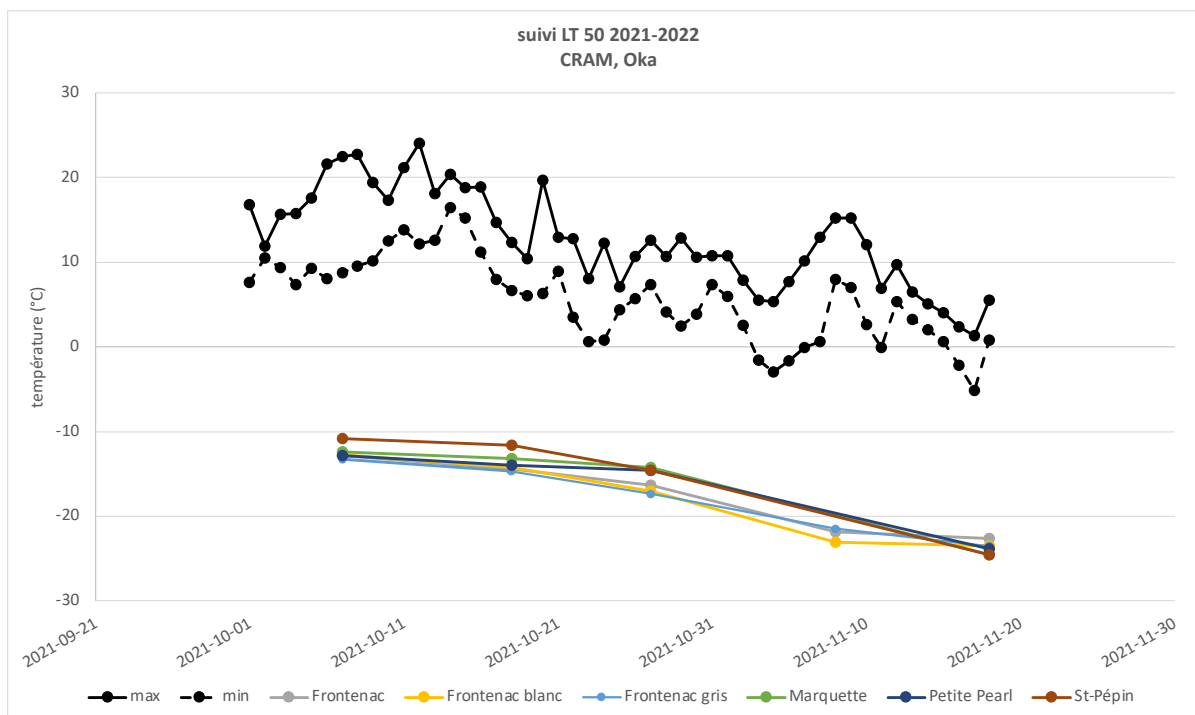


Bud hardiness monitoring for the winter 2021-2022

Bulletin 2. Acclimation carries on

By Andréanne Hébert-Haché, Ph.D. candidate, Alexander Campbell, M.Sc. agr. and Caroline Provost, Ph.D

As the temperature gradually drops, grapevines continue acclimating. The end of October and the beginning of November were very much like 2020. Despite a warm-up in the first two weeks of November, a cooling trend is evident. Several nights below 0 °C were observed at all of the research sites and encouraged the vines to gain hardiness. Minimum temperatures remained much higher than LT10, the lethal temperature for 10% of the buds, for all cultivars and sites. This indicates that the primary bud survival is probably still excellent. We see differences between sites and cultivars that were observed in previous years. It could be due to particular viticultural practices or weather conditions that favour a more rapid acclimation in some vineyards, like at Deux-Montagnes site 2. However, the differences are inconsequential at this time. The non-hardy cultivars are covered and the hardy uncovered ones are sufficiently acclimated for the temperatures observed. The majority of *Vitis vinifera* vines are already covered or hilled but we were able to sample prior. While there were no significant differences between the *vinifera* and hybrids in late October, the gap was beginning to widen in our last analyses in November. The *vinifera* cultivars are already close to their theoretical hardiness maximum and won't gain much more hardiness even with continued cold exposure. It is expected that the uncovered hybrid varieties will continue to acclimate gradually throughout November and December depending on temperatures.



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