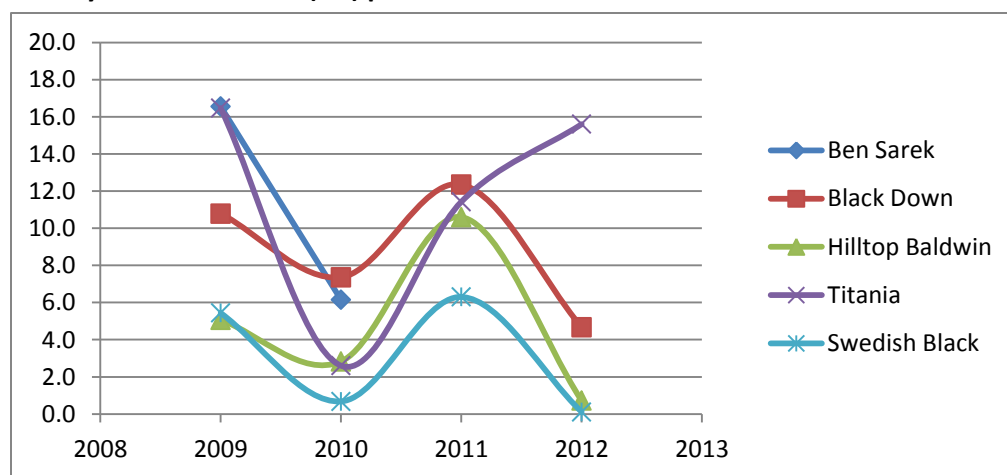


## Currant Production Notes and Recommendations 2009-2012

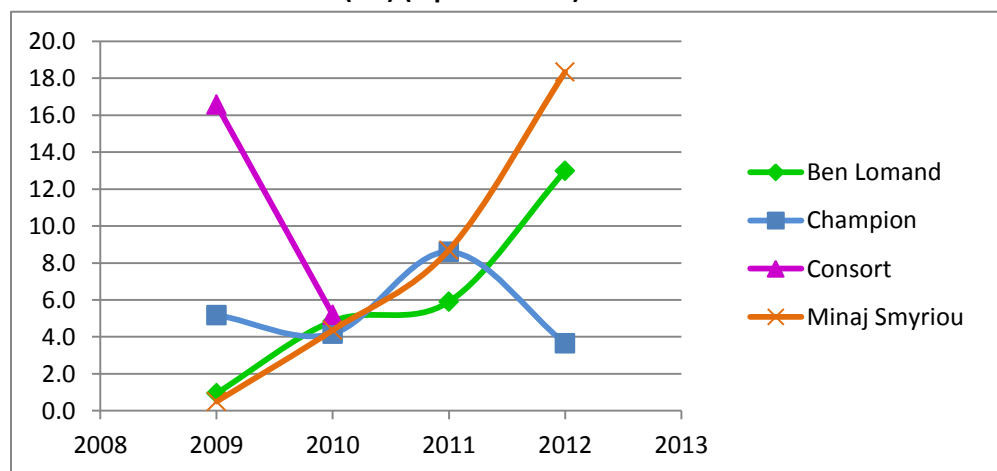
Black currant production has been variable at CREC. With few resources available for growing information, it is difficult to determine the reasons for this. We are in the northern end of its recommended growing range. We have not seen winter damage and both summer growth and cane replacement seems good. Production began in 2009 for both the variety trials and the demonstration plantings. That harvest, in total, was the largest of any that followed, though some varieties' production has been greater than those first-year numbers.

		No. of plants	2009		2010		2011		2012	
			Date	pounds	Date	pounds	Date	pounds	Date	pounds
<b>Black Currant Variety Trial</b>	<i>Ben Sarek</i>	12	10-Aug	66.2	3-Aug	24.6		x		x
	<i>Black Down</i>	16	27-Jul	43.2	29-Jul	29.5	15-Aug	49.4	24-Jul	18.7
	<i>Hilltop Baldwin</i>	16	30-Jul	20.2	29-Jul	11.3	18-Aug	42.4	24-Jul	2.9
	<i>Titania</i>	16	30-Jul	65.9	2-Aug	10.4	8/23-25	45.7	24-Jul	58.7
	<i>Swedish Black</i>	16	27-Jul	21.8	2-Aug	2.7	8/16-22	25.2	24-Jul	0.5
				<b>217.2</b>		<b>78.5</b>		<b>162.7</b>		<b>80.7</b>
<i>Whistler replaced Ben Sarek 2011</i>										
<b>Black Currant Demo</b>	Ben Lomand	4	10-Aug	0.9	2-Aug	4.9	16-Aug	5.9	7/23-25	13.0
	Champion	4	29-Jul	5.2	2-Aug	4.2	16-Aug	8.6	23-Jul	3.6
	Consort	4	4-Aug	16.6	2-Aug	5.2	x	x	x	x
	Minaj Smyriou	4	23-Jul	0.5	29-Jul	4.4	16-Aug	8.7	24-Jul	18.3
				<b>23.2</b>		<b>18.6</b>		<b>23.2</b>		<b>35.0</b>
<i>Blackcomb replaced Consort 2011</i>										

### Variety Trial Production (lbs) per 4 Plants



### Demonstration Production (lbs) (4 plants each)



From this data, it appears that the variety trial members 'Titania' and 'Black Down' have had the most reliable production at the highest rate. 'Swedish Black' has produced the least fruit over time.

### Comments by Variety:

1. **Ben Sarek:** This variety is readily available in garden catalogs. It is often recommended for u-pick operations as it produces large fruit reliably. Sometimes there is a comment that it is not suitable for juice or that it may be too tart for the US market. We *removed* 'Ben Sarek' because of 2 faults – the large fruit sunburned every year and it was so sour as to be unpalatable.
2. **Black Down:** We like this variety for its sweet, tasty berries. However, we ordered our plants from two sources and we have two different plants – noticeable from their leaf shape, disease resistance and ripening period. Both produce fruit of excellent quality, however.
3. **Hilltop Baldwin:** 'Hilltop Baldwin' was selected for its noted sweet currant flavor, good jelly-making rating and that it may be somewhat milder in flavor. Unfortunately, there are two different selections blended in together. It is almost impossible to separate the plants visually in summer but a difference in growth habit is noticeable during dormancy, there is different disease progression and the fruit ripens slightly differently.
4. **Titania:** This is the best overall for flavor, disease resistance, growth habit and production. These are big plants with the potential to produce a lot of fruit. I don't believe that we have seen maximum production here, but I need to figure out why.
5. **Swedish Black:** Mild, sweet fruit was the promise here, and it is true – they are really good right off the plant. However, the growth habit is downward and twisted, making harvest a struggle. Even in the home garden they would be trouble as most people are loathe to prune.
6. **Ben Lomand:** This selection was called the most popular variety in Scotland but was noted to have high powdery mildew problems. It does suffer more mildew quicker than most other varieties but I don't think growth has been compromised as the disease affects the top 6 inches of stem. Each fall there are new buds and the cane tips don't die. This is my favorite berry for flavor and it seems vanilla-y to me.
7. **Champion:** 'Champion' was said to flower and fruit a bit later than other varieties. At CREC it is harvested at similar times to the other plants and may even be a few days earlier. It has smaller fruit and is more intensely currant-y. It is fine.
8. **Consort:** This variety was removed from the trial because all of the fruit was bitter. It may have been a poor selection as I have met a few people who indicate that the fruit from their plants is fine.
9. **Minaj Smyriou:** There are some spelling variations online. It was selected because it was from Bulgaria and was noted to be self-fertile (many currants are). The flavor is good but it's a bit mealy fresh. Production has increased.
10. **Whistler:** NEW. This variety replaced 'Ben Sarek' in the variety trial. Bred at McGinnis Berry Crops in BC with rust and mildew resistance and production 50% higher than 'Titania'.
11. **Blackcomb:** NEW. We had room for four plants to replace 'Champion'. Also bred at McGinnis Berry Crops. It is said to be resistant to foliar diseases with production 50% higher than 'Titania' and fruit that is 20% larger. Late frost resistance should be better than 'Titania'. It is suited to machine harvest.

A special concern for currant producers is the threat of a late frost damaging the currant blossoms. In 2009-11 we did not experienced this. In 2012, however, it was not a late frost but a freeze event April 9-11 that affected the developing plants in a season when spring came very early. While 'Titania' did have some branch and shoot injury, it had healthy blossoms. There was good weather during pollination (we also had a bee-yard in 2012) and it had the best production in the variety trial. In the demonstration trial, 'Minaj Smyriou' and 'Ben Lomand' survived and fruited well.

Freeze-damage assessment of currants 5-18-12																			
<b>Black Currant - Variety Trial</b>																			
<i>Sm Black Down</i>				<i>Hilltop Baldwin</i>				<i>Titania</i>				<i>Swedish Black</i>				<i>Blackcomb</i>			
XX				D to B				C				D to B				D			
1 1 1 1				2 2 1 2				1 2.5 0 1				2 1 2.5 N							
1				2 2 1 3				1 1 1 1				3 2 1 1							
				2.5 2.5 2.5 3				0 1 1 1				2.5 2.5 1 1							
				3 1 3 3				1 1 1 2				2 1 2 1							
<b>Ave 1</b>				<b>Ave 2.2</b>				<b>Ave 1.03</b>				<b>Ave 1.7</b>				<b>Too Young</b>			
<b>Harvest 1.1 lb per plant</b>				<b>0.9 lb</b>				<b>3.9 lb</b>				<b>almost 0.0 lb</b>							
<i>Reg Black Down</i>				<u>Bud assessment before freeze</u>								<u>Freeze Damage Rating</u>							
C to B				A = buds closed and gray								0 = none							
3 2.5 2.5 2.5				B = buds swelled a bit of green showing								1 = Some tips injured							
2.5 2.5 2.5				C = 1/4th inch of leaf showing								2 = Upper leaves are smaller than in lower areas							
2.5 2 1 2.5				D = 1/2 - 3/4 inch leaf showing								3 = Whole canes are dead							
<b>Ave 2.4</b>				E = 3/4 - 1 inch leaf showing															
<b>Harvest 1.2 lb per plant</b>																			
<b>Black Currant - Demo</b>																			
<i>Ben Lomand</i>				<i>Champion</i>				<i>Whistler</i>				<i>Minaj Smyriou</i>							
E				D-C				E				E+							
0.5 0.5 0.5 0.5				1 1 1 1								0.5 0.5 0.5 0.5							
<b>Ave 0.5</b>				<b>Ave 1</b>				<b>Too Young</b>				<b>Ave 0.5</b>							
<b>Harvest 3.3 lb per plant</b>				<b>0.9 lb</b>								<b>4.6 lb</b>							
<b>Red Currant</b>																			
<i>Red Lake</i>				<i>JVT</i>				<i>Red Start</i>				<i>Rosetta</i>				<i>Rovada</i>			
A				B to C				B				A				A			
No Freeze Damage																→			
<b>Harvest 6.0 lb per plant</b>				<b>8.8 lb</b>				<b>5.0 lb</b>				<b>8.6 lb</b>				<b>12.0 lb</b>			
<b>White Currant</b>																			
<i>Blanka</i>				<i>Swedish White</i>				<i>Mystery Red</i>											
A				A				A											
No Freeze Damage																→			
<b>Harvest 12.3 lb per plant</b>				<b>12.8 lb</b>				<b>8.9 lb</b>											

**Recommendations:**

At this time, our recommendations for growing black currants in North Dakota include the following varieties because of their record of more reliable production over the past four years:

1. Titania
2. Blackdown
3. Minaj Smyriou
4. Ben Lomand

For red currants, 'Rovada' has been the most productive while both 'Blanka' and 'Swedish White' were equally productive. (I like the flavor of 'Swedish White' better.)

**Note from McGinnis Berry Crop's *Ribes* Growers Guide:**

Blackcurrants are heavy feeders. They should not be planted on marginal soils. High fertility is a major factor in maintaining plant health and yields. Blackcurrants tolerate a wide range of pH but 6.0 is optimal. Successful results have been observed at pH 5.0 where organic matter is high and at pH 7.8 in prairie soils.

Blackcurrants seem to tolerate wide pH ranges (4.8 to 7.8) but 6.0 is optimal for high yields and plant health. High levels of organic matter buffer the effects of pH and may contribute to wider acceptable range. There are some indications in Europe that high levels of calcium reduce plant health and yields.

**Response:** We seen very little iron chlorosis in the currants and replacement growth seems to be good. Our soil pH is generally 7.3 to 7.5 with organic matter at 3.5-4% and high calcium and magnesium levels.

We fertilize in the spring with a mixture of Agro-K products and liquid 8-30-2 fertilizer. We also foliar apply Agro-K products every 2 weeks.

**Future:** Plant evaluations are continuing. We are exploring drip irrigation and fertilization.

April 29, 2013