

Fort Collins grape variety trial

- Planted in 2013, with additions in 2014
- Randomized Complete Block (RCB) design with 4 replications (8 vines per rep)
- Vine x row spacing is 5' x 9'
- Training system is High Cordon
- Drip irrigation with "volunteer" grass in the inter-row area

Test Varieties

- Aromella
- Chambourcin
- Frontenac
- La Crescent
- Marquette
- Vignoles
- (Noiret and Traminette in guard rows & panels)

Results

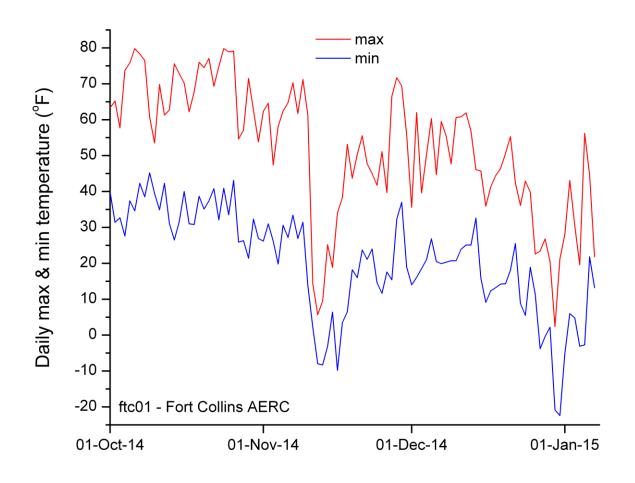
Two extreme low temperature events occurred in late 2014

-9 F (12 Nov 2014)

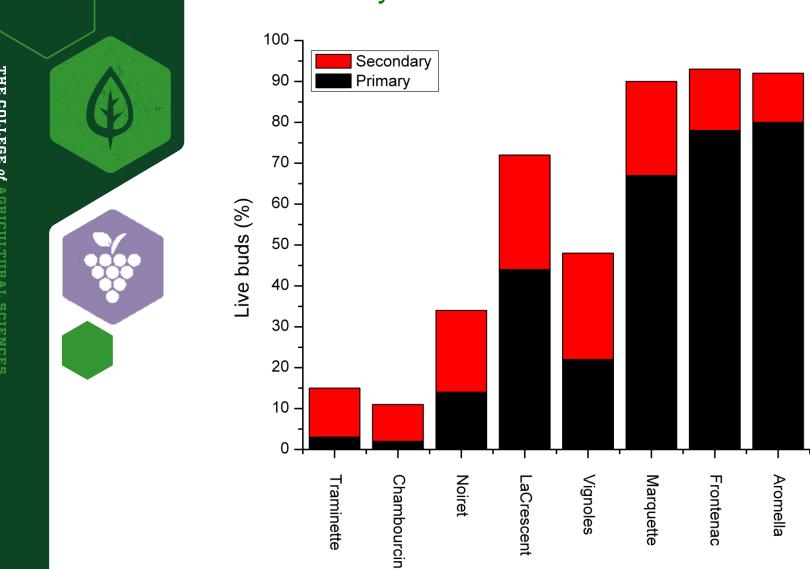
-22 F (31 Dec 2014)

Buds were evaluated in early January 2015

Temperature data Oct 2014 - Jan 2015



January 2015 bud evaluations



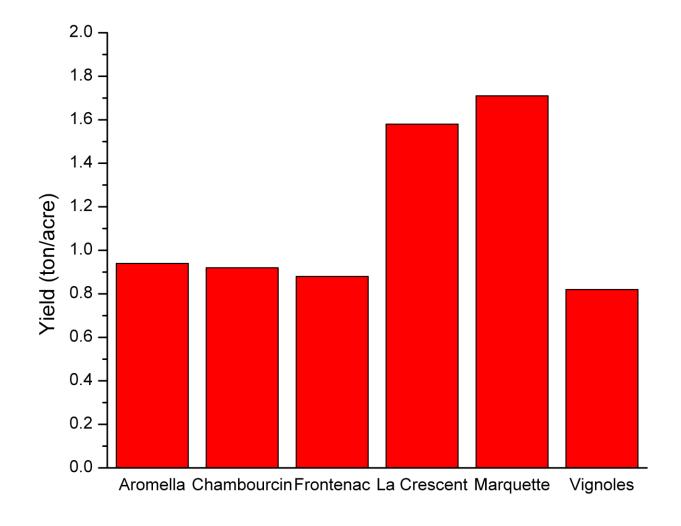
Summary

- Poor bud survival of Traminette, Chambourcin, and Noiret
- Very good bud survival of MN varieties, Aromella, and Vignoles particularly in light of the extreme November event.
- But a late spring frost (23 F on 11 May 2015; after bud break) caused near 100 % crop loss on all varieties.

Summary

- Many vines needed re-training due to the repeated cold damage during fall & winter 2014, and spring 2015.
- At this site vines have low vigor, and only a small crop was produced in 2016.

2016 Harvest



Outlook 2017

- Another low temperature event occurred on 6 January 2017 (-20 F)
- This site might be too cold for mediumhardy varieties such as Chambourcin, Noiret, and Traminette





Questions?

Dr. Horst Caspari Department of Horticulture & Landscape Architecture Colorado State University Western Colorado Research Center Grand Junction, CO 81503 Ph: (970) 434-3264

horst.caspari@colostate.edu