

AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF CALIFORNIA
MADERA COUNTY

128 Madera Avenue
Madera, California 93637

Telephone 674-4641
Extension 236

February 15, 1967

Dear Grape Grower:

For your information the "1967 Pest and Disease Control Program for Grapes" is enclosed. Keep it handy for easy reference.

During the months of March through June I will be on sabbatical leave making a study of wine varietal grapes and the raisin market of Western Europe. During my absence Clarence Johnson, field crops farm advisor, will take care of your problems. Specialists will be available if necessary.

Dead Arm Disease

Some vineyards show evidence of dead arm disease and should be sprayed with Captan when the buds swell. This will prevent the disease from spreading. Check the spray schedule for more details on page 5.

This past year some interesting results were obtained from some of the test work. These are as follows:

1. Fertilizer Test - George Kaufman Ranch.

After three years of conducting the test, the carry-over results were measured in 1966. The plot was fertilized in 1963, 1964 and 1965 using 240 pounds of ammonium nitrate per acre and 500 pounds of triple 16 per acre. The plot consisted of 6 reps - 1/8 mile long of check, nitrogen treatment and NPK treatment. The results are averages per row of the 6 reps.

Treatment	F R E S H F R U I T			R A I S I N S	
	Berry Weight	^o B	% A	No. Trays	Raisin Weight
Check	1.87 grams	19.2	.51	198	1098 pounds
Nitrogen	1.90 grams	19.0	.52	199	1104 pounds
NPK	1.85 grams	19.0	.52	192	1086 pounds

Treatment	R A I S I N S						
	Per Cent Grades			Per Cent Screen Size			
	C-	C	B+	1	2	3	4
Check	3.6	13.0	83.4	6.7	7.3	27.3	58.7
Nitrogen	3.4	19.8	76.8	5.5	8.0	26.9	59.6
NPK	3.7	10.0	86.3	7.2	8.6	29.6	54.5

Treatment	R A I S I N S P E R P O U N D				Average
	Screen Size*				
	1	2	3	4	
Check	2075	1490	1210	920	1118
Nitrogen	2210	1530	1180	925	1111
NPK	2330	1570	1210	928	1165

* Screen Size: #1 - less 20/64 inch, #2 - 20/64 to 22/64, #3 - 22/64 to 24/64, #4 - over 24/64.

There was no advantage of using either fertilizer in this plot. If anything, the nitrogen resulted in a slightly poorer grade and the NPK reduced the yield slightly by reducing the size of the berries.

2. Gib Test for Raisins - Fred Kachadoorian Ranch.

Bloom sprays of Gib with concentrations of 2½, 5 and 10 ppm were used on Thompson Seedless on own roots for raisin production in 1966. Before harvest a sample of second shoulders were removed from clusters to determine looseness of clusters, berry weight, °B and per cent acid. At harvest, tray count and fresh weight was obtained. Finally, raisin yield was obtained and the raisins were graded and screened for size. Results are as follows:

Treatment	Number Berries Second Shoulder	Berry Weight in Grams	°B	% A	Yield - Pounds per Vine			
					Fresh Weight	Loss %	Raisin Weight	Loss %
Check	33	1.74	18.6	.47	46.5	--	10.7	--
2½ ppm	30	1.97	18.6	.46	43.1	7.3	10.4	2.8
5 ppm	28	1.98	19.2	.50	42.2	9.2	9.8	8.4
10 ppm	29	2.02	19.8	.50	35.3	24.1	8.6	19.6

Treatment	RAISIN QUALITY AND SIZE						
	Per Cent Grades			Per Cent Screen Size			
	C-	C	B+	1	2	3	4
Check	2.8	12.7	84.5	7.0	13.7	31.0	47.3
2½ ppm	3.3	10.4	86.3	5.5	9.8	29.7	55.0
5 ppm	2.3	11.4	86.3	5.2	8.4	35.4	50.8
10 ppm	2.9	7.1	90.0	5.0	10.5	27.3	57.3

Treatment	RAISINS PER POUND				
	Screen Size*				
	1	2	3	4	Average
Check	1880	1395	1200	983	1160
2½ ppm	1695	1315	1052	864	1008
5 ppm	1650	1320	1090	850	1014
10 ppm	1680	1240	1030	778	940

* Screen Size: #1 - less 20/64 inch, #2 - 20/64 to 22/64, #3 - 22/64 to 24/64, #4 - over 24/64.

A Gib spray at bloom time reduced the number of berries on a cluster and increased berry size. At concentrations of 5 and 10 ppm the fresh weight and the raisin yield was reduced substantially. However, an earlier maturity was reached at the higher concentrations. In general, the Gib produced larger raisins.

Sincerely,

Paul P. Baranek

Paul P. Baranek
Farm Advisor

PPB:ghc
Enclosure