuckles seem to have larger fruit as the bushes get older). Unfortunately, this variety does not have the firmness of 'Tundra' and it is not suitable for IQF. It tends to get a bit mushy when handled with equipment. It may be best for home gardeners or U-pick operations who can hand pick the delicate fruit. Or if shake harvesting the fruit, the berries will be damaged and will need to be quickly processed. Not only did the breeder and a University panel choose it as having the best flavour, but its top rating for flavour was also verified by a Japanese Company that chose it as the best tasting of 43 samples!



## Three Experimental Selections

Propagators and growers interested in commercial production prevailed upon us to release additional varieties for trial. The following two selections are from the same family as 'Tundra' and 'Borealis' and are similar in flavour. If additional tests in the coming years are favorable, then we may give these selections names.

**'9-15'** This selection had almost twice as much fruit, by weight, than other selections in its family. However, yield of the original mother plants is not always a reliable predictor of yield if grown elsewhere and requires additional plantings to verify. This selection also has a trait rare in Haskap; its berries are a bit chewy when eaten fresh. Perhaps this trait is desirable for some processed products. We are hoping that chewy fruits hold their shape better when cooked. We plan to test this selection further to see if there is some advantage of 'chewy' in processing



**Variety 9-15** **'9-92'** This selection is like a slightly smaller version of 'Tundra'. It could be mixed in the same rows with 'Tundra' plants and harvested at the same time. Its flavour is similar but more tangy than 'Tundra' which may be more desirable for some products. Only a few propagators have this selection as it was harder to propagate.



**Variety 9-92**



**'9-91'** Similar in fruit size to tundra but easier to propagate than '9-92'. Berries a bit more stretched than others being released for testing. Flavour is excellent.

## Variety 9-91

*Characteristics of the 2007 Haskap varieties from the U of Saskatchewan*

Name	Scar	Yield (g)	Average Fruit Weight (g)	Fruit End	Fruit Shape	Flavour	Stems	Integrity
Borealis	Wet	average	1.62	small + bb	short flat boxy	sweet tart	a	c+
Tundra	Dry	average above	1.49	small	long flat bullet oval	sweet tangy	a	a
9.15	Dry	average	1.30	small	robust short oval	sweet, chewy Nice tangy	a-	b
9.91	Dry	average	1.41	small	Flat cylinder	sweet	a	b-c
9.92	Dry	average	1.29	small	long flat oval	tangy sweet	a	a

## ***Explanation of characteristics measured***

**Scar** The scar is where the fruit is attached to the stem. Some fruits 'bleed' at the scar when picked (wet) or are dry. Dry is preferable. A wet scar can mean that the fruit was picked too early. However, some varieties may always have a wet scar. We harvested our fruit the last week in June. Borealis, is either is a late variety or it may always have a wet scar.

**Yield** Yield is based on the mother plants that were approximately 2 feet high and 3 years old. This data is very preliminary and inconclusive. To be measure yield properly, it is best to have many plants on several soil types. The U of S site is notorious for its heavy clay soil and slow growth of young plants. That 9.15 had twice the yield was an important reason for its being selected for further trials.

**Avg. Fruit** We measured 10 berries of each selection, but did not include any unusually small fruit.

**Weight(g)** Very small fruit can occur when a certain flower was not well pollinated. The average Russian blue honeysuckles at that age were 0.7 grams and the largest were 0.9 grams.

**End** The ends of the fruit where the flower was attached can vary. Small is desirable. bb is short for belly button. Some people like the bb, some don't. Pointed hairy ends are most undesirable, none of these selections had that

**Flavour** Descriptors are listed in order of importance. Thus sweet tangy is sweeter than tangy sweet. A panel of 8 compared 8 U of SK selections, Blue Belle and frozen cultivated blueberries All U of S selections were unanimously judged superior to Blue Belle and blueberries The U of SK selections were considered highly acceptable and similar but there was a preference for z' Borealis' as the best tasting of the above group. Chewyness of 9.15 is not desirable fo fresh fruit. More research is needed to determine if 9-15 could be good for certain products that require a firmer berry.

**Stems** Selections were harvested by shaking fruit off the bushes. Notes were made regarding how many stems were still attached to the fruit. An 'A' rating meant that stems were not found on the fruit. An 'A' rating meant that a few stems were found on the fruit after shaking.

**Integrity** After shaking, fruit was run through a sorting line which drops fruit a few inches while a fan blows off debris. This caused damage to many selections. An 'A' rating meant that fruit was mostly dry and undamaged. A 'B' rating meant that Fruit was slightly damp from juice released from damaged fruit. A 'C' rating was average damage which would not be optimum for commercial production, most of the fruit tested in the program got a C rating. D' and 'E' ratings were for selections with extensive damage.

For more info on Haskap or other prairie fruits visit:  
[www.usask.ca/agriculture/dom\\_fruit/index.html](http://www.usask.ca/agriculture/dom_fruit/index.html)

