

Winter Injury Studies 2006

Grape Bud Survival

November 20, 2006

Research Team

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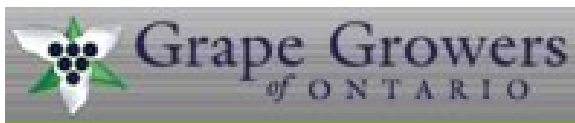
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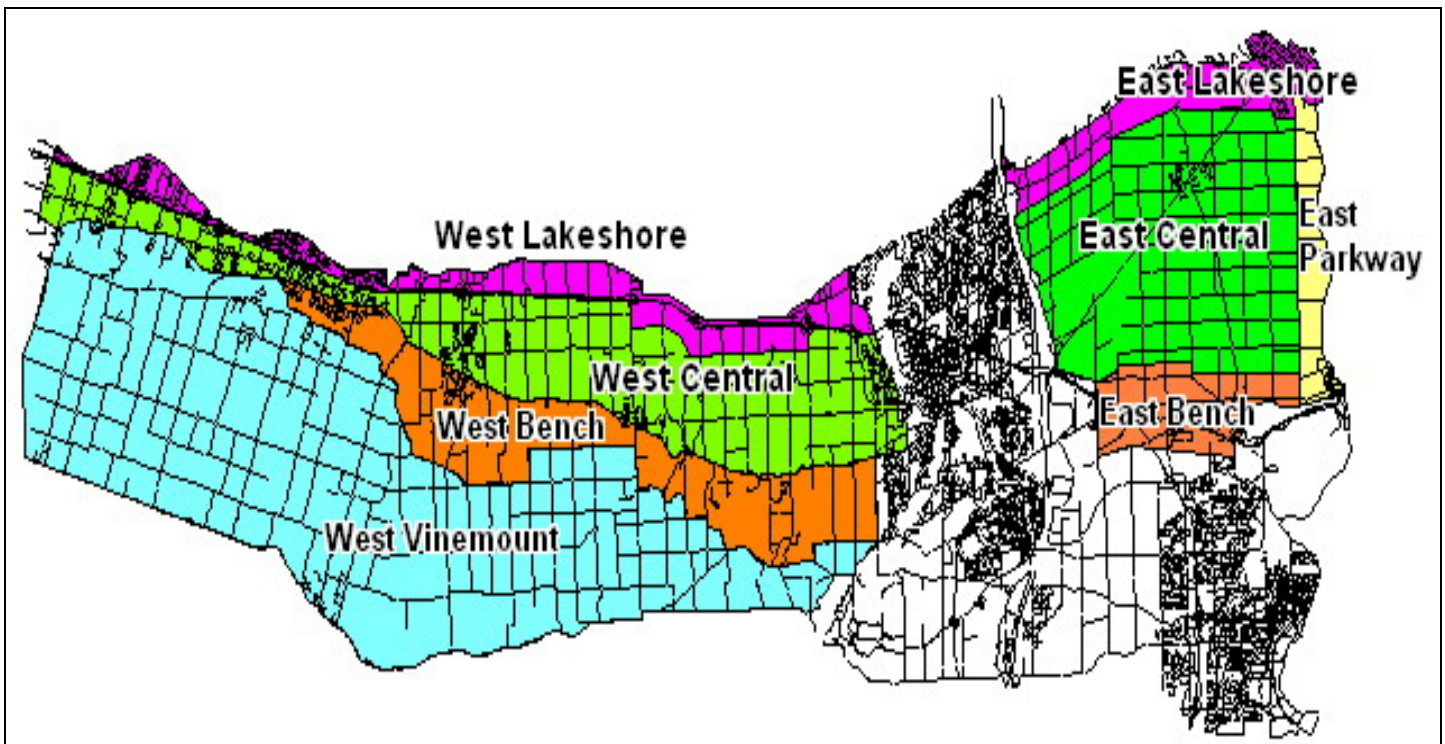
Grape bud sampling to establish winter survival is part of the 3 year - CanAdvance and CRESTech funded Winter Injury and Wind Machine project. The tables in this article report the sampling results based on the bud collection during the week of November 20-22, 2006. The tables below are based on multiple 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 – Nov. 20-23, 2006 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Concord	Vinemount	NS	94-100
Niagara	Vinemount	NS	94-97

% Live Buds - Hybrids – Nov. 20-23, 2006 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Baco Noir	Central	100	100
	Parkway	99	NS
Foch	Central	NS	97-99
	Vinemount	NS	100
Vidal	Central	99	96
	Lakeshore	ICE WINE	NS
	Parkway	99	NS
	Vinemount	NS	94

% Live Buds - Vinifera – Nov. 20-23, 2006 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Cabernet Franc	Bench	95-98	84-100
	Central	98-99	98-99
	Lakeshore	92-97	100
	Parkway	80-99	NS
	Vinemount	NS	90-94
Cabernet Sauvignon	Central	NS	95
	Lakeshore	NS	97
	Parkway	98	NS
Chardonnay	Bench	99	93-99
	Central	98-100	93-100
	Lakeshore	98-99	NS
	Parkway	98-99	NS
	Vinemount	NS	86
Gamay	Parkway	99	NS
Merlot	Bench	99-100	98-99
	Central	99	99-100
	Lakeshore	100	99-100
	Parkway	90-99	NS
	Vinemount	NS	97
Pinot Noir	Bench	99	97-99
	Central	97	86-99
	Lakeshore	99	99
	Parkway	97	NS
	Vinemount	NS	76-78
Riesling	Bench	92	85-99
	Central	97	97-100
	Lakeshore	81	96
	Parkway	99	NS
	Vinemount	NS	91-99
Sauvignon Blanc	Central	92	97
	Lakeshore	91	NS
Syrah	Lakeshore	NS	91
	Parkway	61	NS