

A photograph of blackberry plants with several clusters of ripe, dark purple and red berries. The leaves are green and serrated. The image is used as a background for the text on the slide.

*Extending Blackberry Production into
New Market Windows*

*Mark Gaskell, Farm Advisor
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Overview

- *review of traditional blackberry production*
- *recent trends*
- *blackberry market situation*
- *seasonal shipping points*
- *trends in variety improvement*

- *current options for season extension*



Traditional blackberry production ...

- *inconsistent flavor, quality*
- *best taste > processing*
- *floricane fruiting types*
- *narrow, defined harvest period*
- *narrow, inconsistent, and limited availability*

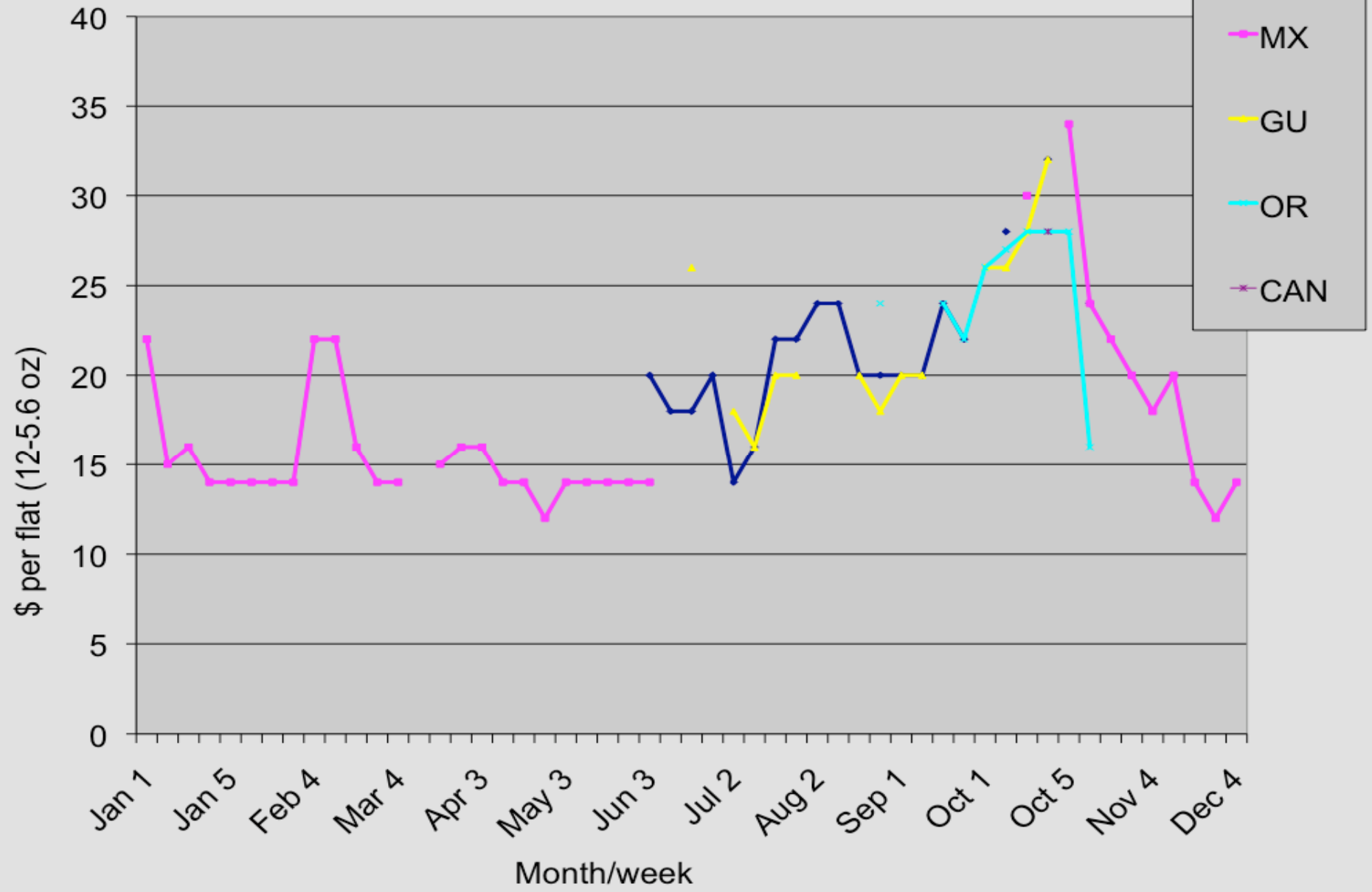


Recent blackberry news ?

- *annual sales > 3X increase in last five years*
- *above 60 million pounds*
- *health benefits of dark fruit with antioxidants*
- *new varieties grown more widely*
- *off-season imports have surged*



Fresh Blackberry Wholesale Prices LA Terminal Market - 2006



Past limitations ?

- *high chill requirement in temperate areas*
- *localized plantings*
- *more as processed fruit*
- *fresh market commercial expansion -1980s and 90s*
Guatemala, Costa Rica, Chile
varieties still not great
- *prior emphasis on raspberry*



Traditional production



- *Marion, Chester, etc in PNW >> processing*
- *Ollalie, Boysen in California; Chester in Watsonville*
- *localized summer production in East*
- *Brazos, Rosborough, Womack, >> Texas, OK, Ark*
- *1980s >>> new erect types from Arkansas
Brazos and Roseborough >>> Guatemala
little or no chill !*

Current / future push with blackberry

- *New varieties*
 - better flavor*
 - firmer – better shipping*
 - low chill*
 - primocane fruiting*
- *Mexico now dominates off-season world wide*
 - Tupy has largely replaced Brazos*
 - some defoliation, etc.*
- *Tunneled production – Spain, Chile, California,*

Floricanne VS Primocane fruiting



Primocane characteristics?

- *flexibility for controlling harvest season*
- *low maintenance*
- *overwintering - mowed back, little pruning labor*
- *drawback ?*
current varieties very thorny



Current and future? - newer varieties ...

- *U. of Arkansas program - erect and thorn-less
USDA – Triple Crown
thorn-free are usually later, lower cold tolerance*
- *expansion into low chill areas is current focus*
- *improved flavor, yield, low chill, easier
management, expanded season*
- *Primocane fruiting (very new)*



Future focus - newer varieties ... (continued)

- *proprietary varieties – Driscoll, U. of Md
Vitalberry (Chile), New Zealand,*
- *EMBRAPA at Pelotas, Brazil*
- *= low chill focus with fruit quality*
- *more low chill varieties coming with
improved fruit quality, more production flexibility*



Newer varieties in California

Erect, lower chill

Arapaho

Navajo

Apache (-T)

Ouchita (-T)

Chickasaw

Choctaw

Kiowa

Triple Crown (-T)

Tupy (replaces Brazos)

-- little, no chill

Natchez (?)

Primocane fruiting

Prime Jim

Prime Jan

others coming?

*Driscoll Proprietary
(floricane to date)*

Carmel

Eureka

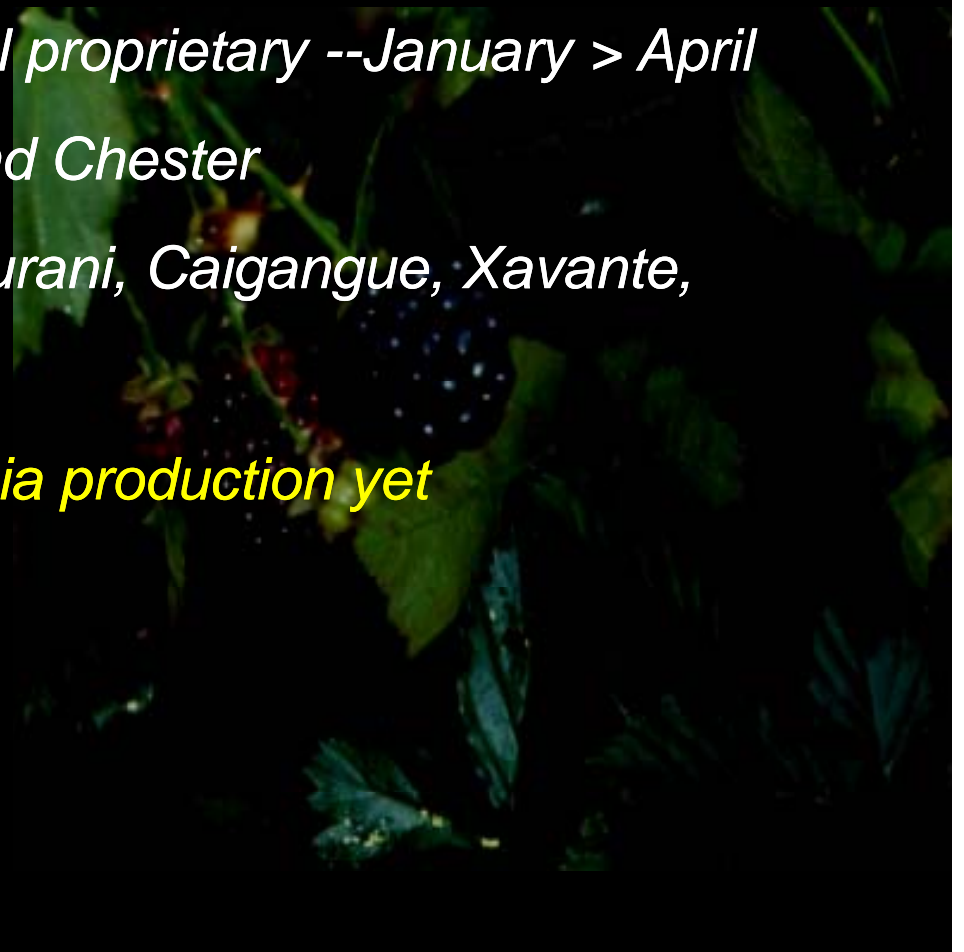
Cowles

Blackberry production windows

	Jan	Feb	Mar	Apr	May	Jun	Jul	Agt	Sep	Oct	Nov	Dec
Rosborough				XXX	XXX	XX						
Arapaho					XX	XXX	XXX	XXX	XXX	XXX	???	
Shawnee					X	XXX						
Navajo						XXX	XXX	XXX	XXX	XXX	???	
Ollalie					XX	XXX						
Boysen					X	XXX						
Black Satin							X	XXX	XXX	XXX	???	
Chester							X	XXX	XXX	XXX	???	
Choctaw							X	XXX	XXX	???		
Ouchita						XX	XXX	XXX	XXX	XXX	???	
Trip Crown							XX	XXX	XXX	???	???	
Apache							XXX	XXX	XXX	???	???	
Prime Jim?	???	???								XXX	XXX	X??
Prime Jan?	???	???								XXX	XXX	XX
Tupy?	???	???								???	???	???

Winter off season – Mexico, Guatemala, Chile, other

- *Mexico now mostly Tupy*
 - *plus some Choctaw*
 - *Sleeping Beauty is Driscoll proprietary --January > April*
- *Chile is Arkansas varieties and Chester*
- *EMBRAPA –Tupy, Ebano, Gurani, Caigangue, Xavante, Brazil breeding low chill*
- *little or no off-season California production yet*



Off-season Mexico management ...

- *Season typically October to May (some local May / June)*
- *Dominate winter season world-wide
North America, Europe, Asia*
- *Tupy, Choctaw, and Chickasaw – erect types
(Driscoll also uses Sleeping Beauty – January > April)*
- *prune back all canes in Nov - December*
- *defoliation sprays in June >>> water stress*



Off-season Mexico management ...

- *“cane conditioning” sprays, growth regulators 2-3 weeks after defoliation for shoot induction ,
- many feel complex spray program not necessary - Dormex?*
- *harvest begins 9 -120 days post defoliation*
- *some growers prune producing wood and repeat 2-3 times for long harvest season*
- *may combine with tunnels; new primocanes?
- lessons for CA?*
- *Tupy is heart of public Mexican program until newer varieties*



Other extended season?

- *Portugal pruning floriscane types like Loch Ness and Triple Crown for EU >>> later, smaller harvest*
- *Oregon tipping and pruning primocane types in tunnels also to extend season into fall >>>> Oct / November
- yield INCREASE with primocane types*
- *both of these techniques should work here*
- *little or no off-season California production yet*





California Off season?

- *experimental attempts at early pruning of Triple Crown, Ouchita > move harvest back but reduce yield?
- more work needed in this area?*
- *late season in mild areas >>> Sept – Nov / Dec
- mow down, pruning for late annual crop*
- *year around with Tupy or primocanes in tunnels?*
- *heat units for ripening and fruit quality?*

Summary

- *new opportunities for extended season blackberry production*
- *attractive prices and growing consumer demand*
- *new varieties coming and new options*
- *Mexico dominates global winter production*
- *best current off-season options for CA include pruning, primocane varieties, proprietary or Tupy in tunnels*



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