
Delaying bud break of Chardonnay through long pruning

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Introduction

Low temperature damage to grape vine tissue(s) is common in Colorado

Late spring frosts can cause substantial crop losses

Early bud-breaking varieties are more at risk than late-breaking varieties

Cultural practices that delay bud break may reduce or eliminate damages from late spring frosts

Pruning and bud break

We have evaluated the effect of pruning time and/or method on bud break over 8 seasons

Timing of dormant pruning (as early as November and as late as mid-April) has had no influence on bud break

Pruning method, however, may affect the timing of bud break

Pruning and bud break

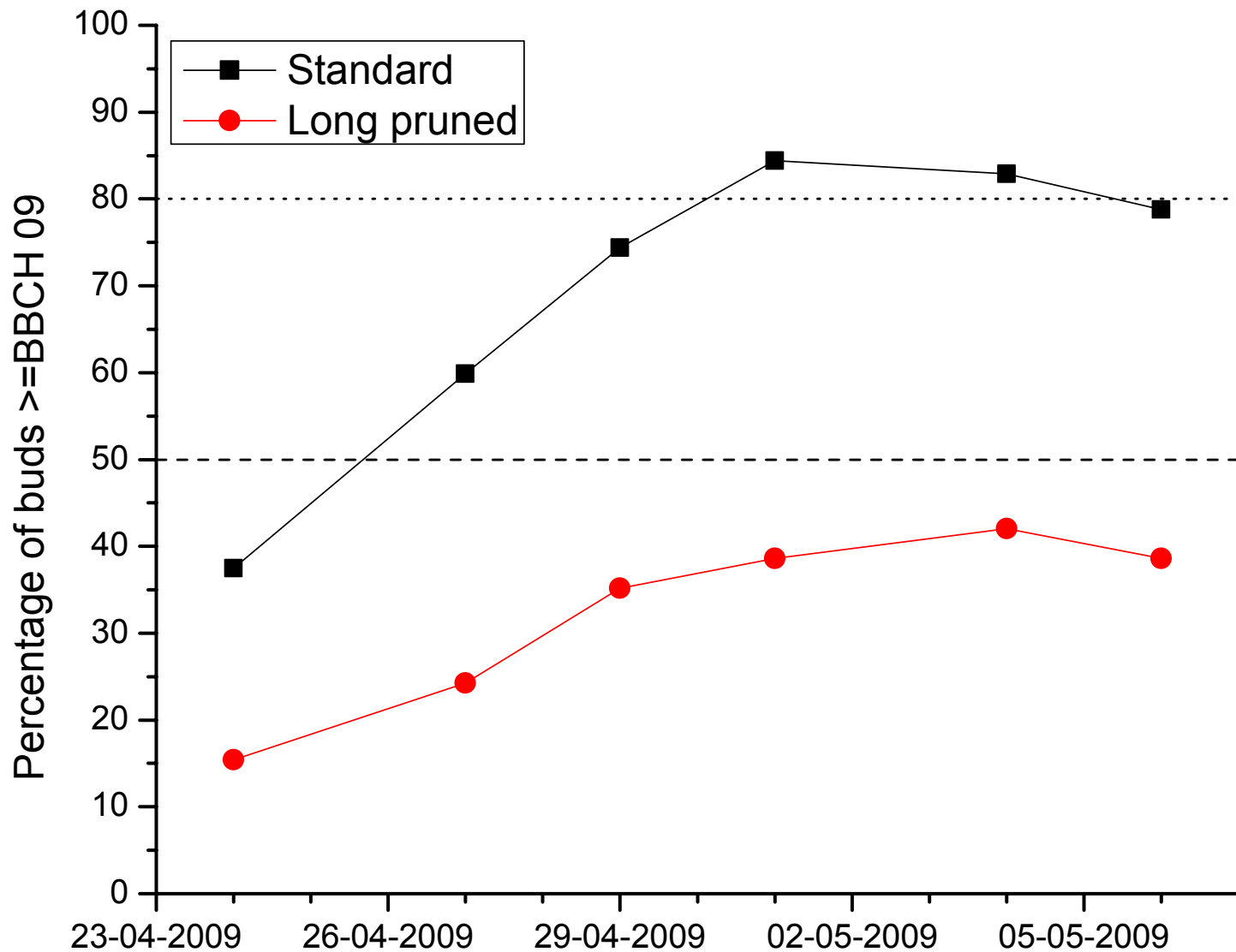
During the 2008/09 dormant season we compared early, long pruning with standard short pruning

Mature Chardonnay vines were either pruned long in late November / early December or pruned short (standard; 3-4 bud spur) in late March

A total of 20 vines per treatment were tagged and observed through the bud break period starting in late April

A vine was judged to be at bud break when ≥ 80 % of the buds had reached or exceeded BBCH 09

Effect of pruning method on bud break of Chardonnay



Preliminary Conclusion

Long pruning delayed bud break by > 1 week

One unexpected outcome was that the hail storm on the evening of May 2 did cause almost no damage to the long-pruned vines versus damaging about 5-10 % of the shoots on standard-pruned vines

Questions?

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What's happening at CSU-WCRC?

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New trials

New variety trials

NE-1020

Aglianico, Aleatico, Alvarinho, Barbera, Carignan noir, Cinsault, Furmint, Garnacha Tinta, Malvasia Bianca, Marsanne, Mourvedre, Rousanne, Souzao, Tocai Friulano, Touriga Nacional, Trousseau, Verdejo, Verdelho

Carmenere, Graciano, Petit Verdot, Refosco, Tinta Carvalha, Touriga Nacional, Verdelho