



**2008/2009 Cold Hardiness Testing of
Grape Buds in Niagara**



UNIVERSITY of GUELPH



| Cultivar | Date | Location | BUD LT 10% °C | BUD LT 50% °C | BUD LT 90% °C |
|--------------------|-----------|---------------------------------|---------------|---------------|---------------|
| Cabernet Franc | 6-Apr-09 | West Central (GRS – Vineland) | -12.8 | -14.8 | -16.4 |
| | 9-Apr-09 | West Central (St. Catharines) | -9.5 | -11.0 | -12.9 |
| | 8-Apr-09 | West Bench 1 (Beamsville) | -15.2 | -16.5 | -18.4 |
| | 8-Apr-09 | West Bench 2 (Beamsville) | -15.5 | -16.6 | -17.8 |
| Cabernet Sauvignon | 6-Apr-09 | West Central (GRS – Vineland) | -15.8 | -18.4 | -20.2 |
| | 8-Apr-09 | West Bench 1 (Beamsville) | -14.0 | -17.0 | -19.6 |
| | 8-Apr-09 | West Bench 2 (Beamsville) | -14.2 | -17.5 | -18.5 |
| | 9-Apr-09 | West Lakeshore (St. Catharines) | -10.0 | -12.3 | -14.6 |
| Chardonnay | 6-Apr-09 | West Central (GRS – Vineland) | -10.5 | -13.8 | -16.2 |
| | 9-Apr-09 | West Central (St. Catharines) | -15.0 | -16.1 | -17.2 |
| | 8-Apr-09 | West Bench 2 (Beamsville) | -15.7 | -19.0 | -21.0 |
| | 9-Apr-09 | West Lakeshore (St. Catharines) | -14.4 | -16.5 | -17.9 |
| | 7-Apr-09 | East Central (NOTL – Virgil) | -14.1 | -15.0 | -16.9 |
| | 7-Apr-09 | East Lakeshore (NOTL) | -15.4 | -16.9 | -17.7 |
| Gamay | 6-Apr-09 | West Central (GRS – Vineland) | -11.6 | -15.9 | -19.3 |
| | 7-Apr-09 | East Central (NOTL – Virgil) | -9.1 | -11.8 | -13.5 |
| Gewurztraminer | 6-Apr-09 | West Central (GRS – Vineland) | -14.8 | -16.2 | -19.5 |
| | 8-Apr-09 | West Bench 1 (Beamsville) | -10.6 | -12.7 | -14.8 |
| Merlot | 6-Apr-09 | West Central (GRS – Vineland) | -11.1 | -14.7 | -17.0 |
| | 9-Apr-09 | West Central (St. Catharines) | -16.4 | -17.5 | -18.7 |
| | 8-Apr-09 | West Bench 2 (Beamsville) | -13.1 | -16.6 | -17.5 |
| | 9-Apr-09 | West Lakeshore (St. Catharines) | -14.2 | -15.7 | -17.9 |
| | 7-Apr-09 | East Central (NOTL – Virgil) | -14.7 | -16.3 | -17.6 |
| | 7-Apr-09 | East Lakeshore (NOTL) | -13.1 | -15.6 | -19.1 |
| Pinot Blanc | 30-Mar-09 | West Central (GRS – Vineland) | -16.9 | -18.6 | -19.4 |

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|-----------------|-----------|----------------------------------|-------|-------|-------|
| Pinot Gris | 6-Apr-09 | West Central (GRS – Vineland) | -11.9 | -16.5 | -17.9 |
| | 7-Apr-09 | East Central (NOTL – Virgil) | -15.0 | -16.0 | -16.9 |
| Pinot Noir | 30-Mar-09 | West Central (GRS – Vineland) | -16.5 | -19.8 | -21.0 |
| | 9-Apr-09 | West Central (St. Catharines) | -15.6 | -17.1 | -18.5 |
| | 8-Apr-09 | West Bench 2 (Beamsville) | -13.9 | -16.8 | -18.3 |
| | 9-Apr-09 | W. Lakeshore (St. Catharines) | -9.3 | -14.7 | -18.2 |
| Riesling | 6-Apr-09 | West Central (GRS – Vineland) | -12.3 | -15.7 | -18.3 |
| | 8-Apr-09 | West Bench 1 (Beamsville) | -16.2 | -17.3 | -18.7 |
| | 7-Apr-09 | East Central (NOTL – Virgil) | -14.5 | -16.4 | -18.0 |
| | 7-Apr-09 | East Lakeshore (NOTL) | -15.4 | -16.7 | -18.1 |
| Sauvignon Blanc | 30-Mar-09 | West Central (GRS – Vineland) | -15.8 | -17.0 | -17.8 |
| | 9-Apr-09 | West Central (St. Catharines) | -10.6 | -12.2 | -14.4 |
| | 1-Apr-09 | West Bench 1 (Beamsville) | -13.8 | -17.8 | -19.3 |
| | 31-Apr-09 | East Central (NOTL – Virgil) | -14.0 | -17.3 | -19.5 |
| | 7-Apr-09 | East Lakeshore (NOTL) | -13.8 | -16.7 | -18.0 |
| Syrah | 1-Apr-09 | West Bench 1 (Beamsville) | -11.7 | -14.3 | -18.0 |
| | 9-Apr-09 | W. Lakeshore (St. Catharines) | -12.0 | -15.3 | -17.2 |
| | 7-Apr-09 | East Lakeshore (NOTL) | -14.7 | -16.7 | -18.2 |
| | | | | | |
| Baco Noir | 9-Apr-09 | West Central (St. Catharines) | -13.0 | -16.2 | -17.4 |
| Vidal | 31-Mar-09 | East Lakeshore (NOTL) | -15.7 | -18.1 | -20.1 |

BUD LT10 is the temperature (degrees Celsius) at which 10% of the primary buds will be killed. BUD LT 50 and BUD LT 90 refer to 50% and 90% bud damage respectively. Vine hardiness ratings are site specific and may vary depending on your specific environmental conditions, overall vine health and viticultural practices. KCMS is not responsible for any damage from the use or misuse of this information.