## Black Currant Update 2007-2010



In 2007, CREC planted five varieties for demonstration and five varieties that seemed to warrant closer attention as a variety trial. We do not have white pines in our area and some of our varieties are not resistant to White Pine Blister Rust (WPBR). We do, however, have rust on the currant leaves late in the season, which does not affect the plants. A New York state Extension agent explained that the disease can travel 350 miles or more from pines to currants, so the spores are probably carried on the wind. The disease lifecycle is very complex and does not overwinter in the currant leaves.

At CREC, black currants are also affected by powdery mildew. It seems to only affect the top six inches of new growth and does not seem to impact hardiness or growth in the following year. In 2010, powdery mildew seemed worse than the previous years. In 2011, several organic mildew-control measures are planned. It will be interesting to see if

these methods also control the development of WPBR.

Hardiness is very good at CREC with no winter injury or death. Currants bloom very early though, and their flowers are susceptible to spring frosts and cold weather. In 2009, the first black currant harvest yielded 240 lbs of fruit. However, in 2010, after 14 days of cool, windy weather the first two weeks of May, production dropped to 97 lbs.

Of concern, is a possible confusion of plant stock from nurseries. CREC obtained the variety 'Black Down' from two different sources. The berries are both sweet but flavors are slightly different. They ripen within days of each other, but the leaves look different and the two have different resistances to powdery mildew and WPBR. The variety 'Hilltop Baldwin' seems to be variable as well – the plants all look alike, but some berries ripen unevenly, some pick harder, yet others are sweet and tender. In 2008, University of Minnesota research demonstrated that a selection of 'Consort' black currant sold by a nursery was not resistant to WPBR.<sup>1</sup> This has implications for the expansion of currant cultivation, as some states require the planting of only WPBR-resistant varieties.

The WPBR-resistant varieties, 'Consort', 'Coronet' and 'Crusader', do not pollinate each other and so another resistant variety such as 'Titania' or 'Minaj Smyriou' is needed. In our experience, 'Consort' is not recommended due poor fruit quality. 'Minaj Smyriou' will be reevaluated this year. 'Ben Sarek' has also not performed favorably. It has large, very acidic fruit that sunburns before it is ripe. 'Swedish Black' is delicious and mild, but the branches tend to grow downward, making picking difficult.

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Name	No. of	Host to	Harvest Weight		Ave. Weight of		Comments:
	Plants	WPBR ?	(pounds)		10 berries (g)		
			2000 2010		2000 2010		
			2009	2010	2009	2010	
Ben Sarek	16	Y	66.2	24.6	-	13.4	Bland, v. sour, sunburns.
Black Down	16	Y	43.2	29.5	11.0	11.5	Sweeter; 2 kinds of plants.
Hilltop Baldwin	16	Y	20.2	11.3	11.1	7.1	Big, tender, sweet berries.
							Variable phenotype.
Titania	16	N	65.9	10.4	12.5	11.7	Swt-tart. Very nice flavor.
Swedish Black	16	Y	21.8	2.7	12.5	9.7	Mildest flavor, sweet.
Ben Lomand	4	Y	.9	4.9	-	8.6	V nice flavor. V good.
Champion	4	Y	5.2	4.2	-	6.5	More resinous, strong flavor.
Consort	4	Ν	16.6	5.2	6.4	5.2	Berries small, bitter. Dirty
							fruit from dried leaves '09.
Minaj Smyriou	4	N	0.5	4.4	13.5	10.8	A little bland w/ mealy texture.
Crandall <sup>a</sup>	4	N	na	na	na	na	Fresh eating, tougher skin.

Our favorites are 'Black Down', 'Titania' and 'Ben Lomand', with 'Titania' being most favored due to its large capacity to produce fruit, good flavor balance and disease resistance.

a. A mild, sweeter N. American currant. Ripens unevenly in September and is more like a gooseberry.

## **References:**

1. Burnes, T.A., R.A. Blanchette, J. A. Smith, J. J. Luby. 2008. Black Currant Clonal Identity and White Pine Blister Rust Resistance. Hort. Sci. 43(1):200–202.