

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	-15.9	17-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	-12.5	15-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	-17.4	15-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	-14.7	15-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	-17.4	15-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	-16.6	15-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	-17.9	15-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	-16.1	17-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	-15.3	17-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	-15.5	15-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	-12.7	15-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	-15.3	15-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	-13.0	15-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	-13.8	15-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	-15.3	15-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	-15.9	17-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	-15.1	15-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	-15.9	15-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	-14.5	15-Mar		
Black Sage	Pinot blanc	-14.0	27-Oct	-20.0	10-Nov	-22.1	24-Nov	-22.2	08-Dec	-23.3	22-Dec	-24.4	05-Jan	-23.5	19-Jan	-24.1	02-Feb	-23.3	16-Feb	-20.3	01-Mar	-17.2	15-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	-17.0	15-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	-17.7	17-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	-17.3	15-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	-22.5	16-Feb	-17.2	01-Mar	-12.2	15-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	-13.8	15-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	-15.8	15-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	-15.4	15-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	-14.7	15-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	-15.3	15-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	-16.0	15-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	-12.3	15-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	-19.2	15-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	-19.1	15-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	-16.2	15-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	-17.9	15-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	-17.4	15-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		15-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	-15.9	17-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	-15.6	17-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	-17.2	15-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	-16.4	15-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	-14.4	15-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	-15.1	15-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	-16.4	17-Mar		
Average Bud Hardiness (all sites, all varieties)		-15.2		-19.1		-21.9		-22.1		-23.0		-24.5		-23.1		-23.2		-22.1		-19.1		-15.7			

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