

## 2013 - 2014 Winter Grape Bud Hardiness Okanagan Valley BC

Location	Variety	Avg LTE/site (Oct 25)	Avg LTE/site (Nov 8)	Avg LTE/site (Nov 22)	Avg LTE/vine (Dec 6)	Avg LTE/site (Dec 20)	Avg LTE/site (Jan 3)	Avg LTE/vine (Jan 17)	Avg LTE/site (Jan 31)	Avg LTE/site (Feb 14)	Avg LTE/site (Feb 28)	Avg LTE/site (Mar 14)	Avg LTE/site (Mar 27)	Avg LTE/site (Apr 11)
Black Sage	Cabernet Franc	-12.9	-17.7	-22.4	-23.8	-23.9	-23.5	-22.6	-23.7					
Oliver, east	Cabernet Franc	-13.1	-18.2	-22.6	-24.4	-24.1	-23.4	-22.9	-23.5					
Osoyoos, northeast	Cabernet Sauvignon	-12.9	-17.0	-22.3	-23.9	-22.8	-22.3	-22.6	-22.7					
Osoyoos, northeast	Cabernet Sauvignon	-11.9	-15.8	-21.7	-23.5	-23.1	-22.7	-22.0	-22.3					
Osoyoos, southeast	Cabernet Sauvignon	-11.8	-17.9	-23.2	-24.1	-22.5	-23.2	-22.9	-23.5					
Black Sage	Cabernet Sauvignon	-11.3	-17.5	-21.3	-24.2	-23.1	-22.5	-21.8	-23.1					
Osoyoos, southeast	Chardonnay	-14.2	-20.7	-23.5	-25.3	-24.6	-24.4	-23.8	-23.7					
Black Sage	Chardonnay	-13.1	-19.1	-22.4	-24.3	-24.4	-23.0	-22.6	-23.2					
Naramata Bench	Chardonnay	-13.6	-18.9	-22.0	-22.4	-23.1	-22.9	-22.3	-23.2					
OK Falls, east	Chardonnay	-14.2	-19.4	-23.8	-24.6	-24.4	-21.9	-22.9	-24.0					
Oliver, east	Chardonnay	-14.4	-19.0	-22.8	-23.7	-24.0	-23.1	-23.5	-23.1					
OK Falls, west	Gewurztraminer	-13.0	-19.2	-22.0	-22.8	-22.9			-23.2					
Oliver, east	Gewurztraminer	-13.2	-19.9	-22.0	-23.2	-22.7	-22.5	-22.0	-22.7					
Oliver, west	Merlot	-11.1	-13.8	-19.3	-22.0	-20.8	-19.2	-21.7	-21.4					
Osoyoos, northeast	Merlot	-12.6	-17.9	-21.3	-22.3	-23.1	-22.2	-22.3	-22.8					
Black Sage	Merlot	-12.5	-19.5	-22.4	-23.3	-22.3	-23.2	-22.8	-23.0					
Black Sage	Pinot blanc	-13.6	-19.3	-24.5	-23.0	-23.4	-22.8	-23.0	-24.3					
Oliver, east	Pinot blanc	-14.2	-20.7	-22.7	-23.1	-24.4	-22.2	-23.1	-24.1					
Black Sage	Pinot gris	-15.1	-20.0	-23.8	-24.3	-25.2	-23.8	-24.4	-22.0					
Oliver, east	Pinot gris	-16.0	-21.7	-25.1	-22.0	-25.3	-24.4	-24.7	-23.3					
Naramata Bench	Pinot gris	-12.2	-16.3	-21.8	-22.7	-23.9	-21.8	-22.6	-23.3					
OK Falls, east	Pinot gris	-16.4	-20.1	-24.0	-24.9	-25.3	-23.4	-23.7	-23.6					
Oliver, east	Pinot gris	-13.9	-19.5	-22.2	-23.6	-23.4	-22.2	-22.6	-24.4					
Black Sage	Pinot noir	-14.6	-19.3	-23.7	-25.1	-24.2	-24.1	-23.7	-24.1					
Kelowna	Pinot noir	-14.0	-20.0	-22.6	-23.7	-24.4	-23.1	-22.9	-23.0					
Osoyoos, northeast	Pinot noir	-14.6	-20.6	-23.0	-23.2	-24.4	-23.6	-24.4	-23.3					
Black Sage	Riesling	-13.4	-21.5	-22.8	-25.1	-24.1	-24.0	-23.7	-23.8					
West Kelowna	Riesling	-11.8	-17.9	-20.7	-23.3	-22.2	-22.3	-21.7	-22.6					
Oliver, east	Riesling	-16.4	-19.8	-23.1	-22.6	-22.0	-22.4	-23.2	-23.1					
Black Sage	Sauvignon blanc	-12.1	-17.3	-21.4	-23.2	-21.8	-21.6	-21.5	-22.0					
Oliver, east	Sauvignon blanc	-15.2	-18.9	-22.5	-23.5	-23.1	-22.1	-22.0	-22.4					
Oliver, east	Sauvignon blanc	-12.9	-19.9	-22.9	-24.1	-23.1	-21.9	-22.9	-23.2					
Osoyoos, southeast	Shiraz	-13.1	-17.1	-22.7	-23.8	-23.7	-23.5	-24.0	-23.3					
Black Sage	Shiraz	-12.5	-16.2	-20.2	-22.9	-23.2	-21.8	-21.7	-23.4					
Osoyoos, northeast	Shiraz	-11.3	-15.2	-20.4	-21.6	-21.9	-21.1	-21.0	-22.0					
Osoyoos, northeast	Shiraz	-12.9	-16.0	-18.8	-21.4	-21.0	-21.1	-21.8	-21.8					
<b>Average Bud Hardiness (all sites, all varieties)</b>		<b>-13.4</b>	<b>-18.6</b>	<b>-22.3</b>	<b>-23.5</b>	<b>-23.4</b>	<b>-22.7</b>	<b>-22.8</b>	<b>-23.1</b>					

LTE - Lethal Temperature Exotherm (°C)

Average LTE/site is the mean temperature for bud death from 3 vines at selected sites in the Okanagan Valley

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