

Grapevine Bud Hardiness in the Okanagan Valley, BC, 2024-2025. Steve Marsh, Agriculture and Agri-Food Canada, Summerland, BC.

Variety	Location	sample day	LTE10 (Nov 26,27)	LTE10 (Dec 10,11)	LTE10 (Jan 7,8)	LTE10 (Jan 21,22)	LTE10 (Feb 4,5)	LTE10 (Feb 18,19)	LTE10 (Mar 4,5)	LTE10 (Mar 18,19)	LTE10 (Apr 1,2)
Cabernet Franc	Oliver, East	Tuesday	-17.6	-21.7	-22.3	-22.2	-22.4	-23.9	-21.8	-17.5	
Cabernet Franc	Black Sage	Wednesday	-17.8	-21.1	-21.8	-21.7	-22.8	-22.5	-19.5	-16.9	
Cabernet Sauvignon	Osoyoos, Northeast	Tuesday	-18.2	-20.7	-20.5	-22.4	-21.2	-21.5	-20.6	-18.2	
Cabernet Sauvignon	Osoyoos, Northeast	Tuesday	-19.9	-20.6	-19.7	-21.1	-22.8	-22.6	-20.0	-19.1	
Cabernet Sauvignon	Black Sage	Tuesday	-19.8	-21.2	-21.0	-20.2	-22.2	-22.6	-18.8	-18.5	
Cabernet Sauvignon	Osoyoos, Southeast	Wednesday	-19.4	-19.7	-20.9	-22.4	-22.8	-19.7	-20.5	-19.2	
Cabernet Sauvignon	Black Sage	Wednesday	-17.2	-21.2	-21.8	-22.7	-23.1	-21.7	-22.3	.	
Chardonnay	OK Falls, East	Tuesday	-18.8	-23.2	-22.6	-23.4	-23.3	-22.9	-19.8	-17.4	
Chardonnay	Osoyoos, Southeast	Wednesday	-21.1	-22.2	-21.3	-23.6	-24.3	-23.8	-18.4	-17.6	
Chardonnay	Oliver, West	Wednesday	-19.7	-20.4	-20.3	-21.9	-22.7	.	.	.	
Chardonnay	Oliver, West	Wednesday	-19.5	-20.1	-20.8	-22.7	-22.2	-21.1	-19.2	-18.5	
Gewurztraminer	OK Falls, West	Tuesday	-16.6	-18.9	-20.9	-20.4	-20.6	-21.5	-16.5	-15.4	
Malbec	Osoyoos, Southeast	Wednesday	-18.7	-22.1	-22.5	-22.8	-23.7	-20.9	-19.8	-19.9	
Merlot	Osoyoos, Northeast	Tuesday	-19.2	-20.2	-22.2	-20.9	-22.7	-21.1	-20.9	-16.1	
Pinot gris	OK Falls, East	Tuesday	-16.5	-19.4	-20.9	-19.8	-20.3	-21.7	-20.4	-17.3	
Pinot gris	Naramata Bench	Tuesday	-19.9	-20.9	-21.7	-21.2	-23.0	-20.4	-17.6	-17.1	
Pinot noir	Naramata Bench	Tuesday	-19.4	-21.2	-20.2	-22.7	-21.9	-23.1	-20.0	-17.9	
Riesling	Black Sage	Tuesday	-18.7	-19.2	-20.2	-20.1	-20.6	-21.5	-19.5	-19.1	
Sauvignon blanc	Naramata Bench	Tuesday	-17.9	-19.7	-20.4	-21.3	-22.1	-21.2	-17.3	-16.5	
Shiraz	Osoyoos, Northeast	Tuesday	-17.7	-21.1	-21.5	-23.5	-22.8	-23.1	-18.3	-18.4	
Shiraz	Osoyoos, Southeast	Wednesday	-19.6	-21.6	-21.3	-24.8	-23.0	-21.5	-19.6	-16.9	
Viognier	Osoyoos, Southeast	Wednesday	-20.9	-21.8	-22.7	-21.8	-22.8	-22.3	-21.4	-18.6	
Zinfandel	Osoyoos, Northeast	Tuesday	-13.6	-17.1	-18.8	-20.4	-22.9	-21.7	-17.0	-15.7	
Zinfandel	Black Sage	Tuesday	-17.4	-18.3	-19.6	-20.6	-22.6	-21.4	-19.0	-17.4	

LTE: Lethal temperature exotherm (°C). AVG LTE10: Average lethal temperature exotherm at 10% bud mortality for buds collected from 3 canes at selected sites in the Okanagan Valley.

Grapevine Bud Hardiness in the Okanagan Valley, BC, 2024-2025. Steve Marsh, Agriculture and Agri-Food Canada, Summerland, BC.

Variety	Location	sample day	LTE50 (Nov 26,27)	LTE50 (Dec 10,11)	LTE50 (Jan 7,8)	LTE50 (Jan 21,22)	LTE50 (Feb 4,5)	LTE50 (Feb 18,19)	LTE50 (Mar 4,5)	LTE50 (Mar 18,19)	LTE50 (Apr 1,2)
Cabernet Franc	Oliver, East	Tuesday	-20.7	-23.2	-23.3	-24.3	-24.6	-25.2	-23.0	-20.5	
Cabernet Franc	Black Sage	Wednesday	-19.7	-22.7	-22.7	-23.5	-24.0	-23.7	-21.3	-19.2	
Cabernet Sauvignon	Osoyoos, Northeast	Tuesday	-20.4	-21.6	-22.2	-23.5	-23.3	-23.4	-21.8	-19.6	
Cabernet Sauvignon	Osoyoos, Northeast	Tuesday	-20.6	-22.6	-22.0	-23.4	-24.1	-23.8	-22.0	-20.2	
Cabernet Sauvignon	Black Sage	Tuesday	-20.8	-23.0	-22.7	-22.7	-23.6	-23.9	-21.1	-19.3	
Cabernet Sauvignon	Osoyoos, Southeast	Wednesday	-20.6	-22.3	-22.6	-24.4	-24.6	-23.3	-22.3	-20.8	
Cabernet Sauvignon	Black Sage	Wednesday	-19.0	-22.1	-23.3	-23.7	-24.2	-23.2	-23.4	.	
Chardonnay	OK Falls, East	Tuesday	-21.3	-24.5	-23.5	-24.4	-25.4	-25.2	-21.6	-18.8	
Chardonnay	Osoyoos, Southeast	Wednesday	-23.1	-24.7	-24.2	-25.3	-25.5	-25.2	-21.8	-19.1	
Chardonnay	Oliver, West	Wednesday	-21.4	-22.9	-22.0	-23.0	-23.9	.	.	.	
Chardonnay	Oliver, West	Wednesday	-21.9	-22.7	-22.7	-24.0	-24.4	-24.1	-21.3	-19.8	
Gewurztraminer	OK Falls, West	Tuesday	-18.1	-21.1	-21.9	-22.5	-22.8	-22.7	-18.8	-16.4	
Malbec	Osoyoos, Southeast	Wednesday	-21.3	-23.5	-24.5	-24.9	-25.3	-24.0	-22.7	-21.6	
Merlot	Osoyoos, Northeast	Tuesday	-21.0	-22.1	-23.3	-23.8	-24.8	-24.0	-22.0	-18.2	
Pinot gris	OK Falls, East	Tuesday	-19.7	-21.8	-22.3	-22.9	-23.1	-23.6	-21.9	-19.3	
Pinot gris	Naramata Bench	Tuesday	-21.3	-23.2	-23.2	-24.2	-25.2	-24.0	-19.8	-17.8	
Pinot noir	Naramata Bench	Tuesday	-21.4	-23.1	-23.0	-24.0	-24.8	-24.5	-21.8	-19.4	
Riesling	Black Sage	Tuesday	-21.1	-21.6	-21.5	-22.7	-22.4	-23.4	-21.0	-20.4	
Sauvignon blanc	Naramata Bench	Tuesday	-19.5	-21.9	-21.7	-23.0	-23.7	-23.1	-18.6	-18.9	
Shiraz	Osoyoos, Northeast	Tuesday	-19.6	-22.7	-23.2	-24.8	-24.6	-24.3	-21.4	-19.7	
Shiraz	Osoyoos, Southeast	Wednesday	-21.2	-23.1	-23.5	-25.7	-25.4	-24.0	-21.3	-19.0	
Viognier	Osoyoos, Southeast	Wednesday	-21.9	-23.5	-23.7	-23.7	-25.4	-24.1	-22.8	-20.8	
Zinfandel	Osoyoos, Northeast	Tuesday	-16.5	-20.1	-19.9	-22.7	-24.0	-23.2	-18.5	-17.3	
Zinfandel	Black Sage	Tuesday	-19.1	-20.0	-21.3	-22.6	-24.3	-23.0	-20.4	-18.5	

LTE: Lethal temperature exotherm (°C). AVG LT E50: Average lethal temperature exotherm at 50% bud mortality for buds collected from 3 canes at selected sites in the Okanagan Valley.

## Grapevine Bud Hardiness in the Okanagan Valley, BC, 2024-2025. Steve Marsh, Agriculture and Agri-Food Canada, Summerland, BC.

Variety	Location	sample day	LTE90 (Nov 26,27)	LTE90 (Dec 10,11)	LTE90 (Jan 7,8)	LTE90 (Jan 21,22)	LTE90 (Feb 4,5)	LTE90 (Feb 18,19)	LTE90 (Mar 4,5)	LTE90 (Mar 18,19)	LTE90 (Apr 1,2)
Cabernet Franc	Oliver, East	Tuesday	-22.3	-24.8	-23.3	-26.5	-26.6	-26.4	-24.0	-22.9	
Cabernet Franc	Black Sage	Wednesday	-22.2	-23.8	-23.8	-24.7	-25.5	-25.3	-23.3	-21.2	
Cabernet Sauvignon	Osoyoos, Northeast	Tuesday	-21.9	-22.7	-23.2	-24.4	-24.9	-24.4	-22.8	-20.8	
Cabernet Sauvignon	Osoyoos, Northeast	Tuesday	-21.6	-23.8	-25.2	-24.3	-25.2	-25.1	-22.8	-21.2	
Cabernet Sauvignon	Black Sage	Tuesday	-22.2	-24.3	-21.3	-24.4	-24.7	-25.2	-22.5	-20.6	
Cabernet Sauvignon	Osoyoos, Southeast	Wednesday	-20.7	-24.8	-24.3	-25.7	-26.0	-25.9	-23.8	-23.2	
Cabernet Sauvignon	Black Sage	Wednesday	-20.7	-23.2	-24.5	-24.9	-25.9	-24.2	-24.2	.	
Chardonnay	OK Falls, East	Tuesday	-22.8	-25.7	-25.0	-26.5	-28.1	-26.7	-23.5	-20.6	
Chardonnay	Osoyoos, Southeast	Wednesday	-24.4	-26.6	-25.7	-26.5	-27.1	-26.5	-24.4	-20.9	
Chardonnay	Oliver, West	Wednesday	-23.5	-23.7	-23.9	-24.4	-25.1	.	.	.	
Chardonnay	Oliver, West	Wednesday	-23.6	-24.2	-24.4	-25.3	-25.9	-25.4	-22.5	-22.6	
Gewurztraminer	OK Falls, West	Tuesday	-19.9	-22.7	-25.2	-24.3	-24.5	-23.8	-20.3	-18.0	
Malbec	Osoyoos, Southeast	Wednesday	-22.8	-24.7	-25.7	-27.2	-27.0	-25.8	-23.9	-23.3	
Merlot	Osoyoos, Northeast	Tuesday	-22.5	-23.7	-23.4	-25.8	-26.4	-26.4	-23.2	-19.5	
Pinot gris	OK Falls, East	Tuesday	-22.1	-23.5	-23.7	-24.4	-25.0	-25.5	-23.5	-20.8	
Pinot gris	Naramata Bench	Tuesday	-21.8	-25.1	-24.4	-26.4	-26.5	-26.4	-22.1	-19.0	
Pinot noir	Naramata Bench	Tuesday	-22.6	-24.8	-22.5	-25.0	-26.0	-25.8	-23.5	-21.1	
Riesling	Black Sage	Tuesday	-22.0	-23.7	-23.9	-26.2	-23.5	-24.9	-23.5	-21.3	
Sauvignon blanc	Naramata Bench	Tuesday	-20.5	-22.8	-23.5	-25.2	-24.4	-24.6	-20.9	-21.8	
Shiraz	Osoyoos, Northeast	Tuesday	-20.8	-24.3	-24.1	-25.9	-26.0	-25.2	-24.3	-20.8	
Shiraz	Osoyoos, Southeast	Wednesday	-22.5	-24.5	-25.2	-26.9	-26.4	-25.3	-23.0	-20.2	
Viognier	Osoyoos, Southeast	Wednesday	-23.0	-24.5	-24.7	-26.1	-27.2	-25.7	-24.0	-22.3	
Zinfandel	Osoyoos, Northeast	Tuesday	-19.6	-21.9	-24.8	-24.7	-25.3	-24.8	-19.7	-19.3	
Zinfandel	Black Sage	Tuesday	-20.7	-22.6	-22.8	-24.7	-25.5	-24.3	-21.4	-20.1	

LTE: Lethal temperature exotherm (°C). AVG LTE90: Average lethal temperature exotherm at 90% bud mortality for buds collected from 3 canes at selected sites in the Okanagan Valley.