

# Evaluation of Sierra Foothill Zinfandel Selections

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# Sierra Foothill Zinfandel Trial

## 1998 Research Committee

- Evaluate Zinfandel selections from “old vineyards” in the Sierra Nevada Foothills
- Evaluate viticultural and fruit quality parameters
- Evaluate wines
- Evaluate virus status



# Sierra Foothill Zinfandel Trial

- Big enough for wine lots
- Representative of true field situation
- Replicated
- Full disclosure

Paul Sobon collected budwood

Deaver cleared and prepared vineyard site

Sunridge benchgrafted plants

# Trial Planted in March 1999

- 2.5 acres, Shenandoah Valley, Plymouth, CA
- St George rootstock, dormant benchgrafts
- 9 x 9, Head-trained
- Spur pruned
- Line sprinkler irrigation



# Treatments – Zin Selections

DalPorto

Aparicio

Deaver

Eschen

Higgins – Fairplay

Lubenko











Ghirardelli - Calaveras

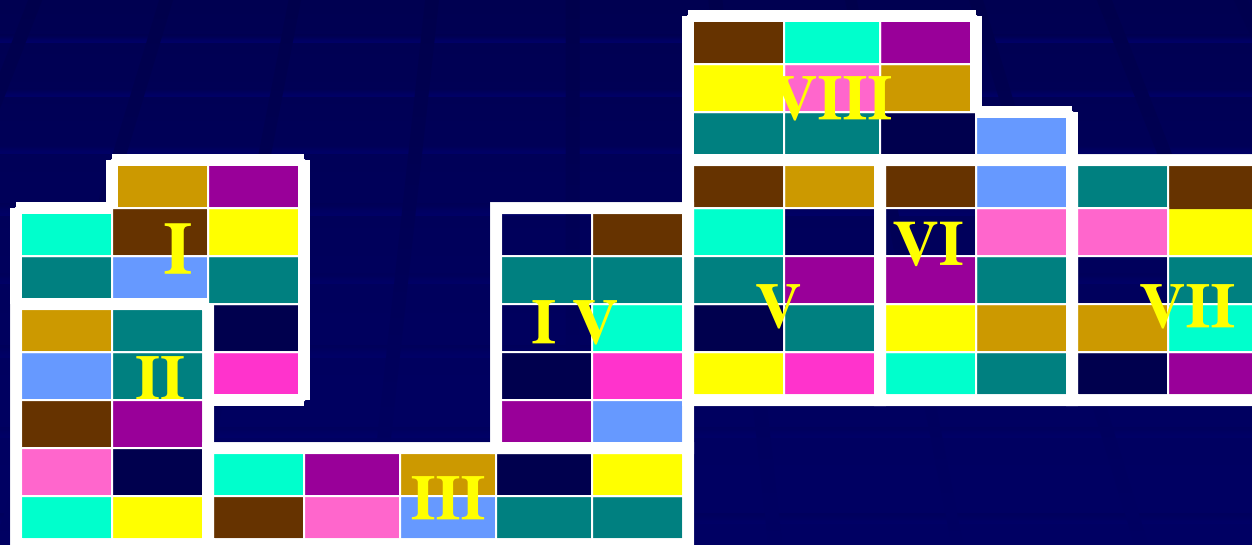
Steiner

Upton

Primitivo 3

# Sierra Foothill Zinfandel Selections - Plot Map

Aparicio		Higgins	
Deaver		Lubenko	
Dal Porto		Primitivo	
Eschen		Steiner	
Ghirardelli		Upton	



Each Square = 32 vines

4 rows x 8 vines

10 treatments & 8 replications





# Smaller Adjacent Trial

Davis

Dupratt

Paso Robles

Geyserville

Santa Cruz

Boeger





Vines trained and pruned

Vine data collected from 2000

Balance pruned

Pruning weight (vigor)

Crop thinned 2000-2004

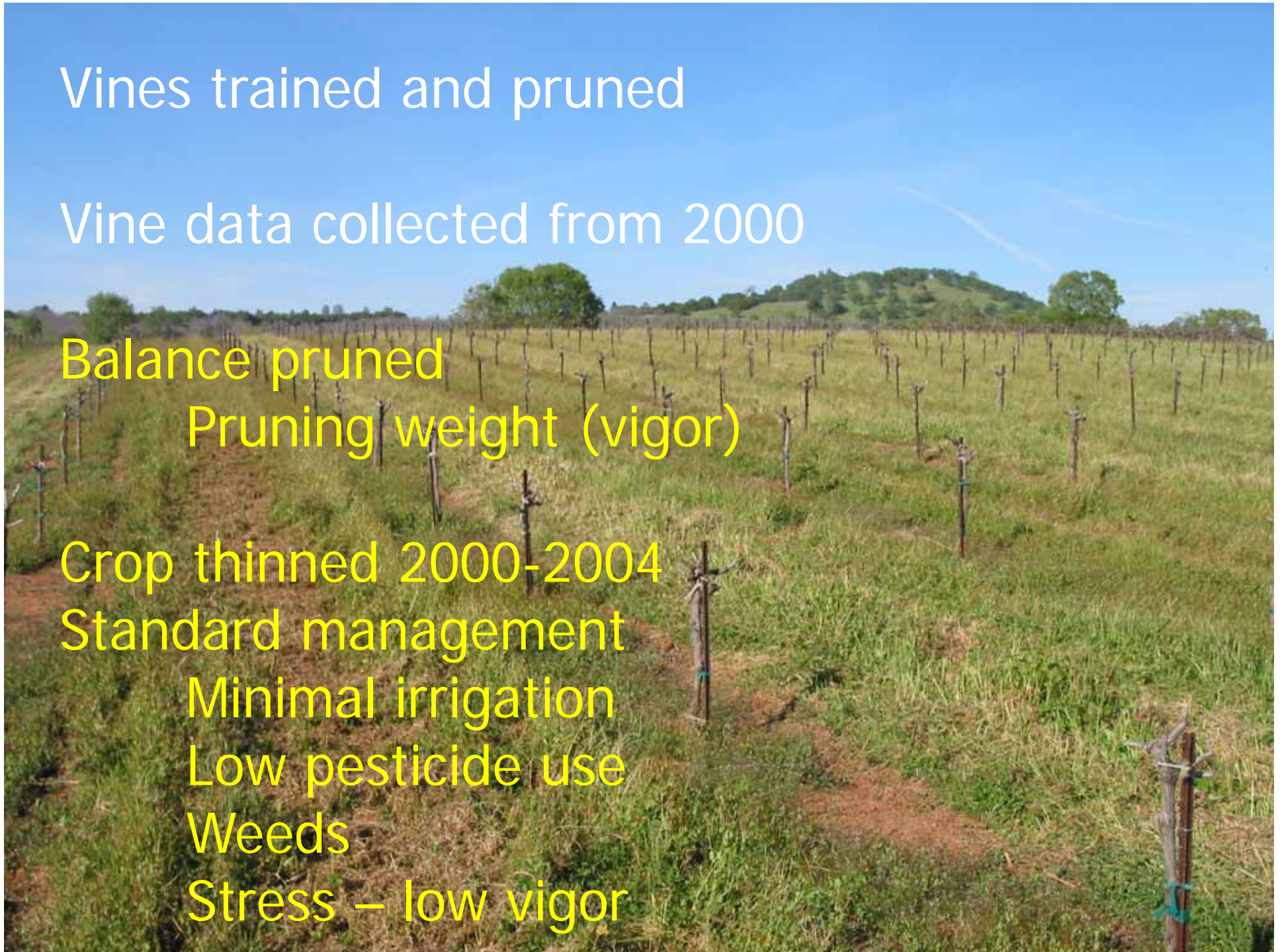
Standard management

Minimal irrigation

Low pesticide use

Weeds

Stress – low vigor



# Viticulture Data Collected 2001-2005 (*sub samples*)



Vine vigor- *pruning wt*

Cluster number

Cluster weight

Yield per vine

Berry weight

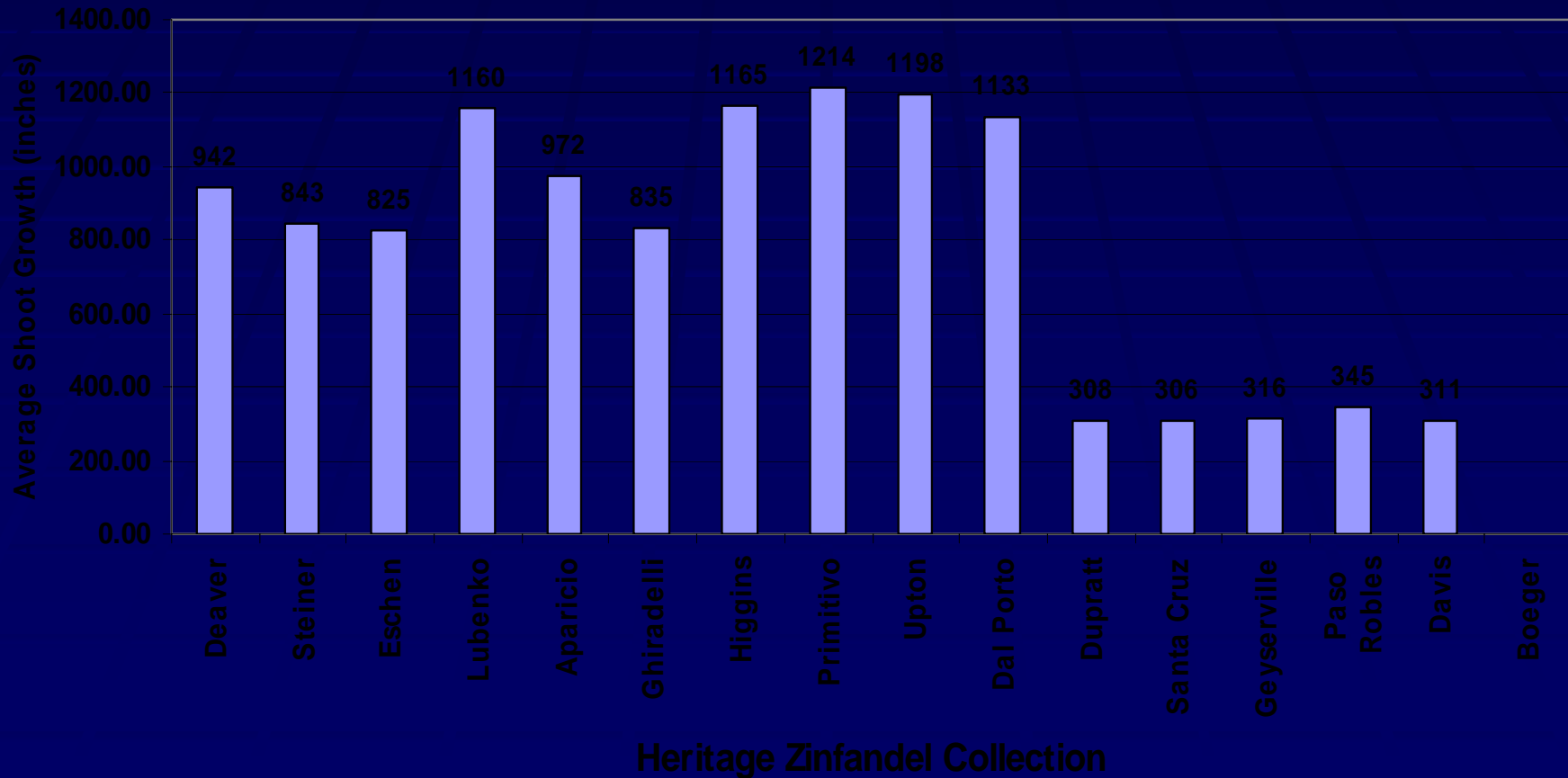
Berry samples

Continue 2007 to ??

# Heritage Zinfandel

## Average Annual Shoot Growth by Collection

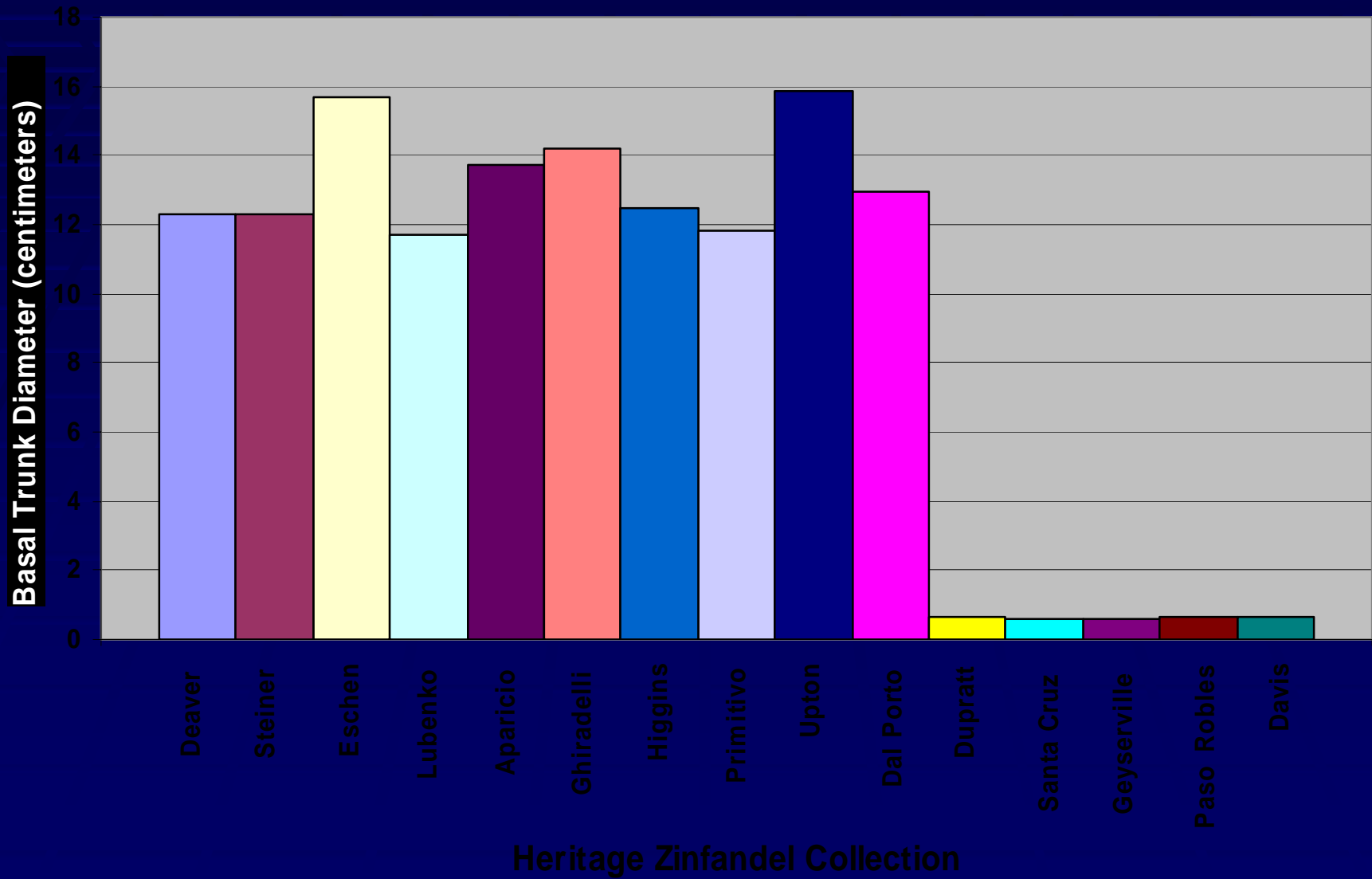
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# Heritage Zinfandel

## Average Basal Trunk Diameter Comparison



Wine made in 2002, 2004, 2005

Harvest – September 10, 2004



Treatments picked separately- reps combined





# Winemaking

- Sept 11, 2004
- Lightly crushed and stemmed
- Cooled
- SO<sub>2</sub> added
- Pasteur Red yeast added on Sept 12





# Winemaking



- Fermented in macrobins
- Punched down 2-3 x
- Temperature
- Brix

Lightly pressed on October 14  
Innoculated with Christian Hansen  
malolactic

Placed in neutral French oak



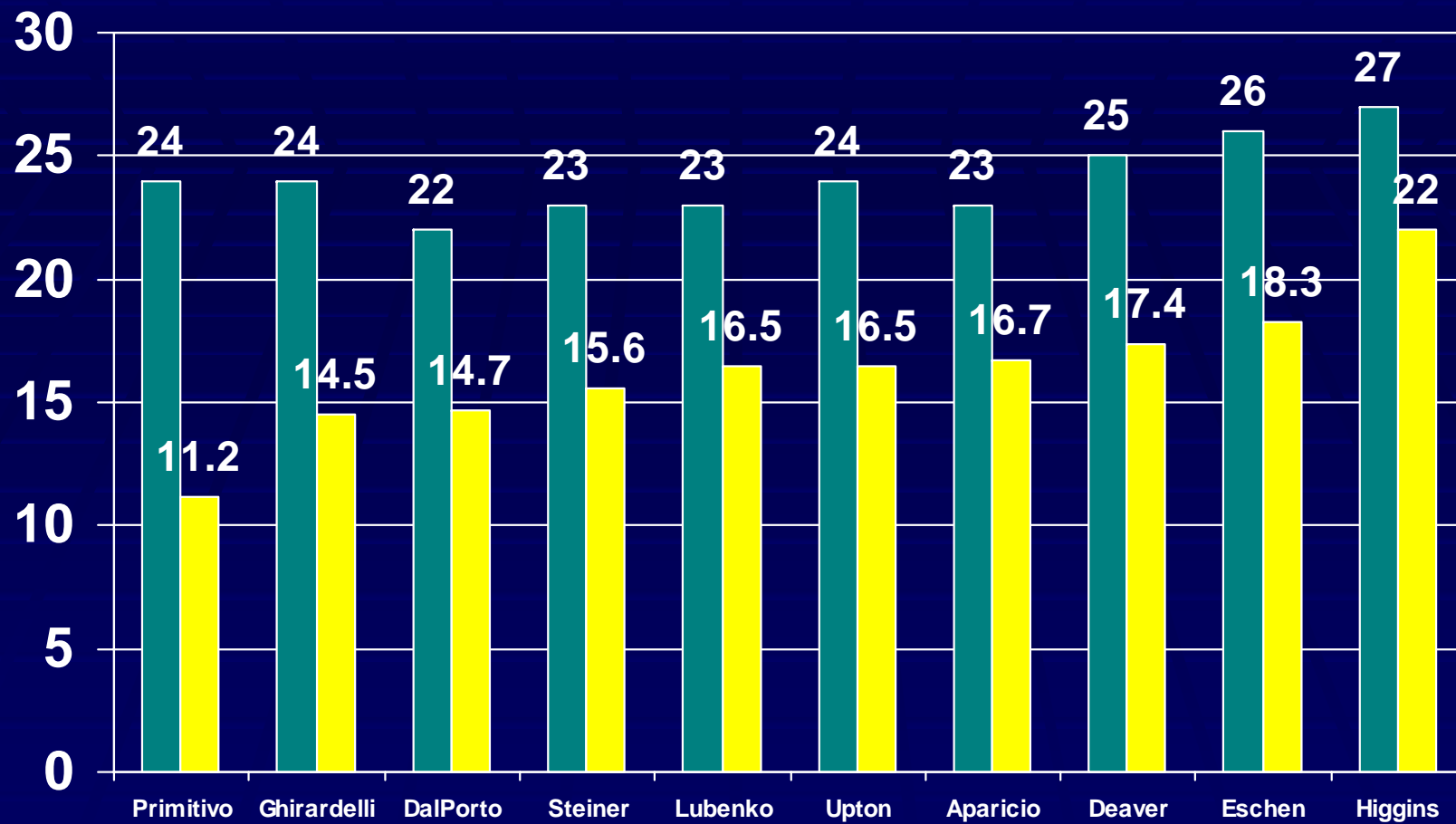
Blended 2 barrels for topping wine  
Racked 3 times  
SO<sub>2</sub>, no other additions



# Results 2005

	Clusters /vine	Yield lb/vine	Cluster wt lb	Berry wt gms
Primitivo	24	11.2 a	.47 a	1.77 a
Ghirardelli	24	14.5 ab	.60 ab	1.91 ab
Dal Porto	22	14.7 ab	.70 bc	1.93 ab
Steiner	23	15.6 ab	.68 ab	1.92 ab
Lubenko	23	16.5 ab	.73 bc	1.94 b
Upton	24	16.5 ab	.69 bc	1.95 b
Aparicio	24	16.7 ab	.70 bc	1.94 b
Deaver	25	17.4 ab	.69 bc	1.90 ab
Eschen	26	18.3 ab	.71 bc	1.88 ab
Higgins	27	22.0 b	.81 c	1.94 b





■ Cluster number ■ yield

# Results

## Harvest Berry Analysis – Sept 21, 2005

	Brix	TA	pH
Primitivo	27.1 a	.96	3.46
Ghirardelli	25.3 bc	.99	3.38
Dal Porto	25.5 bc	1.0	3.40
Steiner	25.5 bc	.99	3.42
Lubenko	25.4 bc	.98	3.43
Upton	26.0 ab	.95	3.44
Aparicio	24.8 bc	.97	3.41
Deaver	25.4 bc	.97	3.45
Eschen	24.6 c	1.0	3.39
Higgins	25.3 bc	1.0	3.41

# Results

## Primitivo

*Lowest yield, smallest cluster, smallest berry*

“Amador Zins”, Ghirardelli – *intermediate*

## Higgins

*Highest yield, largest cluster, intermediate berry*

# Results

## Primitivo

*Highest vigor (.65 kg/vine)*

## Ghirardelli

*Lowest vigor (.37 kg/vine)*

# Summary

## Preliminary results

### Primitivo

- Stands out as a different clone
- High vigor, earlier maturity, nice balance
- Small clusters, small berries
- Less variability, rot, drought response?
- Wine ?



# Summary

## Preliminary results

### Deaver, Lubenko, Higgins

- Amador selections – similar
- Viticultural differences – slight
- Usually not significant
- Wines?

### Ghirardelli

- Significantly different
- Weaker vine

# Summary

## Preliminary results

St George rootstock

Vines well balanced

Few virus symptoms

# Future

Funding

Continuation of project

Virus status

Wine in which years?

# Acknowledgements

Scott Oneto

Carol Laubach

Sarah Hale

Ken Deaver

Paul Sobon

Jeff Meyers

Chris Leamy

Mark McKenna

Hank Beckmeyer

Sunridge Nursery

Deaver Vineyards

Hector

Frank Alviso

Montevina Winery

Shenandoah Vineyards

Art Toy

Deborah Golino - FPS

Jim Wolpert

Mike Anderson

# Acknowledgements - Funding

- Amador Wine Grape Growers Association
- Amador Vintners
- ZAP
- American Vineyard Foundation
- CA Competitive Grant Program for Research in Viticulture and Enology