

# **Opportunities for Cherry Production In Saskatchewan**

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## **Introduction**

It may be surprising to some that sour cherry breeding and research began in the 1940's with Les Kerr and his breeding program was transferred to the University of Saskatchewan in the 1980's. Fruit breeding takes a least a decade between generations, so improvement in both hardiness and fruit quality have taken a while to achieve. Working with the Mongolian Cherry and flavourful varieties from northern Europe, the U of S breeding has developed the 'new' dwarf sour cherries.

## **Advantages of the new cherries**

The quality of the new varieties of our dwarf sour cherries surpasses what is commonly found in North American products. Most of our new varieties are so sweet that the word "sour" does a disservice to the name. In our breeding program we have deliberately selected for flavour and for darker almost black cherries in contradiction to the established sour cherry market which uses bright red cherries that are rather sour. Why? Because we want to be most competitive in the fastest growing segments of the fruit industry. Red Cherries are traditionally used for pie filling, which has had a flat growth trend for 20 years. On the other hand, the juice, dried fruit and health food markets have been showing steady gains. For these emerging markets, a dark colour is an advantage for highly coloured juice and being rich in anti-oxidants and anthocyanins. Speaking as a baby boomer with an expanding midsection, I can assure you that I plan to be buying more healthy foods in the future, and I am sure this is the trend for all the baby boomers.

Most people don't realize that they have eaten sour cherries, probably because they are used in processing. In the USA they call them tart cherries but in Canada they are sour cherries. In fact many sour cherries are sweeter than sweet cherries, but because they have higher acid content, they taste more sour. A lot of that acid is vitamin C!

Besides flavour, our cherries are dwarf enough in stature to be harvested with an over-the-row harvester. Traditional sour cherries require large specialized equipment that shakes the trunks of trees. In Saskatchewan we also have the advantage of relatively few pests and dry summer conditions that do not promote disease or fruit rots. Thus it is quite possible that the cherries could be raised pesticide free, or at least with far less pesticides than our competition. When you consider that our land is much cheaper per acre than other fruit growing regions, it seems we should have distinct economic advantages.

## **Production Challenges**

In other growing regions, insects and diseases are the most pressing production problems. In Saskatchewan these are relatively unimportant except for grasshoppers. Our most likely problems will be keeping out deer and other critters who might chew the twigs in winter, a good water supply for irrigation and windbreaks.

Although grown successfully for a decade by a handful of growers, these cherries are to a degree 'experimental' especially for those unfamiliar with fruit production practices. With these cherries we do not yet know the northern limits for their growth. It is also a rather big change to go from

field crop growing to fruit growing. Fortunately, there is a Cherry Manual offered by U. of S. Extension written in 2004. If you have never grown fruit before it would be a good idea to get the manual, start small and increase acreage if successful.

### **Marketing challenges**

In a 2003 survey of North American cherry processors by Sask. Ag and Food it was found that primary processors of cherries were pessimistic of the future yet secondary processors were highly optimistic. To me, this indicates that Saskatchewan growers should work together to develop their own products to reap the full benefits. Saskatchewan Agriculture and Food and even Ag Canada have a myriad of programs aimed at value-added production and marketing. It is hoped that activities of this sort may help to stabilize rural communities by providing more jobs.

While the various candies, pie fillings and sugar coated cereal products are big business and hard to break into, the health food industry is relatively smaller and there is opportunity to get in on the ground floor. If I were to get together a group of growers on a cherry project I would certainly want to have someone in that group who is passionate about healthy food and quality to lead promotion.

Allured by higher prices, many sour cherry growers in BC., Ontario, Washington State and Michigan have been removing their sour cherry orchards and replanting to grapes for wine production and sweet cherries. Only a handful of growers have a different strategy: grow tastier sour cherries and develop better quality products.

I advise you to look at your grocery store shelves and look for cherry products. Look on the labels for artificial flavours and the country of origin. I think you will find few products from Canada and half will be artificial. My favourite 'knock off' is the cherry-flavoured dried cranberries. When you see the huge number of cranberry products on the market, ask yourself if a cherry would be better. Look at other fruits, particularly in the frozen food section, and see if cherries are there. I've tried sour cherry wine and it is fantastic! You probably won't find any in the liquor store! After a while I think you will be convinced that there are not enough cherries in the grocery store.

### **Diversity**

If you accept the idea of producing cherry products it is only a small step to realize that you probably should diversify into other fruit crops. With any crop there is always a risk. I get alarmed when someone asks "What crop should I grow?" and even more alarmed when someone wants to grow only one variety of one fruit crop. To grow only one crop or variety is rather risky. A better question would be "What crops would be good to grow together?" Having a diversity of crops helps to make every year a good year. 2000 was a good year for strawberries and cherries, but a disaster for saskatoons. 2001 was a disaster for strawberries, good for cherries, but a bumper crop for saskatoons. Diversity also spreads the cost of equipment, labour and facilities.

A creative solution would be to have many different crops or some other business that could employ workers over a longer period.

Mechanically harvested crops that would fit well together are blue honeysuckles, saskatoons, dwarf sour cherries, and raspberries. These four crops could be harvested with the same over-the-row harvester. And could utilize the some of the same cleaning and cooling equipment. Except for some overlap between the cherries and raspberries, the above crops have different harvest times, which would be especially good for producing a series of products. They can be used in similar products. Pruning for blue honeysuckles, saskatoons, and dwarf sour cherries would be very similar and easier to teach employees.

### **Conclusions**

New crops are both exciting and risky. Since cherries have been around for hundreds of years in Europe and decades at the U of S, there is much knowledge already out there, growers just need to learn the details of growing them on the prairie. With dwarf sour cherries we are starting with a high quality crop that will make it easier to market them. If we put our sights on creating high quality cherry products, we will better capture their potential in the marketplace.