



# Fruit Chemistry Trends at the Willsboro Cold-Hardy Grape Trial

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The Willsboro cold-hardy grape trial, located at Baker Research Farm overlooking Lake Champlain, is an experimental planting of 24 grape varieties, including cold-hardy ‘Minnesota’ and ‘Swenson’ hybrids. Established in 2007, the trial is managed by Kevin Iungerman and Richard Lamoy, in conjunction with grower groups in the Champlain region. Goals are to provide both data on vine performance and hands-on experience in growing and managing these varieties.

This year’s crop looks excellent, with favorable ripening conditions that have resulted in high brix and reasonably low acids. Richard Lamoy, who manages this planting and also his own vineyard in Plattsburgh, has been running weekly fruit samples for the past few weeks. Results from the September 9 (Table 1) and September 14 (Table 2) samples are shown here.

In addition, Kevin and Richard did some post fruit-set fruit thinning in a portion of these plantings. (Shoots were adjusted in all blocks). Fruit thinning to manage cropping level may be

an important strategy – particularly for lowering acids in these high-acid varieties – in some years. We ran comparative samples (Table 3) on selected varieties of cluster thinning versus ‘no cluster thinning’ at Geneva. Unfortunately we were not able to get accurate pH on some of these, but cluster thinning increased bricks and lowered acids in some cases. Thanks to Richard and Kevin for sharing this fruit chemistry data with us.

**Table 1.** Fruit Chemistry at Willsboro Grape Trial on September 9, 2010

Variety	Brix	pH	TA	Berry Weight
Marquette	23.0	3.08	10.9	1.42
Frontenac Gris	23.0	3.18	15.4	1.27
Mn 1200	21.8	3.08	7.9	1.14
LaCrescent	23.6	3.30	12.5	1.43
Leon Millot	22.0	3.47	8.7	1.30
Foch	20.6	3.32	10.4	1.50
Frontenac	21.6	3.31	16.0	1.33
St. Pepin	20.2	3.30	8.6	2.19
ES 6-16-30	19.4	3.40	8.1	2.27
Sabrevois	18.6	3.51	9.9	2.21
Prairie Star	18.6	3.55	9.6	2.51
Louise Swenson	17.2	3.27	5.2	2.68
Baco	19.8	3.36	15.1	1.38
Petitie Amie	19.0	3.26	6.4	2.19
Edelweiss	16.0	3.41	4.9	3.17
Vignoles	18.4	3.03	19.6	1.48
St. Croix	19.2	3.27	7.1	1.79
Lacrosse	18.0	3.05	10.2	1.82
Landot	17.0	3.18	13.1	1.71
GR7	19.0	3.18	12.5	1.76
Cayuga White	16.5	3.17	9.6	3.31
NY 76.844.24	18.0	3.07	11.8	1.78
Noiret	15.4	3.15	13.8	1.93
Niagara	13.0	3.16	9.3	3.09

**Table 2.** Fruit Chemistry at Willsboro Grape Trial on September 15, 2010

Variety	Brix	pH	TA
Frontenac Gris	23.2	3.39	12.4
Marechal Foch	21.8	3.45	8.0
Frontenac	22.0	3.53	13.3
Baco noir	20.0	3.28	12.7
Petite Amie	17.0	3.39	5.8
Vignoles	18.0	3.12	13.2
Lacrosse	18.4	3.23	7.2
Landot	17.0	3.27	9.1
GR7	19.0	3.47	8.9
Cayuga White	16.6	3.27	6.7
NY 76.844.24	19.6	3.15	8.9
Noiret	16.4	3.20	9.8
Niagara	14.0	3.30	4.5
Not Ravat	14.0	3.20	9.1



*Willsboro Trial at Baker Research Farm on Lake Champlain.*

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