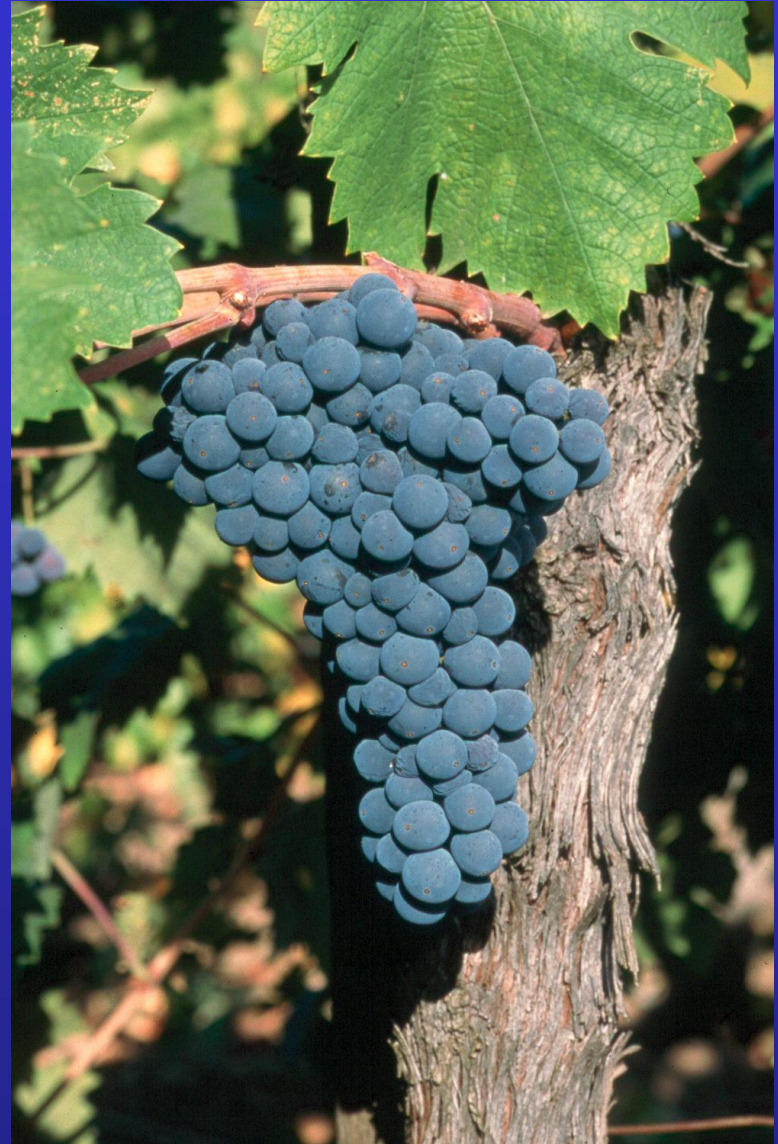


Zinfandel Heritage Vineyard

Jim Wolpert and Mike
Anderson

Department of Viticulture
and Enology, UC Davis



Clonal Variation

- Amount of clonal variation is dependent on:
 - Rate of favorable mutations
 - Length of time a cultivar has been cultivated
 - How much effort you spend looking for variability

FPMS Zinfandel Selections Tested

<u>FPMS #</u>	<u>Source</u>	<u>Heat</u>
01A	Handel 1V4	None
02	Handel 1V6	None
03	Ruetz #1	None
06	Zin 01A	117 days

Winemakers' Complaints About Certified Zinfandel Clones

- Clusters are large, tight and rot-prone
- Berries are large
- Wines tend to have poor color and varietal character
- Conclusion: Good for “white” but not for “red”

How to improve Zinfandel

- Return to the place of origin for diversity
 - Burgundy, Bordeaux, Chianti
- Other countries where history is significant
 - Argentina, Chile, Australia
- Old plantings locally

Zinfandel Safari Scouts and Trailblazers

Amand Kasimatis

Rhonda Smith

Ed Weber

Janet Caprile

Paul Verdegaal

Jack Foott

Donna Hirschfelt

Glenn McGourty

Criteria for Inclusion in Heritage Vineyard

🎬 Vineyard age of more than 60 years

🎬 Loose clusters and small berries

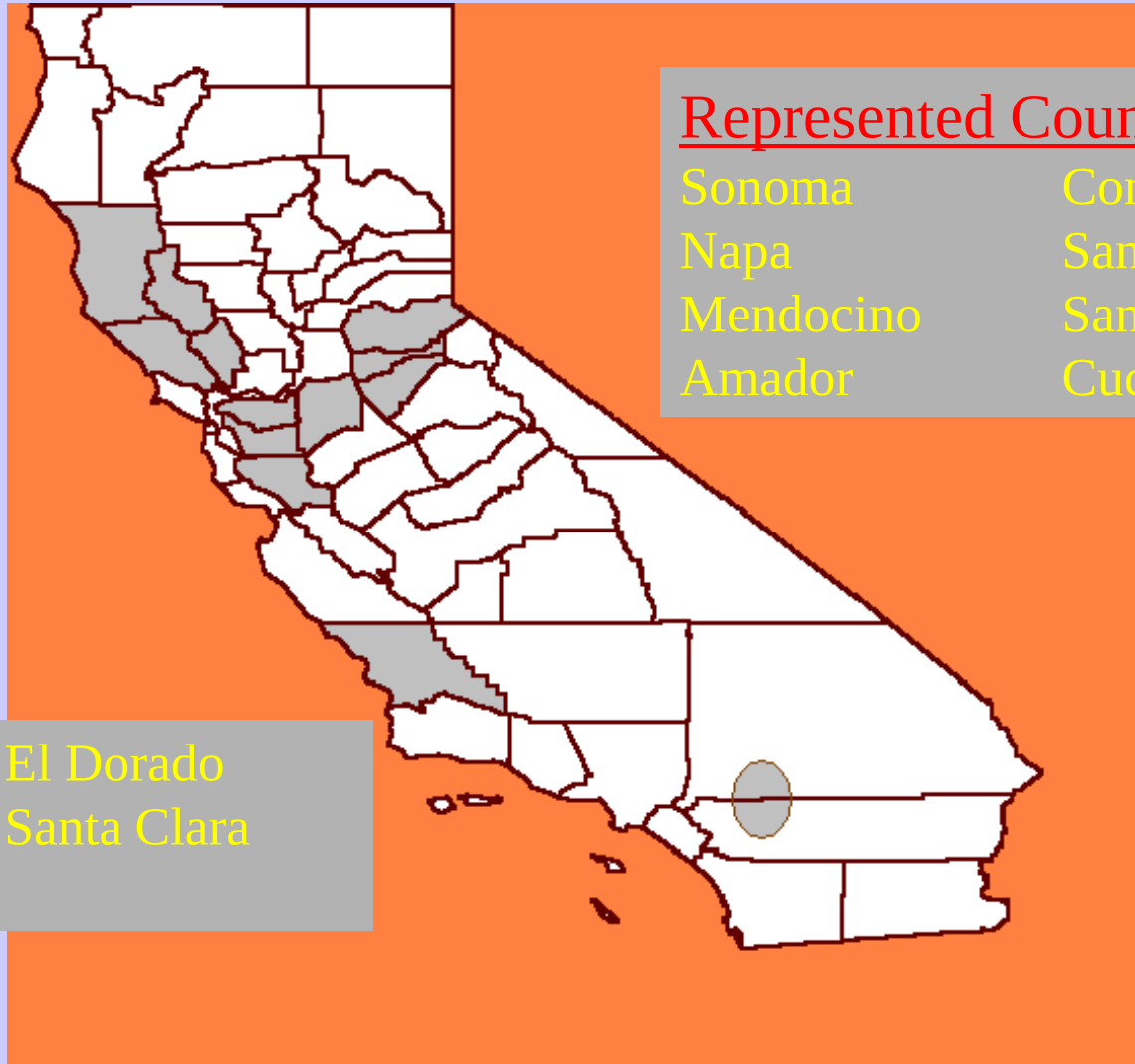
🎬 No “red leaf” in the fall

🎬 Often more than one selection was made from the same vineyard

Additional Criteria

- Geographic diversity
- The “story”

Zinfandel Heritage Vineyard



Represented Counties

Sonoma

Contra Costa

Napa

San Luis Obispo

Mendocino

San Joaquin

Amador

Cucamonga

Lake

El Dorado

Alameda

Santa Clara

Calaveras



Oakville Experimental Vineyard

Zinfandel Heritage Vineyard

90 Selections

Phase I – 63 selections budded 1995-96

Phase II – 27 selections budded 1999

9' x 8' spacing

Saint George Rootstock

Head-Trained – Spur Pruned

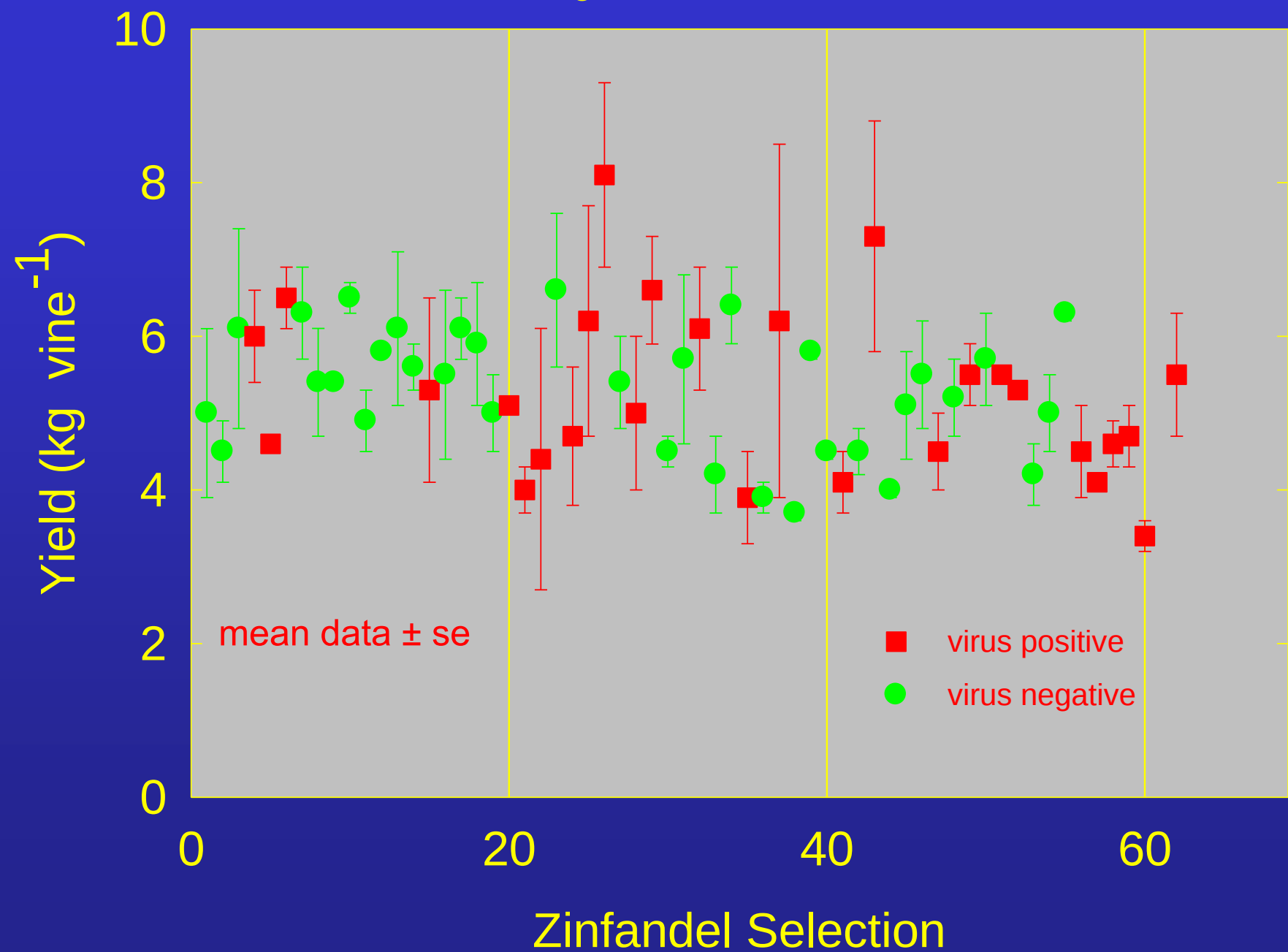
Gravelly Bale Loam



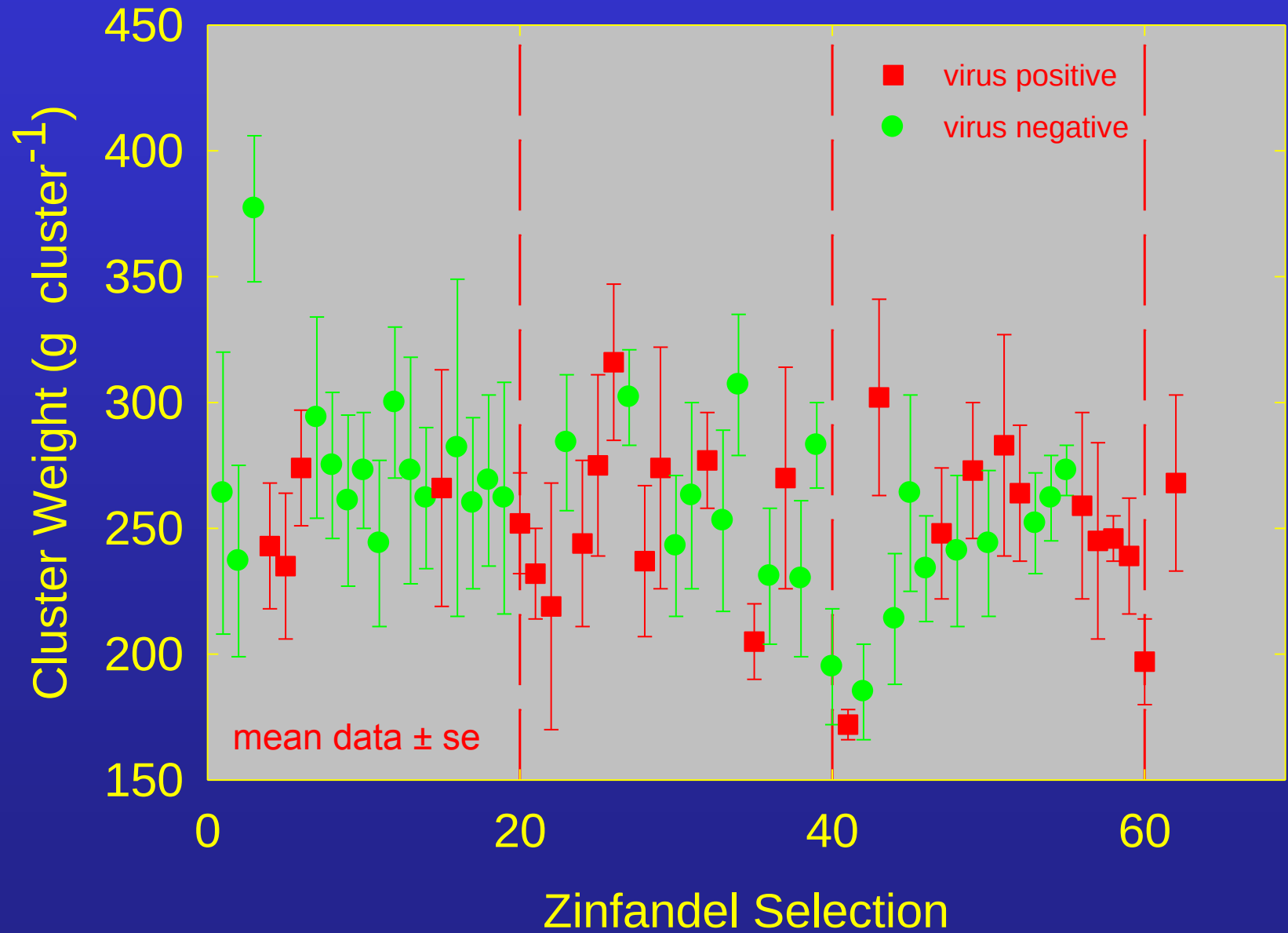
Additional Protocol

- Numbers only – no identity
 - Donor vineyards requested anonymity
 - Location bias
 - Oakville is Oakville

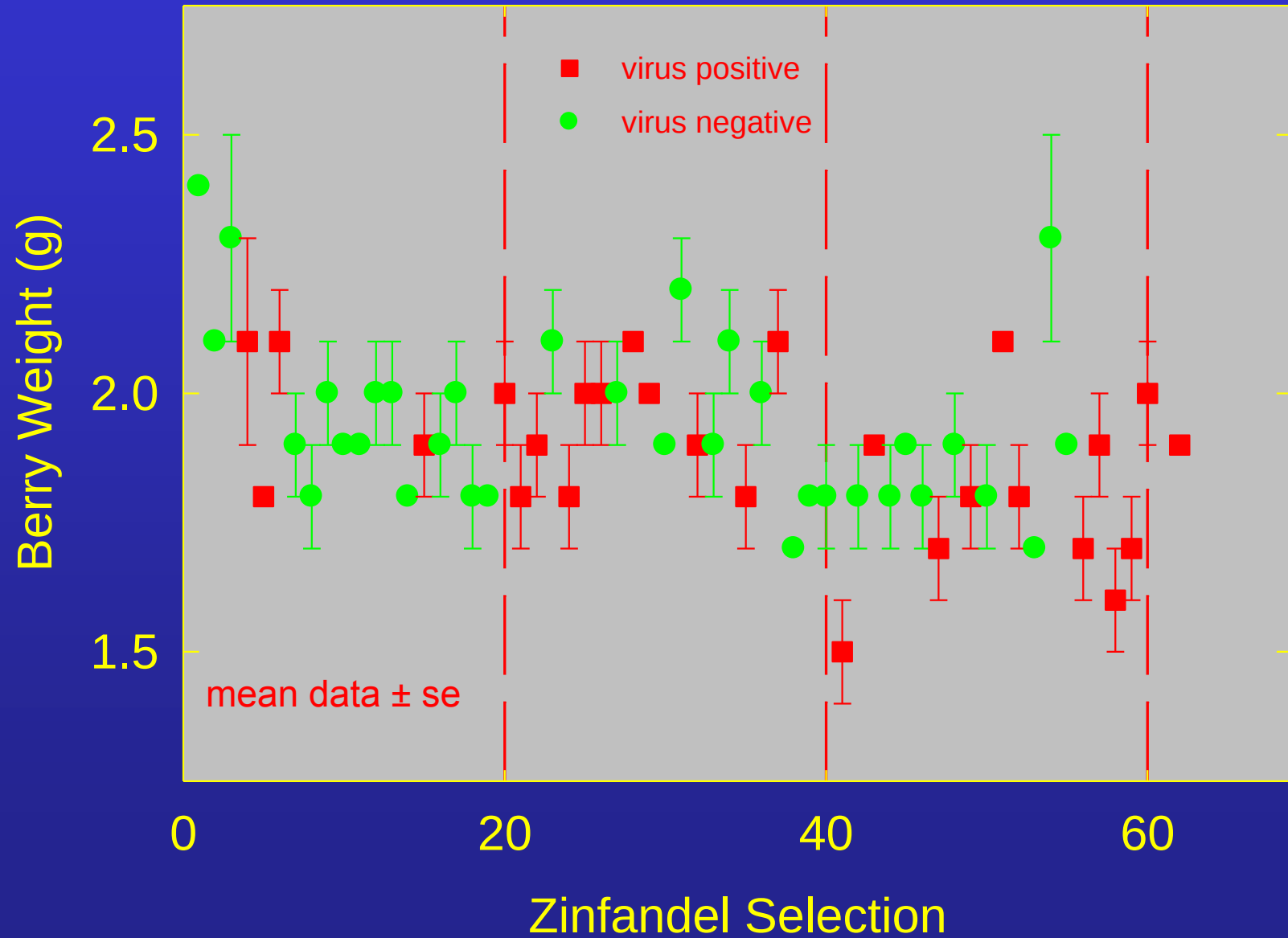
Oakville Experimental Vineyard
Heritage Zinfandel - 1999 - 01



Oakville Experimental Vineyard
Heritage Zinfandel - 1998 - 01



Oakville Experimental Vineyard
Heritage Zinfandel - 1998 - 01



Zinfandel Heritage Vineyard (Phase I) 1998 - 2003 harvest data
(except as noted)

		99-03 Yield (kg vine ⁻¹)	99-03 Cluster Per Vine	Cluster Weight (g)	Berry per Cluster	Berry Weight (g berry ⁻¹)
ALL	mean	4.8	21	244	136	1.8
ALL	std	0.9	2	34	15	0.2
ALL	high	7.5	25	331	176	2.4
ALL	low	3.3	18	157	98	1.4
Primitivo						
FPMS	03	4.2	24	185	107	1.8
FPMS	05	3.5	23	157	112	1.4
FPMS	06	3.8	24	170	98	1.7
FPMS	1a	4.7	19	257	141	1.9
FPMS	2	3.9	20	208	118	1.8
FPMS	3	3.9	19	219	122	1.8

Conclusions – Phase 1

- Zinfandel selections show variability in yield components (cluster wt and berry wt)
- FPS selections do not appear to be distinctly different from field selections
- The greatest differences are between Zinfandel selections and Primitivo clones

New Phase 2 Vineyard

- 22 Selections, 4 FPS and 18 Heritage
- Rootstock: St. George
- Spacing: 1.8 m x 2.4 m (6 x 8 ft, v x r)
- Head-trained, spur-pruned
- 5 replicates, 18 vines/rep

Analyses and Calculations

- Growth components: pruning wt, shoot number (shoot wt)
- Yield components: fruit wt, cluster number, berry wt (cluster wt, berries per cluster)
- Juice composition: Brix, TA and pH
- Wine lots: unreplicated, half-ton bin lots

Conclusions – Phase 2

- Zinfandel selections show less variability in the yield component of berry wt
- FPS selections do not appear to be distinctly different from field selections
- The greatest differences are between the Zinfandel selections and the Primitivo clones

Phase 3

- 3 sites
 - Sonoma Valley – full trial, data + wine
 - Sonoma Dry Creek – full trial, data + wine
 - Paso Robles – abbreviated trial, data

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ZAP

Zinfandel Advocates and Producers

AVF

American Vineyard Foundation

IAB

Fruit Tree, Nut Tree, Grapevine Improvement Advisory
Board

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 - Foundation Plant Services, UC Davis



1999
CALIFORNIA
Zinfandel

Alc. 15.4% By Vol.

