

Summary of Winter Damage to Grapes 2013-14 (cold winter) apx 6/1/14

Sort by Name		Sort by Damage	
Blue Bell	0.28	Frontenac Gris	0.00
Brianna	2.47	King of the North	0.00
Clinton	0.13	Clinton	0.13
ES 6-16-30	x	Valiant	0.19
ES 8-2-43	2.50	Blue Bell	0.28
Frontenac	0.50	Sabrevois	0.46
Frontenac Gris	0.00	Frontenac	0.50
King of the North	0.00	MN 1200	0.72
LaCrescent	1.69	St Croix	0.75
Louise Swenson	1.08	Louise Swenson	1.08
Marquette	1.41	Marquette	1.41
MN 1200	0.72	LaCrescent	1.69
Petite Amie	2.34	Somerset Seedless	2.25
Prairie Star	2.67	St Pepin	2.28
Sabrevois	0.46	Petite Amie	2.34
Somerset Seedless	2.25	Brianna	2.47
St Croix	0.75	ES 8-2-43	2.50
St Pepin	2.28	Prairie Star	2.67
Valiant	0.19	ES 6-16-30	x

Key:

- 0 = Canes seem fine
- 1 = Some cordon ends are dead
- 2 = Plants are mostly good only on lower half of trellis
- 3 = Very dead above ground

Yellow = reduced number of plants (from 16 to 4) or eliminated

Later Evaluation for Further Damage, Further Pruning

Sort by Name		Sort by Damage	
Blue Bell	0.30	Frontenac	0.00
Brianna	1.70	Frontenac Gris	0.00
Clinton	0.10	King of the North	0.00
ES 6-16-30	x	Clinton	0.10
ES 8-2-43	1.80	MN 1200	0.20
Frontenac	0.00	Valiant	0.20
Frontenac Gris	0.00	Blue Bell	0.30
King of the North	0.00	Marquette	0.40
LaCrescent	1.10	St Croix	0.40
Louise Swenson	1.20	Sabrevois	0.50
Marquette	0.40	LaCrescent	1.10
MN 1200	0.20	Louise Swenson	1.20
Petite Amie	1.80	Somerset Seedless	1.60
Prairie Star	1.80	Brianna	1.70
Sabrevois	0.50	St Pepin	1.70
Somerset Seedless	1.60	ES 8-2-43	1.80
St Croix	0.40	Petite Amie	1.80
St Pepin	1.70	Prairie Star	1.80
Valiant	0.20	ES 6-16-30	x

Key:

- 0 = fine; 2 good cordons on top wire
- 1 = 1 cordon left; partial retrain
- 2 = total retrain

apx 6/16/14

% Plants had Fruit (any amt)

Blue Bell	100
Clinton	100
Frontenac	100
Frontenac Gris	100
King of the North	100
Marquette	100
MN 1200	100
Sabrevois	100
St Croix	100
Valiant	87
LaCrescent	75
Louise Swenson	56
St Pepin	56
Prairie Star	38
Somerset Seedless	19
Brianna	13
ES 8-2-43	6
Petite Amie	6
ES 6-16-30	x

Numbers are extrapolated from veraison measurements
They reflect fruiting but are not 100% accurate.

2014 Analysis of Grape Samples at CREC

Collection Date	Date tested	Name	pH	%TA	Brix	Note	
	9/25	9/26	Bluebell	2.71	2.11	18.8	
	9/25	9/26	Clinton	2.72	2.42	19.4	
	9/25	9/26	Frontenac	2.70	2.32	23.4	
	9/25	9/26	Frontenac Gris	2.77	2.28	24.5*	
	9/25	9/26	Prairie Star	3.01	1.45	19.7*	not many clusters
	9/25	9/26	Sabrevois	2.89	1.73	19.2*	
	9/25	9/26	St. Croix	2.80	1.50	18.5	
	9/25	9/26	Valiant	2.96	1.36	20.0	Only sample possible due to birds
	9/25	9/26	LaCrescent	2.77	1.91	22.4	
	9/25	9/26	King of the North	2.71	2.15	19.1	
	9/25	9/26	Louise Swenson	2.83	1.30	15.4	
	9/25	9/26	Marquette	2.81	1.87	22.2	
	9/25	9/26	MN 1200	2.85	1.33	19.9	Only sample possible due to birds
	9/25	9/26	Petite Amie	2.84	1.50	17.8	Very small number of berries
	9/25	9/26	St Pepin	2.77	1.98	20.6	
	9/25	9/26	Somerset Seedless	3.06	1.12	21.0	Only sample possible due to birds
			ES 8-2-43			No fruit	
			Brianna			No fruit	

Ideal harvest parameters:

<http://viticulture.hort.iastate.edu/cultivars/cultivars.html>

pH	%TA	Brix
2.90	< 1.50	24-28 <i>UMN</i>
3.00	1.40	26-28 <i>UMN</i>
3.00	1.19	24.5 <i>UMN</i>
2.95	1.21	26.1 <i>UMN</i>
3.40	0.90	18.0 <i>Nebraska</i>

acidity tends to be moderate, but grapes struggle to make 20° Brix. *Plocher and Parke*

2014 Accumulated Corn Growing Degree days (4/1-9/26/14) = 2014 Corn AGDD. Deprture from normal = -286 Corn AGDD

* Forgot to record Brix on 9/26. New samples taken on 9/28 and read on 9/29.

Whole samples were refrigerated O/N.

Samples of 3 varieties at a time were returned to RT and pressed with a potato ricer and analysed.

Analysis was completed with Thermo brand pH probe and Hanna HI84432 titrator; probe recalibrated after each group of 3 samples.

Samples were collected from as wide of a range of clusters as possible, from different sides of clusters. About 1-1.5 cups of berries.

KW at meeting week of 9/29. Freeze 10/4 Saturday morning 25°F. 10/6 All leaves dead and most fruit eaten by birds.

2014 veraison examples: Valiant apx 20% August 12 but 100% and almost all eaten by 8/27. Marquette apx 75% August 27.