

Table 1. Yield in Lb/vine and T/acre of Frontenac at NE1020 Coordinated Variety Trials, 2011-2016

Site	Cultivar	EvalYear	Vines/ acre	Lb/vine	T/acre	ph	Brix	Titr Acid (g/l)
CT Site 1	Frontenac	2012	807	8.1	3.3	3.74	17.5	12.4
	Frontenac	2013	807	6.0	2.4	3.54	24.1	12.5
	Frontenac	2014	807	5.7	2.3	3.45	24.1	11.8
	Frontenac	2015	807	7.1	2.9	3.49	22.8	10.2
Average				6.7	2.7	3.56	22.1	11.7
CT Site 2	Frontenac	2012	605	21.5	6.5	3.31	24.2	7.8
	Frontenac	2013	605	4.4	1.3	3.37	24.0	11.6
	Frontenac	2014	605	6.8	2.1	3.21	23.8	12.2
	Frontenac	2015	605	4.9	1.5	3.42	27.6	8.7
Average				9.4	2.8	3.33	24.9	10.1
IA	Frontenac	2012	545	12.7	3.5	3.47	28.4	11.1
	Frontenac	2013	545	8.4	2.3	3.32	27.4	11.6
	Frontenac	2014	545	6.9	1.9	3.37	26.0	9.3
	Frontenac	2015	545	0.0	0.0	3.23	22.5	11.1
	Frontenac	2016	545	10.4	2.8			
Average				7.7	2.1	3.35	26.1	10.8
MA	Frontenac	2012	622	27.8	7.7		23.5	9.6
	Frontenac	2013	622	28.2	7.7		23.5	9.6
Average				28.0	7.7		23.5	9.6
MI Site 2	Frontenac	2010	691	1.9	0.7	3.29	27.2	13.8
	Frontenac	2011	691	15.5	5.4	3.30	23.0	
	Frontenac	2012	691	22.1	7.7	3.13	21.8	12.3
	Frontenac	2013	691	15.9	5.5	3.03	19.1	14.2
	Frontenac	2014	691	10.0	3.5	2.86	20.9	15.6
	Frontenac	2015	691					
Average				12.7	4.4	3.08	21.2	14.0
ND	Frontenac	2012	545	10.2	2.8	3.19	27.9	20.0
	Frontenac	2013	545	9.8	2.7	3.13	25.4	13.5
	Frontenac	2014	545	6.9	1.9	2.98	24.4	21.8
	Frontenac	2015	545	7.0	1.9			
	Frontenac	2016	545	18.7	5.1			
Average				10.5	2.9	3.10	25.9	18.4
NY - Champ	Frontenac	2008	605	19.2	6.7	3.36	21.0	14.0
	Frontenac	2009	605	26.4	9.1	3.38	20.5	14.0
	Frontenac	2010	605	25.6	8.8	3.53	22.0	13.3
	Frontenac	2011	605	24.1	8.3	2.91	21.4	15.4
	Frontenac	2012	605	27.6	9.6	2.85	23.0	16.4
	Frontenac	2013	605	14.4	5.0			
	Frontenac	2014	605	39.0	13.5			
	Frontenac	2015	605	19.2	6.6	3.02	22.9	15.1
Average				24.4	8.6	2.93	22.4	15.6

SD	Frontenac	2012	605	3.8	1.2	2.94	26.5	9.7
	Frontenac	2013	605	7.3	2.2	3.19	26.0	14.8
Average				5.5	1.7		26.3	12.2
VT	Frontenac	2009	726	6.3	2.3	3.02	24.0	18.9
	Frontenac	2010	726	10.6	3.9	3.15	24.5	15.8
	Frontenac	2011	726	17.5	6.3	3.12	21.5	16.8
	Frontenac	2012	726	11.3	4.1	3.21	22.8	16.5
	Frontenac	2013	726	16.6	6.0	2.98	20.6	17.0
	Frontenac	2014	726	11.2	4.1	3.23	25.1	16.8
	Frontenac	2015	726	9.2	3.3	3.41	25.9	
Average				11.0	4.8	3.19	23.2	16.8

Table 2. Yield in Lb/vine and T/acre of Frontenac Gris at NE1020 Coordinated Variety Trials, 2011-2016

Site	Cultivar	Year	Vines/ acre	Lb/vine	T/acre	ph	Brix	Titr Acid (g/l)
CT1	Frontenac Gris	2012	807	9.7	3.9			0.0
CT1	Frontenac Gris	2013	807	7.4	3.0	3.64	25.3	12.5
CT1	Frontenac Gris	2014	807	5.1	2.1	3.41	23.0	12.1
CT1	Frontenac Gris	2015	807	6.4	2.6	3.57	23.7	10.0
Average				7.2	2.9	3.5	24.0	8.7
MI3	Frontenac Gris	2011	546	31.4	10.9	3.14	23.5	10.0
MI3	Frontenac Gris	2012	546	11.2	3.9	3.13	25.0	10.2
MI3	Frontenac Gris	2012	546	5.3	1.8			
MI3	Frontenac Gris	2013	546	0.0	0.0			
MI3	Frontenac Gris	2014	546	13.6	4.7			
MI3	Frontenac Gris	2015	546	0.0	0.0	3.17	23.0	10.4
Average				10.3	3.6	3.1	23.8	10.2
ND	Frontenac Gris	2012	545	5.0	1.4	3.35	27.5	10.9
ND	Frontenac Gris	2013	545	5.5	1.5	3.08	28.4	13.7
ND	Frontenac Gris	2014	545	5.2	1.4	3.02	24.5	15.8
ND	Frontenac Gris	2015	545	5.1	1.4			
ND	Frontenac Gris	2016	545	13.4	3.7			
Average				6.8	1.9	3.15	26.8	13.5
NY-W	Frontenac Gris	2008	605	24.5	8.5	3.40	20.0	14.6
NY-W	Frontenac Gris	2009	605	22.8	7.9	3.34	19.8	13.4
NY-W	Frontenac Gris	2010	605	31.0	10.7	3.39	23.2	12.4
NY-W	Frontenac Gris	2011	605	23.6	8.2	2.89	21.3	15.8
NY-W	Frontenac Gris	2012	605	29.3	10.2		23.6	
NY-W	Frontenac Gris	2013	605	16.2	5.6	3.01	22.0	15.6
NY-W	Frontenac Gris	2014	605	27.6	9.6			
NY-W	Frontenac Gris	2015	605	18.9	6.5	3.01	24.6	13.5
Average				24.2	8.0	2.97	22.9	15.0

Table 3 Yield in Lb/vine and T/acre of La Crescent at NE1020 Coordinated Variety Trials, 2011-2016

Site	Cultivar	EvalYear	Vine				ph	Brix	Titr Acid
			spacing	Lb/vine	T/acre				
IA1	La Crescent	2012	545	5.0	1.4	3.3	24.8	11.6	
IA1	La Crescent	2013	545	7.4	2.0	3.3	25.4	11.4	
IA1	La Crescent	2014	545	7.4	2.0	3.3	22.5	10.0	
IA1	La Crescent	2015	545	12.8	3.5	3.3	23.3	6.9	
IA1	La Crescent	2016	545	13.1	3.6				
Average				9.1	2.5	3.30	24.0	10.0	
MA1	La Crescent	2012	622	14.0	3.9		19.1	4.5	
MA1	La Crescent	2013	622	13.4	3.7		19.1	4.5	
Average				13.7	3.8		19.1	4.5	
MI2	La Crescent	2010	691	2.0	0.7	3	22.4		
MI2	La Crescent	2011	691	15.4	5.3	3.2	23.6		
MI2	La Crescent	2012	691	15.4	5.3	3.33	24.7	10.7	
MI2	La Crescent	2013	691	16.8	5.8	3.16	22.1	11.6	
MI2	La Crescent	2014	691	12.0	4.2	3.02	20.6	11.8	
MI2	La Crescent	2015	691	0.0	0.0				
Average				10.3	3.6	3.1	22.7	11.4	
MI3	La Crescent	2011	546	17.9	6.2	3.28	21.0	5.6	
MI3	La Crescent	2012	546	11.7	4.1	3.26	21.7	9.1	
MI3	La Crescent	2012	546	13.4	4.6				
MI3	La Crescent	2013	546	19.8	6.9	3.3	18.0	9.1	
MI3	La Crescent	2014	546	0.0	0.0				
MI3	La Crescent	2015	546	0.0	0.0				
Average				10.5	3.6	3.3	20.2	7.9	
ND	La Crescent	2012	545	8.4	2.3	3.13	27.1	21.6	
ND	La Crescent	2013	545	14.7	4.0	4.37	20.3	17.6	
ND	La Crescent	2014	545	1.0	0.3	2.97	22.8	19.5	
ND	La Crescent	2015	545	2.2	0.6				
ND	La Crescent	2016	545	5.2	1.4				
Average				6.3	1.7	3.49	23.4	19.6	
NY Geneva	La Crescent	2010	810	2.2	0.9	3.4	23.2	8.3	
	La Crescent	2011	810	10.9	4.6	3.4	23.1	10.3	
	La Crescent	2012	810	17.6	7.4	3.4	26.9	7.6	
	La Crescent	2013	810	19.7	8.3				
	La Crescent	2014	810	12.6	5.3	3.3	24.2	11.4	
	La Crescent	2015	810	17.9	7.6	3.3	24.2	11.4	
Average				13.5	5.7	3.4	24.3	9.8	
NY Champl	La Crescent	2008	605	19.6	6.8	3.50	23.0	11.4	
	La Crescent	2009	605	25.8	8.9	3.50	22.5	11.4	
	La Crescent	2010	605	22.7	7.8	3.30	23.6	12.5	
	La Crescent	2011	605	19.5	6.8	3.13	19.6	12.1	
	La Crescent	2012	605	22.3	7.7	2.96	24.0	13.9	
	La Crescent	2013	605	14.2	4.9	3.05	22.0	15.7	
	La Crescent	2014	605	16.6	5.8				
	La Crescent	2015	605	10.9	3.8	3.02	21.3	15.8	
Average				18.9	6.6	3.2	22.3	13.3	

SD1	La Crescent	2012	605	1.3	0.4	2.89	25.9	9.8
SD1	La Crescent	2013	605	8.1	2.5	3.16	28.2	18.0
Average				4.7	1.4	3.0	27.1	13.9
VT	La Crescent	2009	726	5.0	1.8	2.96	23.4	17.6
VT	La Crescent	2010	726	13.0	4.7	3.07	22.3	13.7
VT	La Crescent	2011	726	17.8	6.5	3.07	20.4	15.6
VT	La Crescent	2012	726	7.6	2.8	3.17	22.4	15.4
VT	La Crescent	2013	726	14.7	5.3	2.97	19.9	14.7
VT	La Crescent	2014	726	7.1	2.6	3.09	23.1	16.0
VT	La Crescent	2015	726	3.4	1.2	3.06	20.8	
Average				9.8	3.6	3.1	21.8	15.5

Table 4 Yield in Lb/vine and T/acre of Frontenac at NE1020 Coordinated Variety Trials, 2011-2016

Site	Cultivar	EvalYear	Vine spacing	Lb/vine	T/acre	ph	Brix	Titr Acid
CT1	Marquette	2012	807	1.8	0.7	3.76	19.2	11.6
CT1	Marquette	2013	807	6.4	2.6	3.78	23.3	8.6
CT1	Marquette	2014	807	4.2	1.7	3.80	24.4	7.1
CT1	Marquette	2015	807	0.0	0.0			
Average				3.1	1.3	3.78	22.3	9.1
CT2	Marquette	2012	605	7.5	2.3			
CT2	Marquette	2013	605	5.3	1.6	3.63	24.53	6.9
CT2	Marquette	2014	605	4.2	1.3	3.48	24.7	8.1
CT2	Marquette	2015	605	3.1	1.0	3.54	26.8	6.6
Average				5.0	1.5	3.55	25.3	7.2
IA1	Marquette	2012	545	3.2	0.9	3.30	28.0	9.8
IA1	Marquette	2013	545	9.3	2.5	3.37	28.2	10.2
IA1	Marquette	2014	545	7.5	2.0	3.41	23.9	7.3
IA1	Marquette	2015	545	15.8	4.3	3.41	22.0	7.9
IA1	Marquette	2016	545	12.5	3.4			
Average				9.7	2.6	3.37	25.5	8.8
MA1	Marquette	2012	622	15.4	4.6		23.3	8.3
MA1	Marquette	2013	622	13.2	3.6		23.3	8.3
Average				14.3	4.1		23.3	8.3
MI1	Marquette	2010	691					
MI1	Marquette	2011	691					
MI1	Marquette	2012	691	30.0	10.4	3.55	26.6	7.4
MI1	Marquette	2013	691	30.0	10.4	3.62	23.7	6.8
MI1	Marquette	2014	691	0.0	0.0	3.09	21.5	11.0
MI1	Marquette	2015	691	22.9	8.0	3.54	24.2	6.3
Average				19.4	7.2	3.45	24.0	7.9
MI3	Marquette	2011	546	31.7	11.0	3.15	23.5	7.4
MI3	Marquette	2012	546	11.1	3.9	3.35	20.4	9.6
MI3	Marquette	2012	546	8.5	2.9	3.36	20.3	9.5
MI3	Marquette	2013	546	11.1	3.8	3.49	23.9	8.2
MI3	Marquette	2014	546	28.4	9.9	2.98	21.0	6.9
MI3	Marquette	2015	546	8.7	3.0	3.22	22.5	8.4

Average				17.0	6.0	3.29	22.2	8.3
ND	Marquette	2012	545	5.4	1.5	3.15	29.2	10.7
ND	Marquette	2013	545	4.6	1.2	2.93	28.6	12.4
ND	Marquette	2014	545	2.4	0.6	3.02	24.6	14.7
ND	Marquette	2015	545	3.7	1.0			
ND	Marquette	2016	545	4.1	1.1			
Average				4.0	1.1	3.03	27.4	12.6
NY-W	Marquette	2008	605	19.2	6.6	3.18	22.0	11.2
NY-W	Marquette	2009	605	11.5	4.0	3.30	21.8	10.8
NY-W	Marquette	2010	605	27.9	9.6	3.08	23.0	10.9
NY-W	Marquette	2011	605	18.2	6.3	3.09	23.7	10.2
NY-W	Marquette	2012	605	20.4	7.1	2.87	25.8	12.3
NY-W	Marquette	2013	605	9.7	3.4	3.16	23.0	10.3
NY-W	Marquette	2014	605	23.4	8.1			
NY-W	Marquette	2015	605	10.9	3.8	2.94	24.6	13.5
Average				17.6	6.1	3.09	23.4	11.3
SD1	Marquette	2012	605	3.2	1.0	2.93	28.9	6.9
SD1	Marquette	2013	605	8.0	2.4	3.04	27.8	9.6
Average				5.6	1.7	2.98	28.3	8.3
VT	Marquette	2009	726	3.2	1.2	3.02	25.5	15.7
VT	Marquette	2010	726	13.2	4.8	2.95	24.4	13.4
VT	Marquette	2011	726	17.2	6.3	2.96	22.4	14.5
VT	Marquette	2012	726	6.9	2.5	3.30	25.6	12.3
VT	Marquette	2013	726	20.4	7.4	2.98	20.8	14.1
VT	Marquette	2014	726	8.4	3.1	3.08	25.6	15.5
VT	Marquette	2015	726	7.2	2.6	3.23	27.0	

Table 5. Yield in Lb/vine and T/acre of St Croix at NE1020 Coordinated Variety Trials, 2011-2016

Site	Cultivar	EvalYear	Vine spacing	Lb/vine	T/acre	ph	Brix	Titr Acid
CT1	St. Croix	2012	807	5.5	2.2	4.22	17.8	3.4
CT1	St. Croix	2013	807	3.6	1.4	4.12	18.5	5.0
CT1	St. Croix	2014	807	1.9	0.8	3.78	19.8	7.6
CT1	St. Croix	2015	807	5.8	2.3	4.11	19.8	4.4
Average				4.2	1.7	4.06	19.0	5.1
CT2	St. Croix	2012	605	7.1	2.1	3.35	24.1	
CT2	St. Croix	2013	605	5.1	1.6	3.8	19.15	4.9
CT2	St. Croix	2014	605	4.2	1.3	3.73	21.1	5.5
CT2	St. Croix	2015	605	3.4	1.0	3.73	21.1	5.0
Average				4.9	1.5	3.65	21.4	5.1
IA1	St. Croix	2012	545	8.9	2.4	3.4	20.4	7.6
IA1	St. Croix	2013	545	17.3	4.7	3.4	20.2	7.4
IA1	St. Croix	2014	545	7.4	2.0	3.8	19.2	5.7
IA1	St. Croix	2015	545	21.0	5.7	3.5	16.1	6.0
IA1	St. Croix	2016	545	15.4	4.2			
Average				14.0	3.8	3.52	19.0	6.7
MA1	St. Croix	2012	622	24.6	7.6		20.0	5.9

MA1	St. Croix	2013	622	23.9	7.4		20.0	5.9
Average				24.2	7.5		20.0	5.9
MI2	St. Croix	2010	691	2.1	0.7	3.58	20.9	7.4
MI2	St. Croix	2011	691	12.0	4.2	3.3	19.2	
MI2	St. Croix	2012	691	21.9	7.6	3.72	18.1	6.5
MI2	St. Croix	2013	691	13.9	4.8	3.64	20.7	6.5
MI2	St. Croix	2014	691	8.2	2.9	3.37	19.9	8.0
MI2	St. Croix	2015	691	0.0	0.0			
Average				9.7	3.4	3.5	19.8	7.1
MI3	St. Croix	2011	546	15.3	5.3	3.11	20.0	5.1
MI3	St. Croix	2012	546	5.2	1.8	3.7	21.0	6.1
MI3	St. Croix	2012	546	9.1	3.2			
MI3	St. Croix	2013	546	20.0	6.9	3.44	20.0	8.9
MI3	St. Croix	2014	546	17.8	6.2	3.29	16.4	6.9
MI3	St. Croix	2015	546	9.0	3.1	3.37	19.0	7.1
Average				12.7	4.4	3.4	19.3	6.8
ND	St. Croix	2012	545	5.5	1.5	3.39	25.7	8.4
ND	St. Croix	2013	545	10.2	2.8	3.17	21.9	7.5
ND	St. Croix	2014	545	2.2	0.6	2.97	21.5	12.8
ND	St. Croix	2015	545	5.1	1.4			
ND	St. Croix	2016	545	15.1	4.1			
Average				7.6	2.1	3.18	23.0	9.6
NY	St. Croix	2010	810	2.8	1.2	3.6	20.6	5.5
NY	St. Croix	2011	810	9.8	4.1	3.7	19.5	6.2
NY	St. Croix	2012	810	15.2	6.4	3.8	21.3	5.0
NY	St. Croix	2013	810	13.4	5.7	3.6	18.4	7.6
NY	St. Croix	2014	810	13.1	5.5	3.5	20.2	9.6
NY	St. Croix	2015	810	10.1	4.3	3.5	20.2	9.6
Average				10.7	4.5	3.6	20.0	7.3
NY-W	St. Croix	2008	605	20.3	7.0	9.10	18.0	18.0
NY-W	St. Croix	2009	605	22.2	7.7	3.44	18.2	9.1
NY-W	St. Croix	2010	605	20.8	7.2	3.27	19.2	7.1
NY-W	St. Croix	2011	605	13.8	4.8	3.32	17.8	7.9
NY-W	St. Croix	2012	605	16.2	5.6	3.17	20.0	8.0
NY-W	St. Croix	2013	605	6.5	2.2	3.24	20.0	9.3
NY-W	St. Croix	2014	605	21.8	7.6			
Average				17.4	6.0	4.26	18.9	9.9
SD1	St. Croix	2012	605	5.2	1.6	3.06	21.5	4.4
SD1	St. Croix	2013	605	14.9	4.5	3.69	7.2	17.4
Average				10.1	3.1	3.37	14.3	10.9
VT	St. Croix	2009	726	5.3	1.9	2.90	19.5	12.8
VT	St. Croix	2010	726	16.0	5.8	2.92	18.6	9.6
VT	St. Croix	2011	726	21.8	7.9	3.18	16.8	7.7
VT	St. Croix	2012	726	7.2	2.6	3.28	20.0	7.3
VT	St. Croix	2013	726	15.6	5.7	3.28	17.0	8.3
VT	St. Croix	2014	726	9.4	3.4	3.12	19.1	8.4
VT	St. Croix	2015	726	5.6	2.0	3.26	19.8	
Average				11.6	4.2	3.13	18.7	9.0

