

Promising new areas for Premium Quality Wine Grapes

to replace acreage lost to urbanization

Many excellent vineyards near cities and towns in the central coast district of California have been displaced by new highways, new subdivisions and other urban facilities.

Possible new locations for the production of wine grape varieties of high quality were surveyed and evaluated for suitable climatological and soil conditions. For evaluation of areas remote from present grape-producing districts, samples of fruit were collected and analyzed.

Loss of grape acreage has been heaviest in Napa, Sonoma, and Santa Clara counties. Those three counties, and Mendocino County, once supported grape plantings of two to three times the present acreages. Some of the early plantings were on slopes too steep for present implements but considerable land in each of those four counties is available. Because of erosion, some of this available land probably is not as productive as it once was, but high tonnage is not such an important requisite with premium-quality varieties. Old vineyards and plantings of other fruit crops on excellent grape land are always being removed—for one reason or another—which makes land available for quality wine grape varieties in proved areas.

Vineyards of common grape varieties, in good locations successfully grafted over to quality wine varieties should be producing practically full crops in two years.

Potential Areas

In Napa County, the Carneros district, the Wooden Valley, and the Chiles Valley and the Pope Valley possess considerable acreages that are favorable for grapes.

The heat summation of the Carneros district is most promising for premium grapes of best quality. The district is as cool as any area now used, or cooler, and the grapes growing there are sufficient to demonstrate its suitability. The San Ysidro loam soils of the district are

not deep, yet the cool climate enables the vines to produce without irrigation. The subsoil is heavy-textured, tight, and compact, restricting root penetration. Drainage may be desirable. In this soil, vine development is limited and production only moderate.

Wooden Valley lies over the low mountains to the northeast of the city of Napa. It is in climatic region II, with a rainfall somewhat higher than that of the city of Napa. Wooden Valley is cooled by the movement of air and fog over the mountains from the Napa Valley and up through the Gordon Valley from Suisun. The Hugo clay loam soil, the principal soil of the area, is moderately heavy but responds well to cultural operations. It is not a deep soil, yet it supports vineyards and prune and walnut orchards without irrigation. The tonnage and quality of the grapes in production are good for the varieties involved.

The Chiles Valley and the Pope Valley are east and northeast from Saint Helena over a ridge of mountains. The climatic region is probably warm Region III, although there is no Weather Bureau Station in either valley. The rainfall is ample. There are a number of flourishing vineyards in each valley. Production and quality are good for the varieties now grown. Irrigation is used to some extent, and would be advantageous in establishing new plantings but none of the mature vineyards is irrigated. Hugo clay loam is the principal soil in both the Chiles and the Pope valleys.

The spring frost hazard in Wooden, Chiles, and Pope valleys is essentially the same as in the Napa Valley. Since 1937 there has been only one year in which Wooden Valley was hit harder by frost than the Napa Valley. Records available for the Carneros district and Chiles and Pope valleys cover only a limited number of years. Nevertheless, in the years of record those areas suffered no more frost damage than the Napa Valley.

In Sonoma County, there are four

promising areas. Two of the areas are in Climatic Region I; the area from around Sebastopol to Forestville, primarily planted to apples; and the area to the east and southeast of Sonoma. The third area, the ridge between the Sonoma and Napa valleys to the north of Sonoma, is in Region II. The fourth area, Knights Valley, probably is in Region III. There is no Weather Bureau Station in Knights Valley, but it may be assumed that the heat summation falls between those of Healdsburg and Calistoga. Rainfall is ample in all four areas, where the soil is deep enough to store the water.

The soils of the Sebastopol-Forestville area are—for the most part—fine-sandy loams of the Goldridge, Altamont, and Yolo series and excellent for fruit and grapes. The deep soils should not require irrigation, but water is available in most of the area.

The area to the east and southeast of Sonoma is an old grape area where the earlier plantings were destroyed by phylloxera. With rootstocks resistant to phylloxera it is now possible to grow grapes there again. The deeper, fertile soils of the Laguna and Pleasanton series will store enough winter rainfall to produce grapes without irrigation but water to irrigate is available when necessary. The

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heavy soils of the area are not suitable for the production of quality wine grape varieties.

Several vineyards on the ridge between the Sonoma and Napa valleys—notably Monte Rosso—are productive.

Knights Valley has a few thriving small vineyards. Although the soils of Knights Valley have not been mapped, the growing vineyards demonstrate the suitability of the deep soils which will support vines without irrigation.

Spring frosts are no more of a hazard in the four promising areas of Sonoma County than in nearby areas where grapes are grown successfully.

In Mendocino County, the arable lands of the Ukiah Valley and the Redwood Valley, the principal areas of the county, have been farmed in their entirety for years. However, east of Hopland is the McDowell Valley, a rather large area, used for pasture or farmed to annual crops. The soils of McDowell Valley are of the Yolo and Pinole series and are suitable for grapes. A similar, though smaller, area of soils is west of Hopland, south of Feliz Creek. Water for irrigation is not available in either valley, so only the deep soils that will store a sufficient amount of the winter rainfall can produce a crop of grapes. The average rainfall of 37.3" is more than ample.

The above Mendocino County valley areas fall within Climatic Region III.

Composition of Wine Grape Varieties Collected in Anderson Valley, Mendocino County

Variety	Degree Balling	Acidity %	pH
French Colombard ..	23.1	0.90	3.16 1960 only
Muscat Canelli	22.2	0.83	3.20 3 yr. ave.
Trousseau ...	23.3	0.83	3.11 3 yr. ave.
Zinfandel ..	21.0	1.19	3.09 3 yr. ave.

Yields on the deep, fertile soils should be high but the summation of heat is too high for success with most of the premium-quality grape varieties. The spring frost hazard here is about the same as in other parts of the Ukiah where grapes are grown.

The Anderson Valley along the Navarro River—on the basis of heat summation—is in Climatic Region I. Some land is producing very good apple orchards, and the few existing vineyards are doing well. Rainfall is ample. In the wider part of the valley, between Philo and Navarro, considerable land now in pasture should grow the best varieties of grapes in tonnages of moderate and above. The deep soils on the undulating lower slope of the hills do not require

irrigation but water is available near the river. The spring frost hazard is about the same as in the other central coastal areas.

The small valleys around Comptche also offer promise because the soils, when selected with care, are amply deep and fertile. These valleys are probably in Region II and should be relatively frost-free.

In Santa Clara County, there are small acreages suitable for quality grapes on both sides of the valley, but there are no large areas available north of Gilroy.

A larger area of good soils, predominantly Yolo series, lies along Carnadero Creek and to the south of Gilroy, almost to the county line on both sides of the valley proper. The heavy, poorly drained soils on the central valley floor are not suitable for vineyards.

The annual average rainfall at Gilroy is 20.0" and the heat summation places the area in Climatic Region II. Water is available for irrigation.

In San Benito and Santa Cruz counties, available land suitable for grapes is very limited.

In Monterey County, the temperature and soils of parts of the county combine to provide favorable conditions for the growing of fine-quality grapes. Heat summation data place Salinas and Spreckels in the coolest part, and Gonzales in the middle of Region I. The strong winds that blow directly off the ocean keep the area—the north end of the Salinas Valley—cool. Further inland the valley becomes warmer. Soledad is near the top of Region II, and King City is in Region III. San Miguel, just beyond the county line, is in Region IV.

A number of soils in different areas of the Salinas Valley are adapted for grapes. Yet the greatest promise is offered by the Greenfield series of soils that occupies the lower gentle slopes on the terrace west of the Salinas River, extending from about opposite Gonzales to and including the Arroyo Seco Valley. Much of this area is open range land, other parts are farmed to annual crops, some to vegetable, and a few small tracts produce apricots and other fruits. Several garden plantings of grapes in the area—mostly table sorts—are doing well. A sample of Grenach collected on September 28, 1960, had a degree Balling—maturity—reading of 21.9, an acidity of 0.90% and a pH of 2.99.

A second promising soil, the Chular series, occupies large areas on the lower slopes to the east of the Salinas River from Salinas to beyond Soledad. The

deep soils of the sandy and loam phases of this soil are suited to grapes. A sample of Zinfandel collected on September 28, 1960, from a commercial vineyard near Soledad, had a degree Balling reading of 24.3, an acidity of 0.90%, and a pH of 2.95.

Other series of soils found in the floor of the Salinas Valley are excellent for grapes but are farmed intensively to crops producing higher returns.

The average annual rainfall at Salinas is 13.7", at Spreckels 13.0", Gonzales 12.3", Soledad 9.5", and at King City 10.3". Irrigation water is available but the pumping lift in some areas is rather high, varying almost directly with elevation above the river bed.

The favorable soil-temperature combination of the Salinas Valley area is offset by wind, which blows almost every afternoon during the growing season, and often reaches 15 to 30 miles per hour, or more. However, the few vines observed in the valley showed little or no ill effects because they were protected by windbreaks or home plantings and buildings. Without windbreaks, many shoots probably would be broken off soon after the vines leaf out in spring.

In the lower end of the Salinas Valley the wet fogs would be a factor in mildew control because the moisture that condenses on the vines would remove the fungicides used to prevent mildew. The fog might also contribute to the development of bunch rot. The detrimental influence of fog should not extend beyond Gonzales.

In southern California, Climatic Regions I, II, and III are, in general, confined to the higher slopes, where spring frosts become an increasing hazard. There are limited areas of suitable land in Santa Barbara County, but competition would be keen with urbanization and crops of higher returns, such as sugar beets and flower seeds.

On the slopes of the Sierra Nevada, adjacent to the interior valleys, there are no Climatic Regions I, II, and III not known to be periodically subject to rather severe spring frosts.

The survey disclosed an estimated 10 to 25 thousand acres of land suitable for premium quality wine grape varieties to replace the production of former acreage lost to the encroachment of urbanization.

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County Farm Advisors of the University of California Agricultural Extension Service in the areas concerned assisted in the survey of potential grape acreage.