‘Indigo’ Series Haskap

By Bob Bors

The Indigo series varieties are sisters to ‘Borealis’ (breeding ID ‘9-94’) and ‘Tundra’ (breeding ID ‘9-84’). The ‘Indigos’ were originally released as test varieties with breeding IDs of 9-15, 9-91, and 9-92. All 5 of these varieties are closely related and have the same mother and father. The ‘Indigos’ were considered ‘runner-ups’ to ‘Borealis’ and ‘Tundra’. All 5 are occasionally referred to as ‘Row 9’ which is the seedling row that they grew up in.

Previous to their release we did propagation experiments where we found some varieties easy and others difficult to multiply and root in tissue culture. I thought it was a good idea to include additional selections for release, just in case one of the 2 named varieties was hard to propagate. As it turned out, 9-92 was hardest to propagate and ‘Tundra’ was hard too. ‘Borealis’ and ‘9-15’ propagated at almost twice the rate of ‘Tundra’. Since that time, some propagators have figured out ways of propagating ‘Tundra’. But propagators and many growers wanted these test varieties named. ‘Indigo’ was chosen because there are many ‘Blue’ names out there; by these all starting out with ‘Indigo’, perhaps people might remember that they are closely related.

After shaking fruit off bushes by hand, Haskap berries were run through this sorting line and then rated for durability.

‘Tundra’ had the highest durability rating while ‘Borealis’ was the most fragile. The ‘Indigo varieties’ were intermediate.

But this was done many years ago on the original bushes. It remains to be seen how durable berries will be with harvesting equipment under commercial growing conditions.
Differences

Compared to the Russian varieties available on the market in Canada in 2006, one might say all ‘Row 9s’ are very similar in bush size, bloom time, leaf appearance and all have superior flavour when ripe. But there are subtle differences when compared against each other, which are described below.

Indigo Gem (formerly 9-15)
The original bush was the most productive of ‘Row 9’, but berries were the smallest, and this was the only variety that was susceptible to mildew on leaves (others were classified as highly resistant). Also the fruit had a slight ‘chewiness’ that perhaps would indicate a more durable fruit. But in tests using a sorting line, ‘Tundra’ was always the best for being durable. Some growers have indicated that this variety grows more upright and faster too.

Indigo Treat (formerly 9-91)
This variety seemed most similar to ‘Tundra’ with berries only about 10% smaller. But this variety was much easier to propagate than ‘Tundra’.
Indigo Yum (formerly 9-92)
The berries on this variety are more stretched than the others. The original bush was noticed a year earlier than the others, which might indicate that it comes into production a little quicker. Since this variety was the hardest of all to propagate only a few nurseries have it. We quit propagating it at the U of SK and only a few propagators have this variety.

Are these Haskap?
There has been some concern about whether to call these Indigos ‘Haskap’. In 2009, Haskap Canada attempted to trademark the term ‘Haskap’ but was turned down by the Canadian government. The term ‘Haskap’ was deemed a term for generic crop in use internationally and could not be trademarked. Haskap Canada had wanted to use the term exclusively for varieties that they felt were of high enough quality for marketing to Japan. During my 2008 visit to Hokkaido (home of Japanese Haskap) I took bulk samples of ‘Row 9’ fruit. The largest distributor of Haskap in Japan and representatives of a natural-products pharmaceutical company told me that our Haskap exceeded the quality that they expected when they bought fruit locally. I also asked if they minded the stretched look of 9-92. I was told that although that berry shape was different, they liked the shape and they thought it could be easily marketed if the fruit was large. However, most likely it would be processed and it wouldn’t matter what shape it was.

Haskap Canada is still interested in having a trademark for quality that members can use on varieties and fruit products that they judge meet quality standards. Perhaps they will adopt a system like winemakers that use ‘VQA’ or come up with grading standards, as is common for other fruit crops. In 2011 and 2012, larger plantings of all the ‘Row 9’ varieties will be coming into production for the first time. We will see if these ‘subtle differences’ really make a difference to producers or consumers. Then we will have a better idea of durability, yield and fruit size amongst these varieties, but I’d predict that it would be very hard to tell
the difference between these for flavour. We will also have a better idea of what growers would consider ‘high quality’.

**Bye Bye Numbers**

As happened with cherries and apples in our program, propagators and growers that receive ‘numbered selections’ after a few years uniformly want everything to be given a name. The original concept was that growers would say which was best, and the winner would be named. The major problem with naming these is that some will think that these are all something new.

**Around the corner**

Starting in 2011, several thousand new hybrids from our breeding program will begin fruiting. Undoubtedly some of these new ones will be better than the old. But that is always the case with active breeding programs. The row 9 ‘Indigo’ series were bred during a time of limited resources. We only had a few varieties to use as parents and we relied on volunteers to get things done. During this period we quietly amassed a large collection of Russian varieties, Japanese seedlings, and Wild Canadian germplasm.

We didn’t have enough resources to do much with the collection until Saskatchewan Agriculture began funding us in 2007. Then we went crazy doing hundreds of crosses and planting thousands of seedlings each year. Also we studied in depth the characteristics of our Russian varieties to use as parents in breeding. In retrospect we discovered that the row 9 parents were actually among the best for fruit quality and row 9 was among the best for disease resistance. However, the ‘Row 9s’ are only average for bush size and plant vigour.

Varieties ‘around the corner’ are likely to grow faster and bushes will be larger with potentially greater yield. Berry size might also increase, but likely flavor will be similar and of excellent quality. If we are lucky, future varieties might be as resistant to leaf disease like ‘Row 9’. But we have been using the ‘Row 9’ plants as parents in our program, so it isn’t exactly left to luck! We’d also like to develop some late ripening and southern adapted Haskap. All ‘Row 9’ varieties are fairly early.

But around the corner could be a few years. My advice is to learn to grow what we have now, but leave room for the future varieties.