Haskap and Honeyberry Update - 2011 to 2012

The haskaps and honeyberries have been doing really well. No diseases, no insects and no iron chlorosis. In late summer, some varieties' leaves turn a blackish color and I have read that this is powdery mildew, but that is probably wrong. It just seems to be sun scald and has no effect on the plants, except for looks in your garden. Since these plants are flowering in April or May and fruiting in June, their lifecycle is pretty complete by August. University of Saskatchewan found mildew spores on these leaves, while Oregon has not.

I pruned heavily in 2010 to correct some *laissez faire* pruning care in the previous years. Therefore, pruning in 2011 and 2012 was limited to light removal of inside and low-hanging branches. The plants are settling into mature growth and do not grow as vigorously as in the past.

Russian Honeyberries – Heavy pruning in 2010 prevented 'Blue Moon' and 'Blue Velvet' from fruiting in 2011. They filled back out, however, and fruited in 2012. These fruits are quite sour and don't have as much flavor as other varieties. Plant shape is like a 3'x4' squat gum drop and flowering is prolonged and near the branch ends. Leaves are fuzzy and thick, so the fruit is well-hidden from the birds.

The three upright varieties, 'Berry Blue', 'Blue Belle' and 'Kamchatka', increased production in 2011 but

did not in 2012. They were blooming and had numerous buds during the three-day 2012 April freeze. Honeyberry flowers are hardy to 19F, but it was colder than this and may have hurt production. Flowers with browning edges were observed after the freeze, but it was difficult to determine whether this was normal senescence or frost damage at the time. One week post freeze though, 'Blue Belle' and 'Kamchatka' had many buds but no open flowers, indicating that earlier buds and flowers had been damaged in the freeze event.



Pruned

Un-pruned

In general, I would consider Russian honeyberry production to be low to average for the size of the plants these past three years.

Canadian Haskaps – These plants have grown tremendously since they were planted in fall 2008. They are the low 'gum drop' shape with fuzzy leaves. These are selections of crosses made between 'Blue Velvet' and 'Blue Belle'. When these were planted, I left a space for the correct pollinizer promised by Univ. Saskatchewan. We finally received and planted the variety 'Bumble Bee' in 2012. (Then this summer they announced the availability of a better pollinizer, 'Aurora'.)

Production in 2011 and 2012 would be considered quite low – 0.5 -2 lbs per plant. The pollinizers have been the Russian cultivars which are located 30-60 feet away. I hope that this distance is the reason for the poor fruit production. The fruit flavor is good, but the two touted varieties, 'Borealis' and 'Tundra' are quite tart and not really that fabulous in taste tests here. The variety with the best flavor is 'Indigo Gem', which was just released for US shipping in 2012.

Planting Trial: In 2011, we planted eight plants each of 'Borealis' and 'Tundra' from the Prairie Tech Propagation order— half of each were planted 1-inch deeper or 3-inch deeper than they were growing in their nursery pots. Two 'Blue Belle' plants were planted among them as pollinizers; the row is only 20 feet from older 'Blue Belle' and 'Berry Blue' pollinizers. This spring, every two plants were pruned to 2- to 3- inches tall, a recommendation from Canadian propagators. The pruned plants had numbers of new, straight shoots from the crown of the plants. The unpruned plants had a lower number of branches, but each branch had grown a great number of new, shorter shoots. (See examples to the right.) Overall, the widths of the plants were similar. It was difficult to determine the true number of shoots; I counted the new shoots in the pruned, and old branch numbers in the un-pruned plants. In the future, we will continue to prune for openness with removal of low branches. Differences will be most obvious in harvest weights.

Oregon Haskaps – These plants are pure Japanese selections from Dr. Maxine Thompson's trials in Oregon. They are more upright and have increased in production each year. Three varieties are producing 4 lbs per plant. In 2011, Dr. Thompson indicated that three of six selections could be dropped from our trial. They were tart and mealy, though production was alright and processed jams are likely to be tasty. We kept the plants for production, but no longer record data. The selections 43-87 and 45-57 are our favorites of the 2007 planting with 43-87 being especially sweet and tasty, though it falls off as it ripens. These fruits are much larger than the Canadian or Russian varieties. They are often more round instead of long.





We acquired 12 new, advanced selections that were planted in

September and October 2012.

Beautiful roots on Dr. Thompson's young Haskap plants.



Big berries with a vase-shape.

All of these selections require a long chilling period as they were selected to withstand the variable winter/spring temperatures in western Oregon. They are perfectly hardy here in North Dakota with or without snow cover. They bloom and ripen about two weeks after the Russian and Canadian Selections; they are ripe about July 4th. When these are available commercially, they will be a huge step forward in haskaps.

Name	Production (lb)				Berry Wt (g)	°Brix	Notes
Russian	2012	2011	2010	2009	Ave.	Ave	
Berry Blue	10.1	12.6	9.3	Х	0.68	15.5	Largest shrub
Blue Belle	3.8	6.2	5.6	Х	0.71	14.9	Fruit falls when ripe
Blue Moon	11.6	Х	3.5	2.0	0.93	12.2	Tart
Blue Velvet	4.0	х	2.7	3.0	1.36	12.8	Tart
Kamchatka	3.1	6.4	2.0	Х	0.64	13.9	Production is low
Canadian	2012	2011	2010	2009	Ave.	Ave	
Borealis	2.7	0.5	Х	Х	1.09	13.3	Tart
Tundra	5.2	4.0	Х	Х	1.07	14.6	Better
Indigo Gem	7.7	4.8	Х	Х	1.05	16.1	Best flavor
Indigo Treat	2.1	1.4	Х	Х	0.92	15.2	Tart
Oregon	2012	2011	2010	2009	Ave.	Ave	
22-37 ^D	7.4	2.4	2.3	0.3	2.14	13.6	Out of study
41-100 D	13.3	2.8	3.8	0.5	1.11	11.5	Out of study
43-87	12.0	4.4	1.1	0.1	1.81	15.3	Sweet and tasty. Ripens first.
43-97	5.4	3.2	3.4	0.3	1.51	15.8	More tart, mealy. Last to ripen.
45-57	6.2	4.4	3.3	0.6	1.79	12.7	A few days later. 2nd best.
85-26 ^D	13.4	6.2	3.9	0.5	1.75	12.7	Out of study

D = dismissed from trial in 2012