

Winter Injury Studies 2006/7

Grape Bud Survival

January 15, 2007

Research Team

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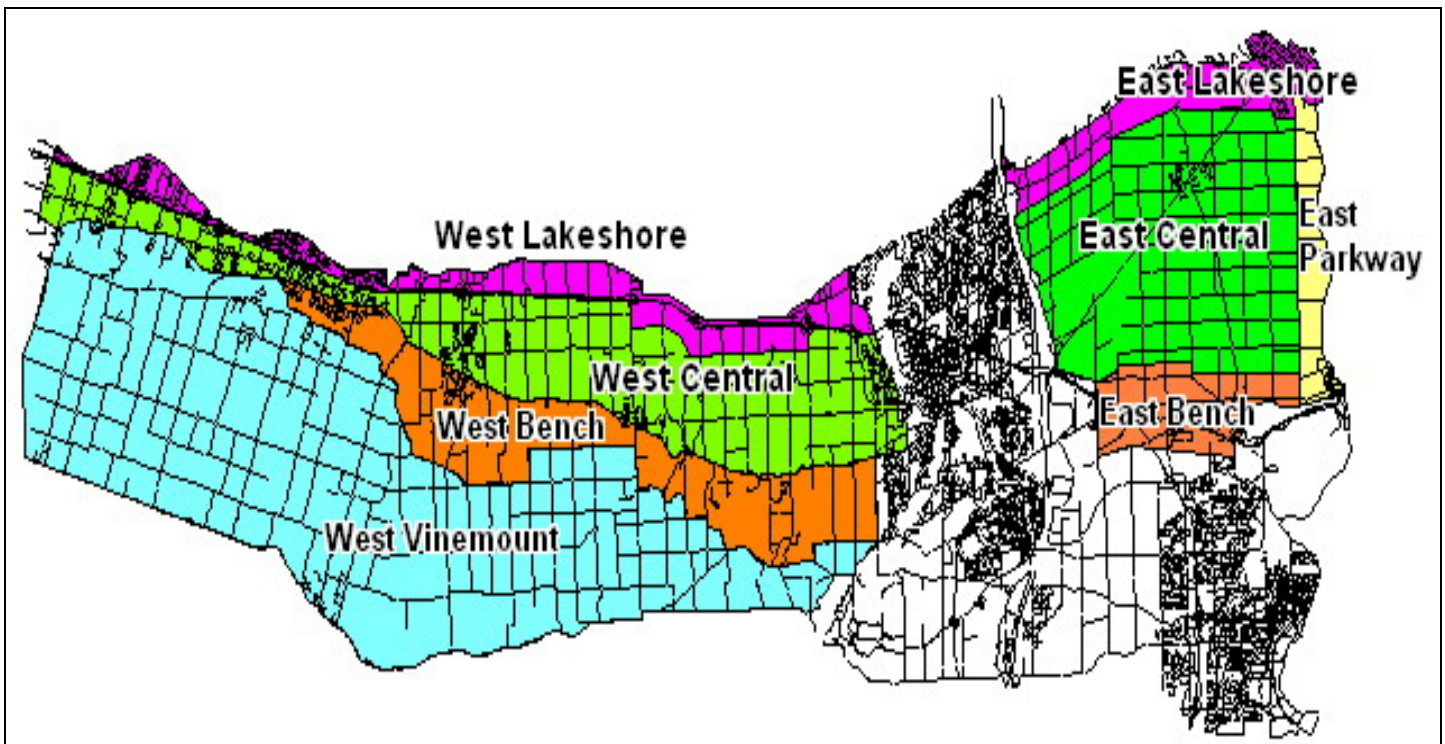
Grape bud sampling to establish winter survival is part of the 3 year - CanAdvance and CRESTech funded Winter Injury and Wind Machine project. The tables in this article report the sampling results based on the bud collection during the week of January 15-17, 2007. There have been relatively few changes from the last sampling of December 18-20, 2006. However, the percent alive may vary up or down from the last sample due to the variation in the samples taken. The tables below are based on multiple samples and multiple sites within in area for each cultivar. All observations for each cultivar and location include both vineyards with wind machines and without.

The Grape Growers of Ontario (GGO) and the Wine Council of Ontario (WCO) are the major sponsors of the project. Other partners include; Stephane Bosc – Orchard Rite; Roger Vail – Chinook; KCMS Applied Research and Consulting; Agricorp; Ontario Tender Fruit Producers' Marketing Board; the Niagara Peninsula Fruit & Vegetable Growers' Association, OMAFRA; Brock University and the University of Guelph.

For sampling purposes, the grape growing areas of the Niagara Peninsula were placed into different climatic zones which closely resemble the “Niagara Grape Climatic Zones”, map originally published in 1976 and revised in 2001 by Fisher and Slingerland.

The Parkway zone runs approximately 1 km along the west side of the Niagara River from Niagara-on-the-Lake to Queenston; the Lakeshore zone is approximately 1 km south of the lake from the Niagara River to Grimsby; the Central zone continues south of the Lakeshore zone to the base of the escarpment; the Bench zone starts at the south side of the Central zone to the brink of the escarpment and the Vinemount zone runs south of the Bench Zone.





8 Sampling Zones Used

% Live Buds - Labrusca – Jan. 15-17, 2007 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Concord	Vinemount	NS	97
Niagara	Vinemount	NS	100

% Live Buds - Hybrids – Jan. 15-17, 2007 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Baco Noir	Central	100	97
	Parkway	100	NS
Foch	Central	NS	66-98
	Vinemount	NS	96
Vidal	Central	97-100	98-99
	Lakeshore	ICE WINE	NS
	Parkway	96-98	NS
	Vinemount	NS	97

% Live Buds - Vinifera – Jan. 15-17, 2007 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Cabernet Franc	Bench	95-99	95-98
	Central	97-98	99-100
	Lakeshore	96-97	100
	Parkway	85-99	NS
	Vinemount	NS	91-99
Cabernet Sauvignon	Central	NS	99
	Lakeshore	NS	97
	Parkway	98	NS
Chardonnay	Bench	93-99	95-100
	Central	97-99	96-100
	Lakeshore	97-99	NS
	Parkway	98-99	NS
	Vinemount	NS	96
Gamay	Parkway	96	NS
Merlot	Bench	97-100	97-100
	Central	100	98-100
	Lakeshore	97	99
	Parkway	77-100	NS
	Vinemount	NS	97
Pinot Noir	Bench	94-97	86-97
	Central	93	99-100
	Lakeshore	88	99
	Parkway	99	NS
	Vinemount	NS	76-87
Riesling	Bench	97	87-97
	Central	97-99	94-99
	Lakeshore	95-99	97
	Parkway	92-97	NS
	Vinemount	NS	88-89
Sauvignon Blanc	Central	100	94
	Lakeshore	94	NS
Syrah	Lakeshore	NS	89
	Parkway	82	NS