

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 | | | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| Osoyoos, southeast | Chardonnay | | | -20.7 | 05-Nov | -22.2 | 19-Nov | -22.6 | 03-Dec | -23.9 | 17-Dec | | | -23.2 | 14-Jan | | | | | | | | | | |
| 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 | | | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| Osoyoos west | Merlot | | | -17.0 | 05-Nov | -20.1 | 19-Nov | -19.6 | 03-Dec | -22.8 | 17-Dec | | | -21.3 | 14-Jan | | | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| Osoyoos, southeast | Shiraz | | | -15.6 | 05-Nov | -19.5 | 19-Nov | -21.4 | 03-Dec | -22.5 | 17-Dec | | | -21.0 | 14-Jan | | | | | | | | | | |
| Osoyoos, southeast | Shiraz | | | -13.5 | 05-Nov | -18.5 | 19-Nov | -20.8 | 03-Dec | -22.3 | 17-Dec | | | -20.9 | 14-Jan | | | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| 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 | | | | | | | | |
| Osoyoos west | Viognier | | | -17.2 | 05-Nov | -22.2 | 19-Nov | -22.7 | 03-Dec | -24.5 | 17-Dec | | | -22.0 | 14-Jan | | | | | | | | | | |
| Average Bud Hardiness (all sites, all varieties) | | -15.2 | | -19.1 | | -21.9 | | -22.1 | | -23.0 | | -24.5 | | -23.1 | | -23.2 | | | | | | | | | |

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