

Grapevine Bud Hardiness in the Okanagan Valley, BC, 2015-2016. Carl Bogdanoff, Agriculture and Agri-Food Canada, Summlerand, BC.

	Variety	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date	Avg LTE	sample date		
Osoyoos, southeast	Cabernet Franc			-16.0	5-Nov	-20.5	19-Nov	-22.4	3-Dec	-23.7	17-Dec			-22.3	14-Jan			-22.7	11-Feb	-18.4	3-Mar	-15.9	17-Mar	-10.7	31-Mar
Black Sage	Cabernet Franc	-14.1	27-Oct	-19.1	10-Nov	-22.1	24-Nov	-22.0	8-Dec	-23.4	22-Dec	-25.2	5-Jan	-23.3	19-Jan	-23.5	2-Feb	-21.6	16-Feb	-18.2	1-Mar	-12.5	15-Mar	-11.3	29-Mar
Oliver east	Cabernet Franc	-14.4	27-Oct	-18.1	10-Nov	-22.5	24-Nov	-21.8	8-Dec	-24.7	22-Dec	-25.2	5-Jan	-23.8	19-Jan	-24.3	2-Feb	-20.7	16-Feb	-19.4	1-Mar	-17.4	15-Mar	-12.2	29-Mar
Osoyoos, southeast	Cabernet Sauvignon			-17.2	10-Nov	-19.3	24-Nov	-21.0	8-Dec	-21.6	22-Dec	-24.1	5-Jan	-22.0	19-Jan	-22.3	2-Feb	-21.8	16-Feb	-18.6	1-Mar	-14.7	15-Mar	-11.4	29-Mar
Black Sage	Cabernet Sauvignon	-13.0	27-Oct	-16.6	10-Nov	-20.5	24-Nov	-20.6	8-Dec	-23.3	22-Dec	-23.9	5-Jan	-23.1	19-Jan	-21.4	2-Feb	-22.9	16-Feb	-18.9	1-Mar	-17.4	15-Mar	-11.2	29-Mar
Osoyoos northeast	Cabernet Sauvignon	-14.3	27-Oct	-18.6	10-Nov	-21.2	24-Nov	-20.8	8-Dec	-22.2	22-Dec	-24.5	5-Jan	-22.6	19-Jan	-23.2	2-Feb	-22.7	16-Feb	-19.0	1-Mar	-16.6	15-Mar	-11.4	29-Mar
Osoyoos northeast	Cabernet Sauvignon	-12.7	27-Oct	-17.6	10-Nov	-20.9	24-Nov	-21.8	8-Dec	-23.3	22-Dec	-24.4	5-Jan	-22.8	19-Jan	-22.9	2-Feb	-20.4	16-Feb	-19.8	1-Mar	-17.9	15-Mar	-14.2	29-Mar
Osoyoos, southeast	Chardonnay			-20.7	5-Nov	-22.2	19-Nov	-22.6	3-Dec	-23.9	17-Dec			-23.2	14-Jan			-20.4	11-Feb	-18.0	3-Mar	-16.1	17-Mar	-10.0	31-Mar
Black Sage	Chardonnay	-15.0	22-Oct	-19.0	5-Nov	-22.0	19-Nov	-23.0	3-Dec	-23.7	17-Dec			-23.2	14-Jan			-21.8	11-Feb	-18.1	3-Mar	-15.3	17-Mar	-10.6	31-Mar
Naramata bench	Chardonnay			-20.2	10-Nov	-22.1	24-Nov	-22.5	8-Dec	-22.0	22-Dec	-23.4	5-Jan	-23.2	19-Jan	-23.1	2-Feb	-20.6	16-Feb	-19.3	1-Mar	-15.5	15-Mar		
OK Falls, east	Chardonnay	-15.7	27-Oct	-22.0	10-Nov	-22.8	24-Nov	-23.5	8-Dec	-21.8	22-Dec	-24.3	5-Jan	-23.3	19-Jan	-22.3	2-Feb	-22.5	16-Feb	-16.6	1-Mar	-12.7	15-Mar	-12.0	29-Mar
Oliver east	Chardonnay	-16.5	27-Oct	-20.7	10-Nov	-23.3	24-Nov	-22.2	8-Dec	-23.4	22-Dec	-25.0	5-Jan	-23.9	19-Jan	-23.2	2-Feb	-24.3	16-Feb	-18.0	1-Mar	-15.3	15-Mar	-12.0	29-Mar
Kelowna	Gewurztraminer			-17.6	10-Nov	-20.2	24-Nov	-21.2	8-Dec	-21.1	22-Dec	-23.1	5-Jan	-21.6	19-Jan	-21.7	2-Feb	-22.2	16-Feb	-16.8	1-Mar	-13.0	15-Mar		
OK Falls, west	Gewurztraminer	-13.9	27-Oct	-19.6	10-Nov	-22.0	24-Nov	-21.6	8-Dec	-22.1	22-Dec	-23.7	5-Jan	-22.6	19-Jan	-23.5	2-Feb	-19.6	16-Feb	-18.4	1-Mar	-13.8	15-Mar	-11.7	29-Mar
Oliver east	Gewurztraminer	-16.7	27-Oct	-21.1	10-Nov	-22.6	24-Nov	-22.0	8-Dec	-22.6	22-Dec	-25.1	5-Jan	-23.8	19-Jan	-23.6	2-Feb	-21.2	16-Feb	-19.3	1-Mar	-15.3	15-Mar	-12.1	29-Mar
Osoyoos west	Merlot			-17.0	5-Nov	-20.1	19-Nov	-19.6	3-Dec	-22.8	17-Dec			-21.3	14-Jan			-23.1	11-Feb	-18.2	3-Mar	-15.9	17-Mar	-10.7	31-Mar
Oliver, west	Merlot	-12.8	27-Oct	-17.4	10-Nov	-20.3	24-Nov	-19.9	8-Dec	-22.5	22-Dec	-24.0	5-Jan	-21.5	19-Jan	-22.0	2-Feb	-21.8	16-Feb	-18.2	1-Mar	-15.1	15-Mar	-11.0	29-Mar
Osoyoos northeast	Merlot	-15.9	27-Oct	-19.7	10-Nov	-22.2	24-Nov	-22.2	8-Dec	-23.2	22-Dec	-24.0	5-Jan	-24.1	19-Jan	-23.1	2-Feb	-21.6	16-Feb	-20.3	1-Mar	-15.9	15-Mar	-13.0	29-Mar
Black Sage	Merlot	-14.4	27-Oct	-19.3	10-Nov	-21.1	24-Nov	-22.0	8-Dec	-21.9	22-Dec	-23.7	5-Jan	-21.7	19-Jan	-22.4	2-Feb	-22.4	16-Feb	-18.3	1-Mar	-14.5	15-Mar	-11.2	29-Mar
Black Sage	Pinot blanc	-14.0	27-Oct	-20.0	10-Nov	-22.1	24-Nov	-22.3	8-Dec	-23.3	22-Dec	-24.4	5-Jan	-23.5	19-Jan	-24.1	2-Feb	-23.8	16-Feb	-20.3	1-Mar	-17.4	15-Mar	-11.8	29-Mar
Oliver east	Pinot blanc	-18.3	27-Oct	-23.3	10-Nov	-23.8	24-Nov	-23.6	8-Dec	-23.1	22-Dec	-26.2	5-Jan	-24.1	19-Jan	-24.1	2-Feb	-22.5	16-Feb	-20.2	1-Mar	-17.0	15-Mar		
Oliver east	Pinot gris	-18.6	22-Oct	-21.0	5-Nov	-22.6	19-Nov	-23.8	3-Dec	-25.5	17-Dec			-24.5	14-Jan			-22.9	11-Feb	-19.3	3-Mar	-17.7	17-Mar	-12.8	31-Mar
Black Sage	Pinot gris	-15.2	27-Oct	-20.7	10-Nov	-23.6	24-Nov	-23.1	8-Dec	-23.0	22-Dec	-25.2	5-Jan	-24.4	19-Jan	-24.9	2-Feb	-22.1	16-Feb	-20.0	1-Mar	-17.3	15-Mar	-13.8	29-Mar
Naramata bench	Pinot gris			-18.3	10-Nov	-21.5	24-Nov	-21.2	8-Dec	-21.7	22-Dec	-23.0	5-Jan	-23.1	19-Jan	-22.7	2-Feb	-23.5	16-Feb	-17.2	1-Mar	-12.2	15-Mar		
OK Falls, east	Pinot gris	-17.2	27-Oct	-22.3	10-Nov	-23.6	24-Nov	-23.4	8-Dec	-23.9	22-Dec	-25.5	5-Jan	-22.7	19-Jan	-23.4	2-Feb	-22.6	16-Feb	-18.1	1-Mar	-13.8	15-Mar	-12.0	29-Mar
Oliver east	Pinot gris	-16.7	27-Oct	-21.8	10-Nov	-23.8	24-Nov	-23.9	8-Dec	-23.4	22-Dec	-26.2	5-Jan	-24.0	19-Jan	-24.1	2-Feb	-23.3	16-Feb	-19.2	1-Mar	-15.8	15-Mar	-12.8	29-Mar
Naramata bench	Pinot noir			-17.2	10-Nov	-21.7	24-Nov	-22.5	8-Dec	-22.2	22-Dec	-24.1	5-Jan	-23.2	19-Jan	-23.8	2-Feb	-20.6	16-Feb	-17.2	1-Mar	-15.4	15-Mar		
Black Sage	Pinot noir	-16.4	27-Oct	-20.2	10-Nov	-23.9	24-Nov	-23.9	8-Dec	-24.6	22-Dec	-25.8	5-Jan	-24.7	19-Jan	-24.0	2-Feb	-21.9	16-Feb	-19.3	1-Mar	-14.7	15-Mar	-13.4	29-Mar
Kelowna	Pinot noir			-20.9	10-Nov	-22.7	24-Nov	-21.7	8-Dec	-22.6	22-Dec	-24.1	5-Jan	-23.3	19-Jan	-23.3	2-Feb	-20.2	16-Feb	-17.6	1-Mar	-15.3	15-Mar		
Osoyoos northeast	Pinot noir	-15.9	27-Oct	-21.3	10-Nov	-22.7	24-Nov	-23.3	8-Dec	-23.5	22-Dec	-25.3	5-Jan	-23.4	19-Jan	-23.1	2-Feb	-22.0	16-Feb	-21.0	1-Mar	-16.0	15-Mar	-13.3	29-Mar
Naramata bench	Riesling			-19.0	10-Nov	-22.9	24-Nov	-23.7	8-Dec	-23.9	22-Dec	-26.0	5-Jan	-24.5	19-Jan	-23.6	2-Feb	-22.8	16-Feb	-17.8	1-Mar	-12.3	15-Mar		
Black Sage	Riesling	-16.1	27-Oct	-19.3	10-Nov	-22.7	24-Nov	-22.8	8-Dec	-23.1	22-Dec	-23.5	5-Jan	-24.2	19-Jan	-23.7	2-Feb	-22.6	16-Feb	-21.2	1-Mar	-19.2	15-Mar	-12.7	29-Mar
Black Sage	Riesling	-17.2	27-Oct	-21.4	10-Nov	-23.7	24-Nov	-24.5	8-Dec	-24.7	22-Dec	-24.5	5-Jan	-25.2	19-Jan	-25.0	2-Feb	-22.8	16-Feb	-23.0	1-Mar	-19.1	15-Mar	-13.3	29-Mar
West Kelowna	Riesling			-19.9	10-Nov	-23.3	24-Nov	-23.2	8-Dec	-23.8	22-Dec	-25.3	5-Jan	-24.0	19-Jan	-23.3	2-Feb	-21.9	16-Feb	-19.8	1-Mar	-16.2	15-Mar		
Oliver east	Riesling	-17.7	27-Oct	-21.2	10-Nov	-23.5	24-Nov	-22.3	8-Dec	-24.2	22-Dec	-26.1	5-Jan	-24.2	19-Jan	-24.5	2-Feb	-22.2	16-Feb	-22.0	1-Mar	-17.9	15-Mar	-16.2	29-Mar
Oliver east	Sauvignon blanc	-14.3	27-Oct	-18.8	10-Nov	-21.8	24-Nov	-22.0	8-Dec	-22.7	22-Dec	-24.1	5-Jan	-22.5	19-Jan	-22.1	2-Feb	-21.8	16-Feb	-20.9	1-Mar	-17.4	15-Mar	-12.7	29-Mar
Oliver east	Sauvignon blanc	-14.7	27-Oct	-20.3	10-Nov	-22.2	24-Nov	-22.0	8-Dec	-22.6	22-Dec	-24.5	5-Jan	-22.9	19-Jan	-22.3	2-Feb	-23.7	16-Feb	-20.1	1-Mar		15-Mar		
Osoyoos, southeast	Shiraz			-15.6	5-Nov	-19.5	19-Nov	-21.4	3-Dec	-22.5	17-Dec			-21.0	14-Jan			-21.9	11-Feb	-18.2	3-Mar	-15.9	17-Mar	-10.6	31-Mar
Osoyoos, southeast	Shiraz			-13.5	5-Nov	-18.5	19-Nov	-20.8	3-Dec	-22.3	17-Dec			-20.9	14-Jan			-22.2	11-Feb	-18.4	3-Mar	-15.6	17-Mar	-9.9	31-Mar
Osoyoos, southeast	Shiraz			-19.0	10-Nov	-21.1	24-Nov	-21.3	8-Dec	-21.7	22-Dec	-24.6	5-Jan	-23.3	19-Jan	-22.7	2-Feb	-22.0	16-Feb	-20.4	1-Mar	-17.2	15-Mar	-12.1	29-Mar
Black Sage	Shiraz	-12.9	27-Oct	-18.5	10-Nov	-20.8	24-Nov	-19.6	8-Dec	-23.1	22-Dec	-23.0	5-Jan	-23.0	19-Jan	-22.3	2-Feb	-22.0	16-Feb	-20.9	1-Mar	-16.4	15-Mar	-13.4	29-Mar
Osoyoos northeast	Shiraz	-12.8	27-Oct	-15.4	10-Nov	-20.3	24-Nov	-20.3	8-Dec	-22.0	22-Dec	-23.6	5-Jan	-21.3	19-Jan	-22.1	2-Feb	-22.5	16-Feb	-18.5	1-Mar	-14.4	15-Mar	-11.7	29-Mar
Osoyoos northeast	Shiraz	-14.5	27-Oct	-17.6	10-Nov	-20.8	24-Nov	-20.4	8-Dec	-22.5	22-Dec	-23.7	5-Jan	-22.6	19-Jan	-22.1	2-Feb	-23.4	16-Feb	-19.2	1-Mar	-15.1	15-Mar	-12.0	29-Mar
Osoyoos west	Viognier			-17.2	5-Nov	-22.2	19-Nov	-22.7	3-Dec	-24.5	17-Dec			-22.0	14-Jan			-21.6	11-Feb	-19.1	3-Mar	-16.4	17-Mar	-11.0	31-Mar
<b>Bud Hardness (all sites, all varieties)</b>		<b>-15.2</b>		<b>-19.1</b>		<b>-21.9</b>		<b>-22.1</b>		<b>-23.0</b>		<b>-24.5</b>		<b>-23.1</b>		<b>-23.2</b>		<b>-22.1</b>		<b>-19.1</b>		<b>-15.7</b>		<b>-12.1</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.