Thinning Tokay Grapes

results of a study on the relationship of thinning practices to lugs shipped, total yield and net income

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Results of a study during the 1952 season—with 103 vineyards, representing 3,333 acres, co-operating—show it pays to thin Tokay grapes.

Thinning costs on 92 vineyards—2,923 acres—reporting some thinning, ranged from \$4.00 to \$30.00 per acre, with an average of \$15.14.

The average labor rate reported was \$1.01 per hour and represented an investment of 15 man-hours per acre in the thinning operation. The cost of thinning is not always directly related to the quality of the work done but an evaluation made during the season of some of the vineyards involved indicated, in general, that the quality of the thinning job was rather closely correlated with cost.

A major factor in thinning is the relationship of crop to the productive capacity of the vines—a given vine will satisfactorily mature only a limited amount of fruit. Most Tokay vines usually are pruned to set more fruit than they can mature satisfactorily.

Properly done, thinning also removes the poorer clusters so only those of good potential shipping quality are left.

For purposes of comparison, the 44 vineyards reporting yield data for this study, were divided into groups based on the per acre thinning costs by \$7.00-intervals starting with the lowest thinning costs, except for the nonthinned group. Most of the vineyards fell into the \$11.00 to \$17.99 group. However, the number of lugs shipped per acre for the entire season varied directly with the amount

Comparison of 1952 Yields and Net Value by Thinning Cost Groups
44 Vineyards—1,418 Acres

Thinning cost groups	Number vine- yards	Average start first pick	Boxes shipped per acre	Total yield tons per acre	Income per acre on vine basis¹		Total on vine	Thin- ning	Net value
					Shipped fruit	Winery fruit	value per acre	cost per acre	per acre on vines
Non-thinned	8	9/15	149	12.2	\$70.03	\$77.26	\$147.29		\$147.29
\$4.00-\$10.99	5	9/12	291	10.6	136.77	49.72	186.49	\$8.82	177.67
11.00-17.99	21	9/2	422	10.4	198.34	34.42	232.76	13.63	219.13
18.00-24.99	8	8/28	511	10.6	240.17	26.01	266.18	20.19	245.99
25.00-30.00 Average all vineyards	2	••••	664	14.0	312.08	35.95	348.03	29.00	319.03
thinned	36		437	10.6	205.39	34.42	239.81	15.28	224.53

¹ Based on estimated 1952 returns, harvesting and handling costs.

spent for thinning. The more severely thinned group—\$18.00 to \$24.99 shipped over three times the average of the unthinned group. The \$25.00 to \$30.00 group is excluded from most comparisons because there were only two vineyards and those averaged much higher yields than the other groups. Because the 1952 season had no serious interference from early rain or winery competition, the differences can be attributed to the amounts of marketable fruit produced by the different degrees of thinning. Not only does thinning increase the proportion of shipping fruit but also advances the maturity date. In the study the more severely thinned group started harvest 18 days earlier than the unthinned group.

Total yields varied little from group to group to which several things may have contributed. The capacity of vines to produce and mature grapes varies considerably and it appears that the capacities of the vineyards in the \$4.00 to \$10.99 group were less than those in the other groups. Thus they would have to be thinned below the 10.6-ton level in order to produce quality fruit.

If a vineyard has set a crop potentially larger than it is capable of maturing properly, thinning can bring it into balance with vine capacity.

Incomes for the various groups of vineyards in this study were based on estimated 1952 prices and costs.

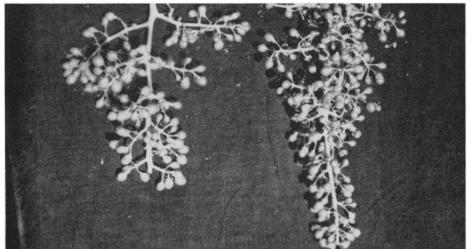
The on-vine returns for the fruit were developed by deducting estimated harvest and handling costs from the estimated average returns for the fruit.

On-vine returns for the shipped fruit varied from \$70.03 for the unthinned vineyards, to \$240.17 for the \$18.00 to \$24.99 thinning cost group.

The change in income from winery fruit between groups was not nearly so great because of the lower price, ranging down from \$77.26 to \$26.01.

The factor of final interest in this study is the net value of the crop—the totals of the on-vine value of the shipped portion and winery portion less the cost of thinning. The net value per acre on the vines climbed rapidly through the various degrees of thinning from \$147.29 for the unthinned group to \$245.99 for the thinned \$18.00 to \$24.99 group; an increase in net returns to the grower of nearly \$100 per acre.





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