



**COST ESTIMATES FOR REPLACING DAMAGED VINES**  
**Thompson Seedless Grown for Raisin or Wine**  
**Estimates for Loss of 10 Vines**  
**September 2009**



This cost analysis was developed to aid growers, insurance adjusters, and allied industry to arrive at an equitable value for the loss of destroyed or damaged vines. It includes examples for costs incurred in replacing vines and compensation for crop loss during reestablishment. It is not intended to establish firm, uncompromising values and should be used as an example, recognizing that each individual situation is different, including vineyard age and productivity, time and nuisances related to trellis systems, number of rows and vines involved, vineyard management and market outlets. These and other variables must be worked out individually. For losses less or more than ten, the costs will be proportionately higher or lower on a per vine basis. As an example, it requires the same amount of time and mileage to purchase five rootings as compared to ten rootings but the cost to plant ten is greater. Since the full value of the loss of production is included in our examples, only special costs above normal operating expenses can be deducted, i.e. the normal operating costs other than harvesting, such as pruning, cultivating, pest control, water, taxes, etc. are costs that come out of the money received for crop loss.

**Replacement Cost**

Removal of damaged vines and stakes	4 hrs. @ \$11.05*	\$44.20
Rootings or grafted vines	10 @ 60¢ (Grafted vines 10 @3.40)	6.00 (34.00)
Planting labor	2 hrs. @ \$11.05	22.10
Stakes, 8' treated	10 @ \$2.49	24.90
100' No. 12 galv., high tinsel wire (3 wires)	9 lbs. @ 65¢	5.85
Staking and wiring labor –	2 hrs. @ \$11.05	22.10

**Special care of vines for 4 yrs.**

Hand weeding mainly 1 <sup>st</sup> and 2 <sup>nd</sup> yrs.	3 hrs.	
Training mainly 2 <sup>nd</sup> and 3 <sup>rd</sup> yrs.	4 hrs.	
Special watering mainly 1 <sup>st</sup> and 2 <sup>nd</sup> yrs.	15 hrs.	
<b>Total</b>	<b>22 hrs. @ \$11.05</b>	<b>243.10</b>

**Miscellaneous**

Rabbit protection	10 @ 15¢ + labor 1 hr. @ \$11.05	12.55
Materials (twine, staples, etc.)		2.90
Phone expenses		2.75
Vehicle expenses: pick up/delivery	40 mi. @ 55¢	22.00
Time and labor: Material ordering and insurance report	4 hrs. @ \$11.05	44.20
Tractor expenses	5 hrs. @ \$13.40*	67.00

<b>Total for 10 Grapevines</b>	<b>\$519.65</b>
<b>Single Grapevine Costs</b>	<b>(A) \$51.97/vine</b>

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## Crop Loss

In the wine grape example, we assume the annual green tonnage yield to be an average 11 tons per acre for the vineyard. This is equal to about 50 lbs. per vine annually. Therefore, three years with a total loss of crop plus two years with one half crop loss will equal a sum total crop loss for these ten vines over a five-year period equal to one green ton. In the raisin example, we assume a 4.25:1 green weight to dry weight ratio equaling 470 lbs. of raisins.

### \*\*Wine Grape Example:

Price/Ton	-	Harvest Cost/Ton	=	Estimated Fruit Value for 10 Vines (5-year period)	Estimated Crop Loss/Vine (5-year period)
\$160	-	55	=	105	(B) 10.50
175	-	55	=	120	12.00
200	-	55	=	145	14.50

### \*\*Raisin Example: 4.25:1 green wt. to dry wt. ratio = 470 lbs. or 0.24 tons

Price/Ton	-	Harvest Cost/Ton	=	Estimated Fruit Value for 10 Vines (5-year period)	Estimated Crop Loss/Vine (5-year period)(B)
\$900	-	270	=	(630 x 0.24 ton)= 151.20	\$15.12
1100	-	270	=	(830 x 0.24 ton)= 199.20	19.92
1300	-	270	=	(1030 x 0.24 ton)= 247.20	24.72

### Formula

Estimated total value    Replacement Cost                      Crop Loss                      Additional Expenses  
 Value per vine =                      (A)                      +                      (B)                      +                      (C)

### Additional Expenses (C)

The following items are often required to repair a damaged vineyard to its former state. Therefore, their estimated cost should be added where applicable.

End Post – treated – 8’	\$ 12.00
Removal and installation of damaged end post – 2 hrs. @ \$11.05	22.10
Crossarm – 2’ – material + installation	2.50 each
Pumps, stand pipes, valves, etc. – It is suggested that you contact an irrigation repair company and bill the insurance for actual costs.	

\*Non-machine (\$11.05/hr.) and machine labor (\$13.40/hr.) includes FICA, Workman’s Compensation and Unemployment Insurance.

\*\* See UC Cost Studies for Wine and Raisin Grape Production

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