

Winter Injury Studies 2007/08

Grape Bud Survival

April 14, 2008

Research Team

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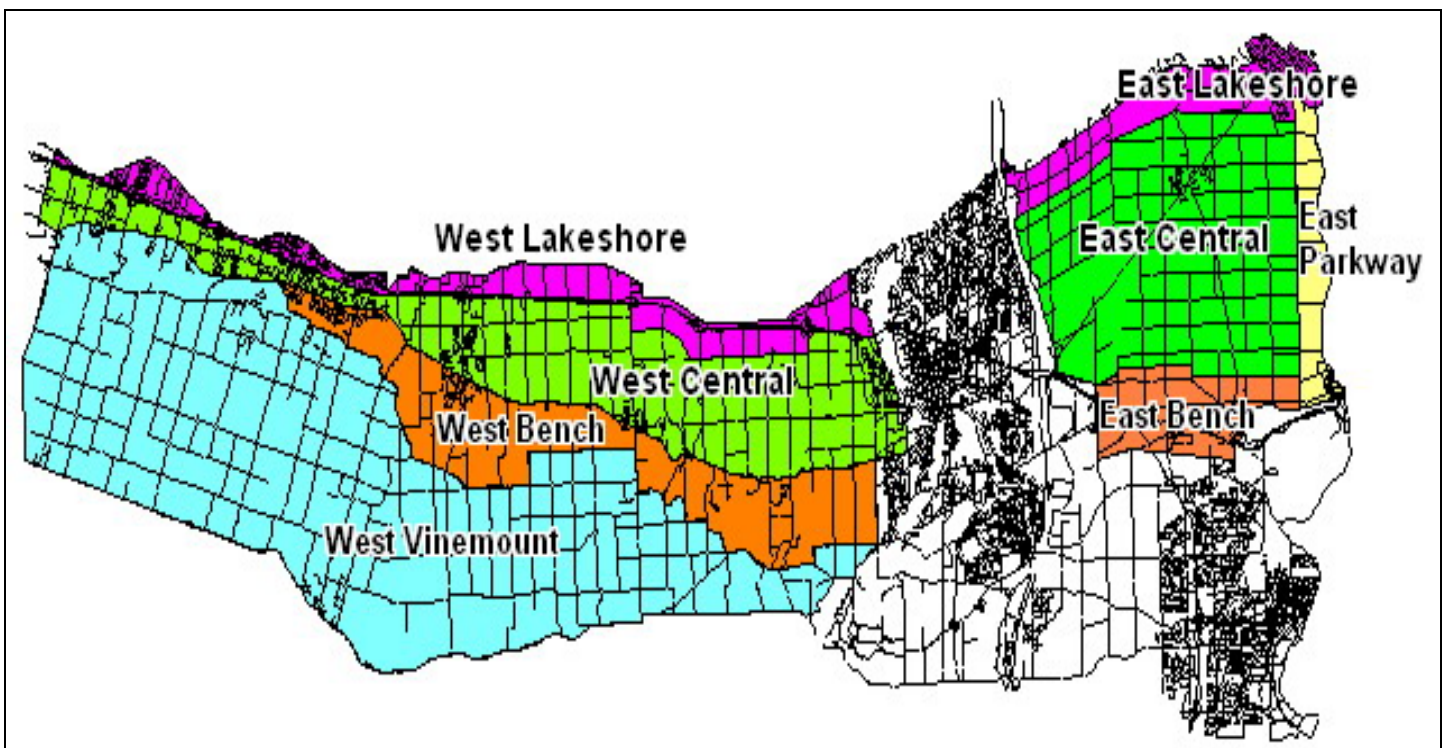
Ryan Brewster, KCMS Applied Research and Consulting Inc.

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 April 14th, 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 – April 14, 2008 (NS means no sample taken)

| Cultivar | Location | East of Canal | West of Canal |
|----------|-----------|---------------|---------------|
| Concord | Vinemount | NS | 90 |
| Niagara | Vinemount | NS | 95 |

% Live Buds - Hybrids – April 14, 2008 (NS means no sample taken)

| Cultivar | Location | East of Canal | West of Canal |
|-----------|-----------|---------------|---------------|
| Baco Noir | Central | 90 | 95 |
| | Parkway | 99 | NS |
| | Vinemount | NS | 97 |
| Foch | Central | NS | 83-90 |
| | Vinemount | NS | 97 |
| Vidal | Central | 69-86 | 77-88 |
| | Lakeshore | 88 | NS |
| | Parkway | 89-92 | NS |
| | Vinemount | NS | 71-79 |

% Live Buds - Vinifera – April 14, 2008 (NS means no sample taken)

| Cultivar | Location | East of Canal | West of Canal |
|--------------------|-----------------|----------------------|----------------------|
| Cabernet Franc | Bench | 59 | 71-94 |
| | Central | 72-91 | 50-95 |
| | Lakeshore | 83 | 90 |
| | Parkway | 89-91 | NS |
| | Vinemount | NS | 68-90 |
| Cabernet Sauvignon | Central | NS | 100 |
| | Lakeshore | NS | 87 |
| | Parkway | NS | NS |
| Chardonnay | Bench | 70 | 78 |
| | Central | 84-95 | 88-97 |
| | Lakeshore | 95 | NS |
| | Parkway | 89-99 | NS |
| | Vinemount | NS | 100 |
| Gamay | Parkway | NS | NS |
| Merlot | Bench | 11-43 | 70-83 |
| | Central | 57 | 29-70 |
| | Lakeshore | 91 | 70-89 |
| | Parkway | 92 | NS |
| | Vinemount | NS | 27 |
| Pinot Noir | Bench | 84 | 82 |
| | Central | 88 | 91-100 |
| | Lakeshore | NS | 90-94 |
| | Parkway | 78 | NS |
| | Vinemount | NS | 70-96 |
| Riesling | Bench | 79 | 70-96 |
| | Central | 93-95 | 75-98 |
| | Lakeshore | 74-97 | 89 |
| | Parkway | 83-95 | NS |
| | Vinemount | NS | 83-96 |
| Sauvignon Blanc | Central | 80 | 87 |
| | Lakeshore | NS | NS |
| Syrah | Lakeshore | NS | 92 |
| | Parkway | NS | NS |