

2017 - 2018 Winter Grape Bud Hardiness Okanagan Valley BC

Variety	Location	sample day	Avg LTE/vine (Nov 7,8)	Avg LTE/vine (Nov 21,22)	Avg LTE/vine (Dec 5,6)	Avg LTE/vine (Dec 19,20)	Avg LTE/vine (Jan 2,3)	Avg LTE/vine (Jan 16,17)	Avg LTE/vine (Jan 30,31)	Avg LTE/vine (Feb 13,14)	Avg LTE/vine (Feb 27,28)	Avg LTE/vine (Mar 13,14)	Avg LTE/vine (Mar 27,28)	Avg LTE/vine (Apr 3,4)
Cabernet Franc	Oliver east	Tues	-20.9	-20.6	-23.4	-23.3	-25.8	-23.2	-23.5	-23.7	-23.3			
Cabernet Franc	Black Sage	Tues	-21.1	-20.5	-23.4	-22.2	-25.7	-21.6	-22.8	-24.0	-23.2			
Cabernet Franc	Black Sage	Wed	-20.1	-19.4	-22.3	-22.4	-25.1	-23.1	-22.3	-22.6	-22.5			
Cabernet Franc	Osoyoos, southeast	Wed	-19.9	-21.7	-22.6		-26.8		-23.1	-23.4	-23.2			
Cabernet Franc	Osoyoos, north	Wed	-19.7	-21.1	-21.6		-23.6		-23.3	-22.4	-22.6			
Cabernet Sauvignon	Osoyoos northeast	Tues	-19.8	-20.5	-22.6	-22.9		-23.2	-22.8	-23.1	-23.4			
Cabernet Sauvignon	Osoyoos northeast	Tues	-17.7	-18.8	-21.1	-22.1		-21.5	-22.3	-21.4	-22.3			
Cabernet Sauvignon	Black Sage	Tues	-19.3	-19.1	-21.5	-21.9	-23.6	-22.3	-21.4	-22.3	-22.4			
Cabernet Sauvignon	Osoyoos, southeast	Wed	-20.0	-20.3	-21.5		-26.0		-22.9	-22.5	-22.7			
Chardonnay	OK Falls, east	Tues	-21.5	-22.0	-24.0	-23.0		-24.0	-22.4	-23.6	-23.3			
Chardonnay	Oliver east	Tues	-22.2	-22.3	-24.3	-23.9	-25.7	-23.9	-22.4	-23.7	-23.4			
Chardonnay	Black Sage	Tues	-21.9	-22.0	-23.9	-24.0	-25.3	-23.4	-23.1	-24.3	-23.9			
Chardonnay	Naramata bench	Tues	-22.1	-22.1	-23.3	-22.5	-25.2		-23.0	-23.8	-23.9			
Chardonnay	Osoyoos, southeast	Wed	-22.1	-22.8	-24.3		-25.8		-23.4	-23.6	-24.1			
Chardonnay	Oliver, south	Wed	-21.9	-21.9	-23.0	-24.6	-25.1	-23.3	-22.7	-22.5	-22.3			
Gewurztraminer	OK Falls, west	Tues	-19.7	-20.5	-22.9	-22.5	-23.2	-21.6	-21.7	-21.4	-21.8			
Gewurztraminer	Oliver east	Tues	-19.7	-20.4	-23.1	-22.0		-21.9	-22.0	-22.2	-22.4			
Gewurztraminer	Kelowna	Tues	-18.8	-19.1	-21.1	-21.4	-22.6	-22.4	-21.8	-21.7	-21.3			
Malbec	Osoyoos, north	Wed	-21.3	-20.0	-21.3		-25.8		-20.6	-22.3	-22.2			
Merlot	Osoyoos northeast	Tues	-19.8	-20.3	-22.4	-22.3	-24.2	-21.9	-22.3	-23.0	-22.5			
Merlot	Black Sage	Tues	-20.3	-20.9	-22.1	-21.4	-23.6	-20.1	-21.7	-21.6	-22.2			
Merlot	Osoyoos northeast	Wed	-21.1	-22.2	-23.9	-23.7	-24.9	-24.0	-23.9	-23.5	-23.1			
Merlot	Osoyoos northeast	Wed	-20.3	-21.4	-22.8	-23.0	-25.0	-22.4	-22.3	-23.0	-23.2			
Merlot	Osoyoos northeast	Wed	-21.1	-21.5	-22.5	-22.9	-24.5	-22.8	-23.4	-23.0	-22.8			
Merlot	Osoyoos northeast	Wed	-20.6	-21.1	-23.1	-23.5	-25.2	-22.8	-23.4	-23.0	-23.0			
Merlot	Oliver east	Wed	-20.8	-20.5	-22.6	-22.3	-24.8	-22.1	-22.2	-22.6	-21.5			
Merlot	Oliver, west	Wed	-19.5	-19.4	-19.3	-20.5	-23.8	-19.5	-20.2	-20.4	-19.7			
Merlot	Osoyoos west	Wed	-20.5	-21.9	-22.3		-25.0		-22.3	-22.3	-22.2			
Merlot	Osoyoos, southeast	Wed	-19.2	-20.8	-22.0		-25.7		-22.3	-22.7	-22.4			
Merlot	Black Sage	Wed	-20.0	-18.2	-22.5	-21.7	-25.3	-22.6	-22.6	-22.7	-22.7			
Merlot	Black Sage	Wed	-20.8	-21.4	-22.7	-22.9	-25.5	-22.1	-22.4	-23.0	-22.6			
Pinot blanc	Oliver east	Tues	-21.1	-21.8	-23.4	-22.4		-23.2	-24.1	-23.5	-24.7			
Pinot blanc	Black Sage	Tues	-21.6	-21.6	-23.5	-21.5	-22.8	-22.1	-23.0	-23.2	-23.8			
Pinot gris	OK Falls, east	Tues	-22.7	-22.3	-23.7	-23.3		-22.7	-23.5	-23.9	-23.9			
Pinot gris	Oliver east	Tues	-21.3	-22.2	-23.2	-22.7	-27.1	-24.3	-23.7	-24.8	-24.3			
Pinot gris	Black Sage	Tues	-22.3	-22.3	-23.5	-22.9	-25.2	-23.0	-23.6	-24.3	-24.0			
Pinot gris	Naramata bench	Tues	-20.7	-20.1	-22.9	-21.9	-25.3		-22.0	-22.1	-22.1			
Pinot gris	Oliver east	Wed	-22.3	-23.2	-24.7	-23.7	-26.8	-24.7	-24.3	-24.0	-24.4			
Pinot noir	Osoyoos northeast	Tues	-22.1	-22.6	-23.7	-23.2		-23.5	-23.4	-24.3	-23.7			
Pinot noir	Kelowna	Tues	-20.4	-21.3	-22.3	-22.7	-23.6	-23.3	-23.7	-23.7	-23.4			
Pinot noir	Naramata bench	Tues	-21.0	-20.2	-21.6	-21.8	-24.8		-22.3	-22.6	-22.9			
Pinot noir	Black Sage	Wed	-22.0	-21.7	-23.5	-23.9	-26.2	-24.5	-23.8	-23.3	-23.8			
Riesling	Oliver east	Tues	-20.7	-21.4	-23.2	-22.6		-23.0	-23.3	-24.0	-24.4			
Riesling	Black Sage	Tues	-23.2	-21.5	-24.5	-23.3	-23.8	-23.3	-23.1	-24.0	-23.4			
Riesling	West Kelowna	Tues	-20.3	-20.3	-22.6	-23.2	-23.8	-23.7	-23.7	-25.3	-24.3			
Riesling	Naramata bench	Tues	-20.9	-21.3	-22.9	-22.0	-25.3		-23.0	-23.9	-23.8			
Riesling	Black Sage	Tues	-21.2	-21.9	-23.5	-23.0	-23.4	-21.2	-23.3	-22.4	-22.4			
Sauv blanc	Black Sage	Tues	-20.7	-20.1	-21.7	-22.4	-24.0	-22.1	-21.5	-22.8	-21.8			
Sauv blanc	Black Sage	Tues	-19.1	-20.7	-21.5	-21.1	-26.0	-21.7	-21.9	-22.6	-22.4			
Sauv blanc	Black Sage	Tues	-20.6	-20.7	-23.3	-21.9	-25.4	-21.7	-21.5	-23.1	-23.5			
Sauv blanc	Black Sage	Wed	-19.0	-19.7	-22.1	-22.1	-23.7	-21.6	-21.0	-22.4	-21.6			
Sauvignon blanc	Oliver east	Tues	-20.5	-20.6	-22.5	-22.7		-22.3	-21.7	-22.6	-22.7			
Sauvignon blanc	Oliver east	Tues	-20.9	-21.0	-23.4	-22.4	-26.3	-23.2	-22.9	-23.7	-23.2			
Sauvignon blanc	Osoyoos northeast	Wed	-18.8	-20.0	-22.0	-22.4	-23.2	-22.2	-21.8	-22.2	-22.1			
Sauvignon blanc	Osoyoos northeast	Wed	-19.4	-20.8	-21.7	-22.3	-24.0	-21.8	-21.4	-22.1	-21.9			
Sauvignon blanc	Osoyoos northeast	Wed	-19.5	-20.6	-22.6	-23.0	-22.7	-22.8	-22.5	-22.9	-22.2			
Sauvignon blanc	Oliver east	Wed	-20.8	-21.9	-23.9	-23.6	-25.0	-23.2	-22.8	-23.6	-22.8			
Sauvignon blanc	Oliver east	Wed	-21.1	-21.0	-22.4	-22.3	-23.0	-22.3	-21.9	-22.4	-22.6			
Shiraz	Osoyoos northeast	Tues	-17.7	-18.0	-20.6	-20.8	-23.5	-20.9	-21.9	-22.7	-22.0			
Shiraz	Osoyoos northeast	Tues	-18.4	-18.7	-20.2	-21.6	-20.9	-21.3	-21.9	-23.0	-22.5			
Shiraz	Black Sage	Tues	-19.6	-19.5	-21.6	-20.8	-21.2	-20.4	-22.2	-23.9	-23.4			
Shiraz	Osoyoos, southeast	Wed	-21.3	-20.9	-21.9		-25.4		-23.1	-23.8	-22.9			
Shiraz	Osoyoos, southeast	Wed	-17.8	-18.1	-21.2		-23.4		-21.5	-22.4	-21.8			
Shiraz	Osoyoos, southeast	Wed	-18.3	-18.7	-22.1		-19.1		-21.4	-21.8	-21.8			
Viognier	Osoyoos west	Wed	-21.3	-21.9	-24.4		-25.8		-23.6	-23.3	-23.6			

Avg LTE/site is the mean temperature for bud death from 3 vines at selected sites in the Okanagan Valley
 LTE - Lethal Temperature Exotherm (°C)

Carl Bogdanoff - Summerland RDC Wine Grape Research