



# 2005 KY Grape Production Budgets Estimated Costs and Returns

# **Vinifera Wine Grape Varieties**

AGRICULTURE & NATURAL RESOURCES • FAMILY & CONSUMER SCIENCES 4-H/YOUTH DEVELOPMENT • COMMUNITY & ECONOMIC DEVELOPMENT

#### Vinifera

Soil Buildup Year Summary (Year 0)

	Quantity	Unit	9	6/Unit		Total	Your Estimate
GROSS RETURNS							
VARIABLE COSTS							
PRODUCTION Soil Test	2.0	ssays	\$	10.00	\$	20.00	
Lime	2 a 3 to		э \$	12.50	Գ \$	37.50	
Herbicide		uarts	\$	16.90		33.80	
Grass Seed	90 lb		\$	0.70	\$	63.00	
Variable Machinery Costs	1 a		\$	20.00	\$	20.00	
					¢	474.00	
TOTAL PRODUCTION COST					\$	174.30	
RETURN ABOVE VARIABLE COS	TS				\$	(174.30)	
FIXED COSTS							
Fixed Machinery & Equipment Costs	1 a	cre	\$	35.00	\$	35.00	
TOTAL FIXED COST					\$	35.00	
TOTAL EXPENSES					\$	209.30	
RETURN TO OPERATOR LABOR, LAN	ND, CAPITAL	, AND MGT			\$	(209.30)	
Operator and Unpaid Family Labor	2.10 h	rs	\$	10.00	\$	21.00	
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TOTAL OPERATOR AND UNPAID FAN					\$	21.00	
RETURN TO LAND, CAPITAL, AND M		т			\$	(230.30)	]
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#### Vinifera

Planting Year Summary (Year 1)

	Quantity	Unit		\$/Unit		Total	Your Estimate
GROSS RETURNS							
VARIABLE COSTS							
PRODUCTION							
Herbicide (Burndown)	1.5	quarts	\$	16.90	\$	25.35	
Herbicide		quarts	\$	38.47	\$	76.93	
Vines	778	vines	\$	4.00	\$	3,112.00	
Fertilizer	150	lbs	\$	0.12	\$	18.00	
Grow Tubes	778	tubes	\$	0.85	\$	661.30	
Bamboo Stakes	778	stakes	\$	0.20	\$	155.60	
Trellis Materials							
4" Posts	216	posts	\$	4.55	\$	982.80	
6" End Posts	72	posts	\$	7.00	\$	504.00	
Wire	37,800	feet	\$	0.025	\$	945.00	
Miscellaneous Trellis Materials	1	acre	\$	275.00	\$	275.00	
Hired Labor							
Planting	60	hours	\$	8.00			
Build Trellis	60	hours	\$	8.00			
TOTAL HIRED LABOR	120	hours	\$	8.00	\$	960.00	
Herbicides		quarts	\$	12.80	\$	38.40	
Fungicides		applications	\$	38.00	\$	114.00	
Insecticides		applications	\$	15.00	\$	60.00	
Irrigation	5	months	\$	15.00	\$	75.00	
Variable Machinery Costs	1	acre	\$	10.00	\$	10.00	
Interest	1	acre	\$	280.47	\$	280.47	
TOTAL PRODUCTION COST					\$	8,293.85	
RETURN ABOVE VARIABLE COSTS	6				\$	(8,293.85)	
FIXED COSTS							
Fixed Machinery Costs	1	acre	\$	80.00	\$	80.00	
Fixed Costs on Irrigation System	1	year	\$	180.00	\$	180.00	
TOTAL FIXED COST					\$	260.00	
TOTAL EXPENSES					\$	8,553.85	
RETURN TO OPERATOR LABOR, LAND	), CAPITAI	_, AND MGT.			\$	(8,553.85)	
Operator and Uppeid Family Labor	70.00	bro	\$	10.00	\$	700.00	<u> </u>
Operator and Unpaid Family Labor	70.00	1113	φ	10.00	φ	700.00	
TOTAL OPERATOR AND UNPAID FAMIL	LY LABOR				\$	700.00	
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RETURN TO LAND, CAPITAL, AND MA	NAGEME	NT			\$	(9,253.85)	
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Vinifera

Growth Year Summary (Year 2)

	Quantity	Unit		\$/Unit		Total	Your Estimate
GROSS RETURNS	1 To	on	\$	1,150.00	\$	1,150.00	
VARIABLE COSTS							
PRODUCTION							
Herbicide	2 qu	uarts	\$	19.23	\$	38.47	
Fertilizer	300 lb	S	\$	0.10	\$	30.00	
Plants (Replant 2% Original Planting)	12 pl	ants	\$	4.00	\$	48.00	
Hired Labor							
1/2 Pruning Time	10 ho	ours	\$	8.00			
1/2 Additional Shoot Maintenance	10 ho		\$	8.00			
Weed Control (Hoeing)	24 ho		\$	8.00			
Total Hired Labor Cost	44 ho		\$	8.00	\$	352.00	
Fungicides		oplications	\$	38.00	\$	114.00	
Insecticides		oplications	\$	15.00	\$	60.00	
Irrigation		onths	э \$	15.00	φ \$	75.00	
Variable Machinery Costs	1 ac		\$	40.00	\$	40.00	
-			φ \$		φ \$	40.00 39.77	
Interest	1 ac	Je	φ	39.77	Φ	39.11	
TOTAL PRODUCTION COST					\$	797.23	
<b>RETURN ABOVE VARIABLE COSTS</b>					\$	352.77	
HARVESTING AND MARKETING							
Harvest	17 ho	ours	\$	8.00	\$	136.00	
Harvest Lugs	20 lu	gs	\$	4.00	\$	80.00	
							1
Total Harvest and Marketing Cost			¢	10.00	\$	216.00	
			\$	10.00			
FIXED COSTS							r
Fixed Machinery & Equipment Costs	1 ac		\$	60.00	\$	60.00	
Pest Control	1 ye	ear	\$	225.00	\$	225.00	
TOTAL FIXED COST					\$	285.00	
TOTAL EXPENSES					\$	1,298.23	
							1
RETURN TO OPERATOR LABOR, LAND,	CAPITAL, AI	ND MGT.			\$	(148.23)	
Operator and Unpaid Family Labor	40.00 hr	S	\$	10.00	\$	400.00	
	10.00 11	-	Ψ	10.00	Ψ	100.00	
TOTAL OPERATOR AND UNPAID FAMIL	LABOR				\$	400.00	
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#### Vinifera

First Production Summary (Year 3)

	Quantity	Unit		\$/Unit		Total	Your Estimate
GROSS RETURNS							
Grapes	3.5 to	ons	\$	1,150.00	\$	4,025.00	
Total Gross Returns					\$	4,025.00	
VARIABLE COSTS							
PRODUCTION							
Herbicide (Spring Apply)	2 q	uarts	\$	19.23	\$	38.47	
Herbicide (Spot Spray)		uarts	\$	16.90	\$	25.35	
Fertilizer	205 lt		\$	0.12	\$	24.60	
Tissue Sampling and Analysis		nalysis	\$	25.00	\$	25.00	
Fungicides		pplications	\$	41.00	\$	533.00	
Insecticides	13 a	pplications	\$	20.00	\$	260.00	
Hired Labor	10.1		•				
1/2 Pruning Time		ours	\$	8.00			
1/2 Training, Thinning, Tying		ours	\$	8.00	•		
Total Preharvest Hired Labor		ours	\$	8.00	\$	512.00	
Variable Machinery Costs	1 a	cre	\$	60.00	\$	60.00	
TOTAL PREHARVEST COST					\$	1,478.42	
HARVESTING AND MARKETING							
Harvest	59.5 h	ours	\$	8.00	\$	476.00	
Harvest Lugs	40 lu	lgs	\$	4.00	\$	160.00	
Total Harvest and Marketing Cost					\$	636.00	
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Interest (9 months)	1 a	cre	\$	10.00	\$	10.00	
TOTAL VARIABLE COST					\$	2,124.42	
RETURN ABOVE VARIABLE COS	TS				\$	1,900.59	
FIXED COSTS							
Fixed Machinery Costs	1 a	cre	\$	75.00	\$	75.00	
Pest Control	1 y	ear	\$	225.00	\$	225.00	
TOTAL FIXED COST					\$	300.00	
TOTAL EXPENSES					\$	2,424.42	
							4
RETURN TO OPERATOR LABOR, LAP	ND, CAPITAL,	AND MGT.			\$	1,600.59	
Operator and Uppeid Family Labor	60 h	rc	\$	10.00	\$	600.00	
Operator and Unpaid Family Labor	00 N	10	φ	10.00	φ	000.00	
TOTAL OPERATOR AND UNPAID FAM					\$	600.00	
					φ	000.00	
RETURN TO LAND, CAPITAL, AND M		-			\$	1,000.59	
RETORN TO LAND, CAFITAL, AND M					φ	1,000.09	

#### Vinifera

First Full Production Summary (Year 4)

	Quantity	Unit		\$/Unit		Total	Your Estimate
GROSS RETURNS							
Grapes	4.5 to	ns	\$	1,150.00	\$	5,175.00	
Total Gross Returns					\$	5,175.00	
VARIABLE COSTS							
PRODUCTION							
Herbicide (Spring)	1 ap	oplications	\$	44.73	\$	44.73	
Herbicide (Spot Spray)	1.5 qu	uarts	\$	16.90	\$	25.35	
Fertilizer	400 lb	s	\$	0.10	\$	40.00	
Fungicides	13 ap	oplications	\$	41.00	\$	533.00	
Insecticides	13 ap	oplications	\$	20.00	\$	260.00	
Hired Labor							
1/2 Pruning Time	40 ho	ours	\$	8.00			
1/2 Shoot Positioning, Thinning, etc.	24 ho		\$	8.00			
Total Hired Labor	64 ho	ours	\$	8.00	\$	512.00	
Variable Machinery Costs	1 ac	cre	\$	65.00	\$	65.00	
TOTAL PREHARVEST COST					\$	1,480.08	
					•	.,	
HARVESTING AND MARKETING							
Harvest	76.5 h	ours	\$	8.00	\$	612.00	
Harvest Lugs	20 lu		\$	4.00	φ \$	80.00	
	2010	95	Ψ	4.00	Ψ	00.00	
Total Harvest and Marketing Cost					\$	692.00	
Interest (9 months)	1 ac	cre	\$	114.03	\$	114.03	
TOTAL VARIABLE COST			\$	10.00	\$	2,286.12	
RETURN ABOVE VARIABLE COST	ſS				\$	2,888.88	
FIXED COSTS							
Fixed Machinery Costs	1 ac		\$	75.00	\$	75.00	
Pest Control	1 ye	ear	\$	225.00	\$	225.00	
TOTAL FIXED COST					\$	300.00	
TOTAL EXPENSES					\$	2,586.12	
RETURN TO OPERATOR LABOR, LAN					¢	2 500 00	
RETORN TO OPERATOR LABOR, LAN	ID, CAPITAL	, AND WGT			φ	2,588.88	
Operator and Unpaid Family Labor	80 hi	S	\$	10.00	\$	800.00	
	00 11	-	Ψ	10.00	Ψ	000.00	
TOTAL OPERATOR AND UNPAID FAM	IILY LABOR				\$	800.00	
					r		
RETURN TO LAND, CAPITAL, AND M		-			¢.	1,788.88	

#### Vinifera

Full Production Summary (Year 5)

	Quantity	Unit		\$/Unit		Total	Your Estimate
GROSS RETURNS							
Grapes	4.5 t	ons	\$	1,150.00	\$	5,175.00	
Total Gross Returns					\$	5,175.00	
VARIABLE COSTS							
PRODUCTION							
Herbicide (Spring)	1 =	pplications	\$	44.73	\$	44.73	
Herbicide (Spot Spray)		uarts	\$	16.90	\$	25.35	
Fertilizer	300	•	\$	0.12	\$	36.00	
Fungicides		applications	\$	41.00	\$	533.00	
Insecticides		pplications	\$	20.00	\$	260.00	
Hired Labor			•		•		
1/2 Pruning Time	40 h	ours	\$	8.00			
1/2 Shoot Positioning, Thinning, etc.	24 h	ours	\$	8.00			
Total Hired Labor	64 h	ours	\$	8.00	\$	512.00	
Variable Machinery Costs	1 a	acre	\$	65.00	\$	65.00	
					•		
TOTAL PREHARVEST COST					\$	1,476.08	
HARVESTING AND MARKETING							
Harvest	76.5 ł	nours	\$	8.00	\$	612.00	
Total Harvest and Marketing Cost					\$	612.00	
Interact (0 months)	1 -		\$	109.62	¢	109.62	
Interest (9 months) TOTAL VARIABLE COST	l c	acre	φ	109.62	\$	2,197.71	
TOTAL VARIABLE COST					φ	2,197.71	
RETURN ABOVE VARIABLE COST	S				\$	2,977.29	
FIXED COSTS	1 .	0.00	¢	75.00	¢	75.00	
Fixed Machinery Costs Pest Control		icre 'ear	\$ \$	75.00 225.00	\$ \$	75.00 225.00	
r est control	i y	cai	Ψ	225.00	Ψ	225.00	
TOTAL FIXED COST					\$	300.00	
TOTAL EXPENSES					\$	2,497.71	
							1
RETURN TO OPERATOR LABOR, LAN	D, CAPITAL,	AND MGT.			\$	2,677.29	
	<u> </u>		<b>^</b>	40.00	<u>~</u>	000.00	I
Operator and Unpaid Family Labor	80 h	115	\$	10.00	\$	800.00	
					<u>~</u>	000.00	
TOTAL OPERATOR AND UNPAID FAM	ILY LABOR				\$	800.00	
		1,877.29					