

Winter Injury Studies 2007/08

Grape Bud Survival

March 17, 2008

Research Team

Ken Slingerland and **Hugh Fraser**, OMAFRA

Kevin Ker, PhD (cand), CCOVI Brock University & KCMS

Dr. Helen Fisher, University of Guelph

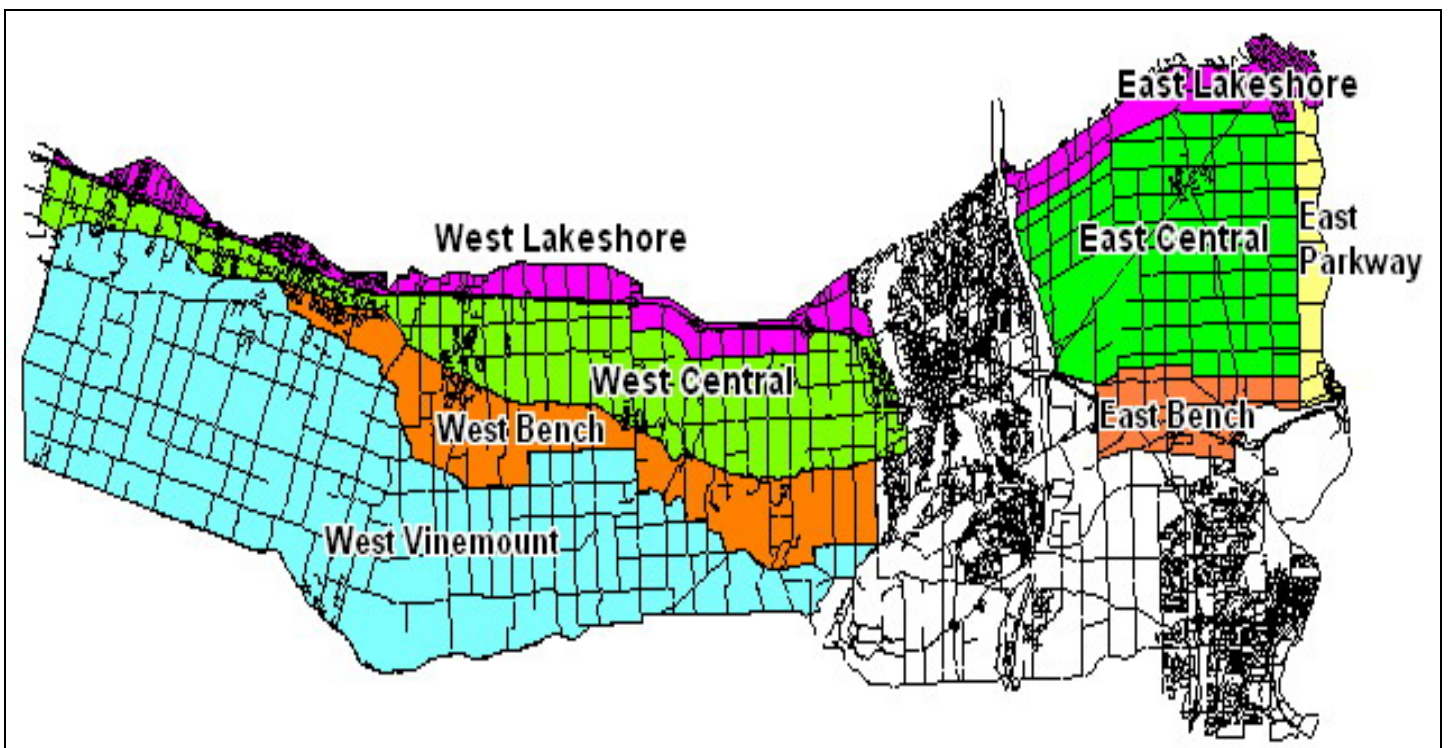
Ryan Brewster, KCMS Applied Research and Consulting Inc.

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 March 17th, 2008. 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.

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.

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 – March 17, 2008 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Concord	Vinemount	NS	88
Niagara	Vinemount	NS	97

% Live Buds - Hybrids – March 17, 2008 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Baco Noir	Central	All Pruned	92
	Parkway	All Pruned	NS
	Vinemount	NS	69
Foch	Central	NS	All Pruned
	Vinemount	NS	83
Vidal	Central	87	All Pruned
	Lakeshore	88	NS
	Parkway	70-77	NS
	Vinemount	NS	46-79

% Live Buds - Vinifera – March 17, 2008 (NS means no sample taken)

Cultivar	Location	East of Canal	West of Canal
Cabernet Franc	Bench	71-98	77-82
	Central	89	37-70
	Lakeshore	92-93	78
	Parkway	78-94	NS
	Vinemount	NS	72-78
Cabernet Sauvignon	Central	NS	92
	Lakeshore	NS	85
	Parkway	96	NS
Chardonnay	Bench	71-97	All Pruned
	Central	91	91-98
	Lakeshore	85-99	NS
	Parkway	84-96	NS
	Vinemount	NS	94
Gamay	Parkway	98	NS
Merlot	Bench	32-73	58-69
	Central	56	31-81
	Lakeshore	93	69-83
	Parkway	90-97	NS
	Vinemount	NS	40
Pinot Noir	Bench	74-92	93
	Central	94	82-100
	Lakeshore	88	74-81
	Parkway	75	NS
	Vinemount	NS	75-87
Riesling	Bench	81-99	81
	Central	91	92-100
	Lakeshore	68-87	All Pruned
	Parkway	80-81	NS
	Vinemount	NS	68-96
Sauvignon Blanc	Central	86	NS
	Lakeshore	90-92	NS
Syrah	Lakeshore	NS	74
	Parkway	78	NS