

2016 - 2017 Winter Grape Bud Hardiness Okanagan Valley 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	-14.8	03-Nov	-20.8	17-Nov	-22.8	01-Dec	-26.6	15-Dec			-26.4	12-Jan			-25.6	11-Feb	-23.7	02-Mar	-19.0	16-Mar	-13.7	30-Mar
Black Sage	Cabernet Franc	-16.1	08-Nov	-21.0	22-Nov	-24.3	06-Dec	-25.4	20-Dec	-26.1	03-Jan	-24.4	17-Jan	-24.8	31-Jan	-24.9	14-Feb	-23.9	28-Feb	-21.2	14-Mar	-15.7	28-Mar
Oliver east	Cabernet Franc	-17.7	08-Nov	-21.5	22-Nov	-24.0	06-Dec	-25.0	20-Dec	-25.4	03-Jan	-24.4	17-Jan	-24.5	31-Jan	-25.0	14-Feb	-23.8	28-Feb	-21.9	14-Mar	-16.3	28-Mar
Osoyoos, southeast	Cabernet Sauvignon	-12.9	08-Nov	-18.6	22-Nov	-22.7	06-Dec	-23.2	20-Dec	-24.6	03-Jan	-24.1	17-Jan	-23.2	31-Jan	-23.2	14-Feb	-22.0	28-Feb	-18.6	14-Mar	-14.9	28-Mar
Black Sage	Cabernet Sauvignon	-15.2	08-Nov	-19.9	22-Nov	-22.8	06-Dec	-24.3	20-Dec	-23.7	03-Jan	-25.2	17-Jan	-22.8	31-Jan	-23.2	14-Feb	-22.1	28-Feb	-20.3	14-Mar	-16.3	28-Mar
Osoyoos northeast	Cabernet Sauvignon	-17.4	08-Nov	-20.7	22-Nov	-22.6	06-Dec	-23.9	20-Dec	-24.5	03-Jan	-24.2	17-Jan	-22.5	31-Jan	-23.7	14-Feb	-21.9	28-Feb	-20.5	14-Mar	-17.2	28-Mar
Osoyoos northeast	Cabernet Sauvignon	-15.1	08-Nov	-18.4	22-Nov	-22.7	06-Dec	-23.7	20-Dec	-25.1	03-Jan	-24.7	17-Jan	-22.5	31-Jan	-23.4	14-Feb	-21.8	28-Feb	-20.5	14-Mar	-17.4	28-Mar
Osoyoos, southeast	Chardonnay	-16.7	03-Nov	-21.6	17-Nov	-23.3	01-Dec	-23.4	15-Dec			-26.1	12-Jan			-24.5	11-Feb	-22.8	02-Mar	-19.8	16-Mar	-14.3	30-Mar
Black Sage	Chardonnay	-17.4	03-Nov	-21.8	17-Nov	-23.3	01-Dec	-25.8	15-Dec			-26.8	12-Jan			-25.1	11-Feb	-23.9	02-Mar	-20.9	16-Mar	-16.0	30-Mar
Naramata bench	Chardonnay	-16.1	08-Nov	-19.5	22-Nov	-23.7	06-Dec	-24.6	20-Dec	-24.2	03-Jan	-25.5	17-Jan	-23.8	31-Jan	-23.2	14-Feb	-22.2	28-Feb	-20.4	14-Mar	-15.6	28-Mar
OK Falls, east	Chardonnay	-17.2	08-Nov	-20.4	22-Nov	-23.1	06-Dec	-23.7	20-Dec	-24.9	03-Jan	-26.0	17-Jan	-23.4	31-Jan	-23.1	14-Feb	-22.7	28-Feb	-20.4	14-Mar	-14.8	28-Mar
Oliver east	Chardonnay	-18.8	08-Nov	-21.6	22-Nov	-24.1	06-Dec	-24.7	20-Dec	-25.0	03-Jan	-25.8	17-Jan	-23.5	31-Jan	-24.5	14-Feb	-22.8	28-Feb	-21.1	14-Mar	-15.9	28-Mar
Kelowna	Gewurztraminer	-15.3	08-Nov	-18.0	22-Nov	-21.4	06-Dec	-22.6	20-Dec	-22.8	03-Jan	-23.2	17-Jan	-21.5	31-Jan	-21.8	14-Feb	-21.4	28-Feb	-18.0	14-Mar	-16.2	28-Mar
OK Falls, west	Gewurztraminer	-15.2	08-Nov	-21.1	22-Nov	-24.0	06-Dec	-24.4	20-Dec	-24.4	03-Jan	-24.8	17-Jan	-22.6	31-Jan	-21.6	14-Feb	-20.8	28-Feb	-18.6	14-Mar	-15.8	28-Mar
Oliver east	Gewurztraminer	-17.6	08-Nov	-21.0	22-Nov	-23.4	06-Dec	-22.4	20-Dec	-24.4	03-Jan	-24.8	17-Jan	-22.3	31-Jan	-21.6	14-Feb	-21.2	28-Feb	-20.4	14-Mar	-16.6	28-Mar
Osoyoos west	Merlot	-12.8	03-Nov	-18.3	17-Nov	-20.7	01-Dec	-23.7	15-Dec			-26.2	12-Jan			-22.6	11-Feb	-21.8	02-Mar	-19.7	16-Mar	-15.4	30-Mar
Oliver, west	Merlot	-14.0	08-Nov	-19.2	22-Nov	-22.3	06-Dec	-21.1	20-Dec	-23.8	03-Jan	-22.6	17-Jan	-21.1	31-Jan	-23.0	14-Feb	-21.1	28-Feb	-18.2	14-Mar	-15.7	28-Mar
Osoyoos northeast	Merlot	-14.4	08-Nov	-19.5	22-Nov	-21.9	06-Dec	-23.6	20-Dec	-24.7	03-Jan	-25.3	17-Jan	-22.6	31-Jan	-23.6	14-Feb	-22.3	28-Feb	-20.9	14-Mar	-15.7	28-Mar
Black Sage	Merlot	-17.6	08-Nov	-20.1	22-Nov	-22.3	06-Dec	-23.6	20-Dec	-25.0	03-Jan	-26.5	17-Jan	-23.3	31-Jan	-23.5	14-Feb	-22.0	28-Feb	-19.7	14-Mar		28-Mar
Black Sage	Pinot blanc	-17.5	08-Nov	-20.8	22-Nov	-23.9	06-Dec	-23.6	20-Dec	-24.9	03-Jan	-23.5	17-Jan	-24.6	31-Jan	-25.4	14-Feb	-23.8	28-Feb	-21.3	14-Mar	-18.2	28-Mar
Oliver east	Pinot blanc	-18.6	08-Nov	-21.4	22-Nov	-23.8	06-Dec	-24.4	20-Dec	-24.8	03-Jan	-25.9	17-Jan	-24.2	31-Jan	-24.5	14-Feb	-23.8	28-Feb	-19.7	14-Mar	-17.8	28-Mar
Oliver east	Pinot gris	-18.1	03-Nov	-21.8	17-Nov	-23.2	01-Dec	-27.3	15-Dec			-25.6	12-Jan			-25.1	11-Feb	-24.7	02-Mar	-21.4	16-Mar	-17.5	30-Mar
Black Sage	Pinot gris	-17.9	08-Nov	-21.2	22-Nov	-24.6	06-Dec		20-Dec	-26.6	03-Jan	-25.0	17-Jan	-25.7	31-Jan	-25.8	14-Feb	-24.3	28-Feb	-21.9	14-Mar	-17.5	28-Mar
Naramata bench	Pinot gris	-16.0	08-Nov	-15.7	22-Nov	-21.9	06-Dec	-23.9	20-Dec	-25.3	03-Jan	-23.9	17-Jan	-23.7	31-Jan	-23.8	14-Feb	-23.0	28-Feb	-17.8	14-Mar	-14.2	28-Mar
OK Falls, east	Pinot gris	-18.9	08-Nov	-21.6	22-Nov	-24.2	06-Dec	-23.3	20-Dec	-27.0	03-Jan	-25.1	17-Jan	-24.5	31-Jan	-25.2	14-Feb	-24.6	28-Feb	-22.7	14-Mar	-17.9	28-Mar
Oliver east	Pinot gris	-18.1	08-Nov	-21.3	22-Nov	-23.7	06-Dec	-25.2	20-Dec	-25.5	03-Jan	-24.2	17-Jan	-24.9	31-Jan	-25.7	14-Feb	-23.7	28-Feb	-21.9	14-Mar	-17.0	28-Mar
Naramata bench	Pinot noir	-15.5	08-Nov	-16.6	22-Nov	-22.5	06-Dec	-24.1	20-Dec	-25.5	03-Jan	-25.7	17-Jan	-23.9	31-Jan	-24.4	14-Feb	-23.7	28-Feb	-17.5	14-Mar	-14.9	28-Mar
Black Sage	Pinot noir	-17.5	08-Nov	-21.9	22-Nov	-23.8	06-Dec	-25.1	20-Dec	-26.1	03-Jan	-23.8	17-Jan	-24.5	31-Jan	-25.8	14-Feb	-24.2	28-Feb	-21.2	14-Mar	-17.5	28-Mar
Kelowna	Pinot noir	-16.2	08-Nov	-17.2	22-Nov	-22.0	06-Dec	-24.8	20-Dec	-25.8	03-Jan	-24.7	17-Jan	-24.3	31-Jan	-24.8	14-Feb	-23.2	28-Feb	-18.9	14-Mar	-16.2	28-Mar
Osoyoos northeast	Pinot noir	-18.3	08-Nov	-21.2	22-Nov	-23.6	06-Dec	-24.4	20-Dec	-27.0	03-Jan		17-Jan	-24.3	31-Jan	-24.9	14-Feb	-24.1	28-Feb	-21.4	14-Mar	-19.4	28-Mar
Naramata bench	Riesling	-15.6	08-Nov	-17.6	22-Nov	-23.2	06-Dec	-25.0	20-Dec	-26.5	03-Jan	-25.8	17-Jan	-24.6	31-Jan	-24.6	14-Feb	-24.0	28-Feb	-20.0	14-Mar	-15.4	28-Mar
Black Sage	Riesling	-18.3	08-Nov	-22.2	22-Nov	-24.3	06-Dec	-24.4	20-Dec	-23.9	03-Jan	-23.4	17-Jan	-24.6	31-Jan	-26.1	14-Feb	-24.3	28-Feb	-22.1	14-Mar	-18.4	28-Mar
Black Sage	Riesling	-19.1	08-Nov	-23.4	22-Nov	-26.3	06-Dec	-26.8	20-Dec	-27.5	03-Jan	-23.6	17-Jan	-26.1	31-Jan	-26.8	14-Feb	-24.1	28-Feb	-23.4	14-Mar	-19.6	28-Mar
West Kelowna	Riesling	-16.5	08-Nov	-15.9	22-Nov	-23.0	06-Dec	-24.6	20-Dec	-25.8	03-Jan	-25.2	17-Jan	-23.9	31-Jan	-23.9	14-Feb	-23.2	28-Feb	-19.6	14-Mar	-16.5	28-Mar
Oliver east	Riesling	-17.8	08-Nov	-21.6	22-Nov	-23.5	06-Dec	-23.8	20-Dec	-25.3	03-Jan	-24.5	17-Jan	-23.6	31-Jan	-25.1	14-Feb	-23.9	28-Feb	-22.2	14-Mar	-18.7	28-Mar
Oliver east	Sauvignon blanc	-17.9	08-Nov	-21.5	22-Nov	-23.5	06-Dec	-23.5	20-Dec	-25.3	03-Jan	-24.0	17-Jan	-21.8	31-Jan	-23.1	14-Feb	-22.2	28-Feb	-20.3	14-Mar	-16.1	28-Mar
Oliver east	Sauvignon blanc	-17.5	08-Nov	-20.6	22-Nov	-23.0	06-Dec	-24.2	20-Dec	-26.7	03-Jan	-26.6	17-Jan	-22.9	31-Jan	-22.1	14-Feb	-21.9	28-Feb	-20.5	14-Mar	-18.4	28-Mar
Osoyoos, southeast	Shiraz	-13.8	03-Nov	-18.0	17-Nov	-20.4	01-Dec	-22.6	15-Dec			-25.6	12-Jan			-23.4	11-Feb	-22.7	02-Mar	-19.9	16-Mar	-16.4	30-Mar
Osoyoos, southeast	Shiraz	-14.0	03-Nov	-16.6	17-Nov	-20.3	01-Dec	-22.3	15-Dec				12-Jan			-24.0	11-Feb	-21.9	02-Mar	-19.1	16-Mar	-15.6	30-Mar
Osoyoos, southeast	Shiraz	-16.7	08-Nov	-20.5	22-Nov	-23.2	06-Dec	-24.3	20-Dec	-26.0	03-Jan	-23.1	17-Jan	-23.9	31-Jan	-24.4	14-Feb	-23.6	28-Feb	-20.4	14-Mar	-16.3	28-Mar
Black Sage	Shiraz	-16.1	08-Nov	-20.4	22-Nov	-23.7	06-Dec	-24.6	20-Dec	-25.0	03-Jan	-23.6	17-Jan	-23.8	31-Jan	-24.3	14-Feb	-22.9	28-Feb	-21.5	14-Mar	-18.2	28-Mar
Osoyoos northeast	Shiraz	-14.5	08-Nov	-18.2	22-Nov	-21.1	06-Dec	-23.1	20-Dec	-24.0	03-Jan	-24.3	17-Jan	-22.3	31-Jan	-22.9	14-Feb	-22.1	28-Feb	-20.1	14-Mar	-15.2	28-Mar
Osoyoos northeast	Shiraz	-16.0	08-Nov	-19.3	22-Nov	-21.6	06-Dec	-22.4	20-Dec	-24.2	03-Jan	-24.1	17-Jan	-22.5	31-Jan	-23.2	14-Feb	-21.8	28-Feb	-19.9	14-Mar	-16.9	28-Mar
Osoyoos west	Viognier	-13.7	03-Nov	-20.0	17-Nov	-22.5	01-Dec	-27.1	15-Dec				12-Jan			-23.1	11-Feb	-23.7	02-Mar	-21.8	16-Mar	-16.2	30-Mar
Average Bud Hardiness (all sites, all varieties)		-16.4		-20.0		-23.0		-24.2		-25.2		-24.8		-23.6		-24.1		-22.9		-20.4		-16.5	

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