

Blackberry Management Options for Targeting Selected Markets

University of California
Agriculture and Natural Resources

***Mark Gaskell, Farm Advisor
UC Cooperative Extension- San Luis Obispo***



Overview

- *Marketing options for blackberries include direct sales and the wholesale market.*
- *Direct sales can be profitable but require additional specialized circumstances.*
- *Wholesale markets mean larger volumes but also have important restrictions.*
- *Targeting profitable market windows is important for success with wholesale marketing.*

***Mexican blackberries are transforming the
blackberry market in the US
(and much of rest of the world also)***

- ***Appearance, flavor and productivity of Tupy.***
- ***Experience with blackberries in the 1990s after Central American problems.***
- ***Little or no chill requirement.***
- ***Knowledge and experience with exports to US, Canada and now EU.***

Newer varieties offer improved quality

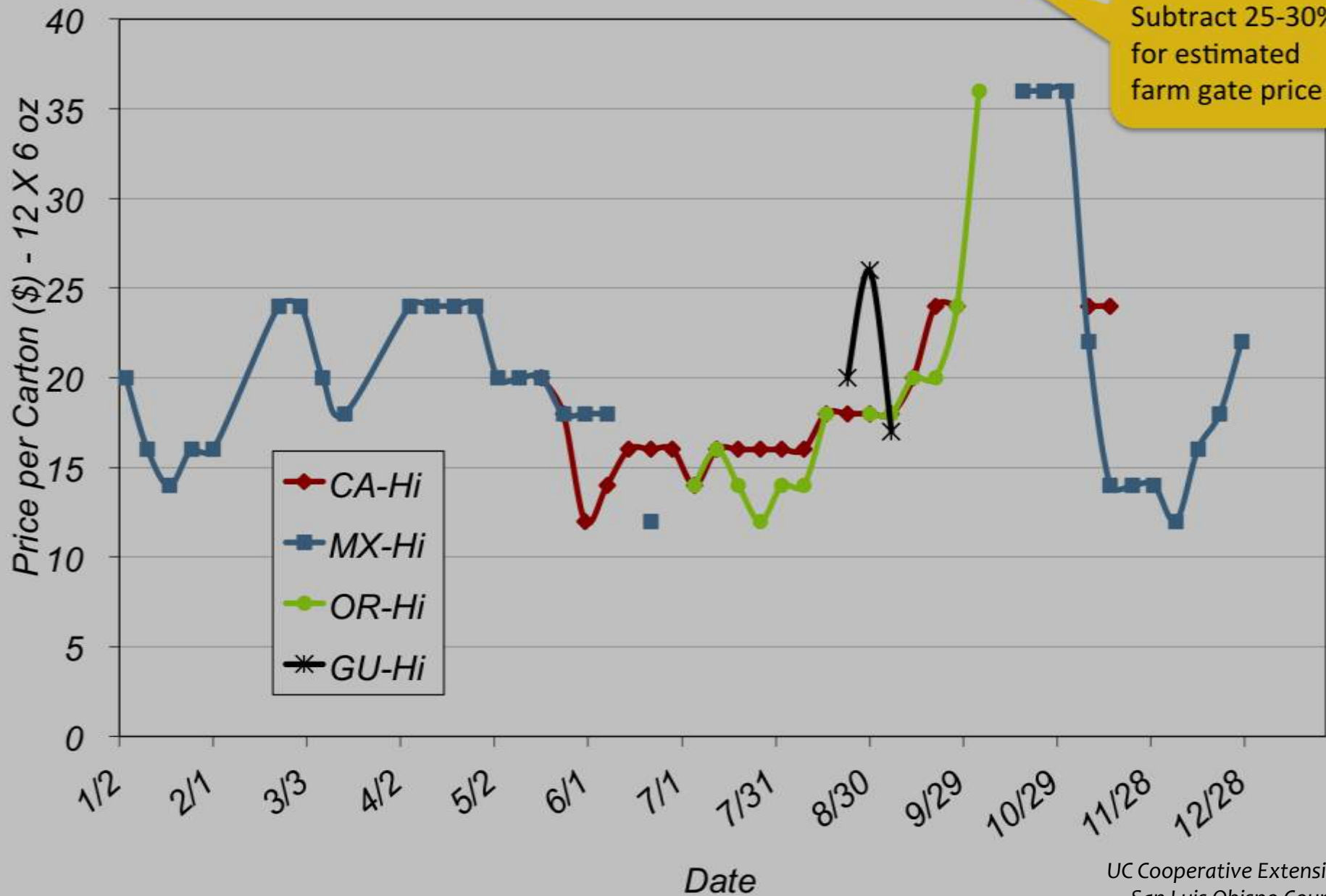
- *Growers now have options*
Improved brix (>10.0? , appearance, firmness)
- *Mexico still dominates >> quality / costs*
ship October to June
- *Growers need to understand their market window*
and production options



Tools to target market windows

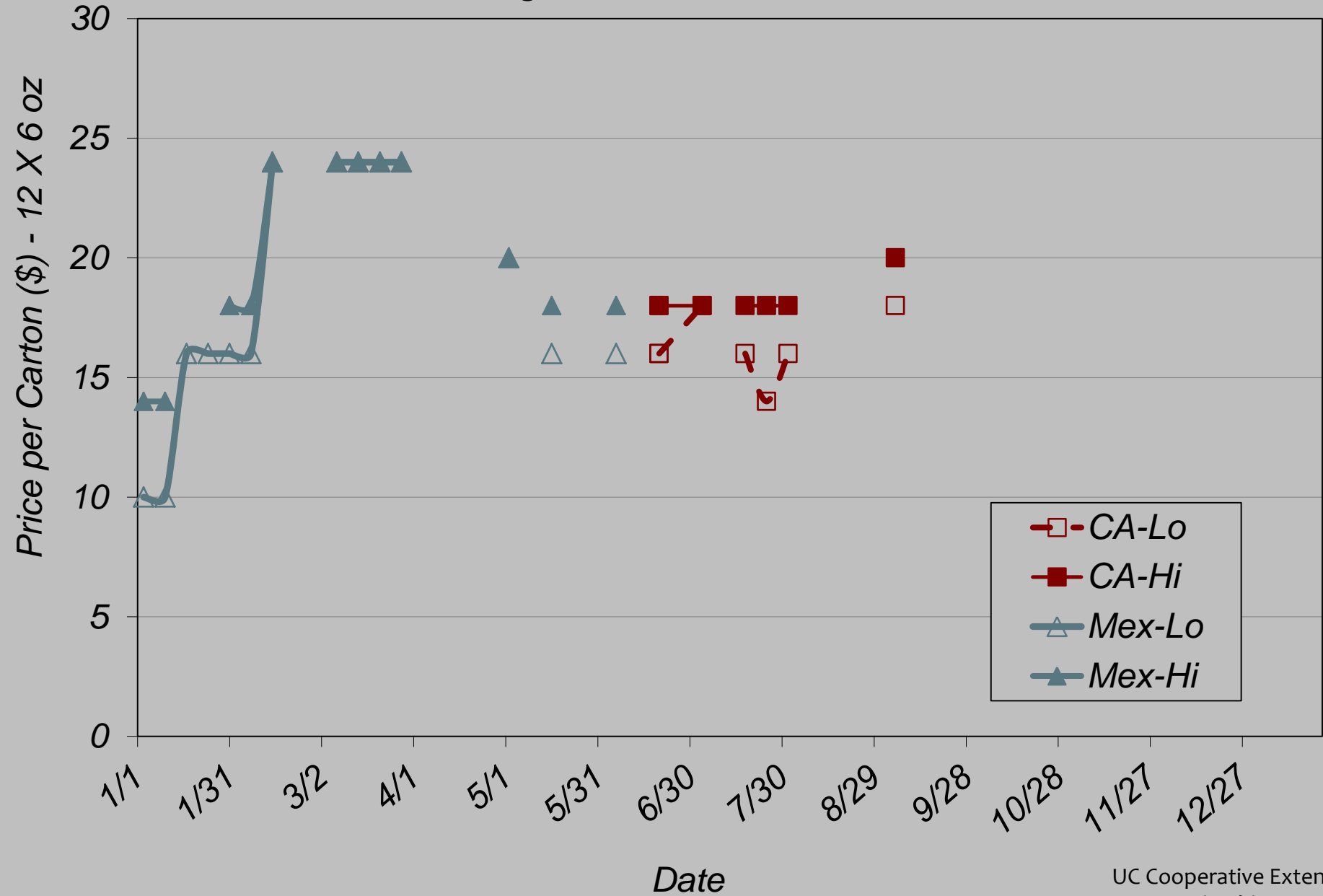
- *Know the market.
price patterns, competition, volumes X source etc.*
- *Know your costs – especially UNIT costs.*
- *Modify growing conditions as needed.*
- *Manipulate plant characteristics.*
- *Berry quality important – flavor and appearance
- pack and post-harvest management also critical.*

Weekly Wholesale Price for Fresh Blackberries Los Angeles Terminal Market - 2009

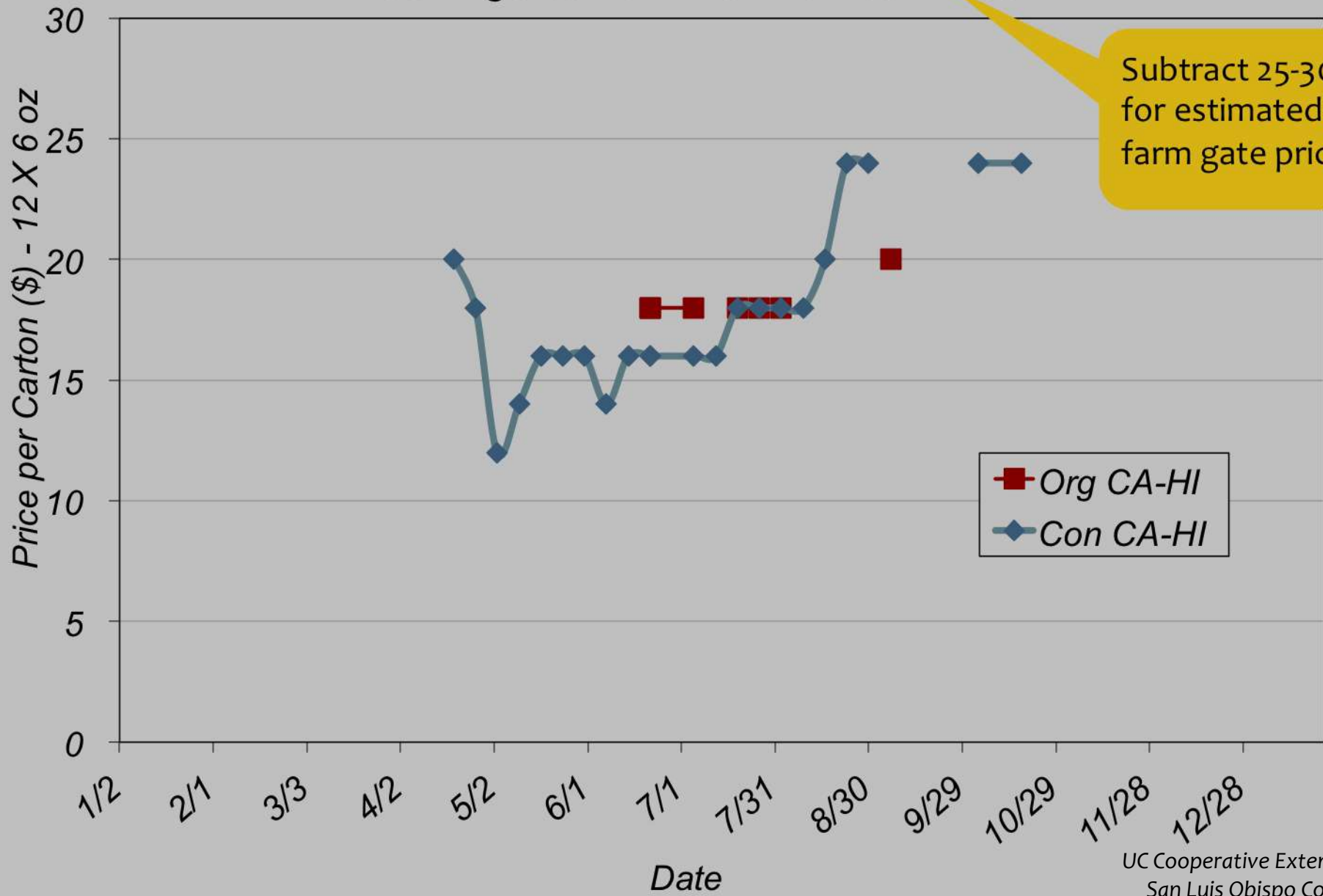


Weekly Wholesale Price for Fresh Blackberries - Organic

Los Angeles Terminal Market - 2009



Weekly Wholesale Price for Fresh Blackberries Los Angeles Terminal Market - 2009



Blackberry varieties evaluated

- *Mostly erect or semi-E Arkansas + Tupy*
- *Tupy not impressive.*
- *Other varieties lack vigor, or*
- *Vigorous but excessive and /or thorny*
- *Lack quality*
 - *flavor, brix,*





Ouchita



Prime Ark45



Prime Jim

Table 1. Postharvest evaluations of Prime-Ark® 45 blackberries from 2007- 2009 at the Fruit Research Station, Clarksville, compared with other named varieties (7 days in cold storage at ~40°F or 5°C).

Variety	Marketability ¹	Red (%) ²	Leak (%) ³	Decay (%) ⁴	Soft (%) ⁵
<u>2007</u>					
Natchez	80.5 b ⁶	29.4 a	12.5 b	0.0 a	29.7 ab
Prime-Ark®45	85.8 ab	2.8 b	14.9 b	0.0 a	39.6 b
Apache	88.3 ab	0.0 b	16.0 b	1.6 a	24.0 a
Ouachita	90.5 a	4.5 b	5.5 a	1.6 a	22.0 a
<u>2008</u>					
Natchez	91.8 a	66.6 ab	12.6 a	1.4 a	10.6 a
Prime-Ark®45	85.6 ab	25.3 bc	7.5 a	0.9 a	9.6 a
Apache	80.8 ab	4.7 c	21.3 ab	10.6 b	21.1 ab
Arapaho	80.0 ab	6.1 c	26.8 ab	4.3 ab	22.9 ab
Ouachita	76.8 ab	22.8 bc	15.5 a	11.5 b	19.9 ab
Tupy	64.3 b	35.1 abc	39.7 bc	1.8 a	30.7 b
Prime-Jim*	33.3 c	75.3 a	56.0 c	11.0 b	57.7 c
<u>2009</u>					
Natchez	90.5 a	14.8 ab	14.7 a	1.3 a	12.8 a
Prime-Ark®45	87.0 ab	4.8 b	29.9 ab	3.4 a	5.7 a
Apache	65.3 d	0.0 b	68.8 c	18.2 bc	23.3 a
Arapaho	73.6 bcd	0.0 b	56.4 c	0.0 a	22.9 a
Ouachita	85.1 abc	0.0 b	35.0 ab	3.5 a	6.3 a
Tupy	57.8 e	12.0 ab	64.0 c	19.6 c	43.0 b
Prime-Jim*	70.8 cde	23.3 a	51.5 bc	11.9 ab	24.3 b

¹Percent marketability ratings are used as an indicator of performance after 7 d in the cooler. Percent marketability is calculated as: $100 - [\text{sum}(\% \text{ decayed} + \% \text{ soft (4- and 5-rated berries)} + \% \text{ leaky})] / 3$. A minimum of 85 is desired.

²The berries were rated on a yes/no scale for presence of red drupelets in clusters of three or more.

³The berries were rated on a yes/no scale for presence of leakiness.

⁴The berries were rated on a yes/no scale for presence of decay.

⁵The berries were rated on a 1-5 scale for softness, where 1 = firm and 5 = collapsed berry, very leaky. Means represent berries that scored a 4 or 5.

⁶Means followed by the same letter are not significantly different ($P > 0.05$) by t-test.

Methods used in these evaluations were developed by Dr. Penny Perkins-Veazie, NC State University.

Table 2. Plant and fruit characteristics of five blackberry varieties at the University of Arkansas Fruit Research Station, Clarksville.

Characteristic	Variety				
	Prime-Ark [®] 45	Prime-Jan [®]	Prime-Jim [®]	Ouachita	Natchez
<i>Floricanes bloom date</i> [†]					
10% bloom	29 Apr.	---	29 Apr.	3 May.	29 Apr.
50% bloom	2 May	---	2 May	6 May	1 May
<i>Floricanes harvest date</i> [‡]					
First	9 June	---	5 June	13 June	5 June
Peak	25 June	---	23 June	30 June	23 June
Last	17 July	---	7 July	17 July	17 June
<i>Primocane first bloom date</i> [‡]	30 June	16 June	13 June	---	---
<i>Primocane first ripe fruit date</i> [‡]	8Aug.	18 July	15 July	---	---
<i>Fruit</i> [™]					
Firmness	8.0 (0.0)	6.7 (0.6)	6.6 (0.6)	8.2 (0.5)	7.5 (0.6)
Flavor	7.8 (1.1)	7.0 (0.0)	6.4 (0.6)	8.0 (0.0)	7.5 (0.6)
Soluble solids (%) [‡]	9.7 (0.5)	8.6 (0.6)	9.1 (1.5)	10.4 (2.1)	8.6 (0.7)
<i>Plant</i> [™]					
Vigor	7.2 (0.5)	6.5 (1.0)	7.6 (0.6)	7.0 (0.0)	7.2 (0.0)
Health	7.6 (0.6)	7.0 (1.4)	7.6 (0.6)	8.0 (0.7)	7.5 (0.6)
Erectness	9.0 (0.7)	7.3 (0.5)	7.8 (0.8)	8.2 (0.5)	7.0 (0.8)

[†] Data from one year, 2008, with data collected from the 2007-established replicated plots.

[‡] Means of 4 years, 2004-2008, with data collected from the observational plots.

[‡] Means of 4 years, 2004-2008, with data collected from the observational plots; X the standard deviation.

[™] Rating scale of 1 to 10 where 10=best.

[‡]Soluble solids measured on a 25-fruit sample from observational plots harvested during the floricanes-fruited season.

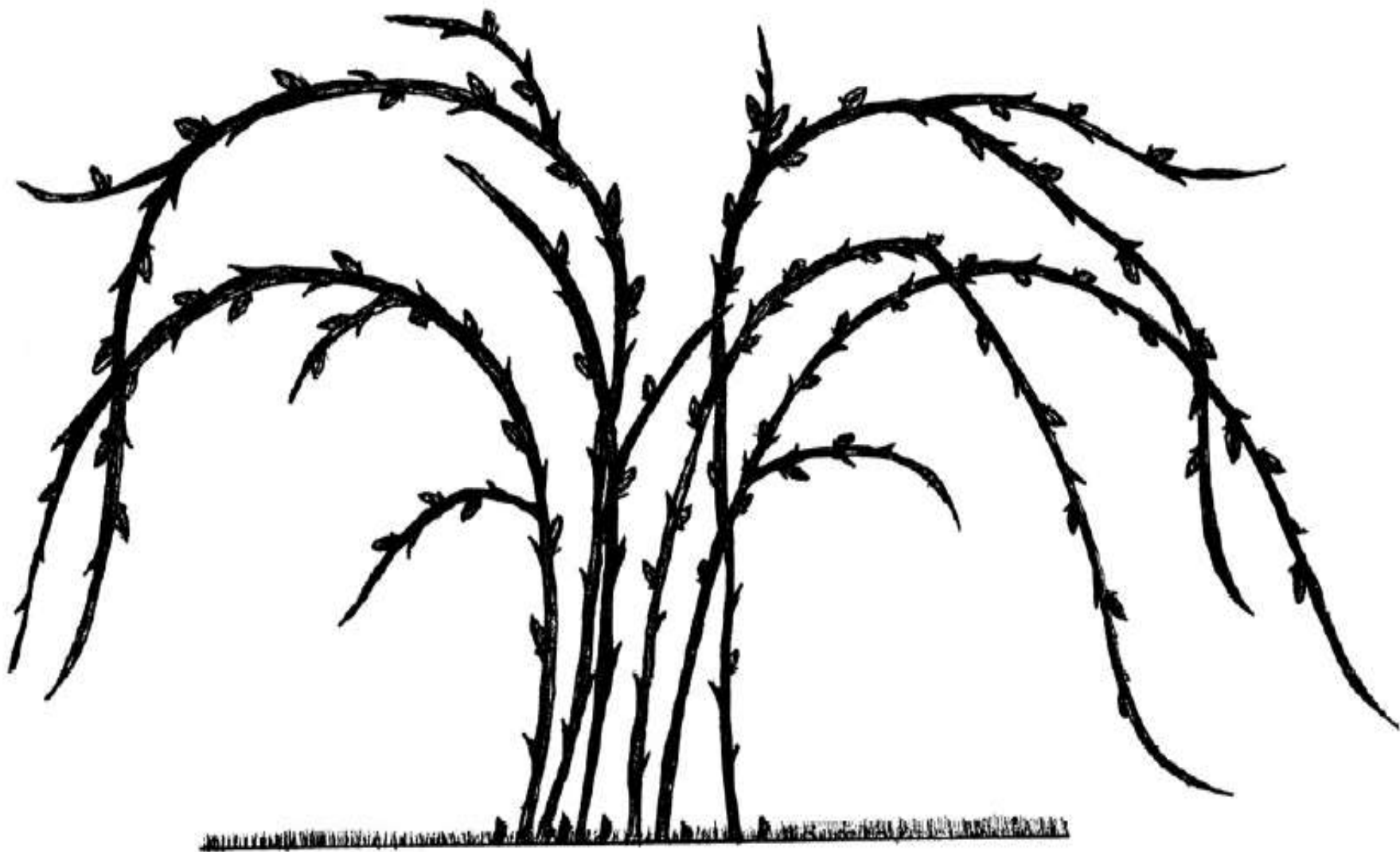


Figure 1. Primocanes of thorny, erect blackberries that have not been pruned.

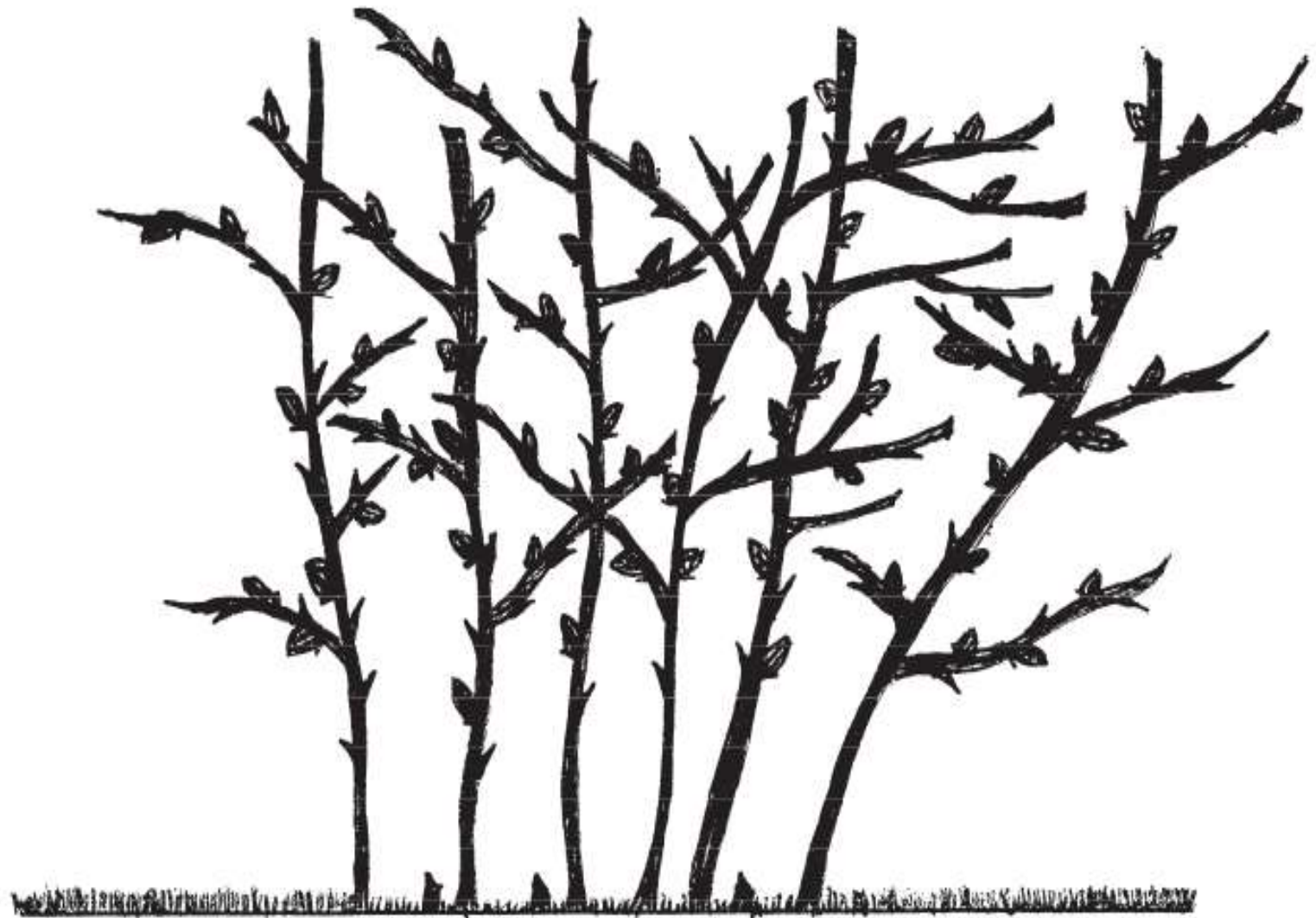


Figure 2. Primocanes of thorny, erect blackberries that have been pruned.

Mow -down of primocanes in winter



Figure 2. Primocanes of thorny, erect blackberries that have been pruned.

Promising blackberry varieties

- *Conventional erect types*
Ouachita – vigorous, fruit quality, thornless
- *Santa Barbara / San Luis Obispo produces late May to August – again in October?*
- *Primocane varieties*
more flexible –
- based on mow-down / tipping





Early season VS Late Season market ?

Fall wind? – Early winter rains?



Blackberry Management Options for Targeting Selected Markets

Mark Gaskell, Farm Advisor

UC Cooperative Extension- San Luis Obispo

BlXXXXXXXXXXXX

XXXXXXXXXXXXs

MXXXXXX

XXXXXXXXXXXXXXXXXX

LXXXXXX

