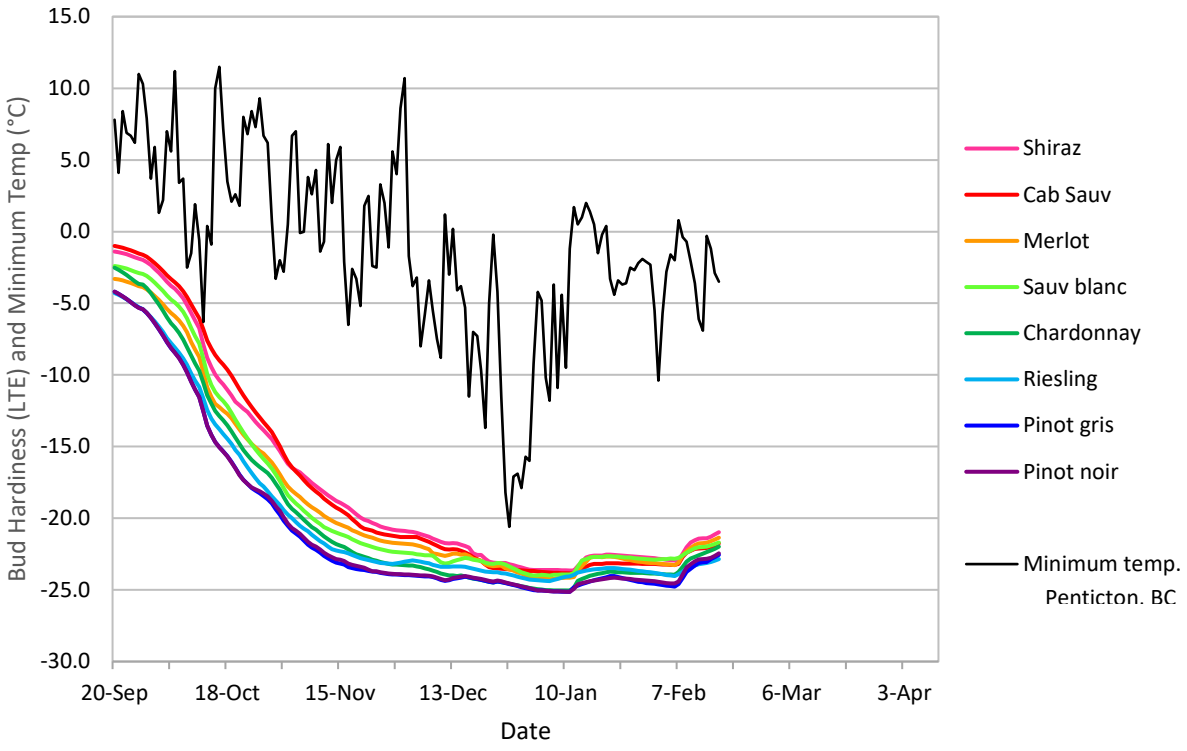
Model-Predicted and Measured Bud Hardiness for Main Cultivars Grown in the Okanagan Valley, BC



The chart shows daily minimum temperatures and the progression of model-predicted bud hardiness for eight cultivars grown in the Okanagan Valley. The model was developed using the measured hardiness of buds sampled from multiple vineyards per cultivar over nine years (2012-2021). Temperature was reported from the Environment Canada weather station in Penticton, BC. Bud hardiness and minimum temperatures vary spatially in the Okanagan Valley due to local topography and site conditions, which should be considered when assessing the risk of winter injury.

Table 1 lists the model-predicted and measured bud hardiness for the eight cultivars on February 17, 2022. Mean hardiness measured for sampled buds may differ from the true average in the valley due to the limited sample sizes.

Table 1. Model-predicted and measured bud hardiness for eight cultivars grown in the Okanagan Valley. Measured values are the mean and range for buds collected from throughout the valley.

Method	Date	Shiraz	Cabernet Sauvignon	Merlot	Sauvignon blanc	Chardonnay	Riesling	Pinot gris	Pinot noir
		Bud Hardiness (LTE_{50} °C)							
Model-Predicted	17-Feb-2022	-21.0	-21.8	-21.3	-21.7	-22.0	-22.9	-22.6	-22.5
Measured	17-Feb-2022	-22.2 -21.4 to -23.1	-21.2 -20.0 to -22.4	-22.6 -20.6 to -23.8	-22.3 -20.9 to -24.4	-23.0 -22.3 to -23.3	-23.2 -22.3 to -23.8	-24.2 -23.1 to -24.9	-23.9 -22.3 to -24.7