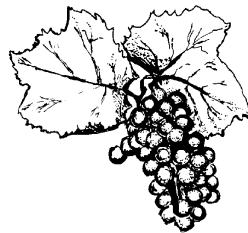




**2002**  
**KY Grape Production Budgets**  
**Estimated Costs and Returns**  
**American Hybrid Wine Varieties**



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# WINE GRAPES, Kentucky, 2002

## American Varieties

Soil Buildup Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
<b>GROSS RETURNS</b>					
<b>VARIABLE COSTS</b>					
PRODUCTION					
Soil Test	2	assays	\$ 10.00	\$ 20.00	<input type="text"/>
Lime	3	tons	\$ 12.12	\$ 36.36	<input type="text"/>
Herbicide	2	quarts	\$ 15.22	\$ 30.44	<input type="text"/>
Grass Seed	50	lbs	\$ 0.70	\$ 35.00	<input type="text"/>
Variable Machinery Costs	1	acre	\$ 9.40	\$ 9.40	<input type="text"/>
Interest				\$ 5.48	<input type="text"/>
TOTAL PRODUCTION COST				\$ 136.68	<input type="text"/>
<b>RETURN ABOVE VARIABLE COSTS</b>				<b>\$(136.68)</b>	<input type="text"/>
<b>FIXED COSTS</b>					
Fixed Machinery & Equipment Costs	1	acre	\$ 25.45	\$ 25.45	<input type="text"/>
TOTAL FIXED COST				\$ 25.45	<input type="text"/>
TOTAL EXPENSES				\$ 162.13	<input type="text"/>
RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.				\$(162.13)	<input type="text"/>
Operator and Unpaid Family Labor	2.00	hrs	\$ 9.00	\$ 18.00	<input type="text"/>
	0.1	hrs	\$ 12.00	\$ 1.20	<input type="text"/>
TOTAL OPERATOR AND UNPAID FAMILY LABOR				\$ 19.20	<input type="text"/>
<b>RETURN TO LAND, CAPITAL, AND MANAGEMENT</b>				<b>\$(181.33)</b>	<input type="text"/>

# WINE GRAPES, Kentucky 2002

## American Varieties

Planting Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
<b>GROSS RETURNS</b>					
<b>VARIABLE COSTS</b>					
<b>PRODUCTION</b>					
Herbicide (Burndown)	1.5	quarts	\$ 15.22	\$ 22.83	
Herbicide	2	quarts	\$ 38.47	\$ 76.93	
Vines	600	vines	\$ 1.80	\$ 1,080.00	
Fertilizer	150	lbs	\$ 0.07	\$ 10.50	
Grow Tubes	600	tubes	\$ 1.20	\$ 720.00	
Bamboo Stakes	600	stakes	\$ 0.20	\$ 120.00	
<b>Trellis Materials</b>					
4" Posts	180	posts	\$ 4.55	\$ 819.00	
6" End Posts	20	posts	\$ 8.25	\$ 165.00	
Wire	13,000	feet	\$ 0.02	\$ 276.25	
Miscellaneous Trellis Materials	1	acre	\$ 253.75	\$ 253.75	
<b>Hired Labor</b>					
Planting	90	hours	\$ 8.00		
Build Trellis	60	hours	\$ 8.00		
<b>TOTAL HIRED LABOR</b>	<b>150</b>	<b>hours</b>	<b>\$ 8.00</b>	<b>\$ 1,200.00</b>	
Herbicides	3	quarts	\$ 10.15	\$ 30.44	
Fungicides	3	applications	\$ 36.57	\$ 109.72	
Insecticides	4	applications	\$ 14.80	\$ 59.20	
Irrigation	5	months	\$ 15.00	\$ 75.00	
Variable Machinery Costs	1	acre	\$ 32.59	\$ 32.59	
Interest	1	acre	\$ 166.13	\$ 166.13	
<b>TOTAL PRODUCTION COST</b>				<b>\$ 5,217.34</b>	
<b>RETURN ABOVE VARIABLE COSTS</b>				<b>\$ (5,217.34)</b>	
<b>FIXED COSTS</b>					
Fixed Machinery Costs	1	acre	\$ 72.98	\$ 72.98	
Fixed Costs on Irrigation System	1	year	\$ 177.70	\$ 177.70	
<b>TOTAL FIXED COST</b>				<b>\$ 250.68</b>	
<b>TOTAL EXPENSES</b>				<b>\$ 5,468.02</b>	
<b>RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.</b>				<b>\$ (5,468.02)</b>	
Operator and Unpaid Family Labor	20.00	hrs	\$ 9.00	\$ 180.00	
	5.00	hrs	\$ 12.00	\$ 60.00	
<b>TOTAL OPERATOR AND UNPAID FAMILY LABOR</b>				<b>\$ 240.00</b>	
<b>RETURN TO LAND, CAPITAL, AND MANAGEMENT</b>				<b>\$ (5,708.02)</b>	

# WINE GRAPES, Kentucky 2002

## American Varieties

Growth Year Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
<b>GROSS RETURNS</b>					0
<b>VARIABLE COSTS</b>					
PRODUCTION					
Herbicide	2	quarts	\$ 19.23	\$ 38.47	
Fertilizer	300	lbs	\$ 0.07	\$ 21.00	
Plants (Replant 2% Original Planting)	12	plants	\$ 1.80	\$ 21.60	
Hired Labor					
1/2 Pruning Time	16	hours	\$ 9.00		
1/2 Additional Shoot Maintenance	20	hours	\$ 9.00		
Weed Control (Hoeing)	24	hours	\$ 9.00		
<i>Total Hired Labor Cost</i>	60	hours	\$ 9.00	\$ 540.00	
Fungicides	3	applications	\$ 33.86	\$ 101.58	
Insecticides	4	applications	\$ 14.80	\$ 59.20	
Irrigation	5	months	\$ 15.00	\$ 75.00	
Variable Machinery Costs	1	acre	\$ 24.53	\$ 24.53	
Interest	1	acre	\$ 57.49	\$ 57.49	
<b>TOTAL PRODUCTION COST</b>				\$ 938.87	
<b>RETURN ABOVE VARIABLE COSTS</b>				\$ (938.87)	
<b>FIXED COSTS</b>					
Fixed Machinery & Equipment Costs	1	acre	\$ 48.08	\$ 48.08	
Fixed Costs on Irrigation System	1	year	\$ 177.70	\$ 177.70	
<b>TOTAL FIXED COST</b>				\$ 225.78	
<b>TOTAL EXPENSES</b>				\$ 1,164.65	
<b>RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.</b>				\$ (1,164.65)	
Operator and Unpaid Family Labor					
	44.00	hrs	\$ 9.00	\$ 396.00	
	4.00	hrs	\$ 12.00	\$ 48.00	
<b>TOTAL OPERATOR AND UNPAID FAMILY LABOR</b>				\$ 444.00	
<b>RETURN TO LAND, CAPITAL, AND MANAGEMENT</b>				\$ (1,608.65)	

# WINE GRAPES, Kentucky 2002

## American Varieties

First Production (Year 3) Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
<b>GROSS RETURNS</b>					
Grapes	2 tons		\$ 950.00	\$ 1,900.00	<input type="text"/>
<b>Total Gross Returns</b>				\$ 1,900.00	
<b>VARIABLE COSTS</b>					
PRODUCTION					
Herbicide (Spring Apply)	2 quarts		\$ 19.23	\$ 38.47	<input type="text"/>
Herbicide (Spot Spray)	1.5 quarts		\$ 15.22	\$ 22.83	<input type="text"/>
Fertilizer	600 lbs		\$ 0.07	\$ 42.00	<input type="text"/>
Tissue Sampling and Analysis	1 analysis		\$ 25.00	\$ 25.00	<input type="text"/>
Fungicides	13 applications		\$ 40.79	\$ 530.27	<input type="text"/>
Insecticides	13 applications		\$ 20.08	\$ 261.04	<input type="text"/>
Hired Labor					<input type="text"/>
1/2 Pruning Time	40 hours		\$ 9.00		<input type="text"/>
1/2 Training, Thinning, Tying	24 hours		\$ 9.00		<input type="text"/>
Weed Control (Hoeing)	24 hours		\$ 9.00		<input type="text"/>
<i>Total Preharvest Hired Labor</i>	88 hours		\$ 9.00	\$ 792.00	<input type="text"/>
Variable Machinery Costs	1 acre		\$ 36.77	\$ 36.77	<input type="text"/>
<b>TOTAL PREHARVEST COST</b>				\$ 1,748.38	<input type="text"/>
HARVESTING AND MARKETING					
Harvest	40 hours		\$ 9.00	\$ 360.00	<input type="text"/>
Harvest Lugs	80 lugs		\$ 5.75	\$ 460.00	<input type="text"/>
<b>Total Harvest and Marketing Cost</b>				\$ 820.00	<input type="text"/>
Interest (9 months)	1 acre		\$ 152.12	\$ 152.12	<input type="text"/>
<b>TOTAL VARIABLE COST</b>				\$ 2,720.50	<input type="text"/>
<b>RETURN ABOVE VARIABLE COSTS</b>				\$ (820.50)	<input type="text"/>
<b>FIXED COSTS</b>					
Fixed Machinery Costs	1 acre		\$ 60.03	\$ 60.03	<input type="text"/>
Pest Control	1 year		\$ 220.00	\$ 220.00	<input type="text"/>
<b>TOTAL FIXED COST</b>				\$ 280.03	<input type="text"/>
<b>TOTAL EXPENSES</b>				\$ 3,000.53	<input type="text"/>
<b>RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.</b>				\$ (1,100.53)	<input type="text"/>
Operator and Unpaid Family Labor	80 hrs		\$ 9.00	\$ 720.00	<input type="text"/>
	10 hrs		\$ 12.00	\$ 120.00	<input type="text"/>
<b>TOTAL OPERATOR AND UNPAID FAMILY LABOR</b>				\$ 840.00	<input type="text"/>
<b>RETURN TO LAND, CAPITAL, AND MANAGEMENT</b>				\$ (1,940.53)	<input type="text"/>

# WINE GRAPES, Kentucky 2002

## American Varieties

First Full Production (Year 4) Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
<b>GROSS RETURNS</b>					
Grapes	3.5 tons		\$ 950.00	\$ 3,325.00	<input type="text"/>
<b>Total Gross Returns</b>				\$ 3,325.00	
<b>VARIABLE COSTS</b>					
<b>PRODUCTION</b>					
Herbicide (Spring)	2 applications		\$ 22.37	\$ 44.73	<input type="text"/>
Herbicide (Spot Spray)	1.5 quarts		\$ 15.22	\$ 22.83	<input type="text"/>
Fertilizer	1200 lbs		\$ 0.07	\$ 84.00	<input type="text"/>
Fungicides	13 applications		\$ 40.79	\$ 530.27	<input type="text"/>
Insecticides	13 applications		\$ 20.08	\$ 261.04	<input type="text"/>
Hired Labor					<input type="text"/>
1/2 Pruning Time	40 hours		\$ 9.00		<input type="text"/>
1/2 Shoot Positioning, Thinning, etc.	24 hours		\$ 9.00		<input type="text"/>
Hoeing	24 hours		\$ 9.00		<input type="text"/>
<i>Total Hired Labor</i>	88 hours		\$ 9.00	\$ 792.00	<input type="text"/>
Variable Machinery Costs	1 acre		\$ 35.87	\$ 35.87	<input type="text"/>
<b>TOTAL PREHARVEST COST</b>				\$ 1,770.75	<input type="text"/>
<b>HARVESTING AND MARKETING</b>					
Harvest	70 hours		\$ 9.00	\$ 630.00	<input type="text"/>
Harvest Lugs	60 lugs		\$ 5.75	\$ 345.00	<input type="text"/>
<b>Total Harvest and Marketing Cost</b>				\$ 975.00	<input type="text"/>
Interest (9 months)	1 acre		\$ 162.53	\$ 162.53	<input type="text"/>
<b>TOTAL VARIABLE COST</b>				\$ 2,908.28	<input type="text"/>
<b>RETURN ABOVE VARIABLE COSTS</b>				\$ 416.72	<input type="text"/>
<b>FIXED COSTS</b>					
Fixed Machinery Costs	1 acre		\$ 56.95	\$ 56.95	<input type="text"/>
Pest Control	1 year		\$ 220.00	\$ 220.00	<input type="text"/>
<b>TOTAL FIXED COST</b>				\$ 276.95	<input type="text"/>
<b>TOTAL EXPENSES</b>				\$ 3,185.23	<input type="text"/>
<b>RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.</b>				\$ 139.77	<input type="text"/>
Operator and Unpaid Family Labor	84 hrs		\$ 9.00	\$ 756.00	<input type="text"/>
	10 hrs		\$ 12.00	\$ 120.00	<input type="text"/>
<b>TOTAL OPERATOR AND UNPAID FAMILY LABOR</b>				\$ 876.00	<input type="text"/>
<b>RETURN TO LAND, CAPITAL, AND MANAGEMENT</b>				\$ (736.23)	<input type="text"/>

# WINE GRAPES, Kentucky 2002

## American Varieties

Full Production (Year 5) Summary

	Quantity	Unit	\$/Unit	Total	Your Estimate
<b>GROSS RETURNS</b>					
Grapes	3.5 tons		\$ 950.00	\$ 3,325.00	<input type="text"/>
<b>Total Gross Returns</b>				\$ 3,325.00	
<b>VARIABLE COSTS</b>					
PRODUCTION					
Herbicide (Spring)	2 applications		\$ 22.37	\$ 44.73	<input type="text"/>
Herbicide (Spot Spray)	1.5 quarts		\$ 15.22	\$ 22.83	<input type="text"/>
Fertilizer	1200 lbs		\$ 0.07	\$ 84.00	<input type="text"/>
Fungicides	13 applications		\$ 40.79	\$ 530.27	<input type="text"/>
Insecticides	13 applications		\$ 20.08	\$ 261.04	<input type="text"/>
Hired Labor					<input type="text"/>
1/2 Pruning Time	40 hours		\$ 9.00		<input type="text"/>
1/2 Shoot Positioning, Thinning, etc.	24 hours		\$ 9.00		<input type="text"/>
Hoeing	24 hours		\$ 9.00		<input type="text"/>
<i>Total Hired Labor</i>	88 hours		\$ 9.00	\$ 792.00	<input type="text"/>
Variable Machinery Costs	1 acre		\$ 35.87	\$ 35.87	<input type="text"/>
<b>TOTAL PREHARVEST COST</b>				\$ 1,770.75	<input type="text"/>
HARVESTING AND MARKETING					
Harvest	70 hours		\$ 9.00	\$ 630.00	<input type="text"/>
<b>Total Harvest and Marketing Cost</b>				\$ 630.00	<input type="text"/>
Interest (9 months)	1 acre		\$ 162.53	\$ 162.53	<input type="text"/>
<b>TOTAL VARIABLE COST</b>				\$ 2,563.28	<input type="text"/>
<b>RETURN ABOVE VARIABLE COSTS</b>				\$ 761.72	<input type="text"/>
<b>FIXED COSTS</b>					
Fixed Machinery Costs	1 acre		\$ 56.95	\$ 56.95	<input type="text"/>
Pest Control	1 year		\$ 220.00	\$ 220.00	<input type="text"/>
<b>TOTAL FIXED COST</b>				\$ 276.95	<input type="text"/>
<b>TOTAL EXPENSES</b>				\$ 2,840.23	<input type="text"/>
<b>RETURN TO OPERATOR LABOR, LAND, CAPITAL, AND MGT.</b>				\$ 484.77	<input type="text"/>
Operator and Unpaid Family Labor	84 hrs		\$ 9.00	\$ 756.00	<input type="text"/>
	10 hrs		\$ 12.00	\$ 120.00	<input type="text"/>
<b>TOTAL OPERATOR AND UNPAID FAMILY LABOR</b>				\$ 876.00	<input type="text"/>
<b>RETURN TO LAND, CAPITAL, AND MANAGEMENT</b>				\$ (391.23)	<input type="text"/>

## ***Labor Summary For 1 Acre of Wine Grapes, Kentucky, 2002***

### **Soil Buildup Year**

All Operations 2.1 hours

*Soil Buildup Year Labor Requirement* 2.1 hours

### **Planting Year**

Dig Holes 60 hours

Plant Vines 25 hours

Set Trellis 50 hours

Train/Thin/Position Vines 20 hours

All Other Operations 20 hours

*Planting Year Labor Requirement* 175 hours

### **Growing Year**

Pruning 32 hours

Train/Thin/Position Vines 20 hours

Weed Control (Hoeing) 24 hours

All Other Operations 32 hours

*Growing Year Labor Requirement* 108 hours

### **First Harvest Year**

Pruning 80 hours

Harvest 40 hours

Train/Thin/Position Vines 48 hours

Hoeing 24 hours

Pest Control 10 hours

All Other Operations 16 hours

*First Harvest Year Labor Requirement* 218 hours

### **Full Production Year**

Pruning 80 hours

Harvest 70 hours

Train/Thin/Position Vines 48 hours

Hoeing 24 hours

Pest Control 10 hours

All Other Operations 20 hours

*Full Production Year Labor Requirement* 252 hours