

## 2015 - 2016 Winter Grape Bud Hardiness Okanagan Valley BC

Location	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	Avg LTE	sample date
Osoyoos, southeast	Cabernet Franc			-16.0	05-Nov	-20.5	19-Nov	-22.4	03-Dec	-23.7	17-Dec			-22.3	14-Jan			-22.7	11-Feb	-18.4	03-Mar				
Black Sage	Cabernet Franc	-14.1	27-Oct	-19.1	10-Nov	-22.1	24-Nov	-22.0	08-Dec	-23.4	22-Dec	-25.2	05-Jan	-23.3	19-Jan	-23.5	02-Feb	-21.6	16-Feb	-18.2	01-Mar				
Oliver east	Cabernet Franc	-14.4	27-Oct	-18.1	10-Nov	-22.5	24-Nov	-21.8	08-Dec	-24.7	22-Dec	-25.2	05-Jan	-23.8	19-Jan	-24.3	02-Feb	-20.7	16-Feb	-19.4	01-Mar				
Osoyoos, southeast	Cabernet Sauvignon			-17.2	10-Nov	-19.3	24-Nov	-21.0	08-Dec	-21.6	22-Dec	-24.1	05-Jan	-22.0	19-Jan	-22.3	02-Feb	-21.8	16-Feb	-18.6	01-Mar				
Black Sage	Cabernet Sauvignon	-13.0	27-Oct	-16.6	10-Nov	-20.5	24-Nov	-20.6	08-Dec	-23.3	22-Dec	-23.9	05-Jan	-23.1	19-Jan	-21.4	02-Feb	-22.9	16-Feb	-18.9	01-Mar				
Osoyoos northeast	Cabernet Sauvignon	-14.3	27-Oct	-18.6	10-Nov	-21.2	24-Nov	-20.8	08-Dec	-22.2	22-Dec	-24.5	05-Jan	-22.6	19-Jan	-23.2	02-Feb	-22.7	16-Feb	-19.0	01-Mar				
Osoyoos northeast	Cabernet Sauvignon	-12.7	27-Oct	-17.6	10-Nov	-20.9	24-Nov	-21.8	08-Dec	-23.3	22-Dec	-24.4	05-Jan	-22.8	19-Jan	-22.9	02-Feb	-20.4	16-Feb	-19.8	01-Mar				
Osoyoos, southeast	Chardonnay			-20.7	05-Nov	-22.2	19-Nov	-22.6	03-Dec	-23.9	17-Dec			-23.2	14-Jan			-20.4	11-Feb	-18.0	03-Mar				
Black Sage	Chardonnay	-15.0	22-Oct	-19.0	05-Nov	-22.0	19-Nov	-23.0	03-Dec	-23.7	17-Dec			-23.2	14-Jan			-21.8	11-Feb	-18.1	03-Mar				
Naramata bench	Chardonnay			-20.2	10-Nov	-22.1	24-Nov	-22.5	08-Dec	-22.0	22-Dec	-23.4	05-Jan	-23.2	19-Jan	-23.1	02-Feb	-20.6	16-Feb	-19.3	01-Mar				
OK Falls, east	Chardonnay	-15.7	27-Oct	-22.0	10-Nov	-22.8	24-Nov	-23.5	08-Dec	-21.8	22-Dec	-24.3	05-Jan	-23.3	19-Jan	-22.3	02-Feb	-22.5	16-Feb	-16.6	01-Mar				
Oliver east	Chardonnay	-16.5	27-Oct	-20.7	10-Nov	-23.3	24-Nov	-22.2	08-Dec	-23.4	22-Dec	-25.0	05-Jan	-23.9	19-Jan	-23.2	02-Feb	-24.3	16-Feb	-18.0	01-Mar				
Kelowna	Gewurztraminer			-17.6	10-Nov	-20.2	24-Nov	-21.2	08-Dec	-21.1	22-Dec	-23.1	05-Jan	-21.6	19-Jan	-21.7	02-Feb	-22.2	16-Feb	-16.8	01-Mar				
OK Falls, west	Gewurztraminer	-13.9	27-Oct	-19.6	10-Nov	-22.0	24-Nov	-21.6	08-Dec	-22.1	22-Dec	-23.7	05-Jan	-22.6	19-Jan	-23.5	02-Feb	-19.6	16-Feb	-18.4	01-Mar				
Oliver east	Gewurztraminer	-16.7	27-Oct	-21.1	10-Nov	-22.6	24-Nov	-22.0	08-Dec	-22.6	22-Dec	-25.1	05-Jan	-23.8	19-Jan	-23.6	02-Feb	-21.2	16-Feb	-19.3	01-Mar				
Osoyoos west	Merlot			-17.0	05-Nov	-20.1	19-Nov	-19.6	03-Dec	-22.8	17-Dec			-21.3	14-Jan			-23.1	11-Feb	-18.2	03-Mar				
Oliver, west	Merlot	-12.8	27-Oct	-17.4	10-Nov	-20.3	24-Nov	-19.9	08-Dec	-22.5	22-Dec	-24.0	05-Jan	-21.5	19-Jan	-22.0	02-Feb	-21.8	16-Feb	-18.2	01-Mar				
Osoyoos northeast	Merlot	-15.9	27-Oct	-19.7	10-Nov	-22.2	24-Nov	-22.2	08-Dec	-23.2	22-Dec	-24.0	05-Jan	-24.1	19-Jan	-23.1	02-Feb	-21.6	16-Feb	-20.3	01-Mar				
Black Sage	Merlot	-14.4	27-Oct	-19.3	10-Nov	-21.1	24-Nov	-22.0	08-Dec	-21.9	22-Dec	-23.7	05-Jan	-21.7	19-Jan	-22.4	02-Feb	-22.4	16-Feb	-18.3	01-Mar				
Black Sage	Pinot blanc	-14.0	27-Oct	-20.0	10-Nov	-22.1	24-Nov	-22.3	08-Dec	-23.3	22-Dec	-24.4	05-Jan	-23.5	19-Jan	-24.1	02-Feb	-23.8	16-Feb	-20.3	01-Mar				
Oliver east	Pinot blanc	-18.3	27-Oct	-23.3	10-Nov	-23.8	24-Nov	-23.6	08-Dec	-23.1	22-Dec	-26.2	05-Jan	-24.1	19-Jan	-24.1	02-Feb	-22.5	16-Feb	-20.2	01-Mar				
Oliver east	Pinot gris	-18.6	22-Oct	-21.0	05-Nov	-22.6	19-Nov	-23.8	03-Dec	-25.5	17-Dec			-24.5	14-Jan			-22.9	11-Feb	-19.3	03-Mar				
Black Sage	Pinot gris	-15.2	27-Oct	-20.7	10-Nov	-23.6	24-Nov	-23.1	08-Dec	-23.0	22-Dec	-25.2	05-Jan	-24.4	19-Jan	-24.9	02-Feb	-22.1	16-Feb	-20.0	01-Mar				
Naramata bench	Pinot gris			-18.3	10-Nov	-21.5	24-Nov	-21.2	08-Dec	-21.7	22-Dec	-23.0	05-Jan	-23.1	19-Jan	-22.7	02-Feb	-23.5	16-Feb	-17.2	01-Mar				
OK Falls, east	Pinot gris	-17.2	27-Oct	-22.3	10-Nov	-23.6	24-Nov	-23.4	08-Dec	-23.9	22-Dec	-25.5	05-Jan	-22.7	19-Jan	-23.4	02-Feb	-22.6	16-Feb	-18.1	01-Mar				
Oliver east	Pinot gris	-16.7	27-Oct	-21.8	10-Nov	-23.8	24-Nov	-23.9	08-Dec	-23.4	22-Dec	-26.2	05-Jan	-24.0	19-Jan	-24.1	02-Feb	-23.3	16-Feb	-19.2	01-Mar				
Naramata bench	Pinot noir			-17.2	10-Nov	-21.7	24-Nov	-22.5	08-Dec	-22.2	22-Dec	-24.1	05-Jan	-23.2	19-Jan	-23.8	02-Feb	-20.6	16-Feb	-17.2	01-Mar				
Black Sage	Pinot noir	-16.4	27-Oct	-20.2	10-Nov	-23.9	24-Nov	-23.9	08-Dec	-24.6	22-Dec	-25.8	05-Jan	-24.7	19-Jan	-24.0	02-Feb	-21.9	16-Feb	-19.3	01-Mar				
Kelowna	Pinot noir			-20.9	10-Nov	-22.7	24-Nov	-21.7	08-Dec	-22.6	22-Dec	-24.1	05-Jan	-23.3	19-Jan	-23.3	02-Feb	-20.2	16-Feb	-17.6	01-Mar				
Osoyoos northeast	Pinot noir	-15.9	27-Oct	-21.3	10-Nov	-22.7	24-Nov	-23.3	08-Dec	-23.5	22-Dec	-25.3	05-Jan	-23.4	19-Jan	-23.1	02-Feb	-22.0	16-Feb	-21.0	01-Mar				
Naramata bench	Riesling			-19.0	10-Nov	-22.9	24-Nov	-23.7	08-Dec	-23.9	22-Dec	-26.0	05-Jan	-24.5	19-Jan	-23.6	02-Feb	-22.8	16-Feb	-17.8	01-Mar				
Black Sage	Riesling	-16.1	27-Oct	-19.3	10-Nov	-22.7	24-Nov	-22.8	08-Dec	-23.1	22-Dec	-23.5	05-Jan	-24.2	19-Jan	-23.7	02-Feb	-22.6	16-Feb	-21.2	01-Mar				
Black Sage	Riesling	-17.2	27-Oct	-21.4	10-Nov	-23.7	24-Nov	-24.5	08-Dec	-24.7	22-Dec	-24.5	05-Jan	-25.2	19-Jan	-25.0	02-Feb	-22.8	16-Feb	-23.0	01-Mar				
West Kelowna	Riesling			-19.9	10-Nov	-23.3	24-Nov	-23.2	08-Dec	-23.8	22-Dec	-25.3	05-Jan	-24.0	19-Jan	-23.3	02-Feb	-21.9	16-Feb	-19.8	01-Mar				
Oliver east	Riesling	-17.7	27-Oct	-21.2	10-Nov	-23.5	24-Nov	-22.3	08-Dec	-24.2	22-Dec	-26.1	05-Jan	-24.2	19-Jan	-24.5	02-Feb	-22.2	16-Feb	-22.0	01-Mar				
Oliver east	Sauvignon blanc	-14.3	27-Oct	-18.8	10-Nov	-21.8	24-Nov	-22.0	08-Dec	-22.7	22-Dec	-24.1	05-Jan	-22.5	19-Jan	-22.1	02-Feb	-21.8	16-Feb	-20.9	01-Mar				
Oliver east	Sauvignon blanc	-14.7	27-Oct	-20.3	10-Nov	-22.2	24-Nov	-22.0	08-Dec	-22.6	22-Dec	-24.5	05-Jan	-22.9	19-Jan	-22.3	02-Feb	-23.7	16-Feb	-20.1	01-Mar				
Osoyoos, southeast	Shiraz			-15.6	05-Nov	-19.5	19-Nov	-21.4	03-Dec	-22.5	17-Dec			-21.0	14-Jan			-21.9	11-Feb	-18.2	03-Mar				
Osoyoos, southeast	Shiraz			-13.5	05-Nov	-18.5	19-Nov	-20.8	03-Dec	-22.3	17-Dec			-20.9	14-Jan			-22.2	11-Feb	-18.4	03-Mar				
Osoyoos, southeast	Shiraz			-19.0	10-Nov	-21.1	24-Nov	-21.3	08-Dec	-21.7	22-Dec	-24.6	05-Jan	-23.3	19-Jan	-22.7	02-Feb	-21.0	16-Feb	-20.4	01-Mar				
Black Sage	Shiraz	-12.9	27-Oct	-18.5	10-Nov	-20.8	24-Nov	-19.6	08-Dec	-23.1	22-Dec	-23.0	05-Jan	-23.0	19-Jan	-22.3	02-Feb	-22.0	16-Feb	-20.9	01-Mar				
Osoyoos northeast	Shiraz	-12.8	27-Oct	-15.4	10-Nov	-20.3	24-Nov	-20.3	08-Dec	-22.0	22-Dec	-23.6	05-Jan	-21.3	19-Jan	-22.1	02-Feb	-22.5	16-Feb	-18.5	01-Mar				
Osoyoos northeast	Shiraz	-14.5	27-Oct	-17.6	10-Nov	-20.8	24-Nov	-20.4	08-Dec	-22.5	22-Dec	-23.7	05-Jan	-22.6	19-Jan	-22.1	02-Feb	-23.4	16-Feb	-19.2	01-Mar				
Osoyoos west	Viognier			-17.2	05-Nov	-22.2	19-Nov	-22.7	03-Dec	-24.5	17-Dec			-22.0	14-Jan			-21.6	11-Feb	-19.1	03-Mar				
<b>Average Bud Hardiness (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>

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

Carl Bogdanoff - Summerland RDC Wine Grape Research