

NIWG

Winter 2013 Spring 2014 Bud Assessment

Variety	50% primary bud loss*	Primary Bud Loss	Secondary Bud Loss	Harvest loss**
DeChaunac	-10/-15	86%	93%	74/125
Marquette	-20/-30	50%	25%	99/101
Noiret	-14.3	100%	90%	0/156
Prairie Star	-20/-30	66%	66%	171/130
Valvin Muscat	-5/-15	91%	75%	0/0

- * Temperature for predicted 50% primary bud loss, second exposure would give 50% loss of remaining buds. Actual temps reached -25 on three occasions, Nov lowest -17, Dec -25, Jan -32 Feb -19, Mar -11 per NWS/NOAA
- ** Harvest loss denominator is an average of harvest weights previous three years, numerator is 2014 fall harvest data
- Noiret and Valvin Muscat were removed in 2014 after bud break, deemed unsuitable
- Prairie Star sample of buds was small (3 images) all others ranged from 8-14 clear images of dissected buds.
- All vines pruned to 5 buds per spur until after last frost, then pruned again to final bud count

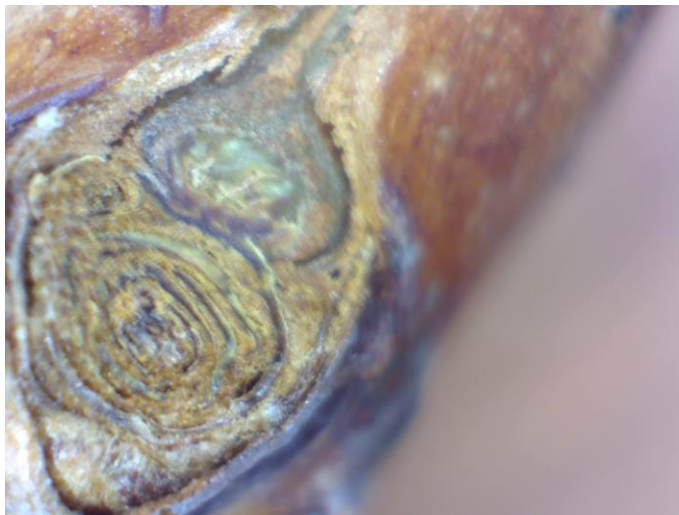
Conclusions

Vines with Minnesota/Canadian heritage – Marquette and Prairie Star/DeChaunac provided a reduced or normal crop even with significant primary bud loss. This may be attributable to a combination of moderate to heavy vigor and surviving tertiary buds.

Cornell varieties Noiret and Valvin Muscat were deemed unrecoverable Individual NIWG members that have Valvin Muscat in other vineyards across the northern region of Illinois are attempting to replace lost trunks and vines, results will show in 1-3 years. It should be noted that Valvin Muscat was trellised on a High Wire Cordon at the experimental vineyard, other growers are using VSP with better success. Noiret showed significant trunk damage spring of 2014. Valvin Muscat buds were particularly dramatic as to the apparent damage.

This was the first year using a microscope at NIWG, many samples of buds were unusable due to razor blade slicing technique, should improve with experience.

Sample images next pages



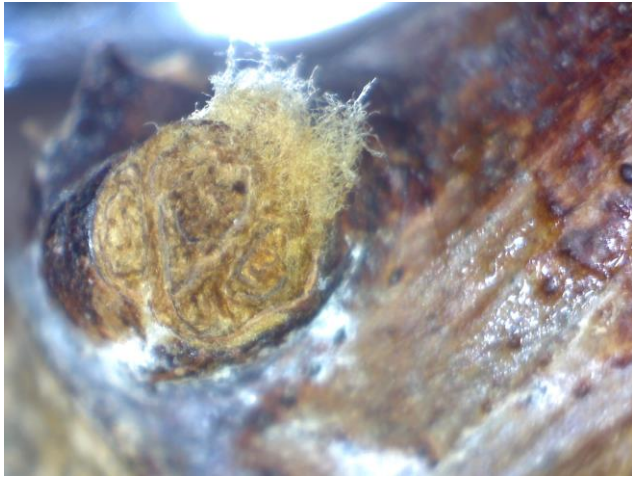
DeChaunac



Marquette



Noiret



Prairie Star



Valvin Muscat