CALIFORNIA WINE GRAPE SUPPLY-

Implications for 1975 and beyond

KIRBY S. MOULTON

A YEAR OF immense grape production, record wine inventories, and slowing sales has focused intense interest on the California grape economy. As in the past, the wine supply situation is of particular concern. This report describes the emerging supply situation and investigates some of its implications.

1975 planting intentions

During January 1975 estimates were made of intentions to plant grape acreage in California during 1975. The results are shown in table 1. They are based on local estimates by University of California Cooperative Extension farm advisors in grape producing areas. Estimates of planting intentions differ from actual plantings because of errors in estimation and because of changes in growers' plans.

Estimated plantings of wine grapes in 1975, 9,140 acres, are down sharply from the 26,000 acres planted in 1974 and the 57,000 acres planted in 1972 and again in 1973. The planting rate remains relatively strong in the north coast area but is likely to fall drastically in the central coast counties. Plantings in the San Joaquin Valley are expected to be about half the 1974 level.

Little net change is expected in raisin and table grape acreage. Expected removals of bearing acreage just about balance out expected plantings.

If planting intentions are realized in 1975, total California vineyard acreage would be 652,000 acres. Table 1 indicates the disposition of this acreage between raisin, wine, and table varieties. Wine grape bearing acreage, under the assumptions in table 1, is projected to 236,000 acres, an increase of 54,000 acres from

Implications for 1975

Plantings in 1975 are not likely to influence grape supply much before 1978. However, current conditions suggest a serious storage problem emerging in 1975. Wine inventories in California reached a record level of 441 million gallons on November 30, about 65 percent of total storage capacity and virtually all the space available for wine storage, according to industry sources. The remaining capacity is required for other crush products and for product processing and flow purposes.

If the 1974 rate of shipment (250 million gallons) continues through 1975,

then wine inventories at the beginning of the 1975 crush will be at record levels. Available storage capacity could not, however, accommodate a crush equal to the 1974 level.

To compound the problem, normal yields on newly productive vineyards would result in an increase of approximately 300,000 tons of wine grapes. If all this is made available for crush, it could result in 53 million gallons more wine. The question is, can this additional crush be stored? Storage for 60 million gallons was constructed in 1974, but current indications are that 1975 storage expansion will fall far short of that figure. An optimistic figure for storage construction in 1975 is 20 million gallons, leaving growers with 33 million gallons of potential crush and no place to store it.

The preceding calculations are not a prediction, nor do they adequately define the grape surplus problem. They are significant because they suggest results which are not influenced much by refinements of the underlying assumptions. The situation should be examined closely by industry members to see if its impact can be lessened by advance planning.

TABLE 1 1975 WINE PLANTING INTENTIONS SURVEY CALIFORNIA

Area ¹	-	U.C. estimated intentions and resulting acreage				
	Bearing acreage?	Intended	Intended	Estimated acreage 1975		
	1974	planting 1975	removals 1 1975	Bearing	Non- bearing 16,817 27,125	Total
North Coast	34,969	3,150	820	40,011	16,817	56,828
Gentral Coast	17,102	940	305	25,031	27,125	52,206
N. San Joaquin	51,559	850	330	57,213	6,379	63,592
S. San Joaquin	61,452	3,900	1.420	94,244	36,940	131,184
Other areas	16,758	300	125	19,170	5.204	24,374
State total	181,840	9,140	3,000	235,669	92,515	328,184

¹ Area definition by counties: North Coast: Lake, Mendocino, Napa, Sonoma; Central Coast: Alameda, Santa Clara, San Benito, Monterey, San Luis Obispo, Santa Barbara; North San Joaquin Valley: San Joaquin, Stanislaus, Merced; South San Joaquin Valley: Madera, Fresno, Kings, Tulare, Kern.

² California Grape Acreage 1974; California Crop and Livestock Reporting Service, Sacramento, November 1974.

TABLE 2. A PROJECTION OF CALIFORNIA GRAPE ACREAGE AND POTENTIAL CRUSH SUPPLY, 1978

	Grape class			
	Wine	Raisin	Table	Total
Estimated total acres 1975	328,184	251,550	72,717	652,451
Assumed annual acre removal rate	3,000	1,500	1.500	6,000
Projected bearing acres 1978	319,184	247,050	68,217	634,451
Normal yield/A, tons (1965-1974, av.)	5 54	8.34	6.80	6.77
Potential tons production % Normal allocation to crush	1,768,279	2,060,397	463,876	4,292,552
(1965-1974, av.)	93.5	41.7	57.4	64.7
Potential crush supply, 1978, tons	1,653,824	858,625	266,265	2,778,714

TABLE 3, CALIFORNIA WINE AND BRANDY: ESTIMATED FRESH GRAPE EQUIVALENT OF SHIPMENTS, 1972-74; AND A PROJECTION TO 1978, AND COMPARISON WITH A PROJECTION OF CRUSH SUPPLY

	Fresh gr	rape equivalent o	f shipments		
	Wi			Grape	
	Less than 14% alcohoi	More than 14% alcohol	Brandy	Total	crush for all uses
	1,000 Tons				
Calculated ¹	2				
1972	909	675	230	1,814	1,455
1973	977	634	240	1,851	2,481
1974 Projected ²	1,042	574	250	1,866	2,278
1978 Change	1,265	468	292	2,026	2,779
1974-78	224	106	42	160	501

Calculated from Wine Advisory Board Statistical Reports of California Wine Shipments and Brandy Entering U.S. Distribution Channels, Conversion based on assumption that one ton of grape crush produces 176 gallons of wine (less than 14%) or 100 gallons of wine (more than 14%) or 44 proof gallons of brandy, Less than 14% wine shipments adjusted for estimated apple wine components by subtracting assumed production of apple wine from reported table wine shipments, Apple wine production estimate based on BATF Reports of Apple Concentrate and Juice Use in California as follows: (Concentrate 1:4 Wine; Juice 1:1 Wine)

riscal real	Concentrate	30100		
	(000 gallons)			
1972	2,809	189		
1973	929	4,414		
1974	862	5,278		
2 Projected at annual growth rate:	Less than 14%	More than 14%	Brandy	

 ± 5 -5 +4 Crush projection based on 634,000 bearing acres; 10-year average yields and crush allocation; see Table 2.

Implications for 1978

Unless current trends change, a continued grape surplus is likely through 1978. A projection of California grape acreage and potential crush supply in 1978 is shown in table 2. The projection is based on assumptions set forth in the table concerning removals, yields and crush allocation. They also assume that 1975 estimated planting intentions are realized. The crush resulting from these assumptions is 2.78 million tons. It would be less if raisin and table variety allocations were reduced to some basic level of utilization for crush purposes. Preference for these varieties and their inclusion in various cooperatives suggests they will continue to be important parts of the total crush.

Balancing this potential supply against projected demand is difficult. The Wine Advisory Board is developing estimates of the fresh grape equivalent of the shipment (more technically, the disappearance) of grape crush products including wines, brandy, concentrate, high proof and other products. The calculations are based on changes in the inventory of various crush products and on total grape crush. Several inventory change figures are unavailable to the public at the present time.

The Wine Advisory Board, in testimony before the International Trade Commission in April 1975, estimated the fresh grape equivalent of crush product shipments to be about 1.96 million tons, a figure which has recently been increasing at the rate of about 50,000 tons per year.

Table 3 shows the results of estimating the fresh grape equivalent of wine and brandy shipments based on public shipment records. It will differ from Wine Advisory Board calculations by the amount of other crush product shipments and the error in estimating the non-grape components of wine shipments. Of principal interest in table 3 is the change in the fresh grape equivalent of wine and brandy shipments between 1974 and 1978 based on a projection of current growth rates. The change amounts to 160,000 tons, or 40,000 tons annually. The change in potential crush supply from the very high level in 1974 to normal level of 1978 is 501,000 tons, also shown in table 3.

The result of these assumptions projected forward to 1978 is a supply excess of 341,000 tons. As in the short-run projection, different answers can be obtained with different assumptions. However, normal fiddling with assumptions will not materially alter the prospects for a significant surplus.

Most critical to the projections are the wine and brandy market growth-rate assumptions. If market demand can be stimulated to growth rates achieved several years ago, then the surplus will tend to disappear. Prospects for more stable wine prices, aggressive advertising, a resumption of consumer income increases and a continuation of wine age population growth all hold hope for expanded market demand.

What can be done

The wine and grape industry faces some important marketing problems over the next several years. It is obvious that grape growers will be at the nexus of readjustments. If problems are to be more accurately defined and alternative courses of action identified, then growers must take the initiative.

Two courses of action are apparent. One is to maintain existing industry practices and allow the supply-demand imbalance to work itself out over time. The other is to undertake group action to influence the readjustment process in a manner more favorable to growers. Such action could be directed toward market expansion, establishment of industrywide quality standards, and legislative remedies. Currently no single group represents the views of California wine grape growers, although one was in the organizational stage in early 1975.

A comprehensive look at the 1975 crush situation is needed. Growers can assume leadership in forming a committee involving growers, viotners, raisin shippers and fresh market shippers to study this situation. An important contribution of the committee can be identification of what can and what cannot be done to ease the expected surplus of grapes relative to storage capacity. For example, what combinations of cultural techniques and storage decisions represent feasible alternatives to current practices. Additionally, the pooling of industry knowledge would help in dampening uninformed speculation about potential outcomes.

In the longer run, continued cooperation among growers is essential to assure a healthy growth for the entire wine and grape industry. The exact form of the cooperation is up to the growers. But it is clear that if they do not take the initiative in their own behalf, no one else will.

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RESEARCH BRIEFS

Short Reports on Current Research in Agricultural Sciences

AVOCADO STUMP CONTROL

As avocado orchards mature and trees are thinned, stumps of cut trees must be controlled to prevent resprouting. A field trial was initiated using eight chemical treatments replicated six times. Ammate X gave 100% control, and a 2.5% solution of sodium naphthalene-acetic acid gave 84% control.

B. W. Lec, Cooperative Extension Farm Advisor (Ventura County)

CITRUS THRIPS CONTROL

A three-year study has shown that a yearly program of a prebloom spray, followed by a petalfall spray of several insecticides, can be used effectively for the combined control of lepidopterous larvae and citrus thrips to prevent fruit scarring, There also is an indication from fruit index data that trees sprayed at petalfall with superior thrips control treatments such as Carzol, Biothion, Orthene, and Cygon produced more fruit than untreated trees or trees sprayed with less effective sprays of Guthion, parathion, Lannate, phosphamidon, PhosVel, Thriptox + sugar, or Rynotox + sugar. Carzol is unique in that trees treated with this compound at prebloom or at petalfall are most likely to develop abnormally high populations of brown soft scale, apparently through an adverse effect on its principal parasite, Metaphycus luteolus.

-W. H. Ewart, Dept. of Entomology, U.C. Riverside.

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