

Grapevine Bud Hardiness in the Okanagan Valley, BC, 2012-2013. Carl Bogdanoff, Agriculture and Agri-Food Canada, Summerland, BC.

Location	Variety	Avg LTE/site (Nov 1)	Avg LTE/site (Nov 14)	Avg LTE/site (Nov 28)	Avg LTE/site (Dec 12)	Avg LTE/site (Dec 27)	Avg LTE/site (Jan 9)	Avg LTE/site (Jan 23)	Avg LTE/site (Feb 7)	Avg LTE/site (Feb 21)	Avg LTE/site (Mar 7)	Avg LTE/site (Mar 21)	Avg LTE/site (Apr 3)
Black Sage	Cabernet Franc		-18.1	-21.4	-22.6	-23.3	-24.1	-24.9	-25.0	-23.3	-19.3	-14.0	-9.4
Oliver, east	Cabernet Franc	-13.7	-19.1	-21.9	-22.7	-22.6	-23.7	-24.9	-22.9	-23.5	-21.6	-18.2	-11.2
Osoyoos, northeast	Cabernet Sauvignon	-12.0	-18.1	-20.5	-21.7	-22.8	-23.3	-23.9	-22.1	-22.8	-22.2	na	na
Osoyoos, northeast	Cabernet Sauvignon	-13.5	-16.5	-18.1	-20.5	-21.6	-21.0	-22.0	-21.6	-21.7	-20.8	-18.1	-10.8
Osoyoos, southeast	Cabernet Sauvignon		-18.0	-18.3	-21.5	-22.8	-21.8	-24.4	-22.4	-22.2	-20.1	-16.7	-9.5
Black Sage	Cabernet Sauvignon		-17.8	-21.0	-21.8	-22.5	-23.1	-24.4	-23.5	-23.1	-21.4	-19.5	-12.6
Osoyoos, southeast	Chardonnay		-21.4	-23.0	-23.2	-24.0	-24.1	-25.7	-25.0	-24.0	-19.4	-16.5	-10.6
Black Sage	Chardonnay		-19.0	-22.5	-22.4	-23.4	-24.5	-24.4	-23.8	-22.7	-20.3	-15.8	-9.2
Naramata Bench	Chardonnay		-18.8	-21.6	-21.9	-22.0	-22.3	-24.3	-22.8	-22.2	-19.2	-14.8	-9.2
OK Falls, east	Chardonnay	-17.5	-21.7	-23.1	-23.0	-22.8	-22.7	-25.3	-22.3	-22.6	-19.8	-16.5	-11.0
Oliver, east	Chardonnay	-17.3	-21.5	-21.3	-22.8	-24.0	-24.2	-23.9	-24.1	-21.8	-20.7	-16.9	-9.7
OK Falls, west	Gewurztraminer	-15.5	-20.7	-21.7	-21.9	-22.4	-21.9	-23.8	-21.1	-21.4	-18.1	-14.0	-7.9
Oliver, east	Gewurztraminer	-14.0	-19.5	-20.5	-21.9	-21.8	-22.3	-23.0	-22.4	-22.4	-20.3	-15.5	-8.2
Oliver, west	Merlot		-15.3	-19.7	-17.7	-19.8	-21.2	-22.5	-21.6	-21.9	-18.7	-15.0	-11.2
Osoyoos, northeast	Merlot	-14.6	-19.7	-21.3	-22.4	-23.7	-22.5	-24.1	-22.9	-22.9	-21.4	-18.6	-10.7
Black Sage	Merlot	-12.0	-18.8	-21.6	-22.0	-21.7	-22.6	-23.1	-22.3	-22.5	-20.2	-17.2	-8.9
Black Sage	Pinot blanc		-19.6	-22.3	-22.1	-23.3	-23.7	-24.8	-24.2	-23.2	-20.5	-17.6	-10.7
Oliver, east	Pinot blanc	-15.4	-20.8	-22.4	-23.5	-23.5	-23.3	-24.5	-24.2	-22.5	-21.0	-16.9	-8.7
Black Sage	Pinot gris		-19.5	-22.0	-22.5	-23.2	-22.7	-25.7	-24.0	-23.5	-21.1	-17.8	-10.9
Oliver, east	Pinot gris		-21.1	-22.1	-22.1	-23.9	-23.1	-24.9	-24.4	-23.6	-21.0	-18.8	-10.7
Naramata Bench	Pinot gris		-18.5	-20.5	-20.6	-21.2	-22.4	-23.0	-22.7	-21.9	-18.4	-14.8	-9.3
OK Falls, east	Pinot gris	-14.0	-20.8	-22.5	-23.5	-24.7	-24.2	-24.6	-23.8	-22.1	-18.0	-15.0	-10.0
Oliver, east	Pinot gris	-15.3	-20.8	-22.7	-23.3	-23.4	-24.4	-24.9	-23.8	-23.7	-20.8	-17.3	-9.8
Black Sage	Pinot noir		-19.7	-21.8	-21.9	-23.0	-24.2	-24.6	-22.9	-23.5	-22.0	-17.9	-10.6
Kelowna	Pinot noir		-20.4	-22.5	-21.5	-23.1	-22.8	-23.4	-23.4	na	-18.3	-15.7	-10.7
Osoyoos, northeast	Pinot noir	-15.6	-19.5	-21.2	-22.5	-23.8	-23.2	-25.0	-22.7	-23.9	-20.8	-17.7	-11.6
Black Sage	Riesling		-20.1	-22.8	-22.1	-22.6	-23.4	-24.4	-24.1	-23.6	-22.2	-16.8	-12.6
West Kelowna	Riesling		-18.8	-20.2	-21.2	-21.7	-22.1	-23.8	-22.0	na	-20.2	-15.5	-9.3
Oliver, east	Riesling	-16.1	-19.9	-20.9	-23.2	-22.1	-22.7	-22.8	-20.7	-22.0	-21.1	-20.3	-11.0
Black Sage	Sauvignon blanc		-16.5	-20.1	-21.1	-21.9	-21.6	-22.4	-21.3	-21.6	-19.2	-15.0	-8.8
Oliver, east	Sauvignon blanc	-14.5	-19.7	-20.7	-21.6	-21.6	-23.6	-23.9	-21.6	-22.9	-20.9	-17.1	-9.2
Oliver, east	Sauvignon blanc	-14.2	-20.4	-21.3	-22.5	-22.3	-22.9	-23.6	-22.8	-22.7	-21.5	-16.9	-9.7
Osoyoos, southeast	Shiraz		-17.9	-21.0	-21.0	-22.4	-22.2	-24.5	-23.7	-21.9	-20.6	-15.5	-12.6
Black Sage	Shiraz		-18.0	-21.3	-20.3	-20.6	-22.3	-24.7	-21.9	-23.3	-20.5	-16.8	-12.3
Osoyoos, northeast	Shiraz	-11.8	-15.9	-18.3	-20.3	-20.9	-20.8	-22.6	-21.5	-21.0	-18.9	-14.9	-9.6
Osoyoos, northeast	Shiraz	-12.4	-16.9	-18.1	-19.6	-20.8	-21.4	-22.3	-21.2	-21.8	-20.1	-16.1	-9.6
<b>Bud Hardiness (all sites, all varieties)</b>		<b>-14.4</b>	<b>-19.1</b>	<b>-21.2</b>	<b>-21.8</b>	<b>-22.5</b>	<b>-22.8</b>	<b>-24.0</b>	<b>-22.9</b>	<b>-22.6</b>	<b>-20.3</b>	<b>-16.6</b>	<b>-10.2</b>

LTE: Lethal temperature exotherm (°C). AVG LTE: Average lethal temperature exotherm for buds collected from 3 vines at selected sites in the Okanagan Valley.