

Dr. Jim Wolpert

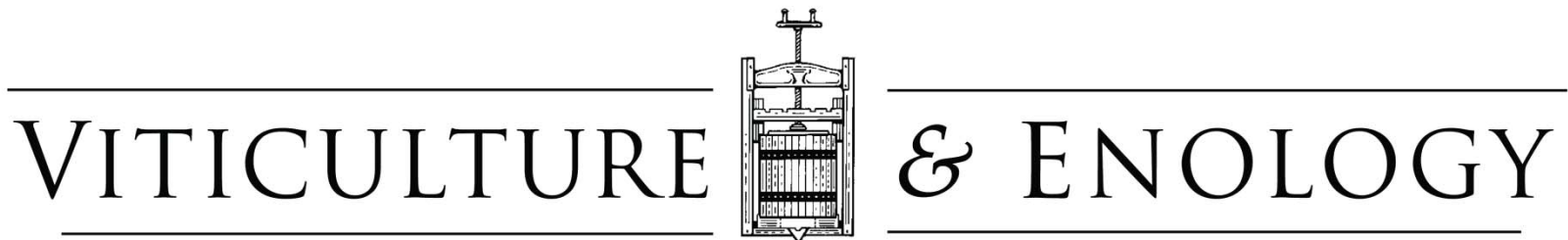
UC Davis

Department of Viticulture and Enology

Systematic Evaluation of Varieties and Clones of Winegrapes in California

57th Annual Lodi Grape Day

TUESDAY, FEBRUARY 3, 2009



U N I V E R S I T Y O F C A L I F O R N I A D A V I S

Acquisition, Clean Up, Evaluation



From all over the world



To FPS



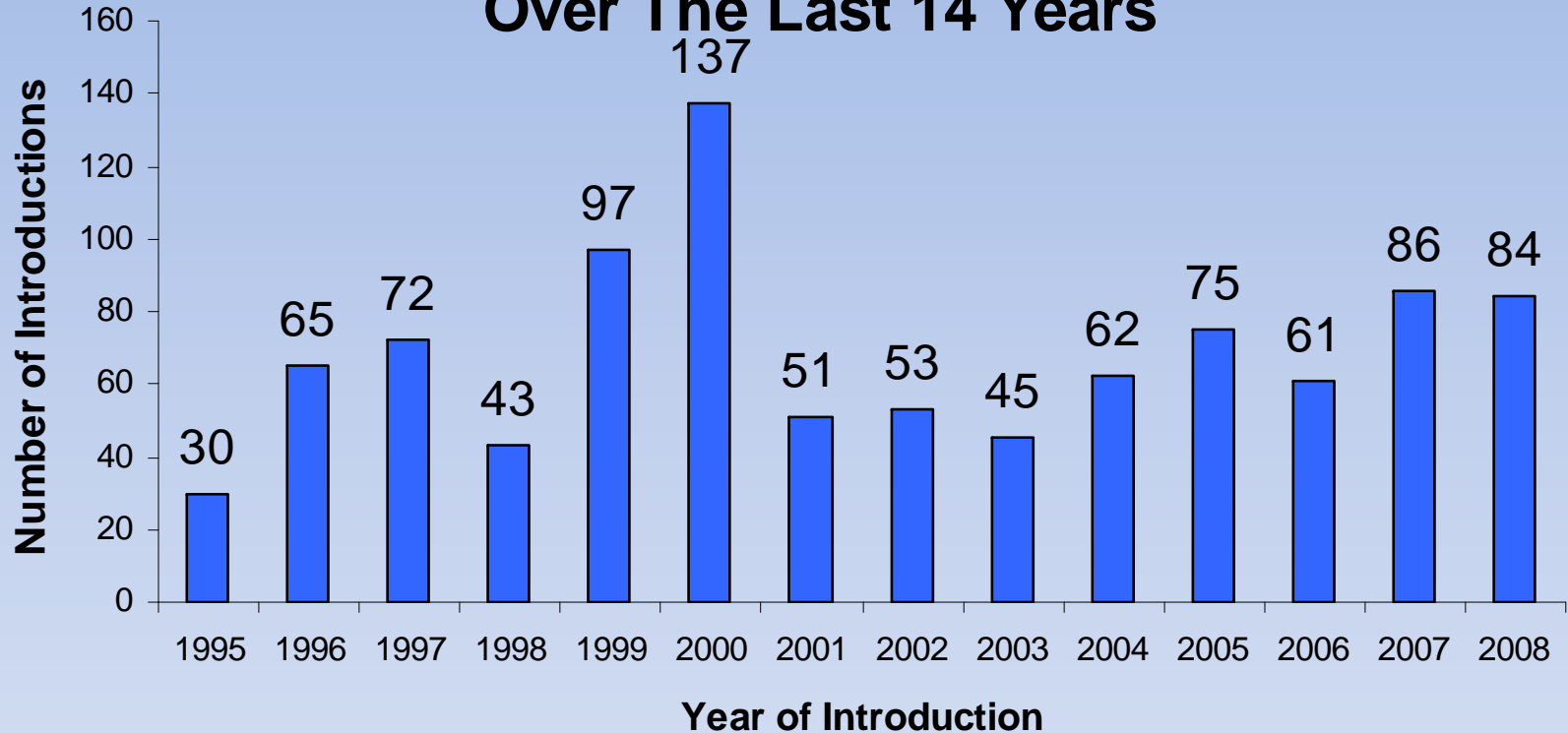
To evaluation

To educated planting decisions

3 Major Improvements That Changed Variety and Clone Availability

- Construction of the National Grapevine Importation Facility, linked with FPS, UC Davis
 - Increased the diameter of the “pipeline”
- Development of Shoot Tip Culture for elimination of grapevine virus diseases
 - Shortened the “pipeline”
- Developed relationships with foreign repositories of clones and varieties
 - Loaded the “pipeline”

FPS New Grape Introductions Over The Last 14 Years



Courtesy of C. Covert, Foundation Plant Services, UC Davis

We propose :

- 1) To evaluate winegrape cultivars and clones for characteristics suitable for wine production;
- 2) To develop a program of outreach delivering information to nurseries, growers and vintners via regular presentations in production locations and trade journal articles;
- 3) To establish a database of information from all previously published clone and cultivar trials done in California, adding the data this proposal will produce as it becomes available.

Proposed Trial Sites



Summary of clones of major and minor varieties. Priorities for establishment and potential locations for testing are subject to change.

Cultivar	Number of clones untested	Locations for testing
Major		
	as of January 2009	
Cabernet Sauvignon	13	Oakville, Davis, Kearney
Cabernet Franc	12	Oakville
Chardonnay	28	Grower-cooperator, Davis
Merlot	13	Oakville
Pinot noir	40	Grower-cooperator
Sauvignon blanc	15	Oakville, Davis
Syrah/Shiraz	14	Oakville, Davis, Kearney
Minor		
Barbera	5	Davis
Cinsaut	2	Davis
Counoise	2	Davis
Grenache/Garnacha	4	Davis
Malbec/Cot	6	Oakville, Davis
Marsanne	3	Davis
Mourvedre	4	Oakville, Davis
Petite Verdot	3	Oakville, Davis
Pinot gris	10	Grower-cooperator
Roussanne	3	Davis
Semillon	7	Oakville, Davis
Tannat	3	Davis
Tempranillo	8	Davis
Viognier	5	Davis

A sample from a list of approximately 60 “new” varieties available from FPS that grows longer every year

Cultivar	Color	Origin	Comments
Albillo Mayor	W	Spain	ITACyL Clone - 30
Arinto	W	Portugal	High acid lemony aromatic, age-worthy
Arneis	W	Italy	Small bunch and berry, low acid, but "characterful" aromas and flavors
Biancolella	W	Italy	Puglia and Campania,
Bonarda	R	Italy	Syn for Croatina
Ciliegiolo	R	Italy	Parent of Sangiovese, Tuscan origin, meaning "cherry", rich in color, high sugar and low acid
Coda di Volpe	W	Italy	modest acidity and ripe perfumed aromas; used to soften blends; makes the famous Lacryma Cristi Bianco
Cortese	W	Italy	Native to Piemonte
Corvina Veronese	R	Italy	Dark, spicy, principal grape in Valpolicella

Evaluation Protocol:

Variety screening trials will be established with 3 to 5 vines of each selection, unless wine samples are anticipated (e.g. Kearney Variety #2) in which case the number of vines will be increased to about 20 per selection.

Clones will be established as replicated trials with 2 to 3 vines per replicate and enough replicates to give statistical robustness

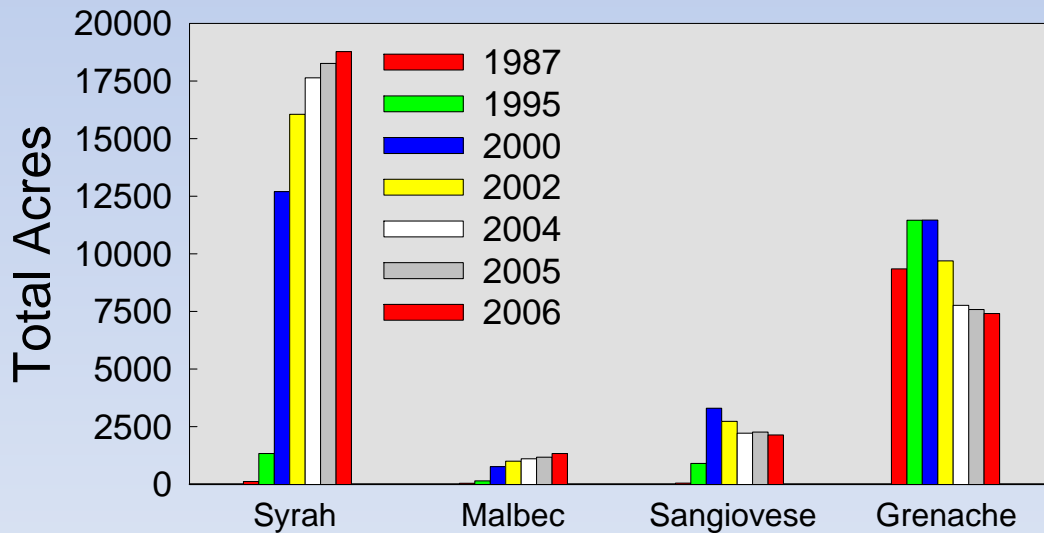
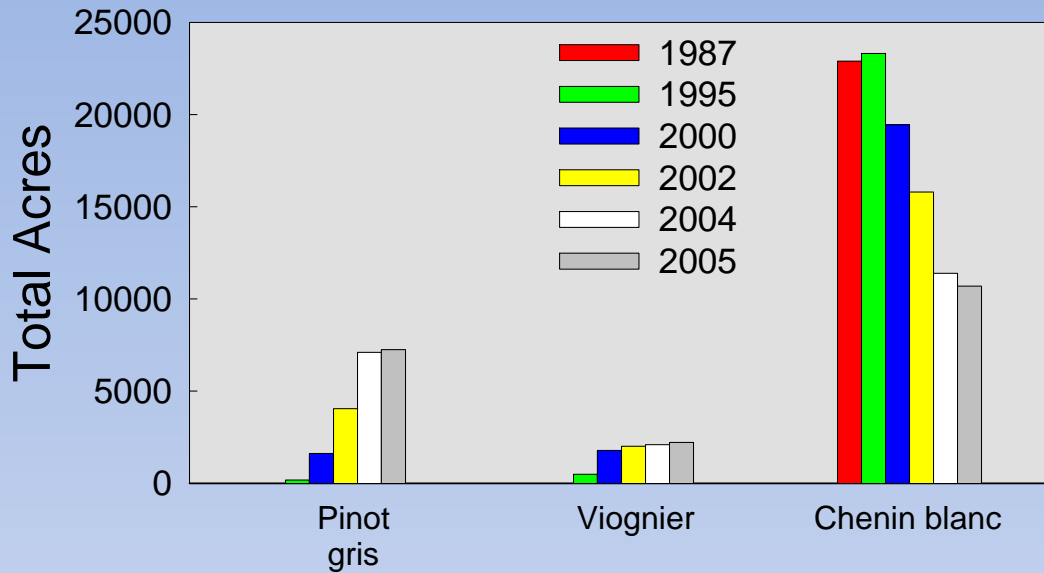
Viticulture measurements and grape and wine composition data which could be taken in variety and clone trials

<u>Viticulture Measurements</u>	<u>Grape Composition</u>
<i>Direct measurement</i>	Soluble solids (Brix)
Pruning weight per vine	Titratable acidity
Shoot number per vine	pH
Yield per vine	Berry skin anthocyanins
Cluster number per vine	Berry tannin ¹
Berry weight per replicate	Organic acids
Cluster rot (incidence and severity) per vine	Pyrazines ²
<i>By calculation</i>	
Average shoot weight	
Pruning wt per meter	
Average cluster weight	
Average berries per cluster	
Yield per acre (hectare)	
<i>Phenological observations</i>	
Relative budburst	
Relative flowering date	
Relative veraison date	
Harvest date	

One could argue that the marketplace will not accept new alternative cultivars, because consumers would not recognize new names.



What is this stuff?
Coda what?
Where is the Cabernet?



It is important to note that the consumer has widely accepted new cultivars such as Syrah (or Shiraz) and Pinot Gris (or Grigio) due to the influence of Australian and Italian imports.

We can and should lead ,not follow.

Will newly introduced varieties be used for blending or stand by themselves?

The name of a single grape variety may be used as the type designation if not less than 75 percent of the wine is derived from grapes of that variety

or

Lizard's Gulch

California

2012

CODA DI VOLPE

Establish Database:

We propose to gather the published work and put all available data into a database.

Included in the database will be results from previous evaluations and new data collected by this project.

Ideally a grower should be able to search for Chardonnay clones and get data on all the clones or specifically ask for “Chardonnay 4” and get only trials where that clone was tested.

Thank you

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Viticulture and Enology

