

'Boreal Blizzard'

by Bob Bors

Available in 2016



*Figure 1. 'Boreal Blizzard' berries are huge, for a Haskap. The spoon in the photo is 3.5 cm wide!
If this page is printed on 8 ½ x 11 paper the berries should be shown at actual size.
Well-pollinated fruits are easily greater than 3 grams and we've weighed a few that were 3.9 grams.*

'Boreal Blizzard' was so named because the fruit size, productivity, and flavour stopped us in our tracks. Like a major winter storm, 'Boreal Blizzard' was hard to forget when evaluating other haskap in our breeding fields. It has the 3rd largest haskap we have ever seen in our program. The largest one didn't taste good ('Boreal Blizzard' tastes great!) and the 2nd largest had wimpy branches that fell over and crept along the ground. I've not seen anything this big elsewhere. It surpasses the largest haskap that I saw on my visit to Hokkaido and its weight is larger than any variety description I have read. 'Boreal Blizzard's berries are more than twice as heavy as 'Tundra' or 'Borealis' and are 3 times heavier than the largest varieties in our trial a decade ago. I've noticed most variety descriptions on the internet neglect to mention the weight of their berries. This is because some haskap can have air pockets within the berries

and long thin berries don't weigh much. But some Haskap are very meaty and heavy, and 'Boreal Blizzard' is one of them.

Does size matter? Of course it does! In Japan, consumers pay a premium for larger berries. Some producers sort through their berries to find the largest ones. It was pointed out to me at a wholesale produce market in Hokkaido that two cases of large Haskap would sell for a similar amount as 20 cases of average-sized fruits. The large haskap berries I saw probably averaged half the weight of 'Boreal Blizzard'. Unless you can ship fresh to Japan, I wouldn't expect a premium price in Japan for large berries for processing.

I don't think anyone cares about fruit size if the fruit is processed. Sugar infusing them as a candy or vodka or other alcohol with whole fruit might be the exceptions. 'Boreal Blizzard' could be used for processing of course. Perhaps the largest fruit could be marketed fresh and the small berries processed. But even its "small" berries would be larger than most varieties.

Perhaps a profitable niche for this variety in North America would be the fresh market. I wouldn't expect such a price differential like Japan has for fruit size in North America, but the larger size is likely worth something. These would certainly be more noticeable on a store shelf than regular-size berries. Their unique shape would not get confused with blueberries! If one is going to the trouble to handpick haskap (less fruit damage than by machines and longer shelf life) picking larger fruit reduces harvesting costs. Fruits are easier to see and each grab of a cluster weighs more. This could be an ideal variety for U-pick farms as customers will fill their pails faster.

Large fruit could also indicate large yields if plants produce many berries. And that does seem to be the case with 'Boreal Blizzard'.



Figure 2. Boreal Blizzard berries, each weighing more than 3.5 grams.

Large size fruit could have disadvantages. They might be more easily damaged by some harvesting equipment. A heavier fruit falling from a taller plant could have more damage. But 'Boreal Blizzard' berries are more firm than 'Indigo Gem' and many growers are mechanically harvesting that variety. If mechanically harvesting, it is good to keep in mind that berries are always more firm with cooler temperatures. Plan to harvest early in the morning before it gets too hot. I've heard of Saskatoon berry growers harvesting before sunrise to take advantage of the firmness but also to have cooler berries going into freezers.

'Boreal Blizzard' holds onto its berries with a similar strength to 'Tundra' or 'Indigo Gem'. Since 'Boreal Blizzard' berries weigh twice as much, they start to drop 3 weeks after ripe. In contrast, Tundra can hold onto its fruit 6 weeks after ripening. Presumably, a very strong windstorm could knock them off a bit easier than some of the U of SK varieties especially when they have been ripe for a week or two. But I have seen many varieties that do not hold onto their fruit as strongly as 'Boreal Blizzard'.

| 'Boreal Blizzard' Details |
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| Plant Breeders Rights application #: 14-8412 |
| Breeder denomination: '22-06-25.5' |
| Ancestry: 50% Japanese, 50% Russian |
| Bloom Time Category: Late. Peak bloom is 4 to 7 days after Tundra/Indigo series We categorize haskap bloom into 4 categories early, mid, late and very late. The late category is similar to many Japanese selections but there are many Japanese selections that bloom later. |
| Harvest Season: Coincides with strawberry season. At Saskatoon in 2014 fruits were good the 1 st 3 weeks of July then began dropping. Ripening started 7 days after Tundra & Indigos and 14 days after most Russian varieties in our collection. |
| Fruit Weight: 2.8 grams avg., 3.9 grams max |
| Fruit Shape: 'Surfboard'= Rounded narrower ends, wide centre, a bit flattened |
| Fruit Firmness: Good Flavour: Excellent |
| Sugars: 13.3 Brix pH: 3.3 Total Acidity: 1.08% Malic Equivalent |
| Bush Habit and Vigour: Upright and strong grower. The original seedling was 50% taller than 'Indigo Gem' planted at the same time, same field |
| Mildew and Sunscald Resistance: Excellent |
| Productivity: Heavy |

In most years 'Boreal Blizzard' blooms and ripens a few days later than 'Tundra', Honey Bee' and the 'Indigo Series'. For a few years blooming happens at the same time. This variety could extend the harvesting season of Haskap a week or two. Later bloom time will make the bees happy to stay in the orchard. The late bloom characteristic may indicate a better adaptation to somewhat warmer areas (see article "Shape of things to come" at www.fruit.usask.ca , in the haskap section).

'Indigo Gem', 'Tundra', and 'Honey Bee' could be used as companion plants with about 80% bloom overlap observed in Saskatoon. The new variety 'Boreal Beast' started blooming at the same time as 'Boreal Blizzard' but continued blooming for 5 to 7 days later in 2016. 'Boreal Beast' would be a good choice as a companion plant if one was also planting 'Boreal Beauty'. 'Aurora' is closely related to 'Boreal Blizzard' and has had poor set in controlled crosses with each other.

'Boreal Blizzard' has excellent flavour, most similar to 'Aurora' to which it is closely related. We've had several growers who tried 'Boreal Blizzard' on Haskap day (but they didn't know what the name would be) and several people tried it at the Agriculture Building at the U of SK. Uniformly, tasters were shocked at how big the berries were and how good they tasted. Several of the tasters proclaimed "You've got a winner there!" This fruit has what I've been calling "tang" or "zing". For many tasters at our haskap days, "zing" is a highly desirable characteristic, second only to sweetness; 'Boreal Blizzard' has both. Others noted that the berries were rather firm for being so big.

Availability: 'Boreal Blizzard' will begin to be available in 2016 in Canada. Not all currently listed propagators will be carrying this variety. Propagators with the best history of paying royalties will have priority in receiving start-up material.

Acknowledgements: For five years, early Haskap breeding and research was funded by plant sales, workshop fees and volunteer labour. Continuing uninterrupted since 2007, Saskatchewan Agriculture's Agriculture Development Fund (ADF) has given us 3 grants in a row that allowed a 10 fold increase in haskap research. By 2011, royalties paid by growers and collected by our propagators allowed a doubling of research efforts by funding haskap breeding in general and graduate students stipends and their research. 65% of royalties go directly to the fruit program. 35% of royalties go to a general horticulture fund that buys and maintains equipment and facilities.