## PEARS IN COLD CLIMATE (A FOLLOW-UP)

Claude Jolicoeur 197 Aberdeen Québec, Québec, Canada, G1R 2C9 Tel. (418) 524-6833 e-mail <u>cjoli@gmc.ulaval.ca</u>

In the Pomona of Summer 2002, I wrote a first paper about the pears that I grow in my small orchard in Petite-Rivière-St-Francois, near Quebec City, in climatic zone 4 (this is canadian zone 4, but it is very similar to USDA zone 4).

There is no fire blight in this area, so my observations might not be very useful for those who have to grow pears in areas where this is a problem.

Since my 2002 article, I have had rather small productions in 2002, 2003 and 2004. In particular, the winters of 2002-03 and 2003-04 have been colder than normal, witch resulted in slight damage to some of the varieties and in general failure of flower buds. Then, the summer of 2005 in Quebec was the nicest we had seen for many years. After a very rainy month of June, the sun started to shine by June 20 and stayed there until October, giving us very nice temperatures and perfect conditions for fruit ripening. Also, the winter of 2004-05 has been relatively mild. I have had many pear varieties that produced fruit for the first time in 2005, while older varieties produced in quality and quantity unseen here before. Then, in 2006, things were more normal, but I still had a fairly good production.

For the readers that have internet access, I have posted pictures that I have taken of all the varieties dicussed here. These pictures are in an album with Google's Picasa web, and are available at: http://picasaweb.google.com/cjoliprsf/PearsForPomona2007

In the 2002 paper, I discussed the results of Golden Spice, Patten, Ure, Harrow Delight and Sainte-Sophie in my orchard. I will only update the information on these varieties:

Patten remains my #1 pear in all aspects - productivity, hardiness, quality, size. It is one of the few that produce even during bad years. I am really impressed by it, and I would recommend it to anyone who wish to grow pears in cold climate. In my orchard, the optimum harvest date appears to be around September 20.

Golden Spice is very irregular in productivity. I harvested 1 Bu in 2001, then nearly nothing the 3 following years, then 2 Bu in 2005 and almost nothing in 2006. It remains my favorite for juice. In 2005, in order to assess its best picking date, I harvested part of the crop on August 28, September 10, 18 and 30. Size of nice specimens was 40 mm on August 28, 48 mm on Sept 10 and 55 mm for the 2 later dates, indicating that by third week of September, the pears had grown to their full size and were ready to harvest.

Ure produced its only crop that is worth mention in 2005: 1/2 Bu. All other years, it has only produced a few pears (less than a pound). The 2005 crop was picked on August 25, September 10 and 18. The first date was too early and the pears never developped a good flavor. By September 18, they were well ripe and had started falling on the ground. They were excellent to eat right off the tree, but did not keep much more than a week. They also increased in size between the 10 and

the 18, reaching 60 mm by the later date. I made a juice test and was quite pleased by the result : specific density of 1.060, a good acidity content and a nice flavor.

Harrow Delight is only marginally hardy in my orchard, and when we get normally cold weather in winter, it produces very little growth and no fruit. In 2005, it produced some growth for the first time since 2000 - but very few fruits, and it had a crop in 2006. When it crops, the quality is great, but unfortunately, it doesn't happen often...

Sainte-Sophie was grafted on a hawthorn root, and produced its last crop in 2001 - the graft was rejected and died during the 2002 summer. I have another tree of the variety grafted on a P.ussuriensis root, but it still hasn't produced fruit.

I will now discuss about he varieties that still had not produced any fruit when I wrote my 2002 paper. These are Flemish Beauty, Beurré d'Amanlis, Beurré Giffard, Luscious, Olia, Savignac, Seckel, Southworth and a group of similar early pears.

The Flemish Beauty is an old P.communis variety from Belgium, introduced by Van Mons around 1810. It has the reputation of being one of the hardiest of the high quality European pears, and was already cultivated in Québec and Ontario by 1890. Through the ages and places of cultivations, it has been known under many different names, some of the better known being Fondante des bois (the original name) and Beauté Flamande (used in Québec). My Flemish Beauty tree was planted in 1992. It is on P.communis seedling root. The tree produced its first fruits in 2005 and a few pears in 2006. Obviously this is not a precocious bearer. The best picking date appears to be around September 15, and the pears start falling a few days later. They are ready for eating a month later. The quality is excellent, the pears are quite big and very juicy. Cold hardiness is good and the tree is a good grower. It seems to be an excellent choice for cold areas where there is no problem with fire blight.

Beurré d'Amanlis is also an old P.communis cultivar, that originated in France by 1850. It is not as well known in North America as Flemish Beauty, but Santerre mentions it as being cultivated in Quebec in 1903. I made two grafts of this variety in 1999, one in the Golden Spice tree and one in the Patten tree. Both grafts fruited in 2005 for the first time. Interestingly, the pears in the Patten tree were much nicer than those in the Golden Spice tree. The pears were picked on September 18 and were ripe by October 1. The quality was very good, tender and melting. The variety seems quite hardy in my climate, the fruit sizes and matures well.

Beurré Giffard is again an old P.communis cultivar, that was found as a chance seedling in France in 1825. It was first described in 1840, and introduced in America by 1850. It is known as being very hardy and happy with a short and cool summer. Reports from other NAFEX members indicate that it is cultivated in Alaska and in Minnesota. I grafted it in my Patten tree in 2002 and it produced one pear in 2005 and two in 2006. The quality was better in 2005, the pear being one of the best I have ever eaten. Optimal picking date appears to be September 1, and eating date about one week later.

Luscious is an american pear, bred in South Dakota in 1954 and introduced in 1973. It is a cross

of the SD selection E31 x Ewart. From the information I have, Luscious would be pure P.communis, and resistant to fire blight. It is generally considered hardy to zone 4 and possibly to warmer parts of zone 3. I grafted it in 1995 in my Patten tree and it only produced its first fruits in 2005, which is very long for a graft to start production. The pears are small, size being between 45-50 mm across, but the quality is quite good. Picking date is between September 15 and 20, and they easily keep over a month for best eating quality. Hardiness and vigor are very good in my location.

Olia is a P.ussuriensis variety from Russia, that was introduced in Canada in 1940. I have one graft in my Golden Spice tree. It was grafted in 2000 and bore 4 pears in 2005, none in 2006. The pears were picked on Sept 18, and were already passed 10 days later - I missed their prime, but they didn't apprear very flavorful anyway. The variety is hardy and vigorous. The fruit is round, green and small.

Savignac. There are two different varieties that heve been propagated under this name. One is a small round pear and the other is medium size and pear shaped. They come from a lot of four pear trees that had been bred at the Ottawa Experimental Farm and sent in 1947 to Brother Armand Savignac, in Joliette, Québec. From the information I was able to get, these were numbered selections from the program that released the Enie-Menie-Moe pears, but those particular selections were never officially named. Two of the trees died and during the 1980s, some nurserymen contacted Brother Savignac and propagated the two remaining trees that had proven hardy in this zone 4 location. The varieties used at Ottawa for the pear breeding program were Flemish Beauty, Clapp, Kurskaya and Zuckerbirn, the 2 latter being hardy P.communis cultivars from Russia. So, if my informations are correct and the Savignac trees are selections from this program, they would have been bred from the same parents and be pure P.communis. For a longer story on these pears, I wrote a note in the Pomona of Winter 1997 (Vol 30 #1).

I grafted the small round Savignac in my Ure tree in 1999 and it produced first fruits in 2005. I must say that those fruits looked identical to the Ure pears, so there is a possibility of tagging error in this case. The other Savignac was grafted in 2000 in my Patten tree and I got small productions in 2005 and 2006. The pears are rather big, and very handsome, the nicest specimens approaching 65 mm across. Picking seems to be by second week of September and they keep for about two weeks, but more testing is required. Hardiness and vigor are very good.

Seckel is a well known american cultivar of P.communis that dates back to about 1800 and is generally considered hardy in zone 5 or 4, and resistant to fire blight. I grafted it in 2002 in my Ure tree and got one pear in 2005. I picked it on October 8 and ate it on November 1. The pear was small, 40 mm across, but with a fabulous taste. Up to now, the variety appears hardy in my location and the vigor is good.

Southworth is an american pear of unknown origin, which probably is pure or almost pure P.communis. Some testing made at the St-Jean-sur-Richelieu research station have shown it as one of the most promising varieties for commercial pear growing in Québec with Flemish Beauty. I grafted it in 1999 in my Golden Spice tree and got a few pears in 2005 and 2006. Quality was better in 2005, the pears were picked September 18 and eaten between October 1 and 15. I didn't find them as tasty as some others, but the quality was still quite acceptable. The variety seems quite hardy and the vigor is good.

I also have a group of early pears that are all very similar although they come from different locations and have different names.

North Brite is a variety that I collected from a young tree in a park in Québec City. There was an identification of that name on the tree. However, I have never seen a reference to this name in the literature. It was grafted in 2000 in my Golden Spice tree and fruited in 2005.

Highway 61 and Westfort are local names given to trees found in the area of Thunder Bay, Ontario. They were sent to me by NAFEX member Martin Hellsten and grafted, one in my Golden Spice and the other in my Patten tree in 1997. Highway 61 fruited in 2001 and in 2005, while Westfort fruited in 2005 only.

These 3 variaties are also very similar to an unidentified tree growing in a public park in Quebec, which I call Bois de Coulonges #2 (or BC-2). This is a adult standard tree which I guesstimate was planted by 1950. The origin of this tree could also be from the Ottawa experimental farm (as are the Savignac pears), or it could be a named variety.

All these pears are rather roundish, green turning yellow, often with a red blush. Size is small to medium and the flavor is quite good. Hardiness and vigor are good. The ideal picking date is by 1st of September and they do not keep more than 1 week.

All of the abovementioned pears appear worthy of trial in a climate of cold winters similar to mine. Some of the varieties that I have tried were not as successful: Clapp and Anjou have died before having time to give a single fruit. Other less successful varieties are Bonne Louise and Shinko:

Bonne Louise is an old P.communis cultivar, that originated in France by 1780. It is also known by the names Louise Bonne de Jersey and Bonne Louise d'Avranches. I have read a report by Leopold, 1914, that mentions it as being cultivated in Québec, probably in the Montréal area. I have one graft, in the Golden Spice tree, grafted in 1999 and first 4 pears in 2002, then 3 more in 2005 and about 10 in 2006. Unfortunately, this variety does not mature well in my climate. The pears remain very small (4 cm / 1.5 in across) as if they wouldn't have enough time to grow to their normal size. Hedrick (Pears of New York, 1921) wrote that the fruit matures in October, and this seems to be too late for my short growing season. However, the taste was quite good, and it is somewhat interesting to have these good looking tiny pears. The wood did suffer from the cold during some of the colder winters.

Shinko is a P.pyrifolia variety from Japan that originated in 1932 from Nijisseiki (20th Century) open pollinated. I bought a tree on unknown root in 1991 to see if it could be possible to grow asiatic pears. However, this tree has winter killed almost every year, but it is really stubborn and every year, it grows back. One year, after an exceptionnally mild winter, I was able to pick some grafting wood from this tree, which I grafted in my Golden Spice tree to check if a hardy frame could increase the hardiness of the variety. The graft was done in 1998, and I did get 4 pears in 2002! The fruits were however miniature, 35 mm across, and had not matured properly. During the winter of 2004, the graft was almost completely killed, but it rebudded. In any case, this variety surely isn't hardy in my location and I have removed it during the summer of 2007.

Other pears that I am currently evaluating in my orchard but haven't produced fruit yet: Clara Frijs, Dr. Jules Guyot, Lubenicarca, Menie, Miney, Nova, So Sweet and Summercrisp. I also have a collection of 6 perry pears (Blakeney Red, Gin, Hendre Huffcap, Thorn, Winnal's Longdon and Yellow Huffcap) that appear hardy enough for my climate - these will be the object of another paper in the near (hopefully) future.

## Update for 2007.

The production of this article has been delayed quite a bit and the 2007 crop is now well on its way. I am writing this update on September 6 and the group of earlier pears has been picked last weekend. North Brite, Westfort and BC-2 are still very similar - see the last picture of the album. Highway 61 and Giffard did not crop this year, while Harrow Delight gave a very poor crop. The other varieties haven't been harvested yet, but Patten is again coming up with a very nice crop while Golden Spice and Ure have poor crops. Sainte-Sophie is cropping again this year after a 5 year interruption, and is looking good. Menie is setting its first crop and is looking good also.