Responses of Primocane Blackberries to Different Mow-down and Tipping Regimes

Blackberry Irrigation Management

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University of **California** Agriculture and Natural Resources Traditional floricane blackberries bear on one-year old wood

- have a limited production season

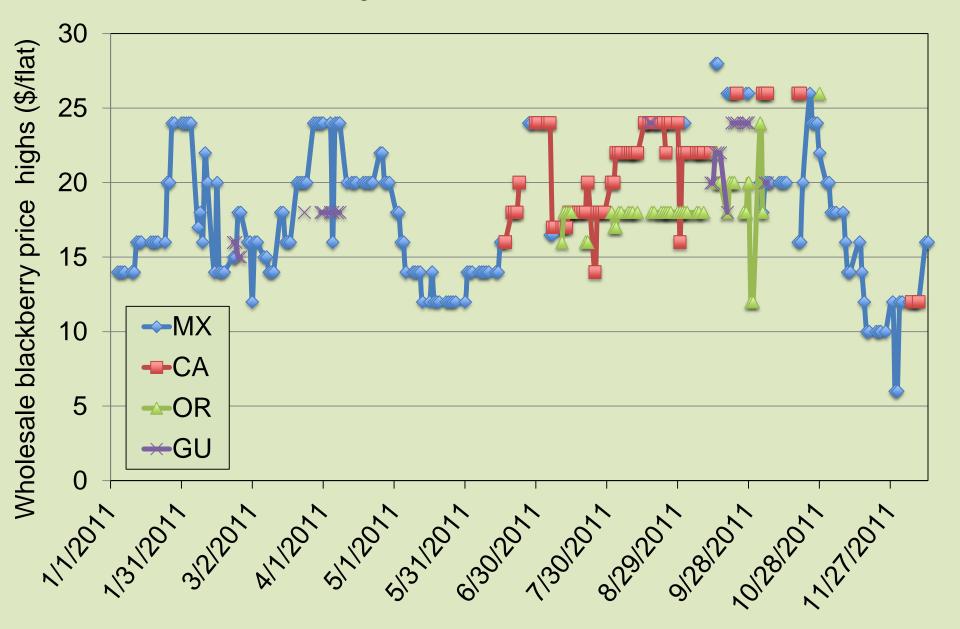


Primocane fruiting varieties fruit on current seasons growth
 more flexibility to manage harvest season





Weekly Fresh Blackberry Wholesale Prices (highs) Los Angles Terminal Market - 2011



Primocane fruiting offers new management options



Field trials to evaluate timing of mow-down and tip pruning of Primeark-45 blackberry

- Mow-down January 15, February 15, March 15
 may also treat has floricane
- Previous research showed advantages to tip pruning
- Important market window remains

June > December?



Tip pruning > force branching to increase fruiting branches and yield.

- Timing is important
- When? Repeat later?





2013 Primeark 45 pruning / tipping trials

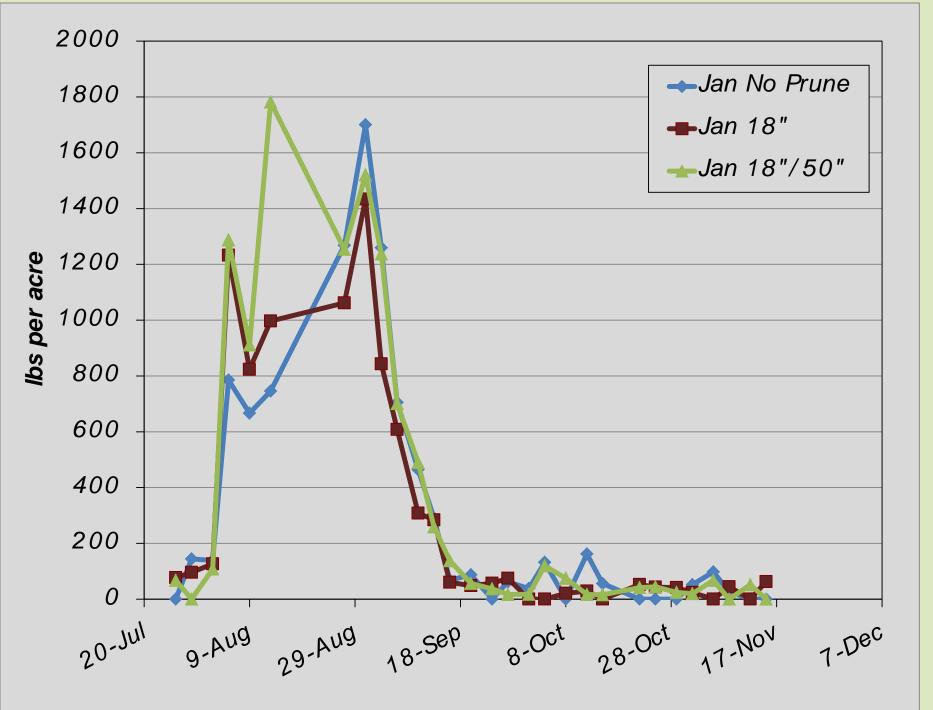
- Two sites

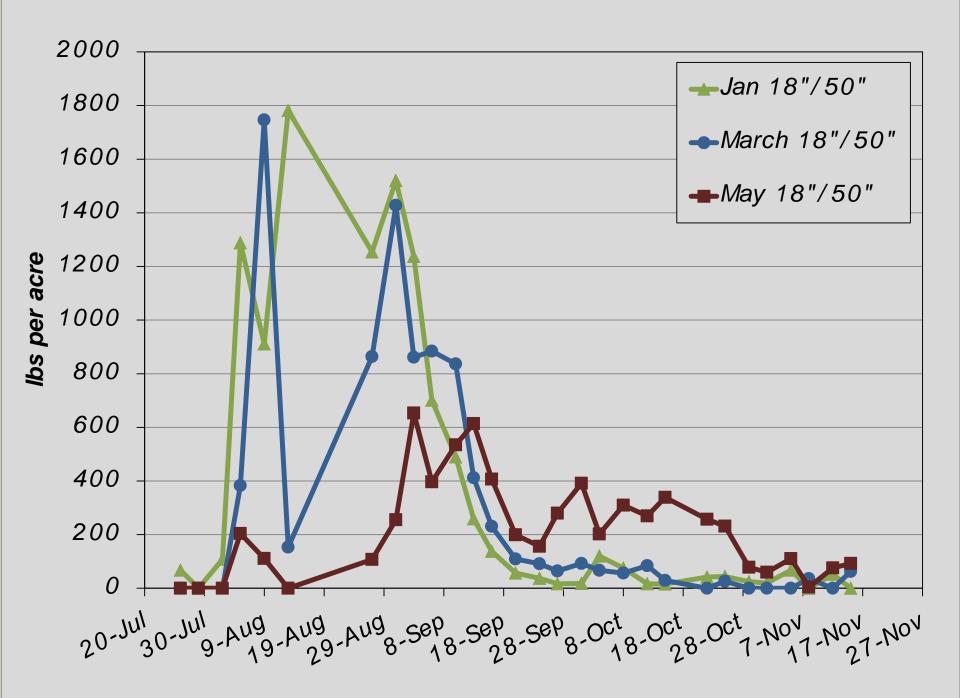
 Nipomo open field until June
 Los Alamos tunnel from beginning
- Mow-down at varying times January > April + floricane – Los Alamos
- Tipping height (Nipomo)
 - 18"
 - 50"
 - 18'/ 50"
 - none

All Shipping Points

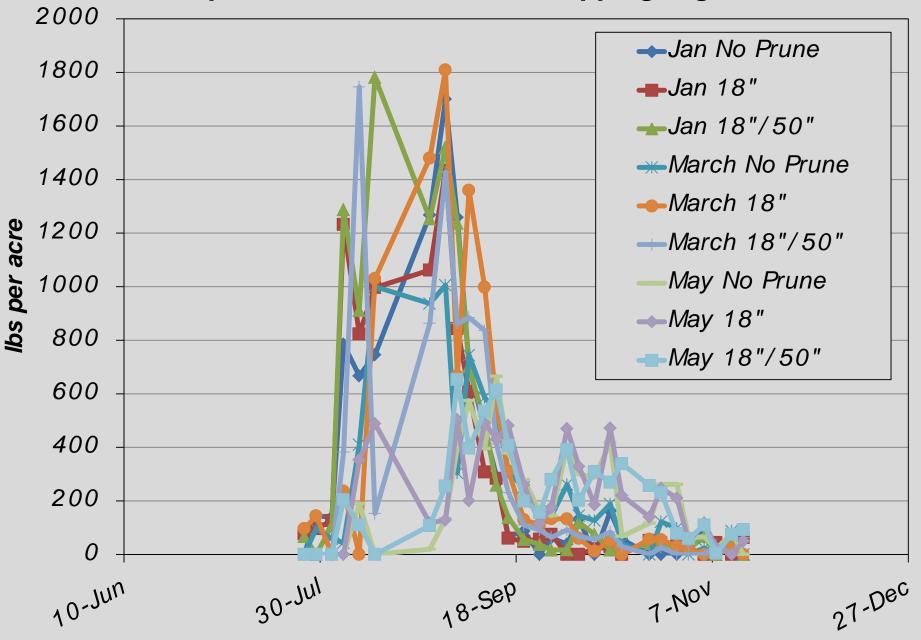
Average Price Trend \$25.00 \$20.00 \$15.00 Average Price \$10.00 \$5.00 \$0 2/11/2012 3/17/2012 4/21/2012 5/26/2012 6/30/2012 8/4/2012 9/8/2012 10/13/2012 11/17/2012 12/22/2012 Week Ending Date May Feb Mar _July Apr Sept Oct Nov Dec Aug

\$14.05





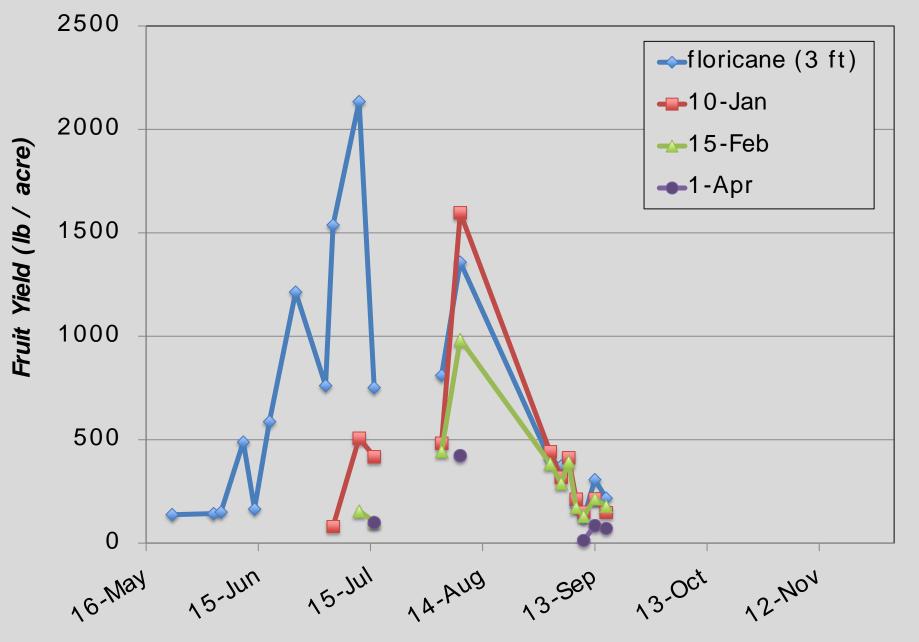
Response to mow-down and tipping regimes



Total Seasonal Berry Yield (marketable)

Pruning Treatment	Yield (lb / acre)
January mow / no tip	8,960
January mow 18" tip	8,481
January mow 18" tip + 50" tip	10,469
March mow / no tip	7,697
March mow / 18" tip	9,530
March mow / 18" tip + 50" tip	8,518
May mow / no tip	5,762
May mow / 18" tip	6,392
May mow / 18" + 50" tip	6,358

Weekly marketable blackberry production from tunneled Primeark 45 blackberry with varying mow-down periods – 2013 season, Los Alamos, CA



Primocane vegetative growth may be excessive in warm tunnels







Questions for future trials

Floricane pruning of Primeark?

- Does elimination of foliage with mow-down affect redberry mite?
- Is traditional redberry control with oils adequate enough to take advantage of earlier harvest resulting from floricane pruning?

In-season pruning?

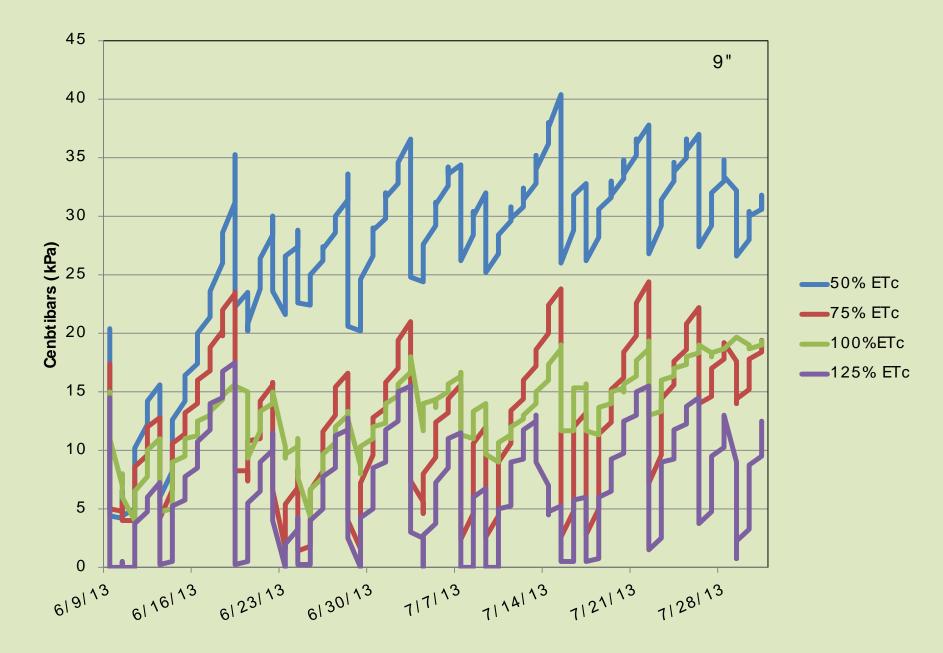
What about late season pruning?
 will August cut back to 3 ft increase October production?

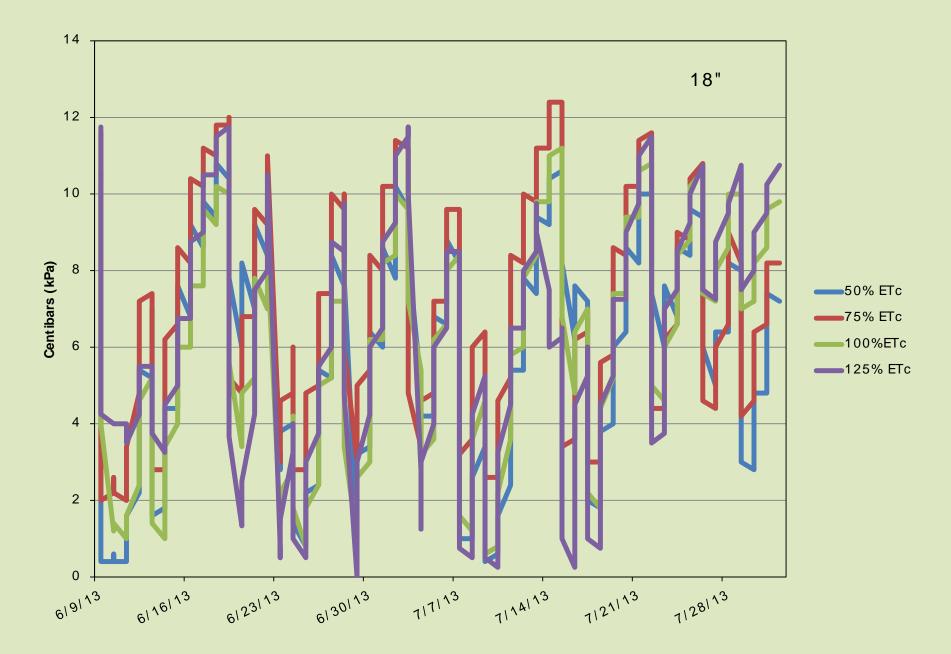
Effects of tunnels, heating?

• Put up plastic as late as possible to minimize vegetative growth, reduce fruiting height?

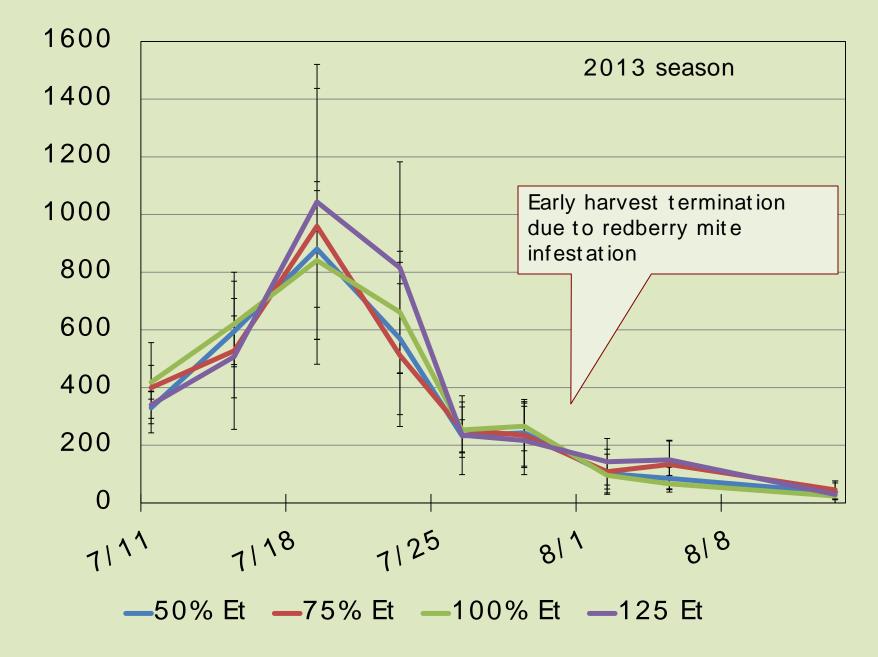
2013 Ouachita Irrigation Management

- Effects of irrigation regime on blackberry yield and quality
- Compared weekly harvests at 4 irrigation regimes
 - > 50 % Et
 > 75% Et
 > 100% Et
 > 125% Et





Fruit Yield (gram/ plot)



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