



Foothill Grape Day

23 April 2009

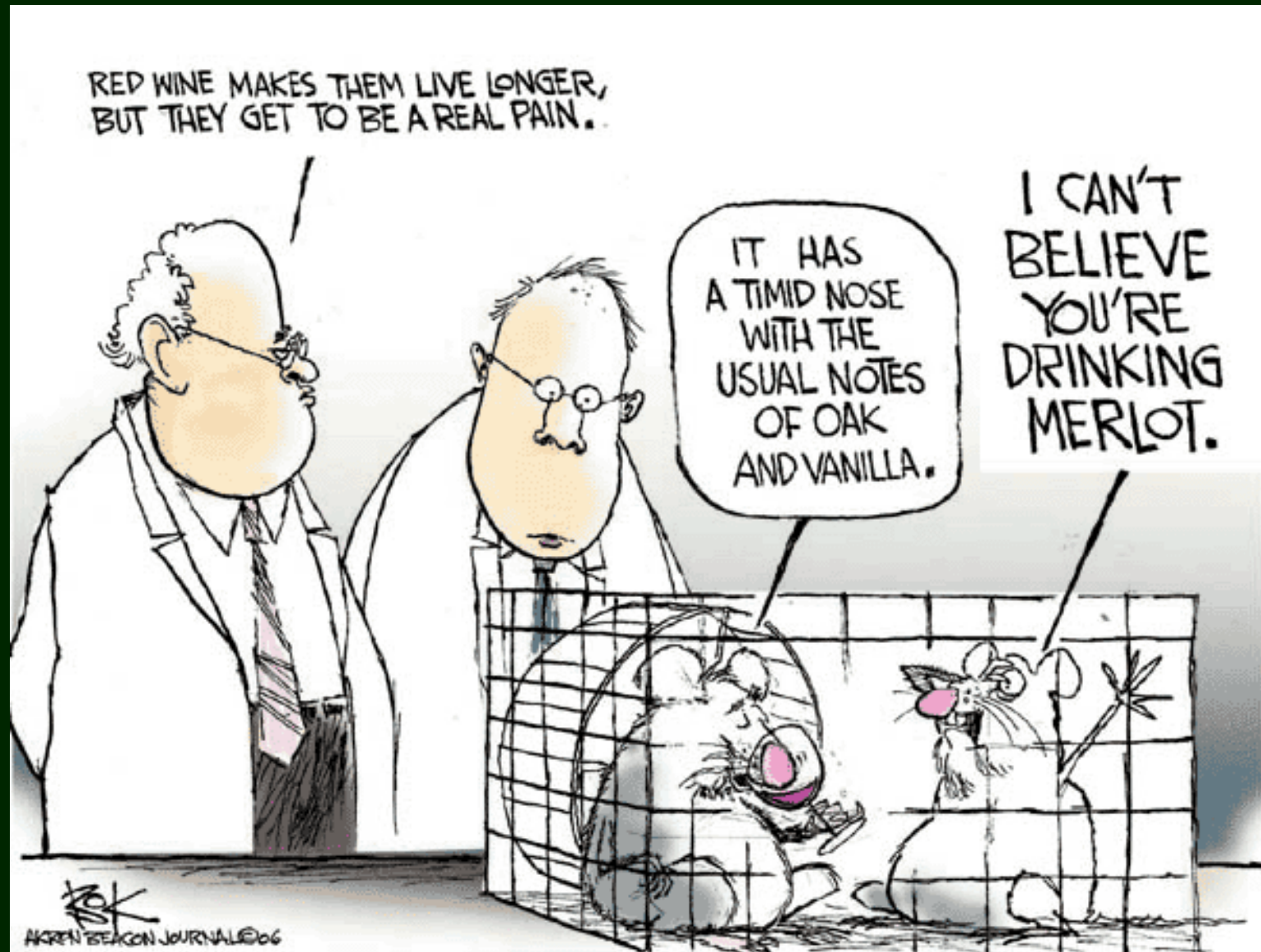


Characteristics of 'New' Varieties of Local Interest - ABCCM

**Paul S. Verdegaal
San Joaquin County**

**University of California
Cooperative Extension**

The Right Variety



Old Vine Zinfandel



Primitivo 03

- The
Holy
Grail?



World Wide Selections

9,000,000 ha

14,000 varieties

Major Commercial Varieties

239 25%

20 30%

259 55%

1998

Variety Acreage

1985		2007	
Colombard	73,241	Chardonnay	94,282
Chenin blanc	41,462	Cabernet Sauvignon	75,662
Chardonnay	27,424	Zinfandel	51,649
Zinfandel	25,367	Merlot	49,781
Cabernet Sauvignon	22,61	Pinot noir	29,191
Carignane	16,381	Colombard	28,649
Sauvignon blanc	15,383	Syrah	18,749
Ruby Cabernet	10,577	Sauvignon blanc	15,367
White Riesling	10,046	Rubired	11,109
Barbera	4,825	Chenin blanc	9,598
		Pinot gris	9,389

Variety Acreage

2007

2005

Chardonnay	94,282	Chardonnay	95,021	
Cabernet Sauvignon	75,662	Cabernet Sauvignon	76,756	
Zinfandel	51,649	Merlot	54,288	(2,497)
Merlot	49,781	Zinfandel	51,425	
Pinot noir	29,191	Colombard	29,455	
Colombard	28,649	Pinot noir	24,442	(7,816)
Syrah	18,749	Syrah	18,257	(110)
Sauvignon blanc	15,367	Sauvignon blanc	15,462	
Rubired	11,109	Rubired	11,100	
Chenin blanc	9,598	Chenin blanc	10,695	
Pinot gris	9,389	Barbera	7,999	

The Big Six

Chardonnay

Cabernet Sauvignon

Zinfandel

Merlot

Sauvignon blanc

Syrah

Varieties With 50,000 Tons Crushed in 2005

Rubired

Colombard

Pinot noir

Chenin blanc

Ruby Cabernet

Barbera

Grenache

Pinot grigio (gris)

Burger

Muscat of Alexandria

69 Red

42 White

? Other

Thompson seedless

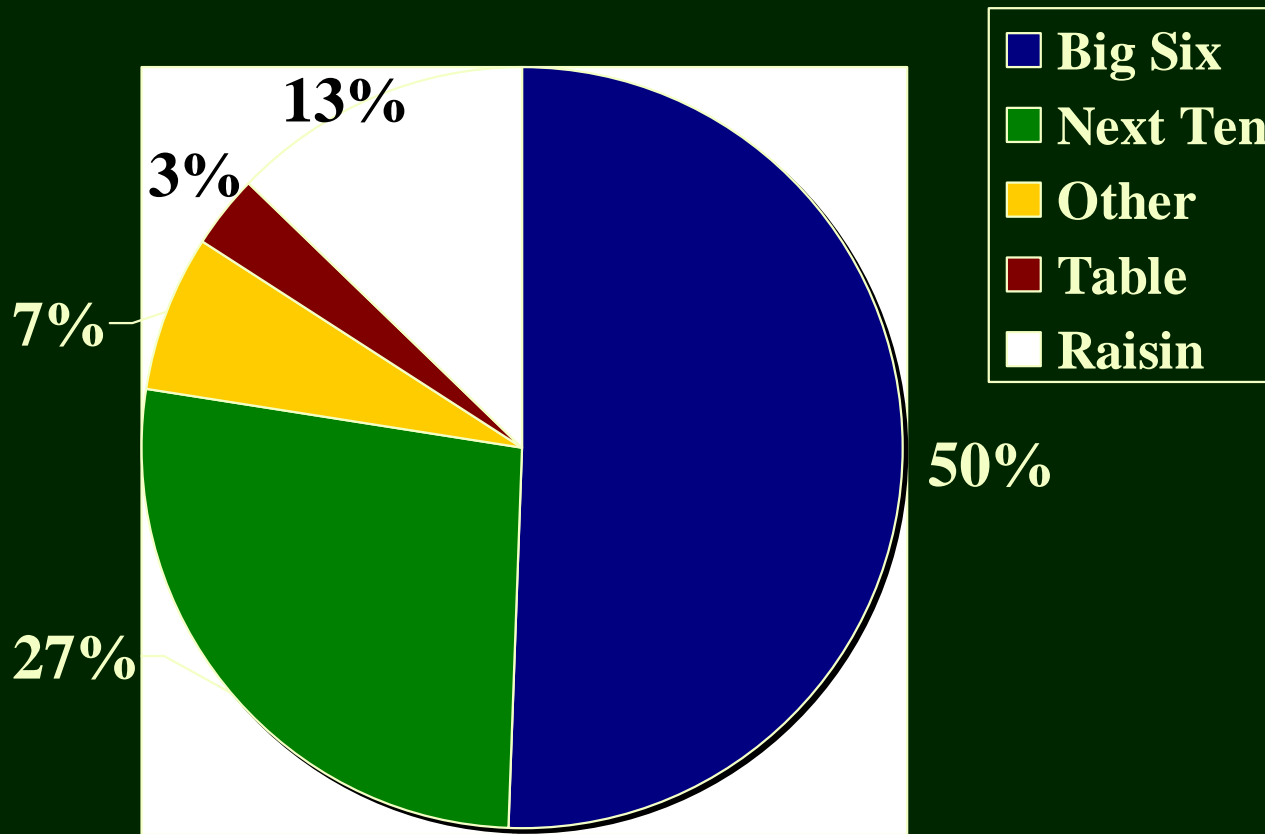
16 Varieties of Wine Grapes

3,488,785 tons (92.9%) vs

267,606 tons of 111 Others

Variety Composition of Crush

2007



1,953,725

1,040,581

253,198

117,099

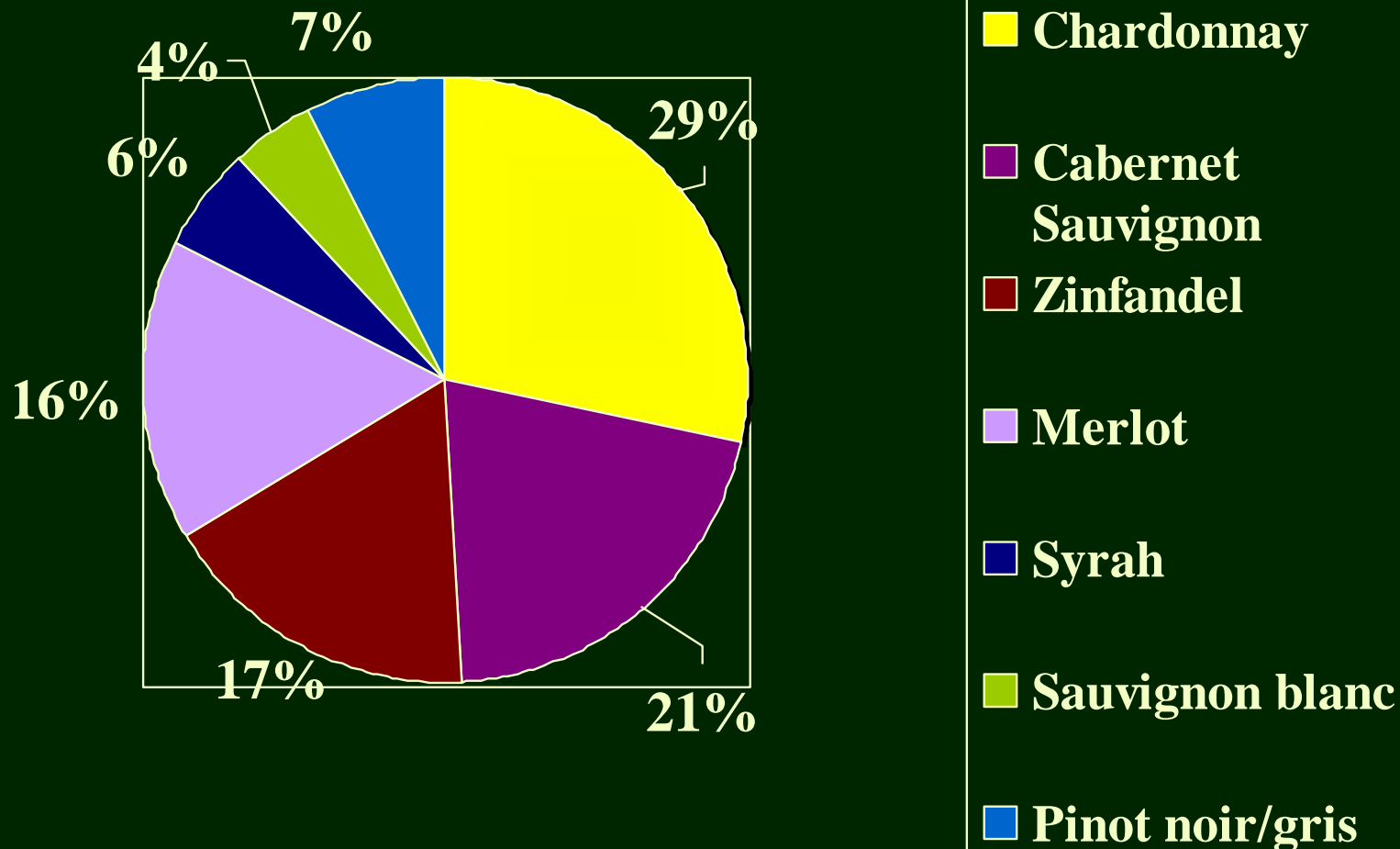
3,665,929

Total Tons

The Big Six 2008

1,953,725 tons of 3,247,504 (60%) Wine Grapes

3,665,929 (53%) Total Grapes



Variety Selection

- Quality
- Demand
- Yield
- Soils
- Climate
- Production Goals
- Personal Commitment

Selection Factors

World

- Resistance
 - Disease
 - Pests
- Tradition
- Regulations
- Growing Conditions
 - Winter Cold
 - Water
 - Soils

California

Marketability
Quality
Yield
Resistance

Consumer Demand

VS

Management/Input



Graciano (Morrastel)



PERSISTENCE

President Calvin Coolidge is the source of this widely quoted insight:

“Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful people with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan "press on" has solved and always will solve the problems of the human race.”



Clones

- Pinot noir
- Chardonnay
- Cabernet Sauvignon
- Merlot
- Cabernet franc
- Sangiovese
- Sauvignon blanc
- Syrah
- Zinfandel *

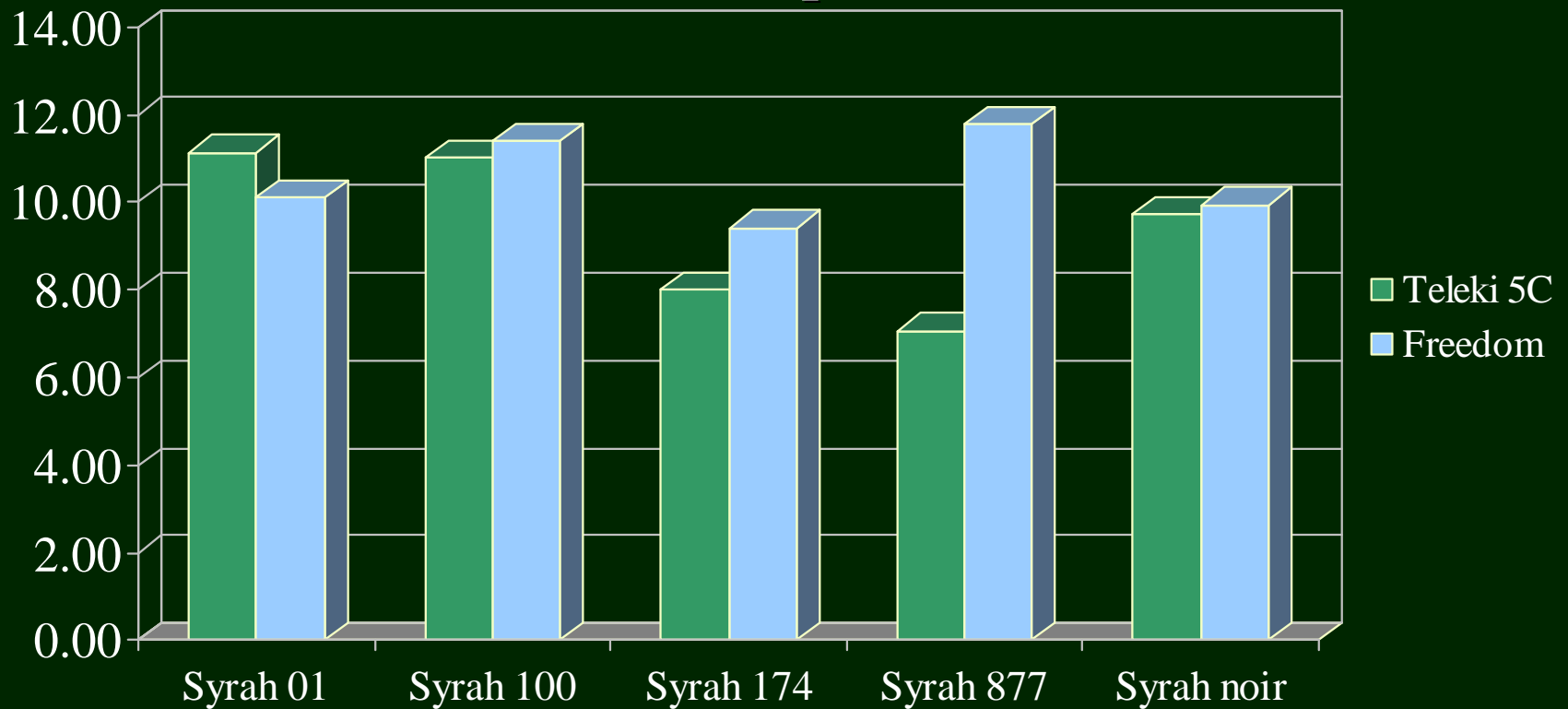


* More selections of Mission

Syrah Clones

Lodi 2002

Yield Pounds per Vine



Clones

146

152

FPS 01



Pinot gris

Climate/Site Conditions

- Rainfall
- Winter Cold
- Growing Season
 - Frost
 - Heat
 - Wind
 - Hail

Global “Warming” Considerations

- Five Warmest Seasons in Lodi during last 25 years: 1992 1997
2001 1984 2006
- Hottest July 1988
- Coolest September 2005
- Winter 2007 January with 25 days of minimum < 30°F

- 2006 Hurricane Prediction of 6 to 9 Severe; actual was 3 severe, with 0 making landfall.
- Polar Ice Caps also shrinking on Mars
- Average Global Temperature decreased since 2002

Bottom Line: Variety selection not at risk.

www.realclimate.org

www.junkscience.com

www.co2science.org

www.WattsUpWithThat.com

www.CarbonDioxide.com

Tendencies & Sensitivities

Petite Sirah

Nebbiolo

Chardonnay

Malbec

Symphony





Petit Verdot



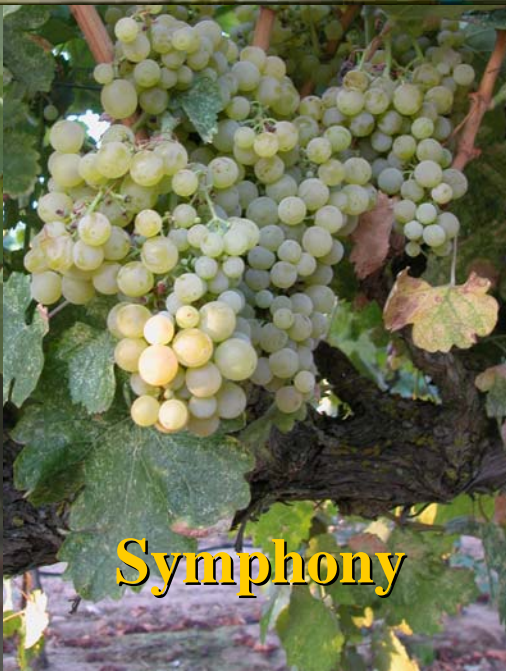
Dolcetto



Tinta Amarella



Cinsaut



Symphony



Grenache

Newcomers in 1997

Syrah	6,987 (18, 257)	Pinot gris	890 (7,245)
Viognier	1,222 (2,217)	Symphony	538 (911)
Roussanne	166 (177)	Muscat Orange	135 (239)
Malbec	369 (1,174)	Dolcetto	98 (92)
Petit Verdot	367 (1,479)	Lambrusco	103 (103)
Sauvignon musqué	81 (165)	Tocai Friulano	124 (131)

Newcomers in 2007

Tempranillo	6,987 (18, 257)	Touriga	890 (7,245)
Tannat	1,222 (2,217)	Souzão	
Graciano		Tinta Barroca	38 (911)
Malbec	369 (1,174)	Trincadeira	135 (239)
Lagrein	98 (92)	Petit Verdot	367
Teroldego	(1,479)	Carmenère	103 (103)
Marzemina	81 (165)	Nero d'Avola	124 (131)
Negroamaro		Refosco	
Aleatico		Dornfelder (Complex vinifera)	
Dolcetto		Pinotage (Pinot noir x Cinsaut)	
Aglianico		Albariño	

Comeback Contenders

- Petite Sirah
- Barbera
- Semillon
- Muscat blanc
- Mourvedre
- Carignane
- White Riesling
- Grenache
- Rubired?

Liberty Gallo

Soil: Tokay fine sandy loam

Rootstock: Freedom (*V. champinii* x 1613C)

Spacing: 7 x 10 feet (2.3 m x 3.1m)

Irrigation: drip 2 x 0.5 gph

Planted: 1992

Region: High III to Low IV

(Average GDD 3,464)

Vine Measurements

Growth

- Budbreak
- Bloom
- Maturity
- Pruning Weight
 - Crop:Pruning Ratio

Yield

- Weight per Vine\
- Cluster Number
- Cluster Weight
- Berry Weight

Juice

- °Brix
- Titratable Acidity g/L
- pH
- Malic Acid
- Potassium
- Phenolics
 - Anthocyanins
 - Tannins

Potential Problems



- Viruses
- Canker Diseases
- Foliar Pests
- Sensitivities



Symphony and Spring Rains 1998





Montepulciano 2006

Eutypa vs Virus



GLRaV



Eutypa dieback

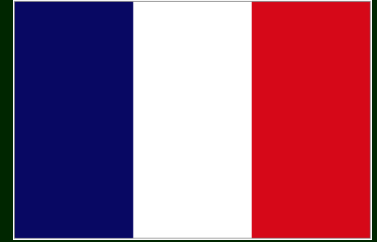
Vine Decline Potential





Escape Plan Status: FAIL

France



Bordeaux

Burgundy

Rhône

Loire

Languedoc

Rosussillon

Cahors

Alsace

Bordeaux

Cabernet Sauvignon

Malbec

Cabernet franc

Sauvignon blanc

Merlot

Semillon

Petit Verdot

Carmenère

Tannat

Cabernet franc



Sauvignon blanc



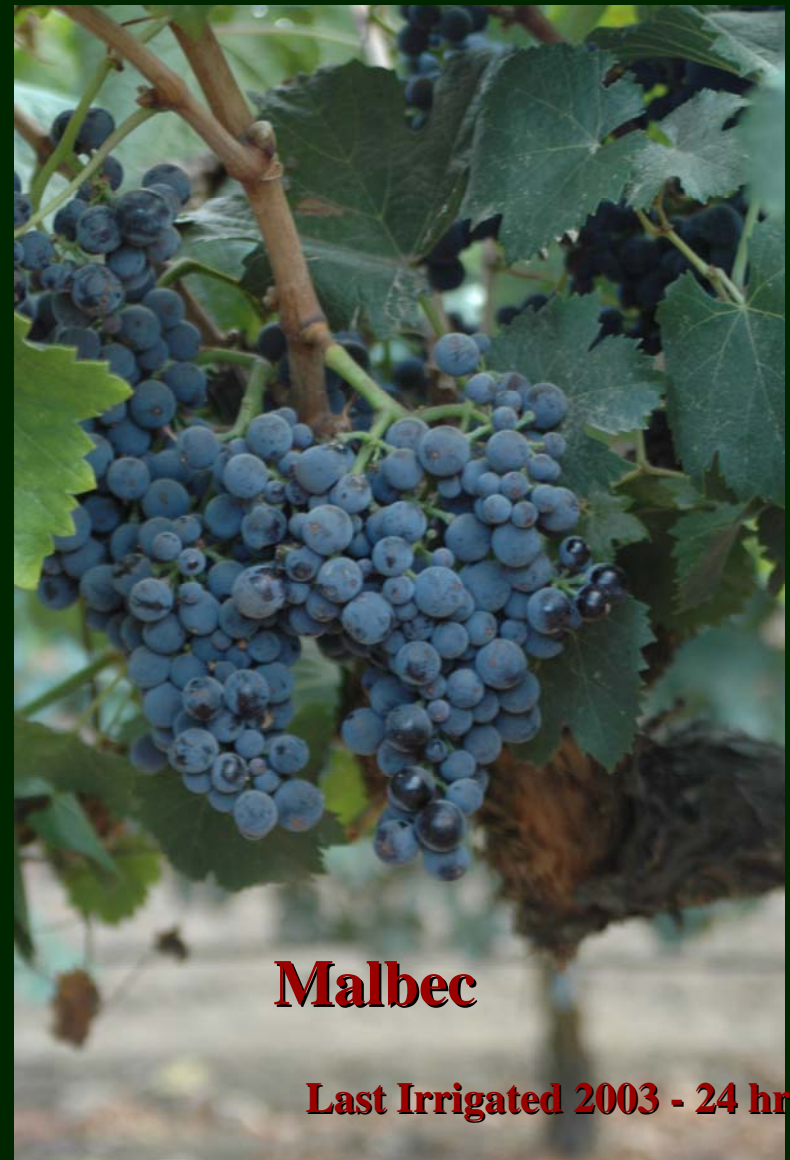
Cabernet Sauvignon





Petit Verdot

Clones FPS 01 vs 02



Malbec

Last Irrigated 2003 - 24 hrs



Malbec

Clones FPS 04, 06, 08 vs 09

Malbec FPS 09



Tannat



Carmenère





Semillon



Muscat blanc

FPS 2, 3, 6, 7

Rhône

Grenache

Viognier

Syrah?

Cinsaut

Mourvedre

Clairette blanche

Carignane



Grenache



Mourvedre



Syrah



Viognier

Cinsaut





Marsanne



Clairette blanche

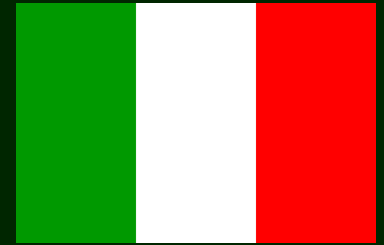


Corbeau



Picpoul noir

Italy



Sangiovese 02 vs 03

Nebbiolo

Marzemino

Lagrein

Aglianico

Picpoul noir

Vernaccia

Pinot grigio 146, 152, FPS 01

Montepulcano

Pignolo

Cortese

Schioppetino

Docetto

Teroldego

Freisa

Aleatico

Arneis

Picolit

Refosco

Corvina

Raboso Paive

Canaiolo nero



Zinfandel



Primitivo

Plavac mali



Freisa



Dolcetto



Aleatico





Corvina Veronese



Aglianico

Schioppetino



Mondeuse





Arneis



Picolit



Aleatico



Aglianico

Barbera





Sangiovese 02



Sangiovese 03

2006

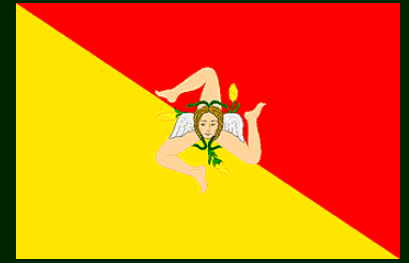
Vintage



Sangiovese 02

Sangiovese 03





Southern Italy/Sicily

Nero d'Avola

Negroamaro

Fiano

Aleatico

Primitivo

Piedirosso

Aglianico

Others (21)



Lagrein



Teroldego



Marzemino

Spain



Tempranillo

Graciano

Garnacha

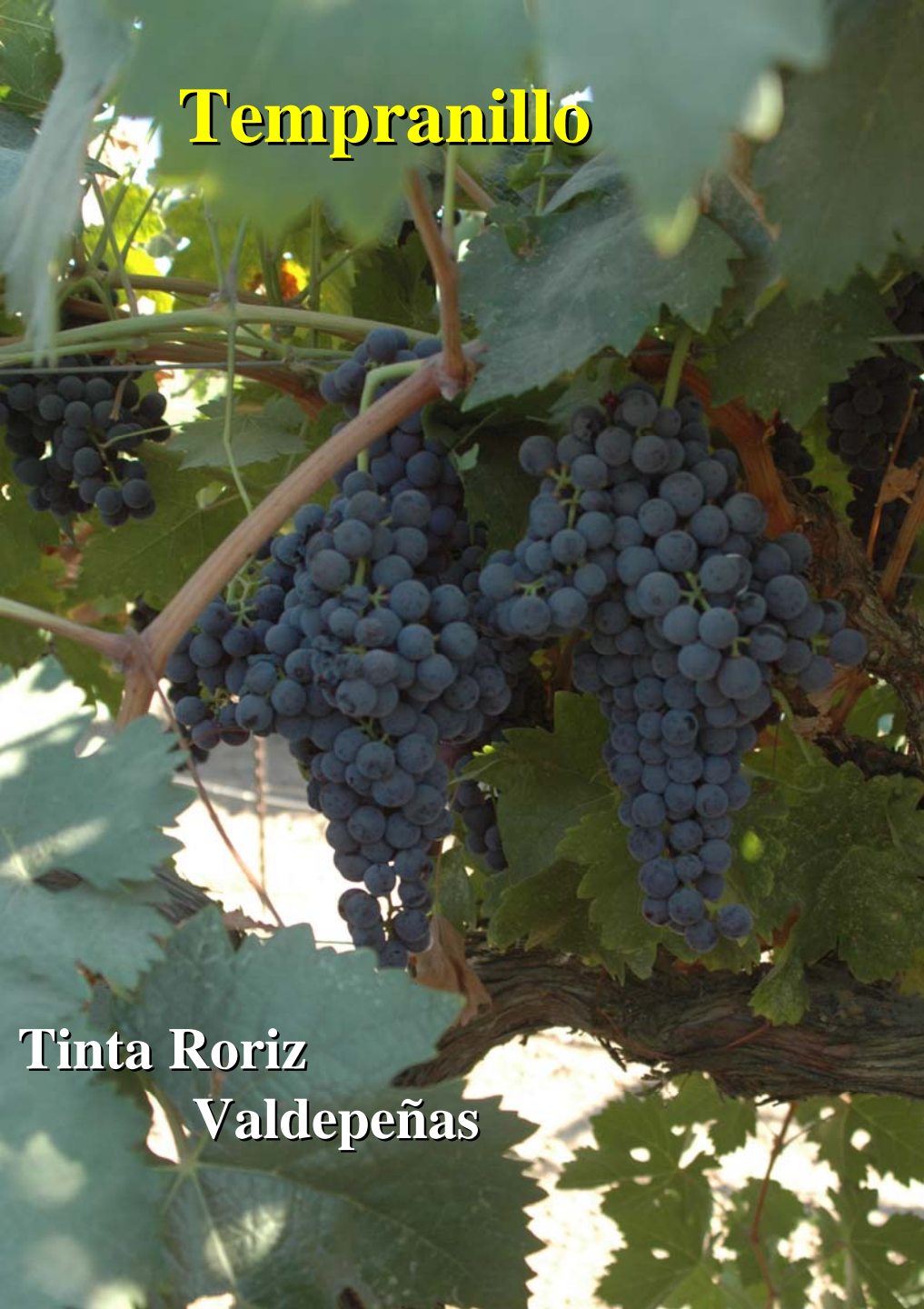
Palomino

Albariño

Xarello

Torrontes

Tempranillo



Tinta Roriz
Valdepeñas



Graciano

Morrastel

Portugal



Alvarelhão

Tinta Cão

Bastardo (Trousseau)

Tinta Roriz

Souzão

Touriga Nacional

Tinta Amarella

Periquita (Trincadeira)

Tinta Barroca

Verdelho



Alvarelhão



Touriga



Tinta Cão



Souzão



Periquita



Germany



White Riesling

Gewürztraminer

Müller-Thurgau

Kerner

Sylvaner

Schereube

Dornfelder

Limberger

South Africa

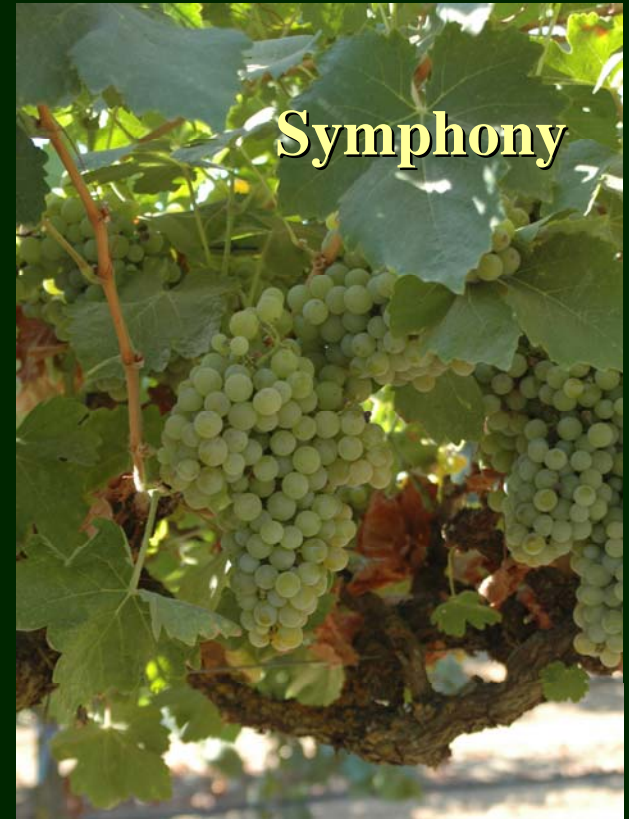


Pinotage

Hybrids

- Rubired (Alicante Ganzin x Tinta Cão)
- Ruby Cabernet (Carignane x Cabernet Sauvignon)
- Symphony (Grenache gris x Muscat of Alexandria)
- Torrontes (Listan Prieto x Muscat of Alexandria)
- Triplett blanc (Colombard x Vernaccia)
- Arinarnoa (Merlot x Petit Verdot)

- Chardonel
- Traminette
- Noire
- Corot noir
- Valvin Muscat



Other Regions



Assyrtiko

Agiorghitiko

Xinomavro



Plavac mali



Furmint

Kékfrankos

Kékoportó

Kadarka

Summary

- Goal
- Variety, Trellis System, Both
- Management vs System Change
 - Vine Balance
- Cash Flow vs Long Term Marketing
- Quality vs Yield
 - Quality finds and keeps a home



Sustainable Farmers



*"You been
farming
long?"*

To Those Who Have Served

And

To Those Now In Harms Way

