

A STUDY OF SOME VARIETAL WINE GRAPES

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REGIONAL CLASSIFICATION

Temperature, especially during the ripening period, affects the grapes' sugar and/or acid content and therefore affects their value for various uses. California grape-producing areas fall into one of five temperature groups or regions. Regional classifications are based on the amount of heat received during the growing season.

The regions are designated as:

Region	I . .	Cool region
Region	II . .	Moderately cool region
Region	III . .	Warm region
Region	IV . .	Moderately hot region
Region	V . .	Hot region

CLIMATE

Regions of climatic zones are defined as degree-days above 50°F for the period of April ^{through} ~~to~~ October, ~~inclusive~~. Degree days are calculated as follows:

If the mean temperature over a five day period for example, was 70°F, the summation would be:

$$70^{\circ} - 50^{\circ} = 20^{\circ} \times 5 = 100 \text{ degree-days}$$

The average degree days for the regions are as follows:

Region	I . .	less than 2,500
Region	II . .	2,501 to 3,000
Region	III . .	3,001 to 3,500
Region	IV . .	3,501 to 4,000
Region	V . .	4,001 or more

PRODUCTION

Grape varieties vary in their ability to produce good quality wines from region to region. Some are more versatile than others, but most of the top varietal grapes produce their best quality in one or two climatic regions.

COMPOSITION

Table wine grapes are influenced by two factors -- amount of crop on vines, and environmental conditions during the growing season.

The sugar-acid relation of a grape takes on one of four forms:

- . . low sugar with low acid
- . . low sugar with high acid
- . . medium sugar with medium to high acid
- . . high sugar with low acid.

The dry table wines, for example, require grapes of fairly low pH (3.0 to 3.35), high acidity (0.65 to 0.90 percent), and moderate sugar content (19° to 23° Balling).¹

Grapes for sweet table wines and the dessert and appetizer wines should be of higher pH (3.3 to 3.65), medium acidity (0.5 to 0.6 percent) and more sugar content, (24° Balling and above).

¹ Degree Balling is a measure of the total soluble solids content of grapes, approximately the percentage of grape sugars in the juice.

GRAPE ACREAGE DATA*

<u>Variety</u>	<u>San Luis Obispo</u>	<u>Santa Barbara</u>
Cabernet Sauvignon	886	1,445
Carignane	17	-
Chardonnay	208	613
Chenin blanc	26	38
French Colombard	13	-
Gamay	61	38
Gamay Beaujolais	72	248
Gewürztramer	92	173
Merlot	468	361
Petite Sirah	107	-
Pinot noir	93	642
Sauvignon blanc	49	60
Semillon	18	-
Sylvaner	27	222
White Riesling	153	877
Zinfandel	887	30

San Luis Obispo - 3,245 acres

Santa Barbara - 4,780 acres

Total in both counties 8,025 acres

* 1973 California Crop and Livestock Reporting Service

GRAPE VARIETAL TRIALS
San Luis Obispo County

SHANDON

<u>VARIETY</u>	<u>HARVEST DATE</u>	<u>BRIX</u>	<u>T.A.</u>	<u>Ph</u>
Barbara	9/22/71	24.0	1.08	3.38
	9/29/72	25.1	1.13	3.50
	9/30/72	24.7	.94	3.19
	10/ 2/72	25.3	1.08	3.29
	10/ 3/72	25.0	1.10	3.29
	10/ 4/72	24.2	1.04	3.19
	10/ 5/72	25.0	1.16	3.18
Cabernet Sauvignon	10/15/71	23.0	.68	3.38
	72	23.5	.725	3.41
	9/20/73	23.9	.625	3.40
Carignane	10/ 1/71	23.0	.85	3.72
	10/ 6/72	23.0	1.00	3.51
Chenin blanc	9/17/71	21.5	.89	3.43
	9/16/72	22.4	.85	3.25
	9/18/72	21.8	.85	3.30
French Columbard	9/18/71	22.0	.86	3.50
	9/18/72	21.5	1.21	3.15
	9/19/72	22.4	1.16	3.10
	9/19/73	21.0	.863	3.10
Gamay	9/25/73	20.0	.777	3.12
Gamay Beaujolais	9/14/73	23.5	.720	3.43
Merlot	9/24/71	24.0	.65	3.39
	72	24.5	.928	3.56
Pinot blanc	9/11/71	22.5	.58	3.30
Petite Sirah	9/24/71	24.0	.89	3.45
	72	24.5	.785	3.50
Semillon	9/11/71	23.2	.57	3.35
	9/14/73	21.7	.530	3.52
White Riesling	9/11/71	23.8	.47	3.92
Zinfandel	10/12/71	22.4	.79	3.40
	9/22/72	25.6	.95	3.52
	9/23/72	23.4	1.12	3.32
	9/25/72	24.7	1.10	3.30
	9/26/72	25.0	1.00	3.50
	9/27/72	24.5	.93	3.20
	9/28/72	25.0	.88	3.50
	9/29/72	25.0	.87	3.29
	9/25/73	23.6	.725	3.50
	10/ 2/73	23.4	.810	3.41

GRAPE VARIETAL TRIALS
San Luis Obispo County

CALIFORNIA STATE
POLYTECHNIC COLLEGE

<u>VARIETY</u>	<u>HARVEST DATE</u>	<u>BRIX</u>	<u>T.A.</u>	<u>Ph</u>
Cabernet Sauvignon	9/ 6/72	17.9	1.300	3.05
Franken Riesling	10/10/71	23.5	.69	3.40
	9/ 6/72	19.6	.670	3.19
Pinot blanc	10/10/71	21.7	.60	3.33
	9/ 6/72	20.1	.865	3.10
	9/ 6/72	18.5	.655	3.09
Pinot noir	9/ 6/72	22.4	.990	3.19
Sauvignon blanc	10/10/71	21.8	.81	3.11
Sauvignon vert	10/10/71	21.6	.84	3.09
Semillon	10/10/71	20.2	.74	3.10

EDNA

Cabernet Sauvignon	9/ 6/72	16.4	.890	3.24
	10/ 2/73	20.0	.92	3.01
Pinot blanc	9/ 6/72	18.6	.700	3.34
Pinot Chardonnay	9/ 6/72	21.0	.830	3.20
	9/17/73	21.0	.80	3.22
Pinot noir	9/ 6/72	21.4	.67	3.54
	9/17/73	21.8	.82	3.25

TEMPLETON

Zinfandel	9/19/73	23.5	1.15	3.20
	9/19/73	25.2	.961	3.30

SUEY RANCH (S.E. of Nipomo)

Pinot noir	9/ 1/73	23.6	1.16	3.22
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