

# *Research Results from Coastal Program for Off-season Fresh Market Blueberries*

*Mark Gaskell  
Farm Advisor – Santa Maria  
Statewide Small Farm Program*



University of  
California

Cooperative  
Extension



Santa Maria, CA

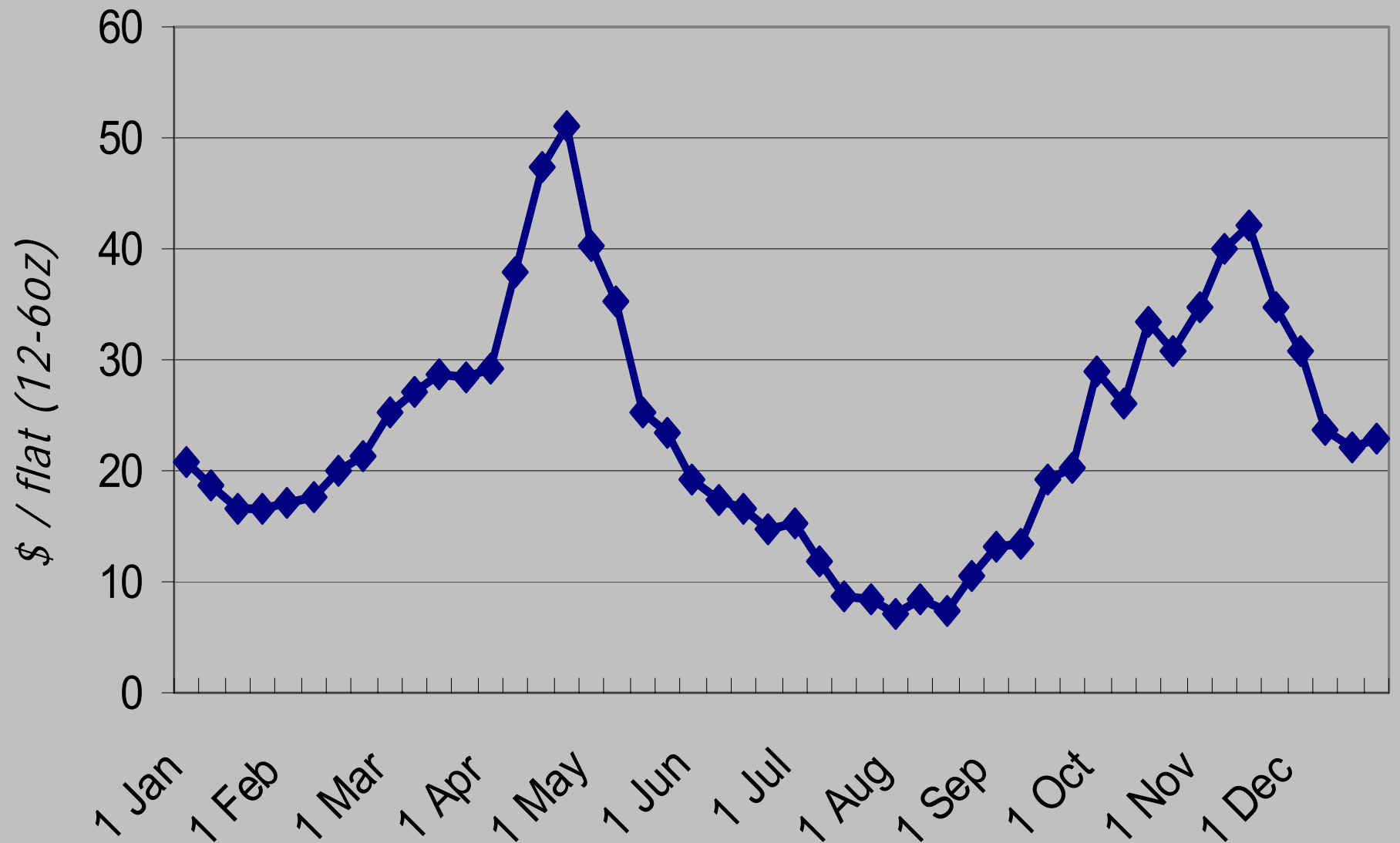
# *Overview*

## *Off-season blueberry production and marketing*

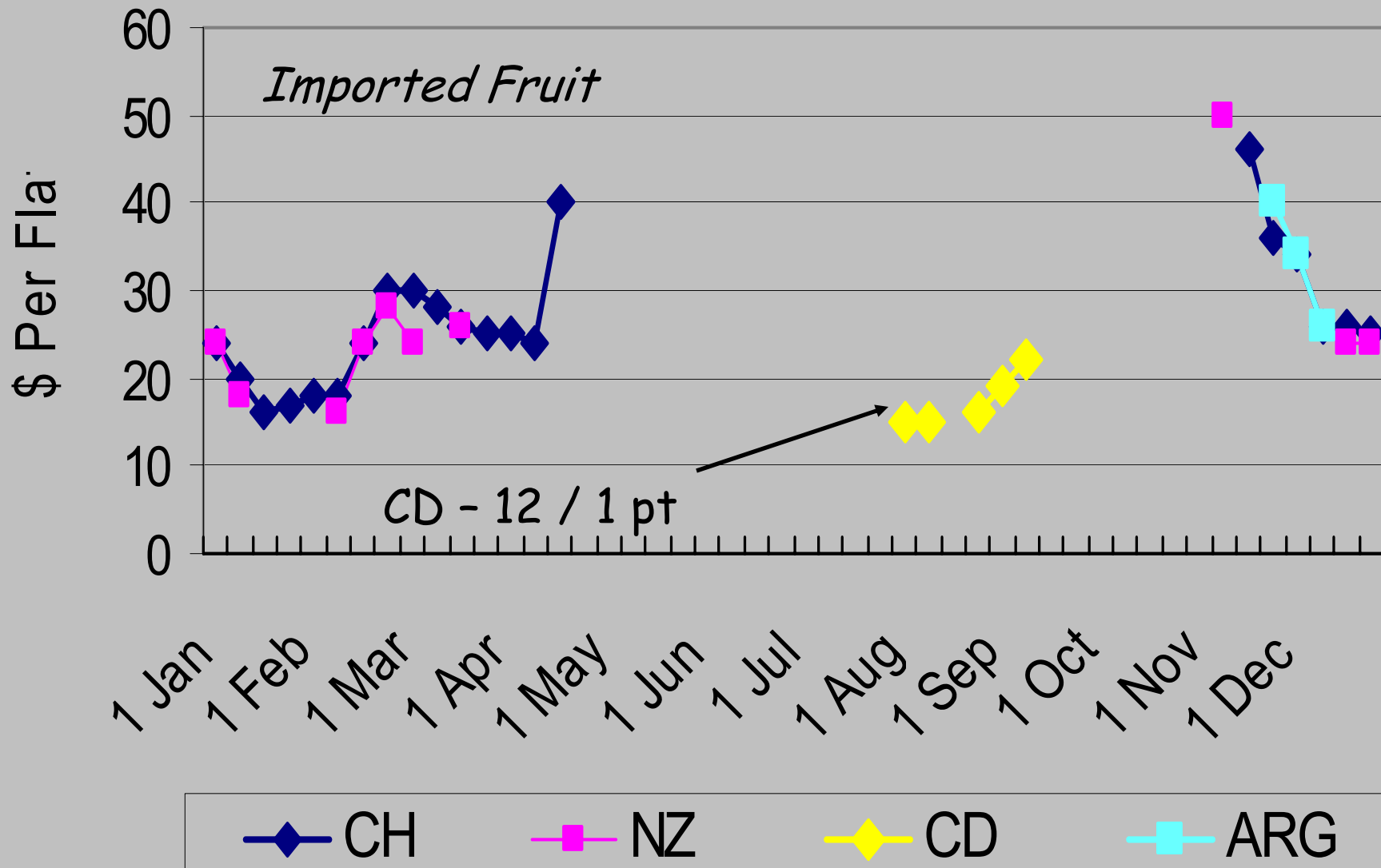
- ▶ *Market histories – price trends*
- ▶ *Sources by period - domestic vs import*
- ▶ *Target market window*
- ▶ *Characteristics and performance of SHB blueberry varieties*
- ▶ *Cultural practices also important*



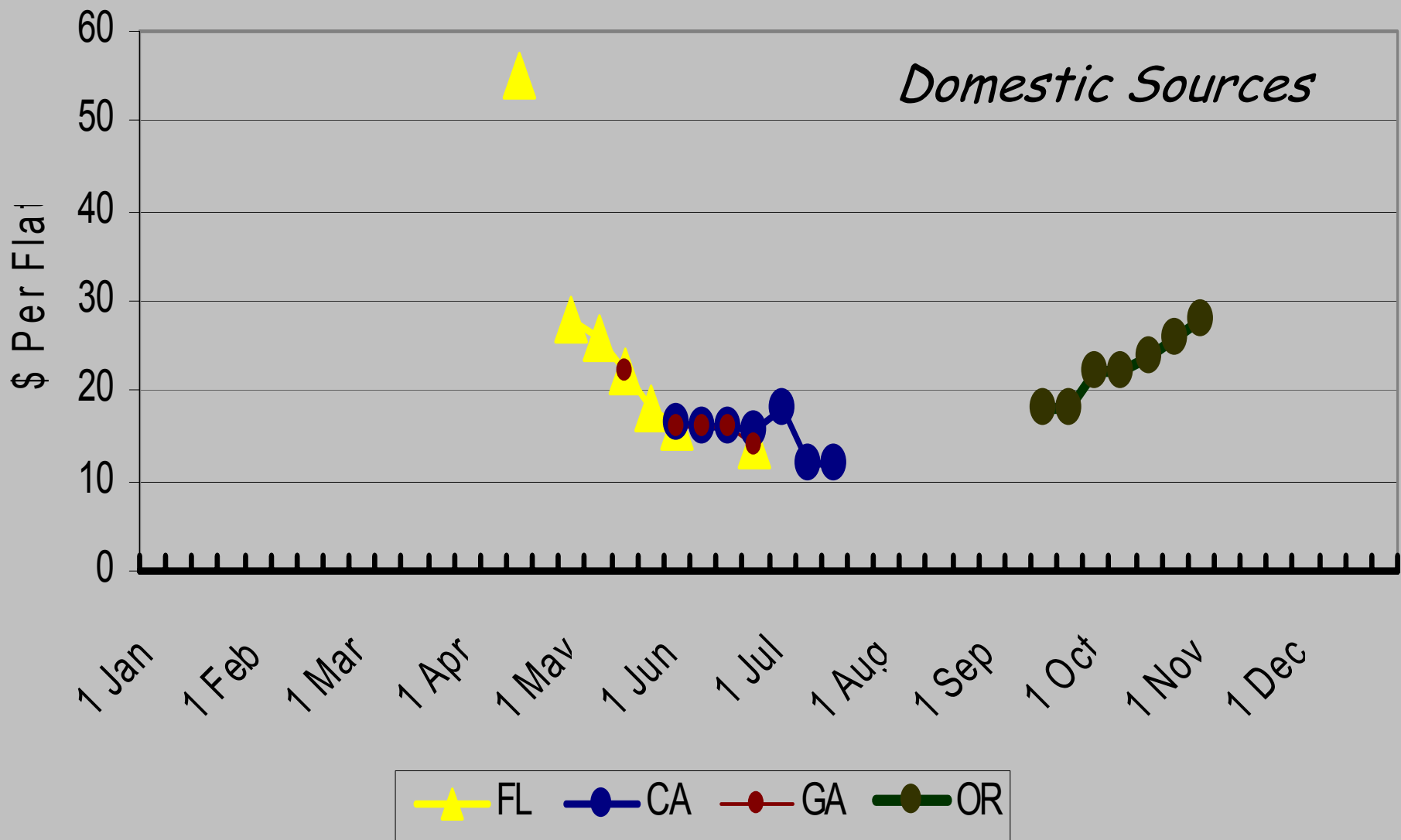
# 3 Year Average Wholesale Fresh Blueberry Prices L.A. Terminal Market 1998 - 2000



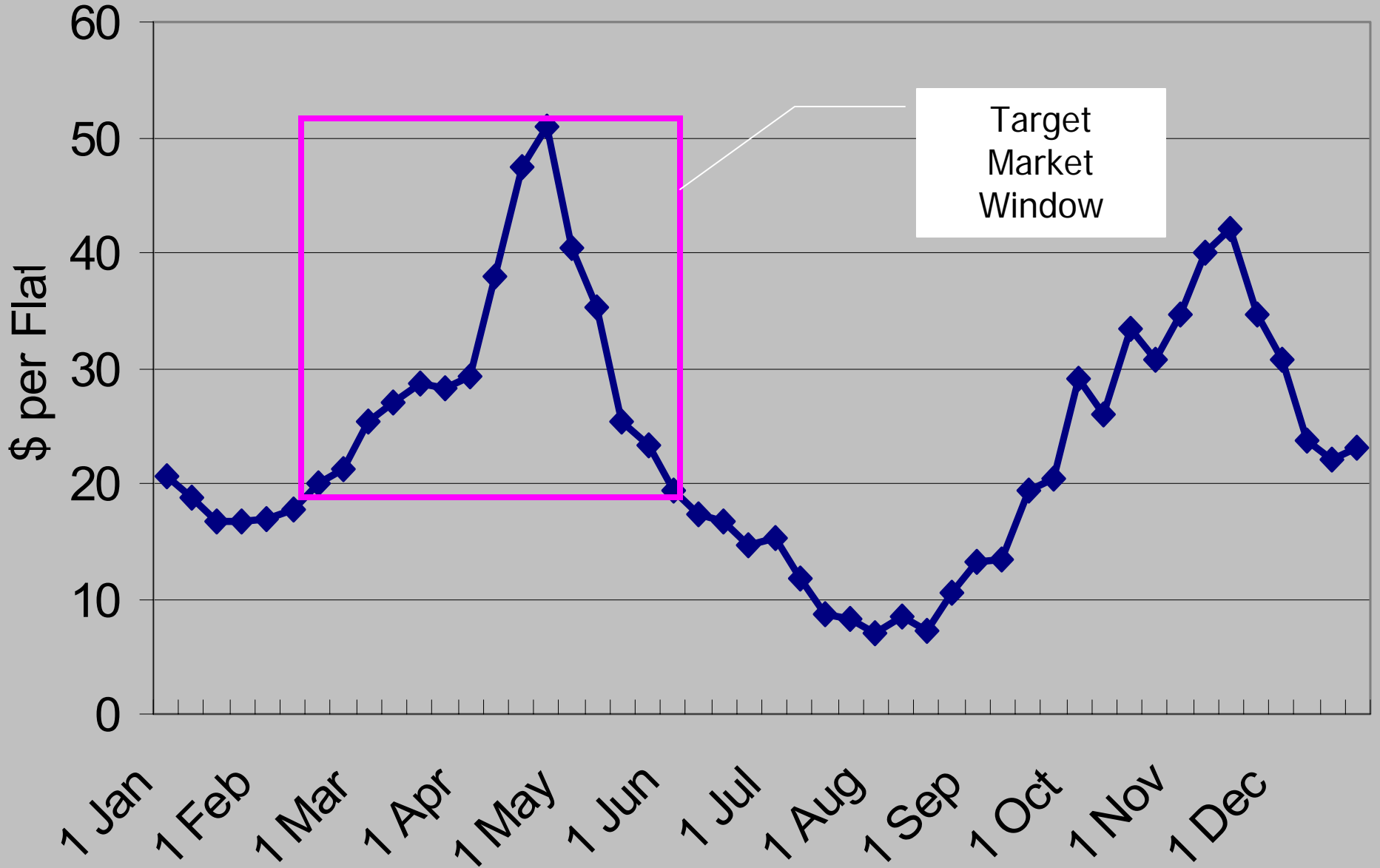
# 2000 Wholesale Fresh Blueberry Prices L.A. Terminal Market



# 2000 Wholesale Fresh Blueberry Prices L.A. Terminal Market

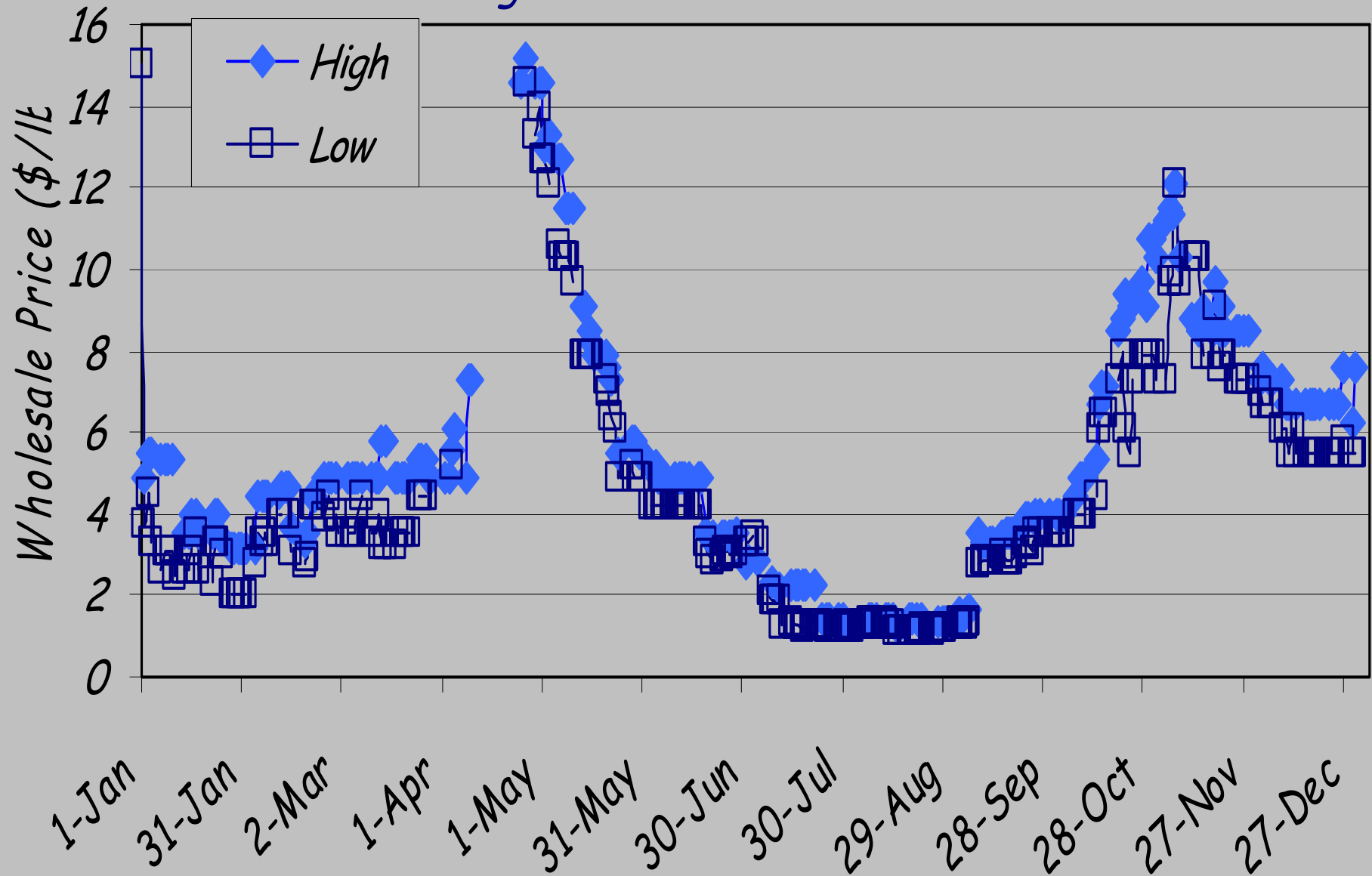


### 3 - year Average Wholesale Prices for Fresh Blueberries L.A. Terminal Market 1998 - 2000



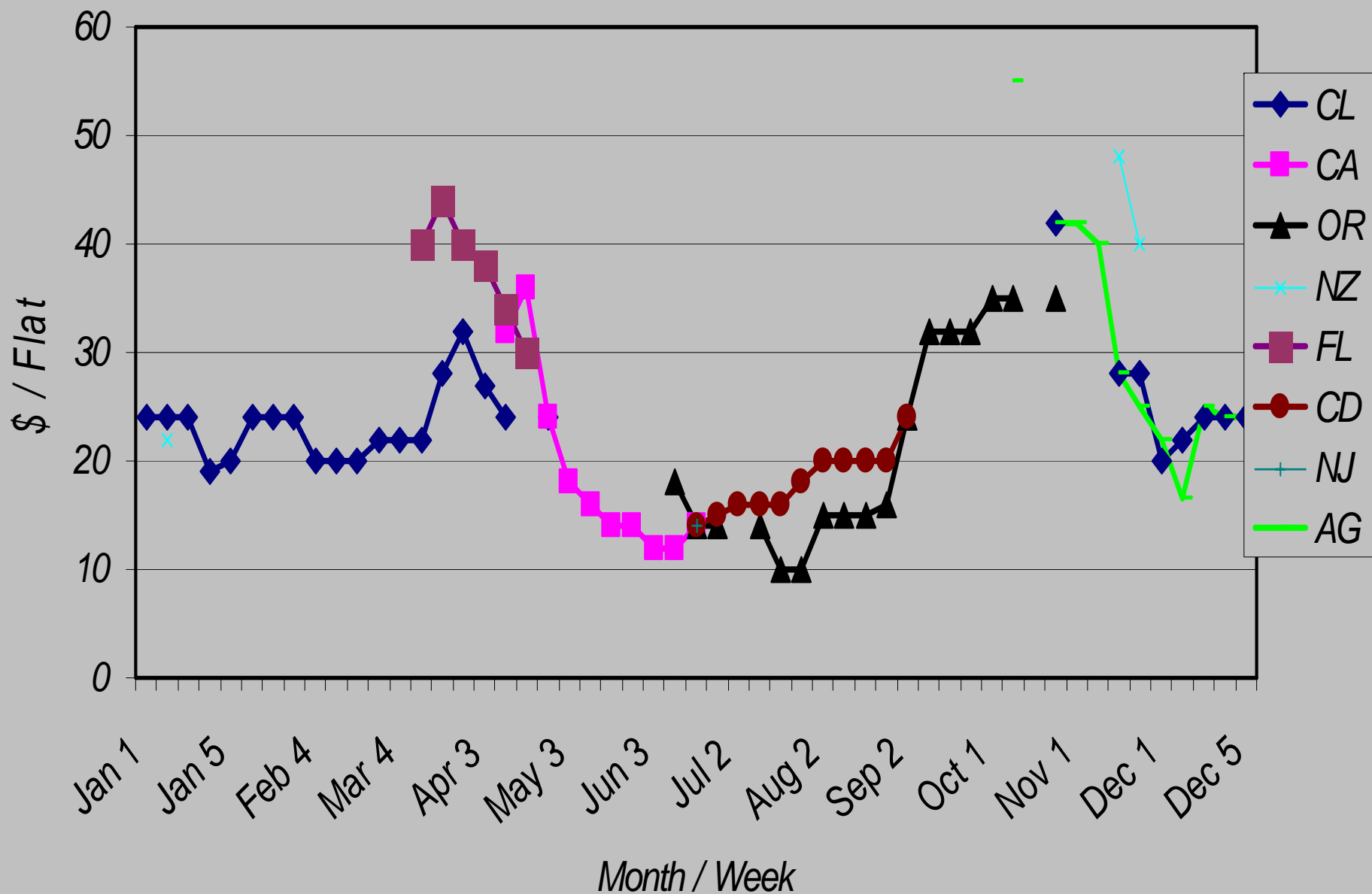


# Fresh Blueberry Wholesale Prices Los Angeles Terminal Market - 2003





Weekly Wholesale Fresh Blueberry Prices  
Los Angeles Terminal Market - 2004



# *Overview - Blueberry Field Trials*



## *Emphasis on off-season production*

- ▶ *Overall yield*
- ▶ *Production to target market window*
  - *wholesale market – earliness is essential*
  - *direct sales – early valuable, extended?*
- ▶ *Cultural practices*
  - *acidification, spacing, protected cropping*
- ▶ *Other horticultural characteristics*
  - *size, flavor, plant vigor, shelf life*



## *Southern High bush Blueberry Cultivars Evaluated in Coastal Field Trials 1997-2005*

Sharpblue	Biloxi	Santa Fe
Southmoon	Sapphire	Southern Belle
Misty	Cooper	ONeal
Blue Crisp	Gulf Coast	Reveille
Marimba	Legacy	Georgia Gem
Millenia	Star	Cape Fear
Windsor	Duplin	Sunshine Blue
Jewell	Blue Ridge	Ozarkblue
Emerald	Bladen	Summit
Sampson	Pearl River	Jubilee

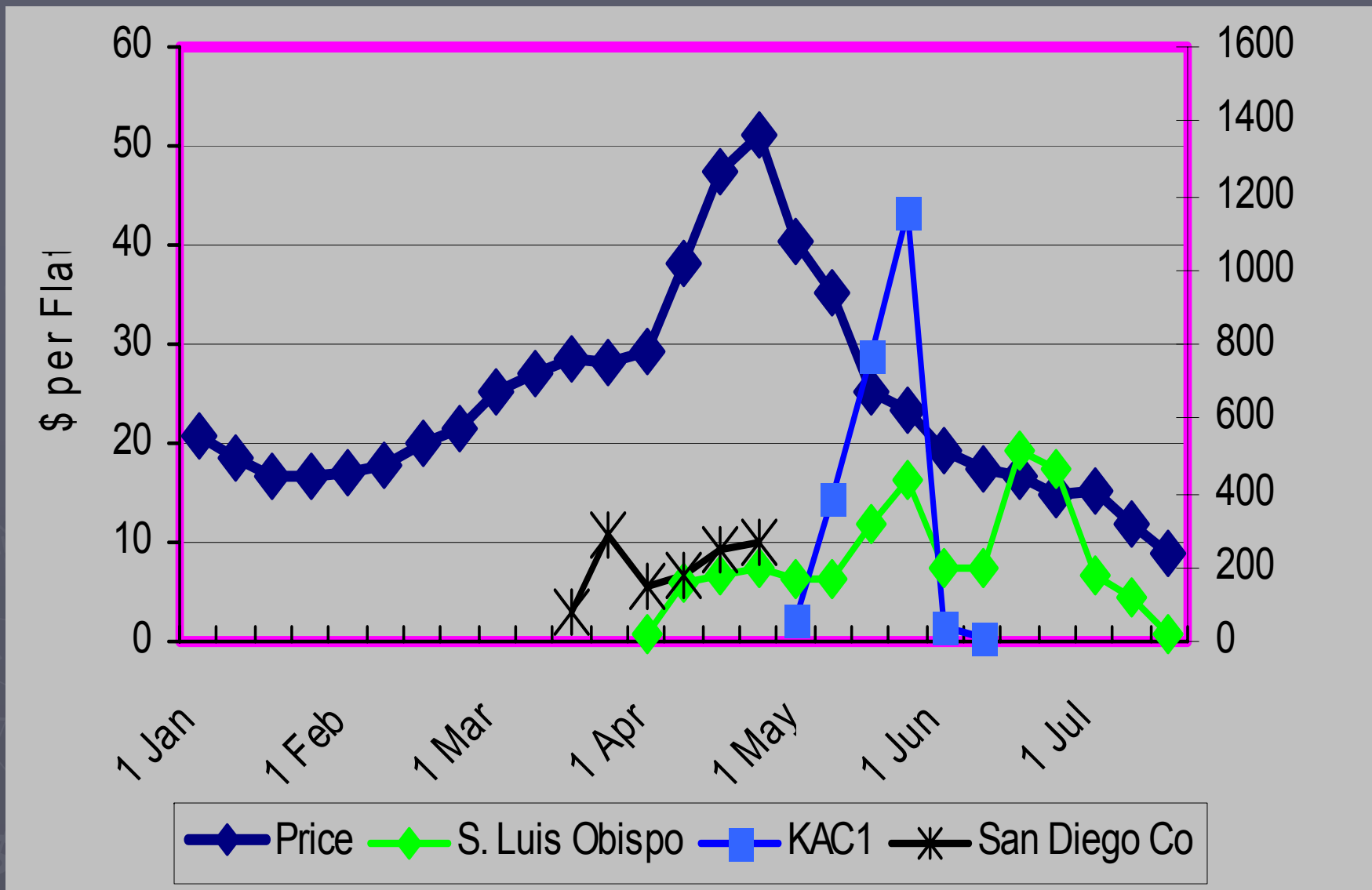


# Southern Highbush Blueberry Ripening Periods - Florida

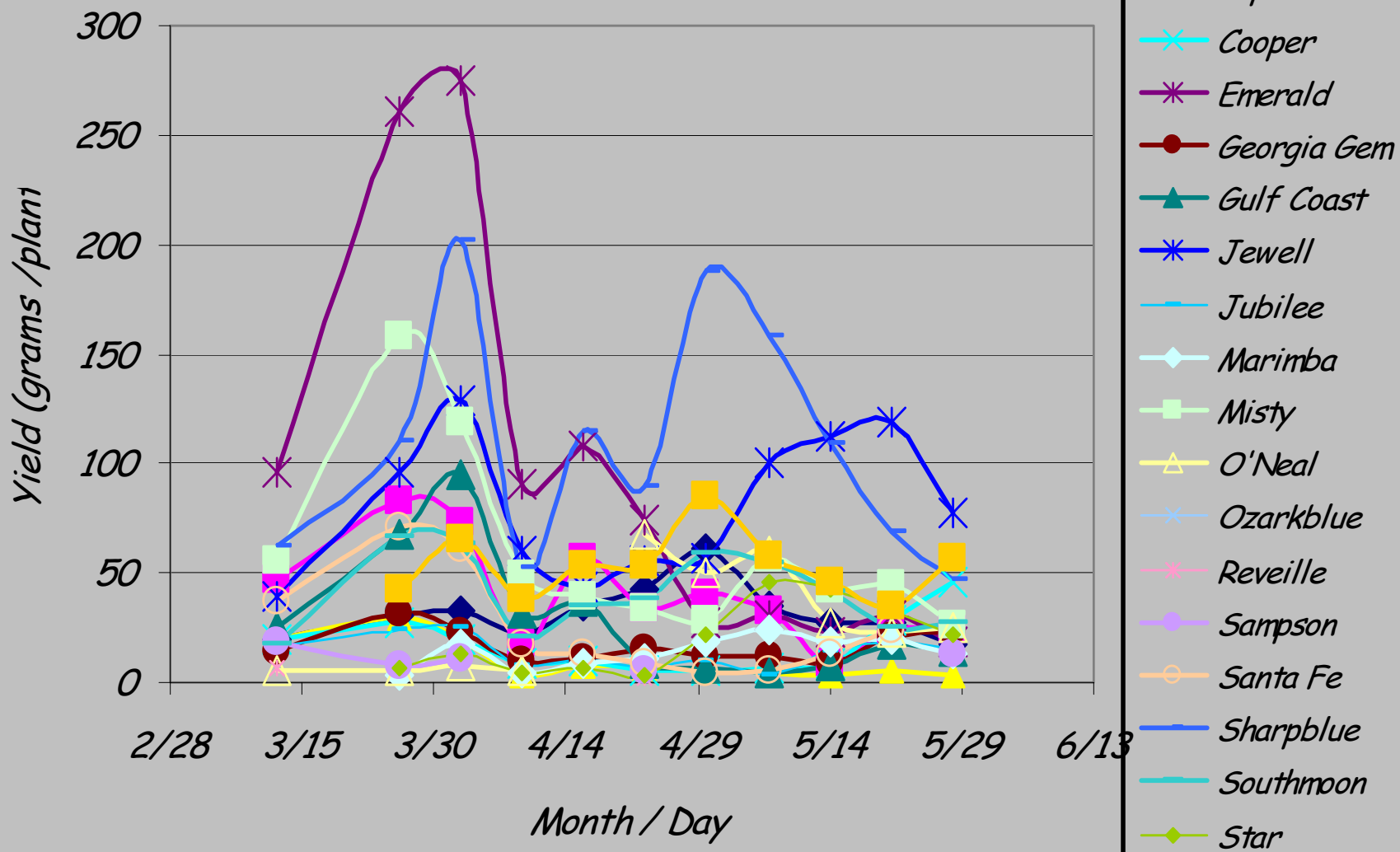
	4/12- 4/19	4/20-27	4/28-5/4	5/5-12	5/13-19	5/20-27	5/28- 6/3
<i>Jewell</i>	XXXX	XXXXXXXXXXXXXXXXXXXX					
<i>Sapphire</i>	XXX	XXXXXXXXXXXXXXXXXXXX					
<i>Star</i>	XXX	XXXXXXXXXXXXXXXXXXXX					
<i>Santa Fe</i>	XXX	XXXXXXXXXXXXXXXXXXXX					
<i>Gulf Coast</i>	XXX	XXXXXXXXXXXXXXXXXXXX					
<i>Emerald</i>		XXXXXXXXXXXXXXXXXXXX					
<i>Sharpblue</i>		XXXXXXXXXXXXXXXXXXXX					
<i>Jubilee</i>			XXXXXXXXXXXXXXXXXXXX				
<i>Blue Crisp</i>			XXXXXXXXXXXXXXXXXXXX				
<i>South Moon</i>			XXXXXXXXXXXXXXXXXXXX				
<i>Misty</i>			XXXXXXXXXXXXXXXXXXXX				
<i>O'Neal</i>			XXXXXXXXXXXXXXXXXXXX				
<i>Marimba</i>			XXXXXXXXXXXXXXXXXXXX				
<i>Georgia Gem</i>				XXXXXXXXXXXXXXXXXXXX			



# California Fresh Blueberry Market Windows

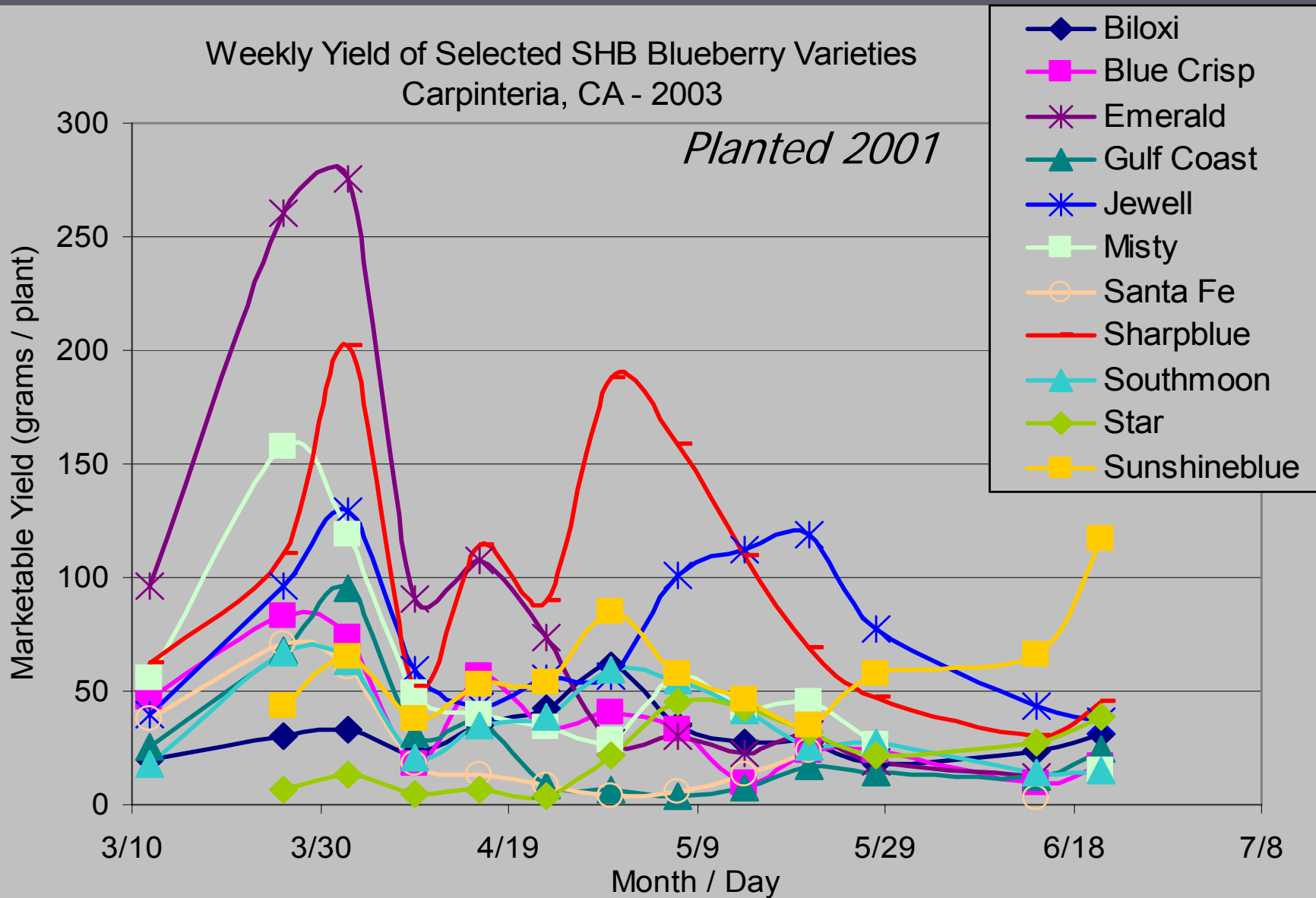


## Weekly Fresh Blueberry Yield Carpinteria, CA - 2003 season

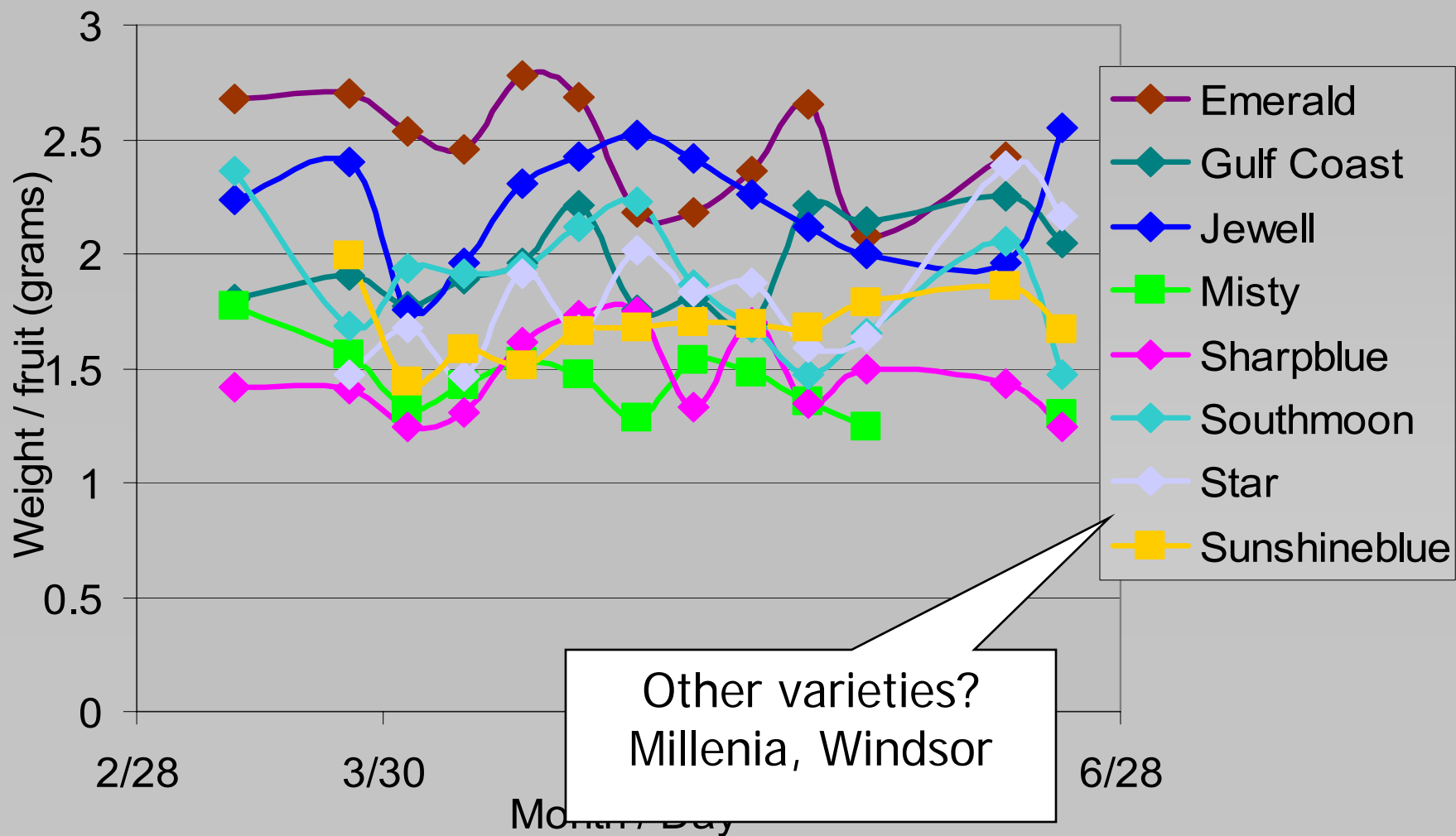


Weekly Yield of Selected SHB Blueberry Varieties  
Carpinteria, CA - 2003

*Planted 2001*

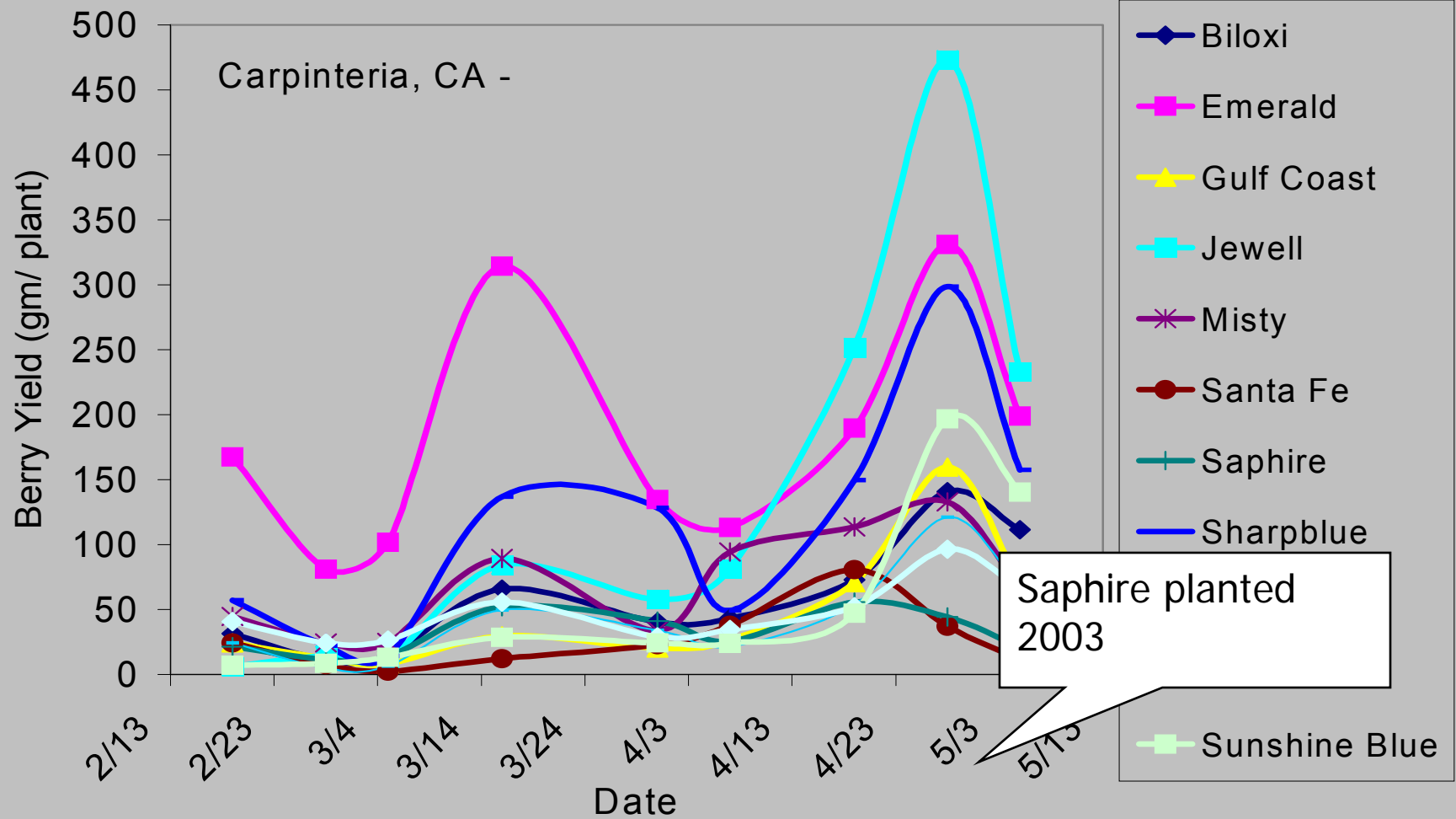


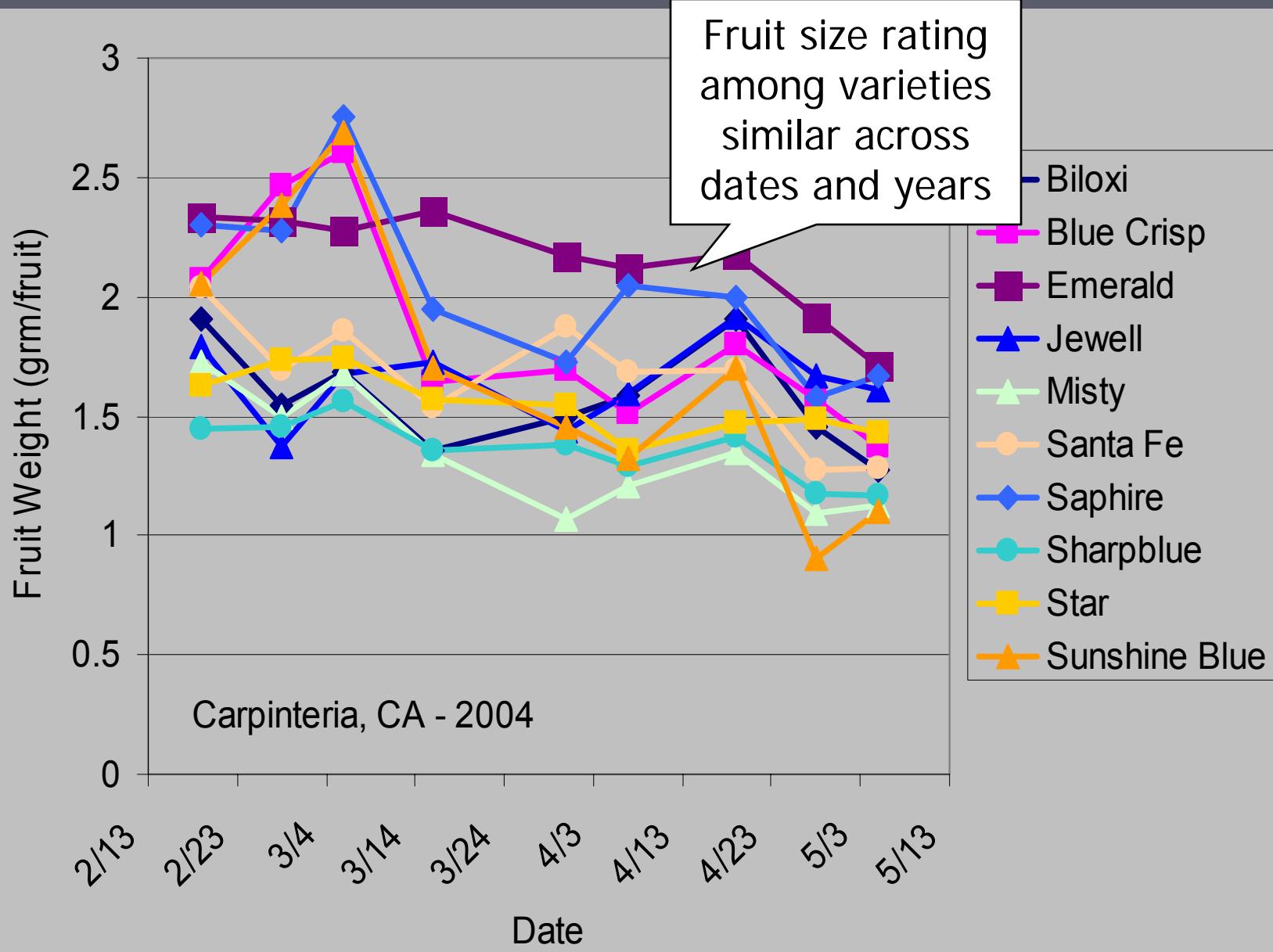
## Weekly Fruit Size of Selected SHB Blueberry Varieties Carpinteria, CA - 2003 season



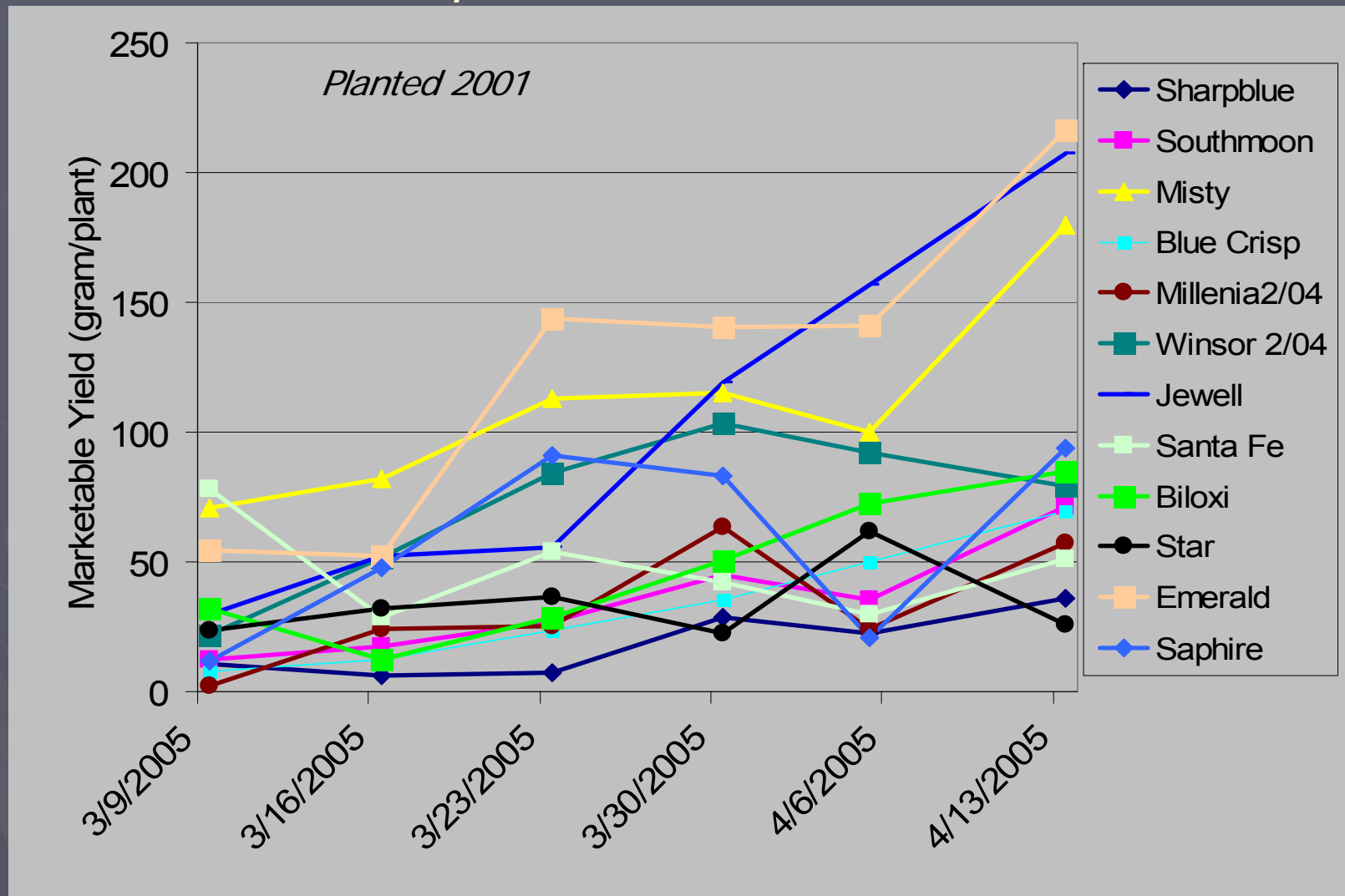


# Weekly Fresh Blueberry Yield Whitney Ranch - Carpinteria, CA 2004

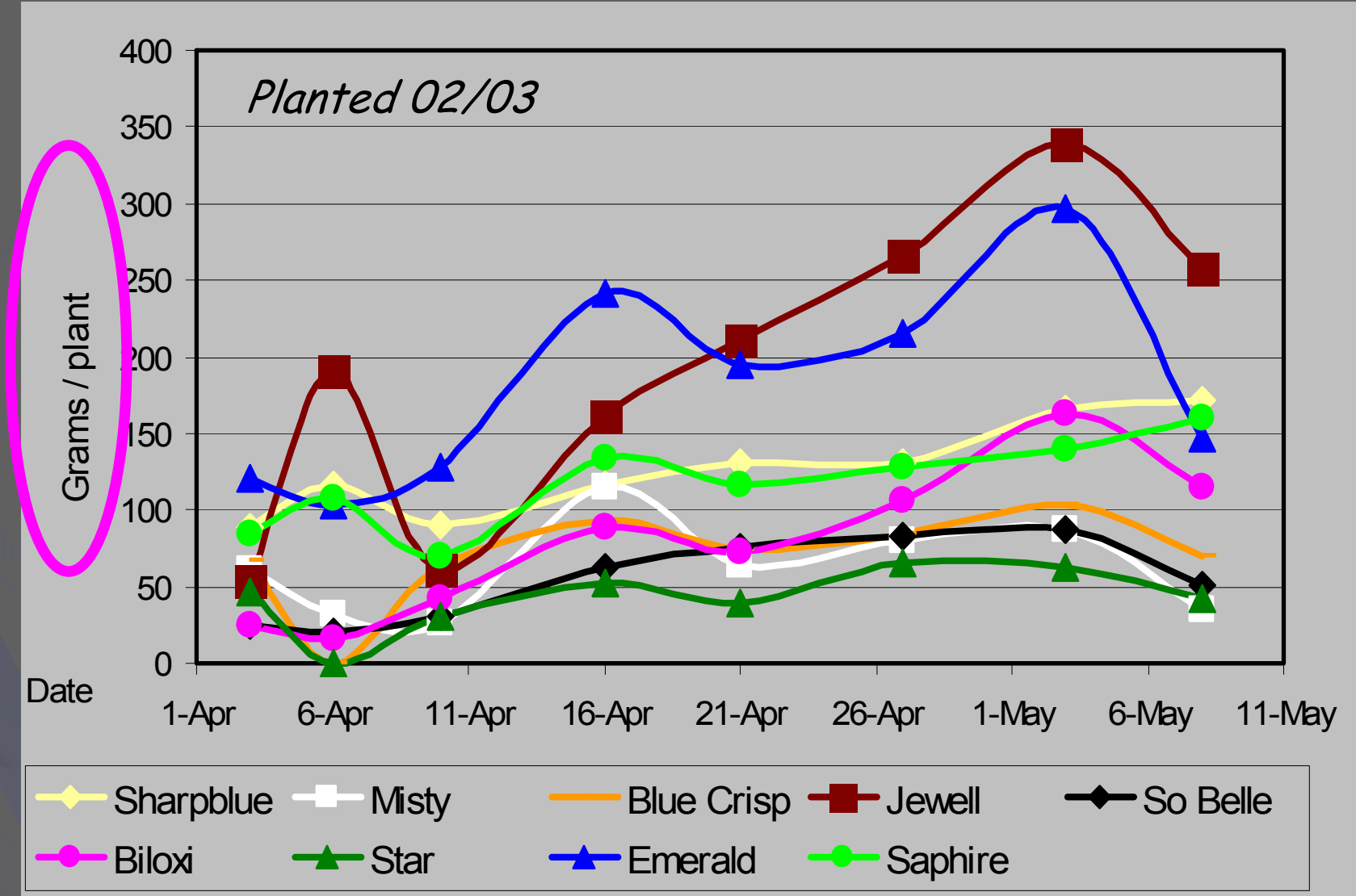




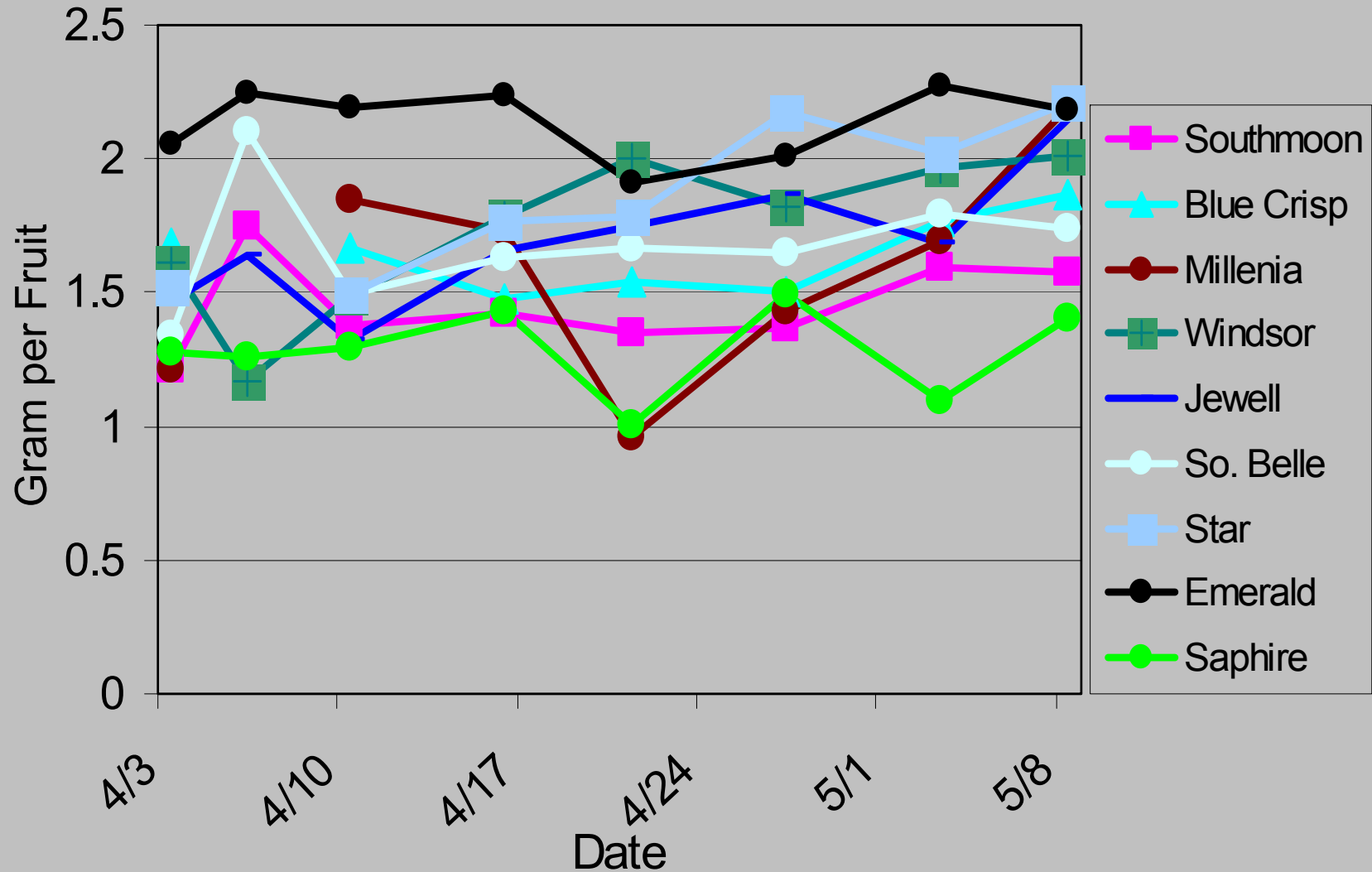
# Weekly Fresh Blueberry Yield Carpinteria, CA - 2005



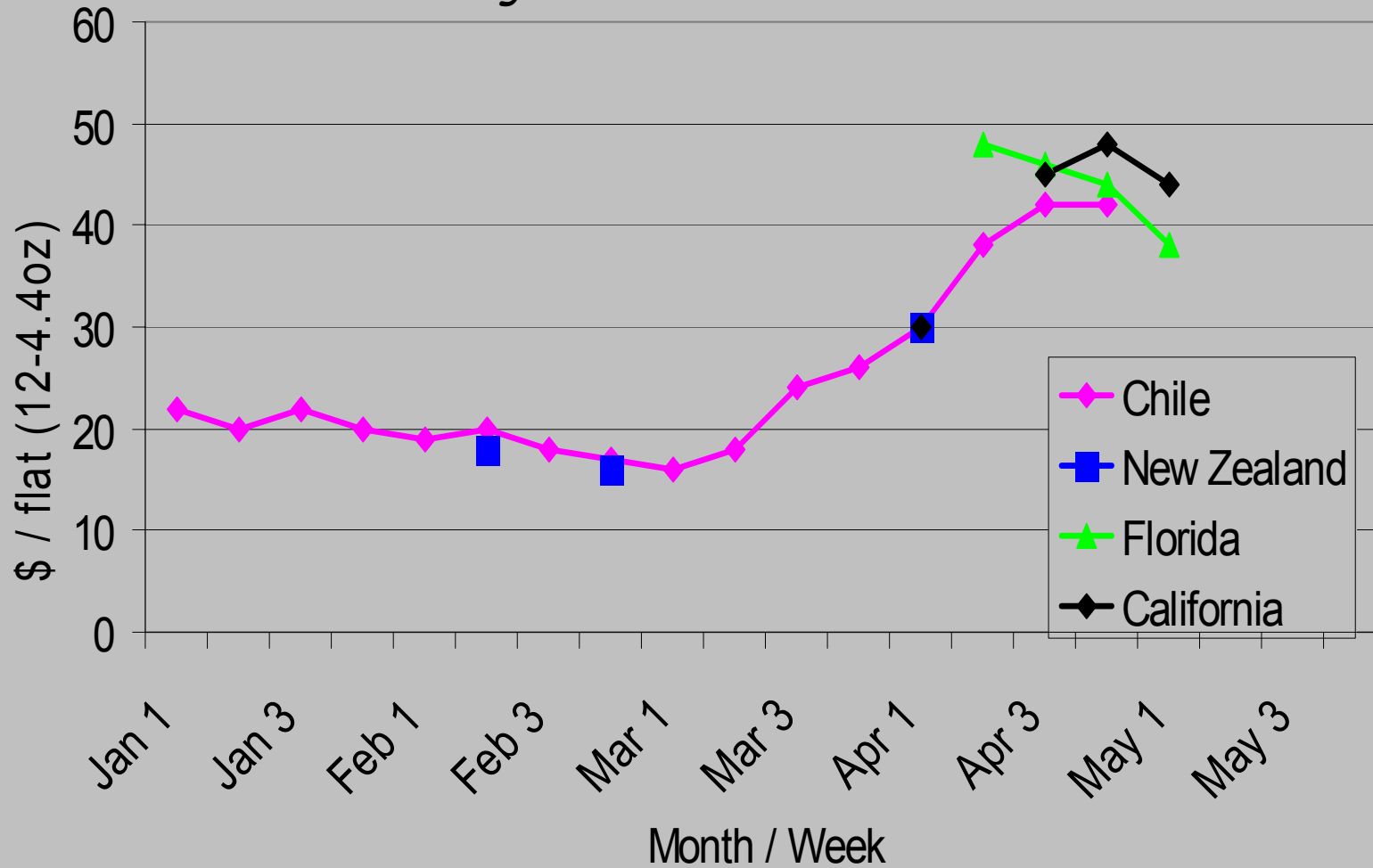
# Weekly Yield of Selected Blueberry Cultivars - SLO 2005



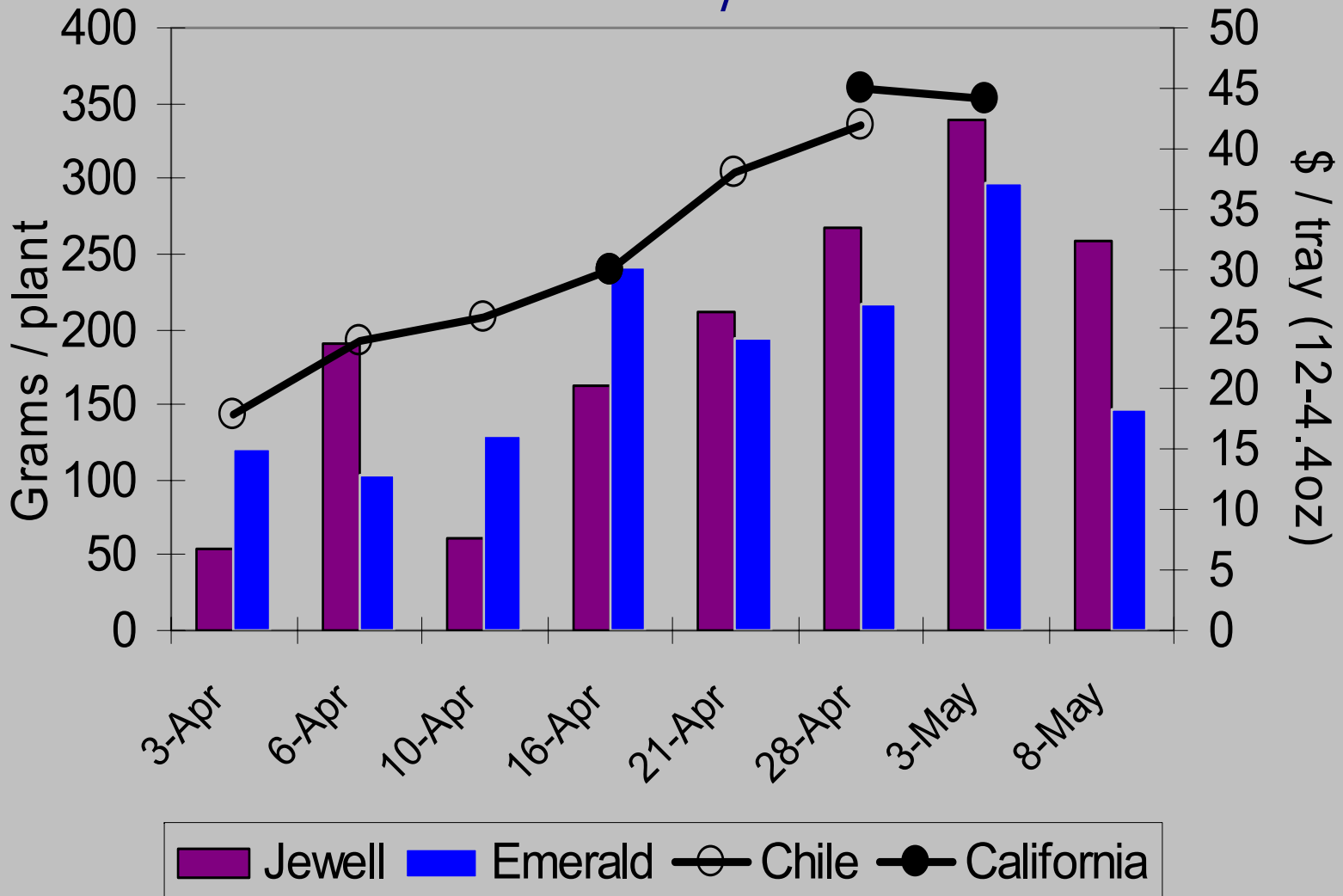
*Weekly Average Fruit Weight  
Selected SHB Blueberries - SLO, 2005*



*Weekly Wholesale Fresh Blueberry Prices  
Los Angeles Terminal Market 2005*



## Weekly Wholesale Price LA VS Weekly Yield San Luis Obispo - 2005



<i>Variety</i>	<i>San Luis Obispo</i>	<i>Carpinteria</i>	<i>Variety</i>	<i>San Luis Obispo</i>	<i>Carpinteria</i>
<i>Biloxi</i>	<i>NT</i>	<i>? promising</i>	<i>Millenia</i>	<i>?</i>	<i>?</i>
<i>Blue Crisp</i>	<i>?</i>	<i>promising</i>	<i>Misty</i>	<i>?</i>	<i>promising</i>
<i>Blue Ridge</i>	<i>Late, high chill</i>		<i>O'Neal</i>	<i>mid, low</i>	<i>?</i>
<i>Cape Fear</i>	<i>mid, average</i>		<i>Ozarkblue</i>	<i>late / high chill</i>	<i>Late, high chill</i>
<i>Cooper</i>	<i>late, high chill</i>	<i>late, high chill</i>	<i>Reveille</i>	<i>late, high chill</i>	<i>Late, high chill</i>
<i>Duplin</i>	<i>late, high chill</i>	<i>late, high chill</i>	<i>Sampson</i>	<i>late, high chill</i>	<i>late, high chill</i>
<i>Emerald</i>	<i>Outstanding</i>	<i>Outstanding</i>	<i>Santa Fe</i>	<i>? low</i>	
<i>Georgia Gem</i>	<i>mid, low</i>	<i>mid, low</i>	<i>Sharpblue</i>	<i>Early, high</i>	<i>Early, high</i>
<i>Gulf Coast</i>	<i>mid, average</i>	<i>mid, average</i>	<i>Southmoon</i>	<i>promising</i>	<i>promising</i>
<i>Jewell</i>	<i>Outstanding</i>	<i>Outstanding</i>	<i>Star</i>	<i>Early, high</i>	<i>Early, high</i>
<i>Jubilee</i>		<i>? mid, low</i>	<i>Sunshine Blue</i>	<i>low ?</i>	<i>Promising</i>
<i>Magnolia</i>			<i>Wannabe</i>	<i>low ?</i>	
<i>Marimba</i>		<i>mid, low</i>	<i>Windsor</i>	<i>?</i>	







Emerald



Star



## *Promising SHB blueberries for coastal California*

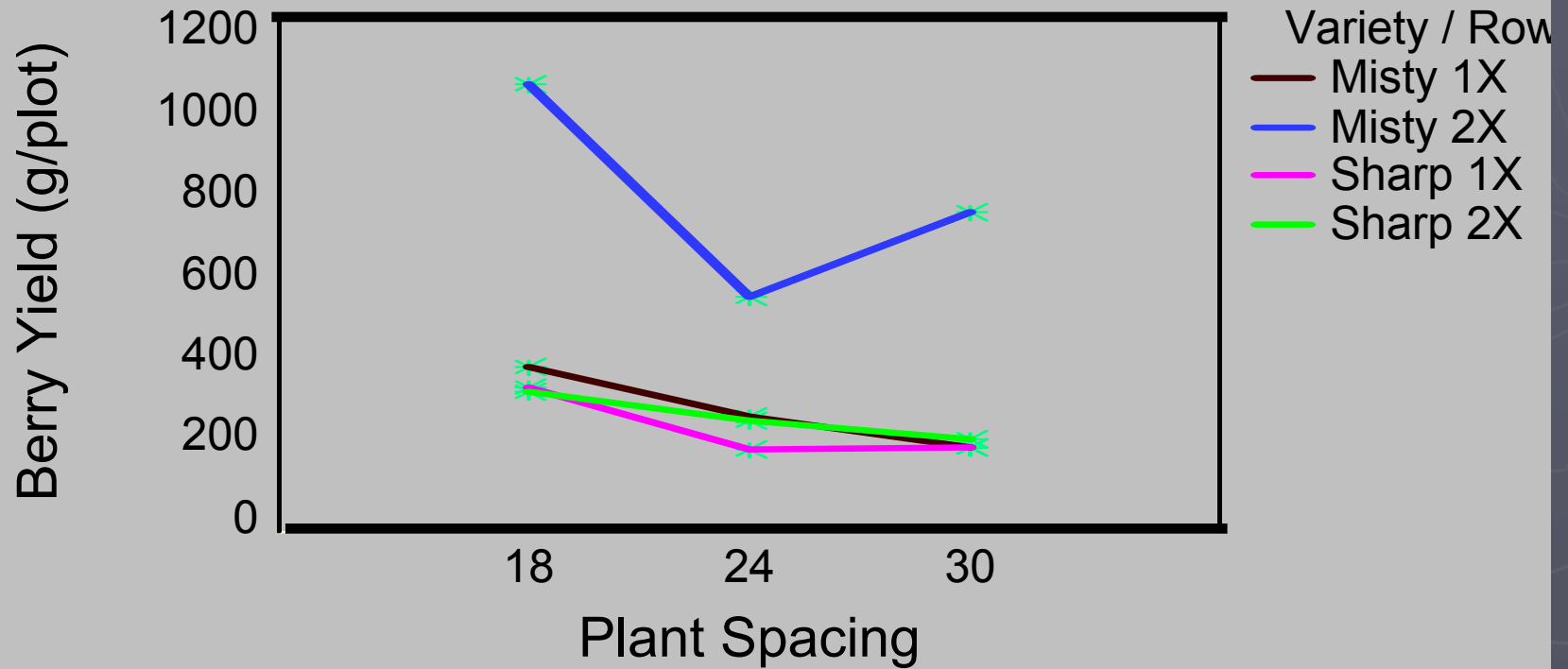
---

- ▶ *Emerald*
- ▶ *Jewell*
- ▶ *Star*
- ▶ *Sharpblue*
- ▶ *Misty*
- ▶ *Millenia*
- ▶ *Windsor*
- ▶ *Others?*



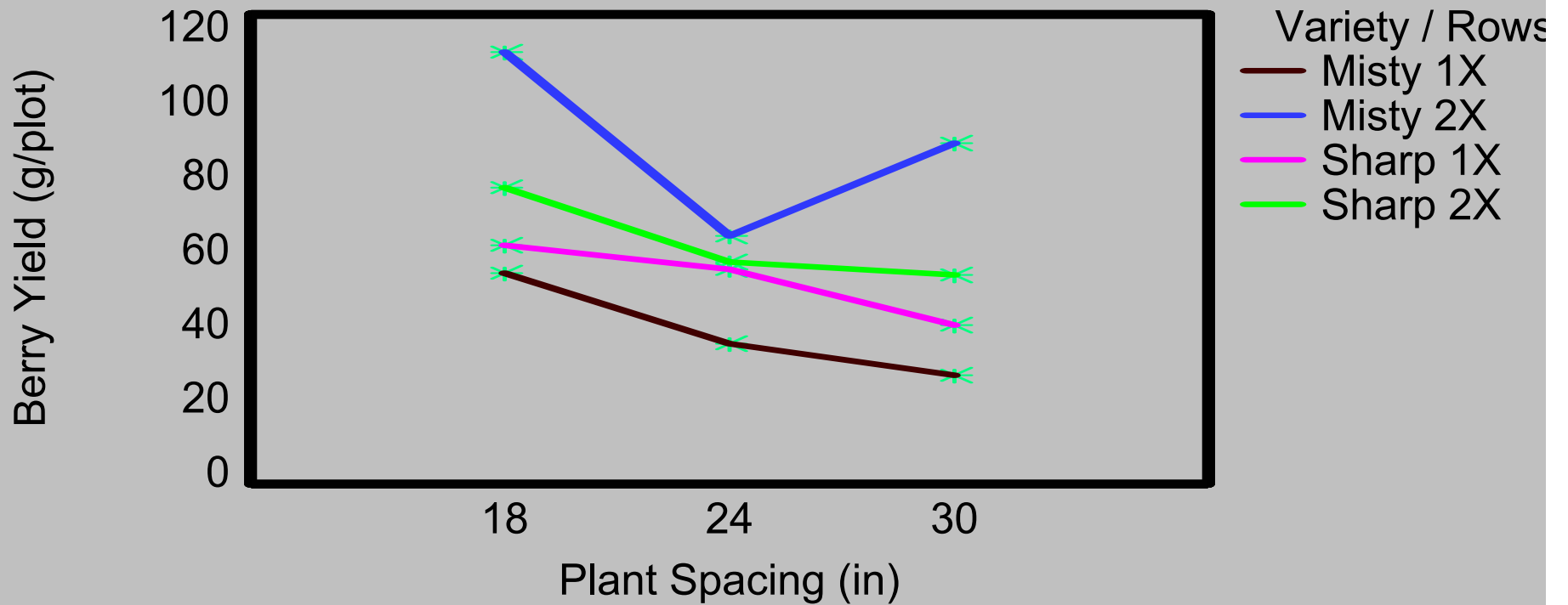
# Plant Spacing Trials

April 16, 2004 Harvest

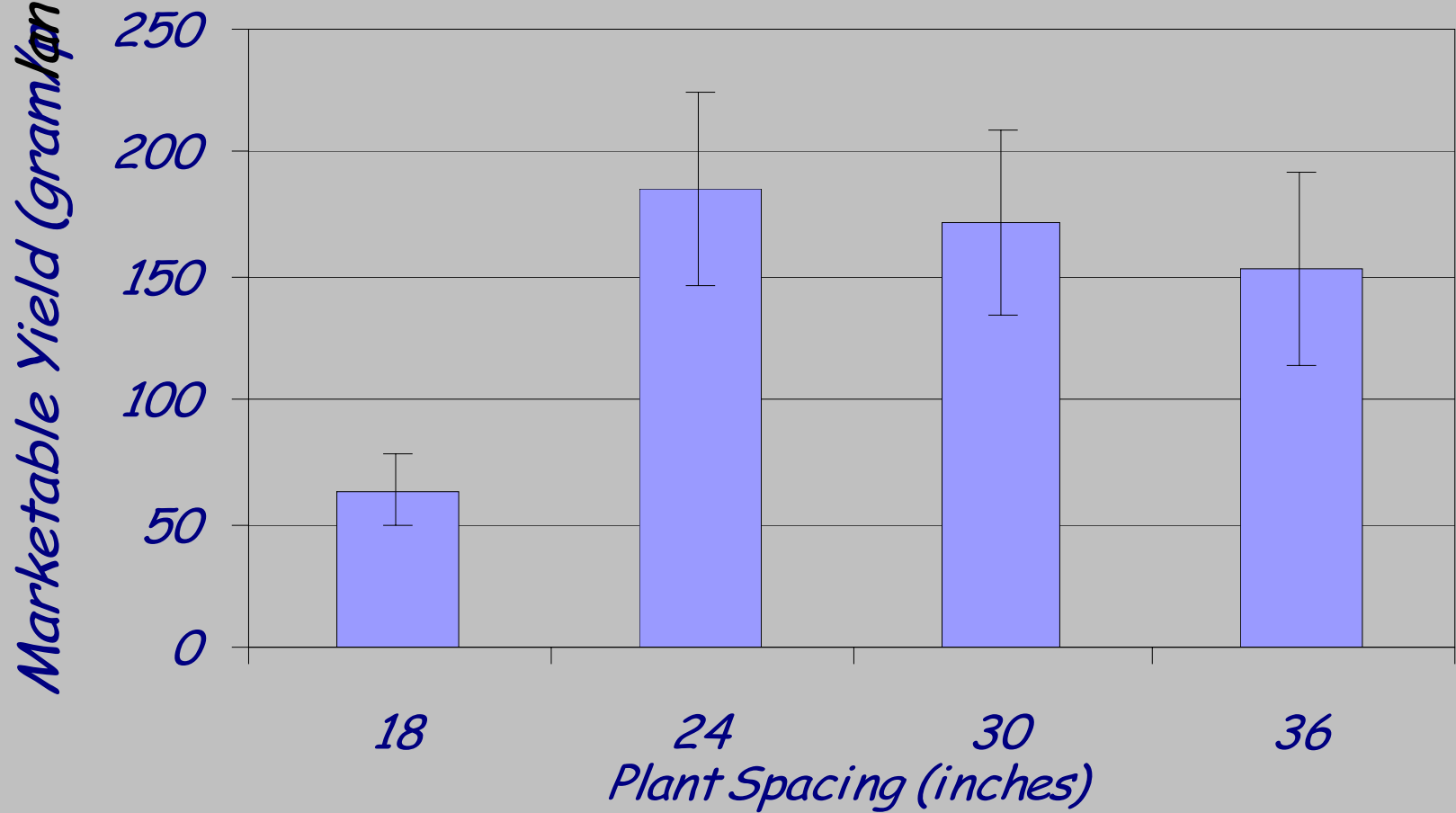


# Plant Spacing Trials

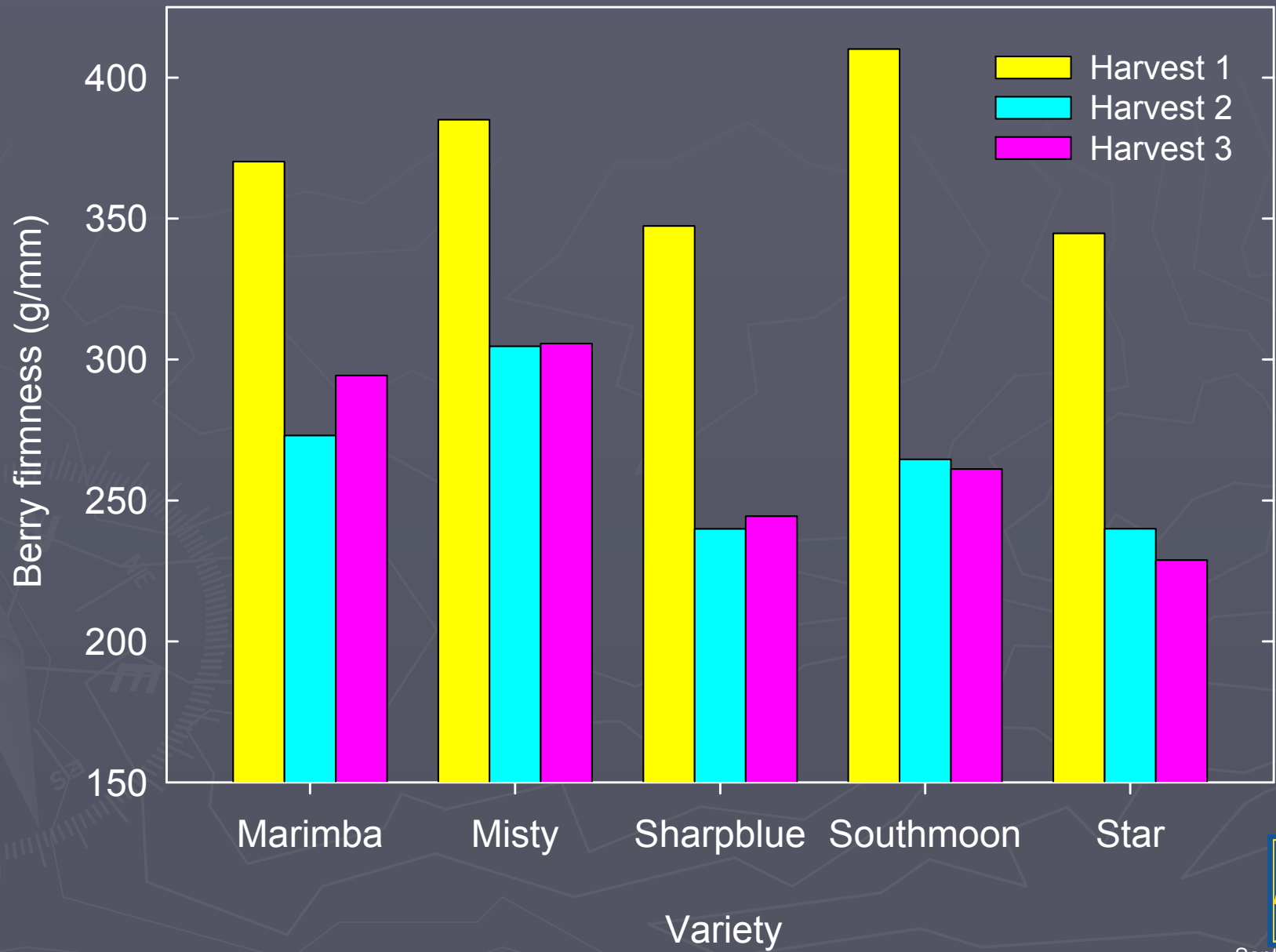
May 4, 2004 Harvest



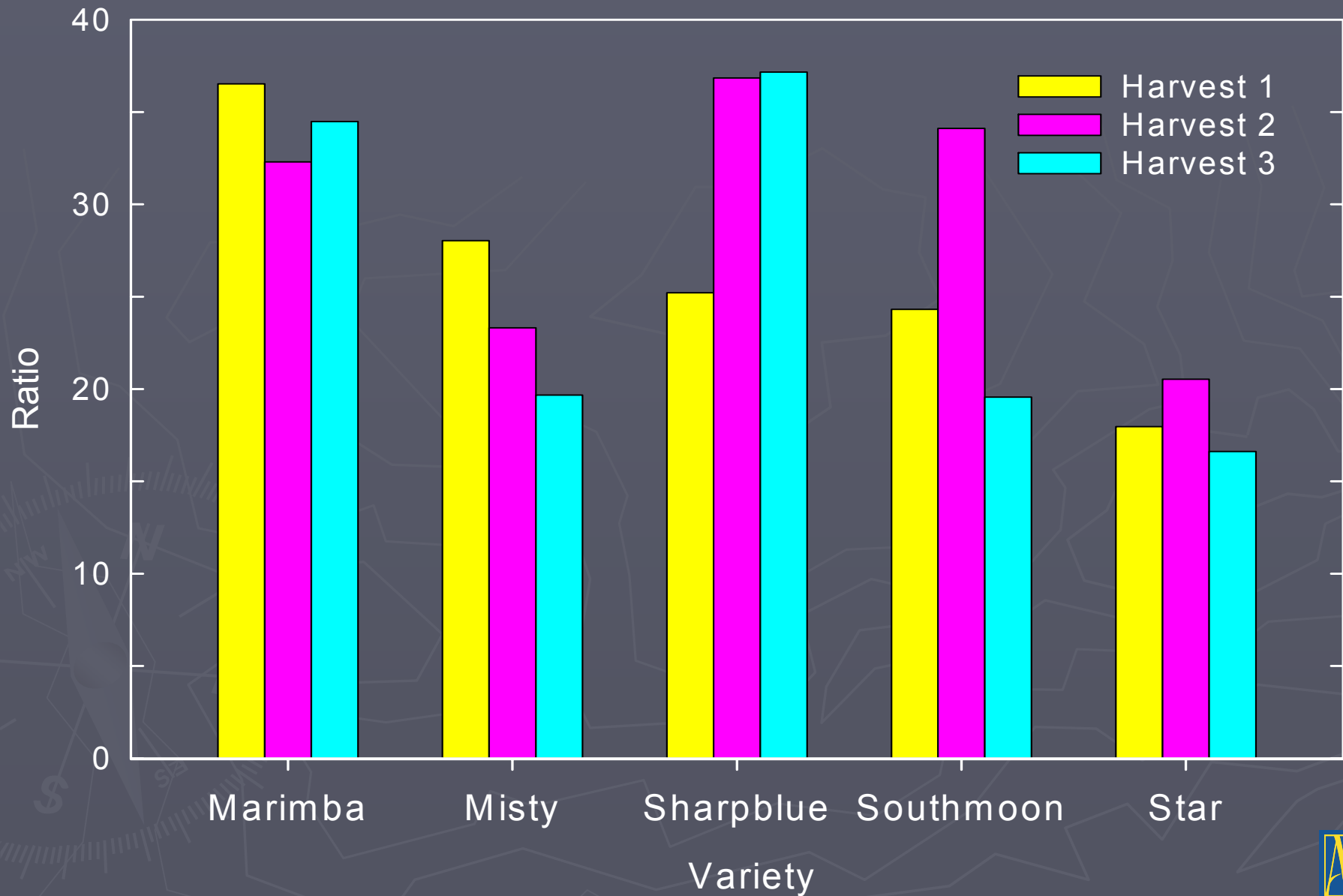
*Yield of Misty Blueberries at Varying Plant Spacing*



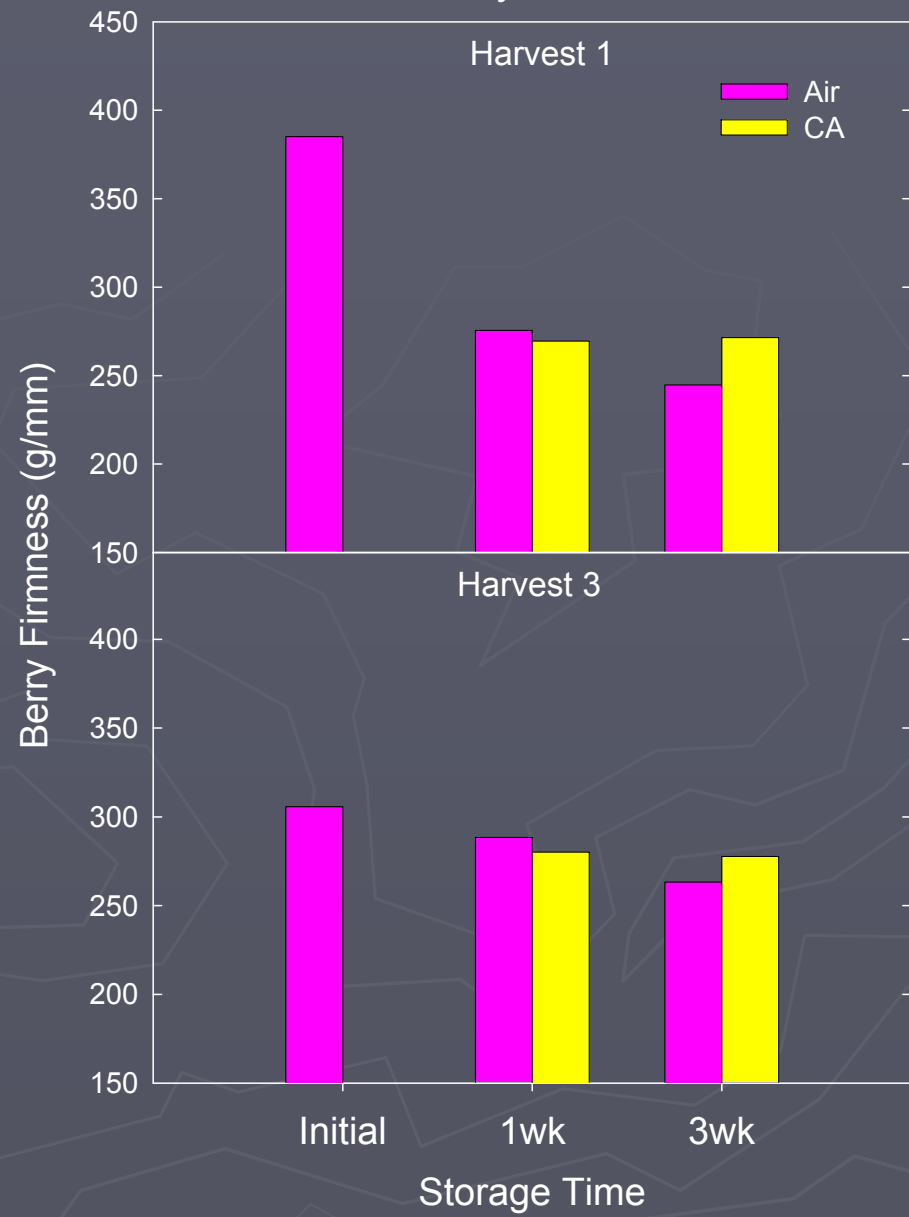
# Firmness Changes With Harvest



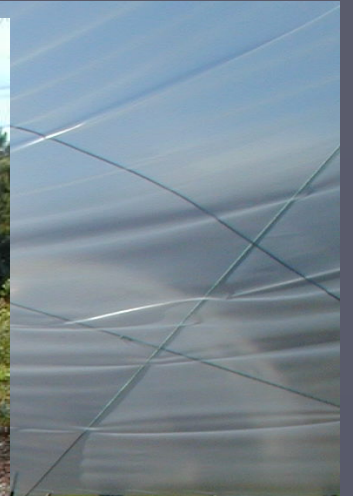
# Soluble Solids to Titratable Acidity Ratio Rachel



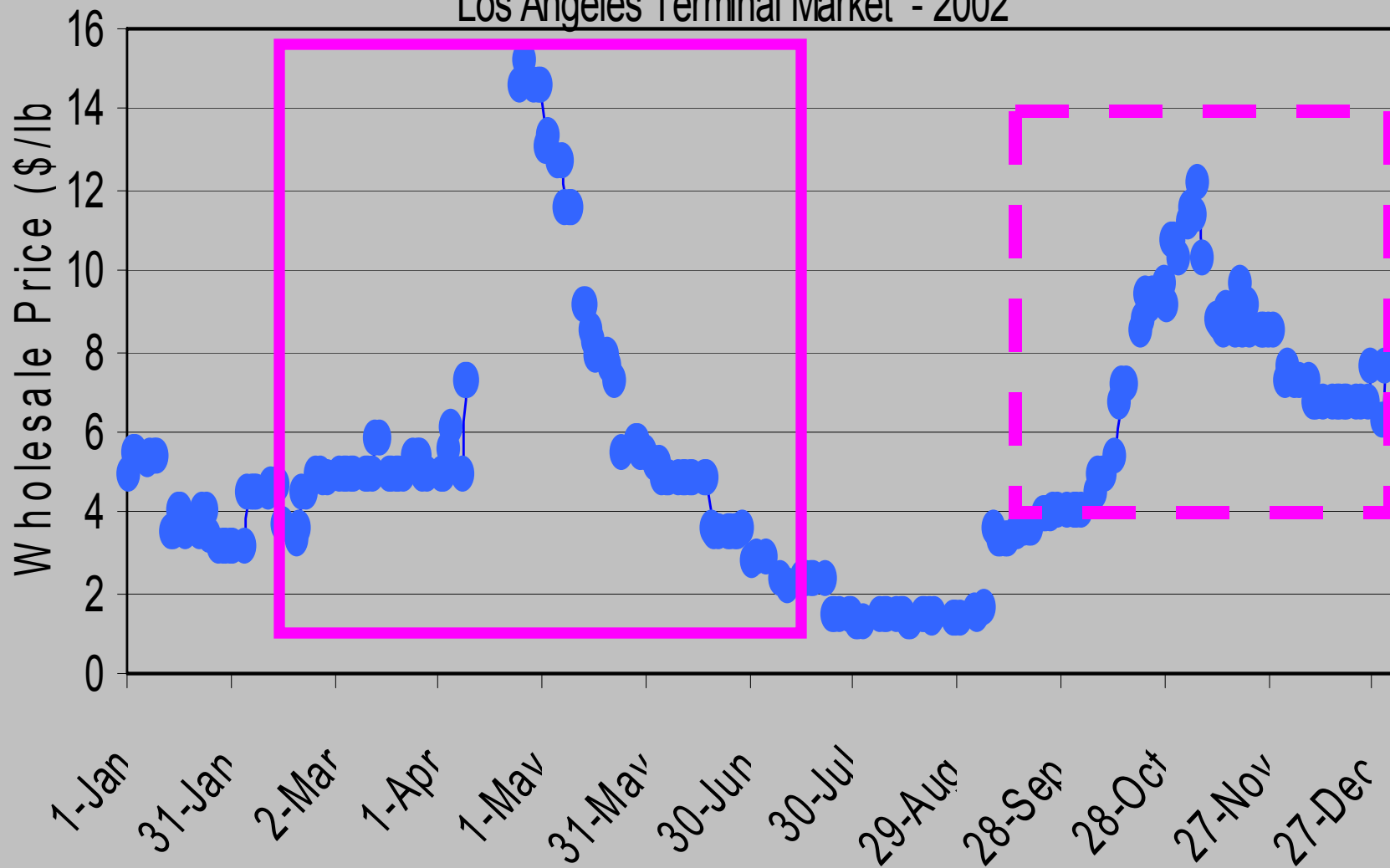
# Firmness Change in Storage Misty, Rachel







# Fresh Blueberry Wholesale Prices Los Angeles Terminal Market - 2002



*Fresh market blueberry production on coastal  
California small farms  
- R&D Program future directions -*

---

- ▶ *Still very young program – earliest trials in 1997*
  - *limited no. varieties initially; other varieties added*
- ▶ *Continue variety evaluations*
  - *weekly production during critical market window (s)*
- ▶ *Flavor / fruit quality X harvest period*
- ▶ *Cultural Practices to intensify production*
  - ✓ - *protected cropping with tunnels,*
  - ✓ - *high density plantings*



# *Research Results from Coastal Program for Off-season Fresh Market Blueberries*

*Mark Gaskell  
Farm Advisor – Santa Maria  
Statewide Small Farm Program*



University of  
California

Cooperative  
Extension



Santa Maria, CA