

Crop budgets vary greatly! Prices and cost estimates are averages collected from retailers across the state. Input prices will vary by vine training, management, region, variety and other criteria and may not be reflective of YOUR true costs.

Assumptions in Analysis:

- Land is owned; purchase price not included in budgets
- Model based on 1 acre + *Vitis vinifera* vineyard
- Excellent site, no crop reduction
- Labor at \$8.00 (unskilled) or \$18.00 (skilled)
- Operating expenses borrowed at 9% interest for 6 months of expenses.
- Excellent vineyard management, including consultant
- Irrigation is included, Deer fence is not
- Fixed costs are calculated with model vineyard assumptions (see equipment below)
 - You should use your actual fixed costs
- 1 Acre 10' Between rows and 6' Within rows = 860 VINES
- Vertical Shoot Position training system
- White variety, 4 tons at full crop and valued at \$1450 at full crop

Estimated Equipment Inventory:

- 55 hp, 4wd tractor w/ spray cab = \$30,000
- 4wd pick-up truck = \$20,000
- 50-gal herbicide sprayer = \$2,700
- 300-gal airblast sprayer = \$12,500
- 5-ft rotary mower = \$1,600
- Fertilizer spreader/broadcaster = \$1,500
- Trailer (harvest, prune etc...)* = \$2,000
- Hand Tools and Safety Equipment = \$1,500

TOTAL = \$71,800

* Rent post driver, auger, drill. Does not include pole building/shed

Budgeting Recommendations:

- Labor and Capital are major requirements of a vineyard
- Write and implement a farm business plan - setting goals, managing finances and develop markets
- Manage capital assets such as land and equipment
- Create your own budgets and fixed costs including equipment, repairs, insurance, depreciation, interest and taxes
- Row spacing and vine training, which affect yield, have a major impact on vineyard profitability
- Track your expenses and at the end of the year reconcile
- Talk with you family, friends and lender before entering the enterprise
- Economies of scale are important. Some vinyards are never profitable if they do not grow enough to cover costs.

Questions Contact: Shannon Dill, 410-822-1244 or sdill@umd.edu

Prepared and Reviewed by:

Ben Beale, AGNR Educator, St. Mary's County; Shannon Dill, AGNR Educator, Talbot County

David Myers, AGNR Educator, Anne Arundel County

The 2014 Maryland enterprise budgets were developed using average yields and estimated input cost based upon producer and farm supplier data. The figures presented are averages and vary greatly from one farm to the other. It is therefore crucial to input actual farm data when completing enterprise budgets for your farm.

UNIVERSITY OF
MARYLAND

EXTENSION

Solutions in your community

WINE GRAPE ESTABLISHMENT

PER ACRE FOR

2014

ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
YIELD	TON	0	1450	0
VARIABLE COSTS				
SOIL TEST	ACRE	1	2.33	\$2.33
GRASS SEED - FESCUE K-31	POUND	60	1.20	\$72.00
GRAPEVINES	UNIT	860	3.75	\$3,225.00
FERTILIZER (4OZ 10-10-10 PER VINE)	POUND	215	0.59	\$126.85
LIME	TON	0.5	45.00	\$22.50
HERBICIDES	ACRE	1	21.11	\$21.11
INSECTIDES	ACRE	1	126.67	\$126.67
FUNGICIDES	ACRE	1	274.45	\$274.45
TRELLISING MATERIALS				
3"X4"X8' TREATED POSTS CCA	ACRE	150	5.99	\$898.50
5"X10' TREATED END POSTS CCA	ACRE	20	17.05	\$341.00
12.5 GAUGE ALUMINUM CLAD WIRE	FEET	4500	0.03	\$135.00
14 GAUGE ALUMINUM CLAD WIRE	FEET	5000	0.07	\$350.00
TIGHTENERS	UNIT	38	5.50	\$209.00
WIRE CRIMPING SLEEVES	UNIT	6	6.60	\$39.60
BAMBOO SUPPORTS	UNIT	1500	0.16	\$243.60
EARTH ANCHORS	UNIT	75	8.00	\$600.00
TAPENERS & VINE TIES	UNIT	2	53.57	\$107.13
TRELLISING LABOR				
FIELD PREPARATION (UNSKILLED)	HOUR	20	8.00	\$160.00
LAYOUT, DISTRIBUTE AND DRIVE POSTS (SKILLED)	HOUR	15	18.00	\$270.00
LAYOUT, DISTRIBUTE AND DRIVE POSTS (UNSKILLED)	HOUR	20	8.00	\$160.00
AUGER AND SET END POST (SKILLED)	HOUR	3	18.00	\$54.00
AUGER AND SET END POST (UNSKILLED)	HOUR	3	8.00	\$24.00
MARK LINE POST FOR WIRES (UNSKILLED)	HOUR	2	8.00	\$16.00
DRILL END POST FOR WIREVISES (UNSKILLED)	HOUR	4	8.00	\$32.00
INSTALL LINE POST STAPLES FOR WIRE (UNSKILLED)	HOUR	8	8.00	\$64.00
INSTALL END POST ANCHOR STRUCTURE (SKILLED)	HOUR	10	18.00	\$180.00
INSTALL BAMBOO STAKES (UNSKILLED)	HOUR	6	8.00	\$48.00
VINE PLANTING (UNSKILLED)	HOUR	55	8.00	\$440.00
INTEREST ON OPERATING CAPITAL	\$8,242.74	0.6	9.0%	\$445.11
TOTAL VARIABLE COSTS LISTED ABOVE				\$8,687.85
FIXED/OVERHEAD COSTS (USING CUSTOM RATES)				
FERTILIZER APPLICATION	ACRE	1	6.90	\$6.90
DRILL SEED PLANTING	ACRE	1	17.30	\$17.30
PESTICIDE APPLICATIONS	ACRE	7	7.90	\$55.30
INTEREST ON CUSTOM CHARGES	\$79.50	0.6	9.0%	\$4.29
HAND TOOLS	UNIT	1	550.00	\$550.00
SAFETY EQUIPMENT	UNIT	1	250.00	\$250.00
LAND CHARGE	ACRE	1	63.00	\$63.00
TOTAL FIXED COST LISTED ABOVE				\$946.79
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$9,634.64
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				-\$9,634.64
Assumptions:				
1 ACRE 10' BETWEEN ROWS AND 6' WITHIN ROWS = 860 VINES				
FERTILIZER 4OZ OF 10-10-10 WITH EACH VINE				

WINE GRAPE ESTABLISHMENT - YEAR 1 **PER ACRE FOR** **2014**

ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
YIELD	TON	0	1450	0
VARIABLE COSTS				
SOIL TEST/TISSUE TEST	ACRE	1	20.00	\$20.00
NITROGEN	POUND	35	0.42	\$14.70
PHOSPHOROUS	POUND	0	0.65	\$0.00
POTASH	POUND	60	0.36	\$21.60
LIME	TON	0.5	17.50	\$8.75
HERBICIDES	ACRE	1	24.12	\$24.12
INSECTIDES	ACRE	1	144.73	\$144.73
FUNGICIDES	ACRE	1	313.58	\$313.58
<i>TRELLISING MATERIALS</i>				
CLIPS & VINE TRAINING SUPPLIES	UNIT	2000	0.10	\$190.00
TRICKLE IRRIGATION SUPPLIES	FEET	4500	0.09	\$405.00
<i>TRELLISING LABOR</i>				
FIELD CARE (UNSKILLED)	HOUR	15	8.00	\$120.00
VINE TRAINING AND PRUNING (SKILLED)	HOUR	55	18.00	\$990.00
IRRIGATION INSTALLATION (UNSKILLED)	HOUR	30	8.00	\$240.00
HARVEST (UNSKILLED)	HOUR	10	8.00	\$80.00
INTEREST ON OPERATING CAPITAL	\$2,572.48	0.6	9.0%	\$138.91
TOTAL VARIABLE COSTS LISTED ABOVE				\$2,711.39
FIXED/OVERHEAD COSTS (CUSTOM RATES)				
FERTILIZER APPLICATION	ACRE	1	6.90	\$6.90
PESTICIDE APPLICATIONS	ACRE	15	7.90	\$118.50
MOWING	ACRE	4	11.50	\$46.00
IRRIGATION	ACRE	1	95.00	\$95.00
INTEREST ON CUSTOM CHARGES	\$266.40	0.6	9.0%	\$14.39
LAND CHARGE	ACRE	1	63.00	\$63.00
TOTAL FIXED COST LISTED ABOVE				\$343.79
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$3,055.18
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				-\$3,055.18

Assumptions:

1 ACRE 10' BETWEEN ROWS AND 6' WITHIN ROWS = 860 VINES

WINE GRAPE ESTABLISHMENT - YEAR 2

PER ACRE FOR

2014

ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
YIELD	TON	0.5	1450.00	\$725.00
VARIABLE COSTS				
SOIL TEST/TISSUE TEST	ACRE	1	20.00	\$20.00
NITROGEN	POUND	35	0.42	\$14.70
PHOSPHOROUS	POUND	0	0.65	\$0.00
POTASH	POUND	60	0.36	\$21.60
LIME	TON	0.5	45.00	\$22.50
HERBICIDES	ACRE	1	24.12	\$24.12
INSECTIDES	ACRE	1	144.73	\$144.73
FUNGICIDES	ACRE	1	313.58	\$313.58
HARVEST LUGS	UNIT	165	10.75	\$1,773.75
FIELD CARE (UNSKILLED)	HOUR	15	8.00	\$120.00
VINE TRAINING AND PRUNING (SKILLED)	HOUR	55	18.00	\$990.00
HARVEST (UNSKILLED)	HOUR	10	8.00	\$80.00
INTEREST ON OPERATING CAPITAL	\$3,524.98	0.6	9.0%	\$190.35
TOTAL VARIABLE COSTS LISTED ABOVE				\$3,715.33
FIXED/OVERHEAD COSTS (CUSTOM RATES)				
FERTILIZER APPLICATION	ACRE	1	6.90	\$6.90
PESTICIDE APPLICATIONS	ACRE	15	7.90	\$118.50
MOWING	ACRE	4	11.50	\$46.00
IRRIGATION	ACRE	1	95.00	\$95.00
INTEREST ON CUSTOM CHARGES	\$266.40	0.6	9.0%	\$14.39
LAND CHARGE	ACRE	1	63.00	\$63.00
TOTAL FIXED COST LISTED ABOVE				\$343.79
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$4,059.11
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				-\$3,334.11
PRICES				
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	YIELDS	\$1,087.50	\$1,450.00	\$1,812.50
	0.375	(\$3,651.30)	(\$3,515.36)	(\$3,379.43)
	0.5	(\$3,515.36)	(\$3,334.11)	(\$3,152.86)
	0.625	(\$3,379.43)	(\$3,152.86)	(\$2,926.30)

Assumptions:

1 ACRE 10' BETWEEN ROWS AND 6' WITHIN ROWS = 860 VINES

Sensitivity analysis based on 75%,100% and 125% of typical yield and ton price.

WINE GRAPE ESTABLISHMENT - YEAR 3

PER ACRE FOR

2014

ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
YIELD	TON	3	1450.00	\$4,350.00
VARIABLE COSTS				
SOIL TEST/TISSUE TEST	ACRE	1	20.00	\$20.00
NITROGEN	POUND	35	0.42	\$14.70
PHOSPHOROUS	POUND	0	0.65	\$0.00
POTASH	POUND	60	0.36	\$21.60
LIME	TON	0.5	45.00	\$22.50
HERBICIDES	ACRE	1	24.12	\$24.12
INSECTIDES	ACRE	1	144.73	\$144.73
FUNGICIDES	ACRE	1	313.58	\$313.58
FIELD CARE (UNSKILLED)	HOUR	10	8.00	\$80.00
VINE TRAINING AND PRUNING (SKILLED)	HOUR	40	18.00	\$720.00
HARVEST (UNSKILLED)	HOUR	30	8.00	\$240.00
INTEREST ON OPERATING CAPITAL	\$1,601.23	0.6	9.0%	\$86.47
TOTAL VARIABLE COSTS LISTED ABOVE				\$1,687.70
FIXED/OVERHEAD COSTS (CUSTOM RATES)				
FERTILIZER APPLICATION	ACRE	1	6.90	\$6.90
PESTICIDE APPLICATIONS	ACRE	15	7.90	\$118.50
MOWING	ACRE	4	11.50	\$46.00
IRRIGATION	ACRE	1	95.00	\$95.00
INTEREST ON CUSTOM CHARGES	\$266.40	0.6	9.0%	\$14.39
LAND CHARGE	ACRE	1	63.00	\$63.00
TOTAL FIXED COST LISTED ABOVE				\$343.79
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$2,031.48
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$2,318.52
		PRICES		
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	<u>YIELDS</u>	\$1,087.50	\$1,450.00	\$1,812.50
	2.25	\$415.39	\$1,231.02	\$2,046.64
	3	\$1,231.02	\$2,318.52	\$3,406.02
	3.75	\$2,046.64	\$3,406.02	\$4,765.39

Assumptions:

1 ACRE 10' BETWEEN ROWS AND 6' WITHIN ROWS = 860 VINES

Sensitivity analysis based on 75%,100% and 125% of typical yield and current ton price.

WINE GRAPE ESTABLISHMENT - YEAR 4 **PER ACRE FOR 2014**

ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
YIELD	TON	4	1450.00	\$5,800.00
VARIABLE COSTS				
SOIL TEST/TISSUE TEST	ACRE	1	20.00	\$20.00
NITROGEN	POUND	35	0.42	\$14.70
PHOSPHOROUS	POUND	0	0.65	\$0.00
POTASH	POUND	60	0.36	\$21.60
LIME	TON	0.5	45.00	\$22.50
HERBICIDES	ACRE	1	24.12	\$24.12
INSECTIDES	ACRE	1	144.73	\$144.73
FUNGICIDES	ACRE	1	313.58	\$313.58
HARVEST LUGS	UNIT	165	10.75	\$1,773.75
FIELD CARE (UNSKILLED)	HOURL	10	8.00	\$80.00
VINE TRAINING AND PRUNING (SKILLED)	HOURL	45	18.00	\$810.00
HARVEST (UNSKILLED)	HOURL	35	8.00	\$280.00
INTEREST ON OPERATING CAPITAL		0.6	9.0%	\$189.27
TOTAL VARIABLE COSTS LISTED ABOVE				\$3,694.25
FIXED/OVERHEAD COSTS (CUSTOM RATES)				
FERTILIZER APPLICATION	ACRE	1	6.90	\$6.90
PESTICIDE APPLICATIONS	ACRE	15	7.90	\$118.50
MOWING	ACRE	4	11.50	\$46.00
IRRIGATION	ACRE	1	95.00	\$95.00
INTEREST ON CUSTOM CHARGES		0.6	9.0%	\$14.39
LAND CHARGE	ACRE	1	63.00	\$63.00
TOTAL FIXED COST LISTED ABOVE				\$343.79
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$4,038.03
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$1,761.97
PRICES				
NET INCOME ABOVE VARIABLE AND	<u>YIELDS</u>	\$1,087.50	\$1,450.00	\$1,812.50
FIXED COSTS LISTED ABOVE FOR	3	(\$775.53)	\$311.97	\$1,399.47
VARIOUS YIELDS AND PRICES	4	\$311.97	\$1,761.97	\$3,211.97
	5	\$1,399.47	\$3,211.97	\$5,024.47

Assumptions:

1 ACRE 10' BETWEEN ROWS AND 6' WITHIN ROWS = 860 VINES

Sensitivity analysis based on 75%,100% and 125% of typical yield and current ton price.

UNIVERSITY OF
MARYLAND
EXTENSION
Solutions in your community

WINE GRAPE ESTABLISHMENT - YEAR 5

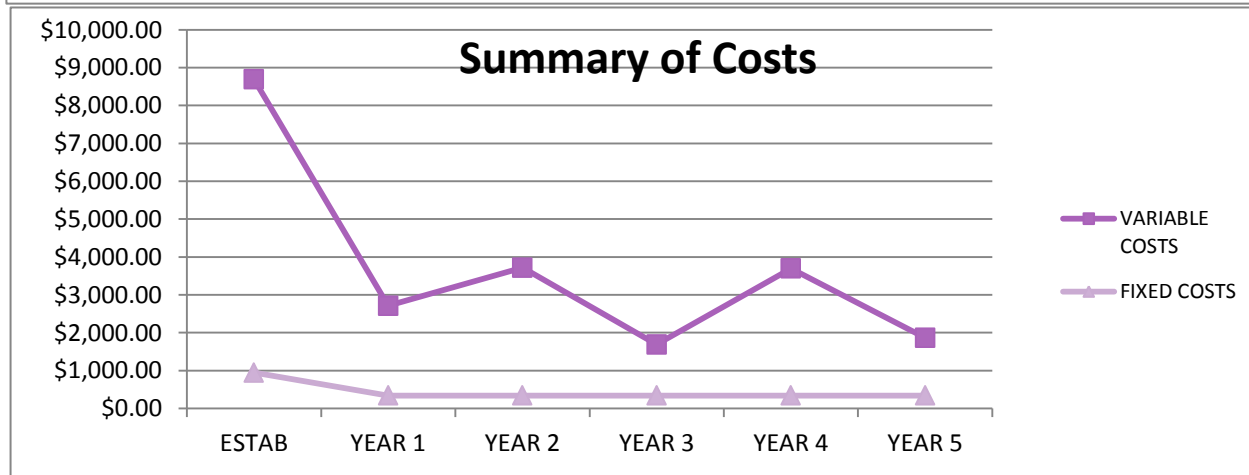
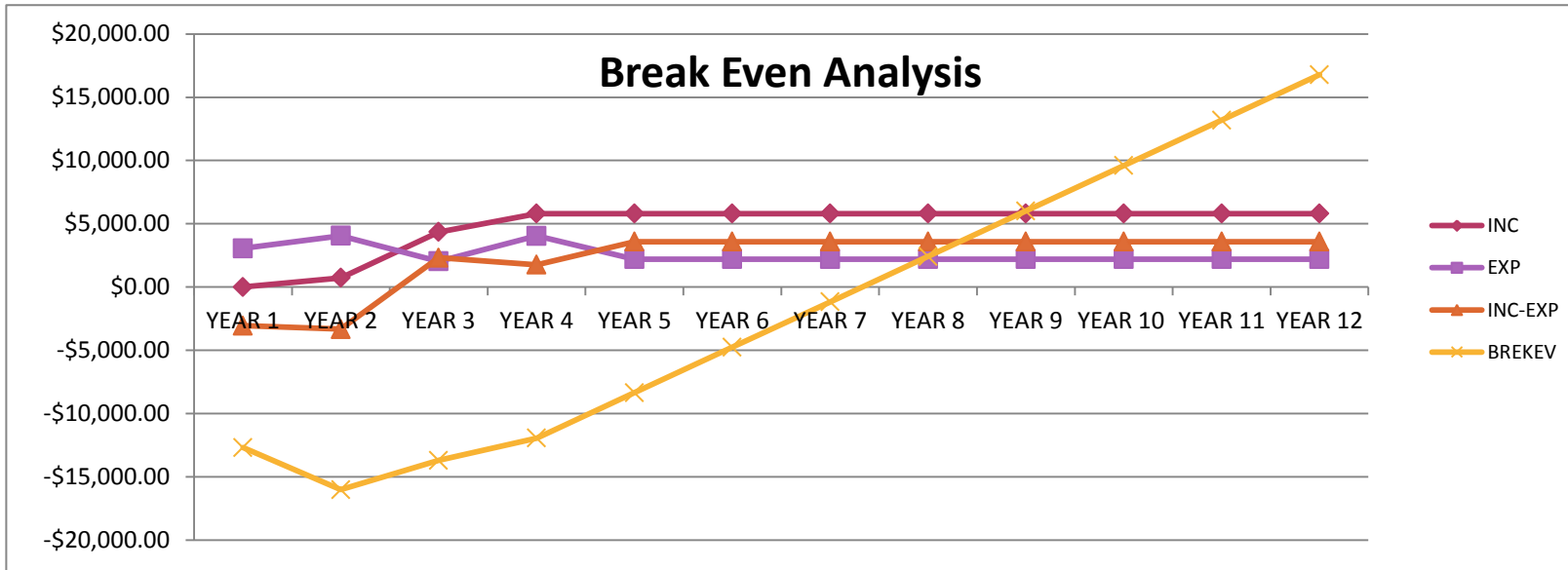
PER ACRE FOR

2014

ITEM	UNIT	QUANTITY	PRICE	TOTAL
GROSS INCOME				
YIELD	TON	4	1450.00	\$5,800.00
VARIABLE COSTS				
SOIL TEST/TISSUE TEST	ACRE	1	20.00	\$20.00
NITROGEN	POUND	35	0.42	\$14.70
PHOSPHOROUS	POUND	0	0.65	\$0.00
POTASH	POUND	60	0.36	\$21.60
LIME	TON	0.5	17.50	\$8.75
HERBICIDES	ACRE	1	24.12	\$24.12
INSECTIDES	ACRE	1	144.73	\$144.73
FUNGICIDES	ACRE	1	313.58	\$313.58
FIELD CARE (UNSKILLED)	HOUR	10	8.00	\$80.00
VINE TRAINING AND PRUNING (SKILLED)	HOUR	45	18.00	\$810.00
HARVEST (UNSKILLED)	HOUR	40	8.00	\$320.00
INTEREST ON OPERATING CAPITAL				
	\$1,757.48	0.6	9.0%	\$94.90
TOTAL VARIABLE COSTS LISTED ABOVE				\$1,852.38
FIXED/OVERHEAD COSTS (CUSTOM RATES)				
FERTILIZER APPLICATION	ACRE	1	6.90	\$6.90
PESTICIDE APPLICATIONS	ACRE	15	7.90	\$118.50
MOWING	ACRE	4	11.50	\$46.00
IRRIGATION	ACRE	1	95.00	\$95.00
INTEREST ON CUSTOM CHARGES	\$266.40	0.6	9.0%	\$14.39
LAND CHARGE	ACRE	1	63.00	\$63.00
TOTAL FIXED COST LISTED ABOVE				\$343.79
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				\$2,196.17
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				\$3,603.83
		<u>PRICES</u>		
NET INCOME ABOVE VARIABLE AND FIXED COSTS LISTED ABOVE FOR VARIOUS YIELDS AND PRICES	<u>YIELDS</u>	\$1,087.50	\$1,450.00	\$1,812.50
	3	\$1,066.33	\$2,153.83	\$3,241.33
	4	\$2,153.83	\$3,603.83	\$5,053.83
	5	\$3,241.33	\$5,053.83	\$6,866.33

Summary of Costs - Years 1-5							
		ESTAB	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
INCOME							
	ACRE	0	0	\$725.00	\$4,350.00	\$5,800.00	\$5,800.00
VARIABLE COSTS							
SOIL TEST	ACRE	\$2.33	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00
GRASS SEED - FESCUE K-31	POUND	\$72.00					
GRAPEVINES	UNIT	\$3,225.00					
FERTILIZER (4OZ 10-10-10 PER VINE)	POUND	\$126.85					
NITROGEN	POUND		\$14.70	\$14.70	\$14.70	\$14.70	\$14.70
PHOSPHOROUS	POUND		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POTASH	POUND		\$21.60	\$21.60	\$21.60	\$21.60	\$21.60
LIME	TON	\$22.50	\$8.75	\$22.50	\$22.50	\$22.50	\$22.50
HERBICIDES	ACRE	\$21.11	\$24.12	\$24.12	\$24.12	\$24.12	\$24.12
INSECTIDES	ACRE	\$126.67	\$144.73	\$144.73	\$144.73	\$144.73	\$144.73
FUNGICIDES	ACRE	\$274.45	\$313.58	\$313.58	\$313.58	\$313.58	\$313.58
TRELLISING/IRRIGATION MATERIALS	ACRE	\$2,923.83	\$595.00				
VINEYARD LABOR	ACRE	\$1,448.00	\$1,430.00	\$1,190.00	\$1,040.00	\$1,170.00	\$1,210.00
LUGS	UNIT			\$1,773.75		\$1,773.75	
INTEREST ON OPERATING CAPITAL		\$445.11	\$138.91	\$190.35	\$86.47	\$189.27	\$94.90
TOTAL VARIABLE		\$8,687.85	\$2,711.39	\$3,715.33	\$1,687.70	\$3,694.25	\$1,866.13
FIXED COSTS							
		ESTAB	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
FERTILIZER APPLICATION	ACRE	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90	\$6.90
DRILL SEED PLANTING	ACRE	\$17.30					
PESTICIDE APPLICATIONS	ACRE	\$55.30	\$118.50	\$118.50	\$118.50	\$118.50	\$118.50
MOWING	ACRE		\$46.00	\$46.00	\$46.00	\$46.00	\$46.00
IRRIGATION	ACRE		\$95.00	\$95.00	\$95.00	\$95.00	\$95.00
INTEREST ON CUSTOM CHARGES		\$4.29	\$14.39	\$14.39	\$14.39	\$14.39	\$14.39
HAND TOOLS	UNIT	\$550.00					
SAFETY EQUIPMENT	UNIT	\$250.00					
LAND CHARGE	ACRE	\$63.00	\$63.00	\$63.00	\$63.00	\$63.00	\$63.00
TOTAL FIXED		\$946.79	\$343.79	\$343.79	\$343.79	\$343.79	\$343.79
TOTAL VARIABLE AND FIXED		\$9,634.64	\$3,055.18	\$4,059.11	\$2,031.48	\$4,038.03	\$2,209.92

	ESTAB	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12
INC	0	0	\$725.00	\$4,350.00	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00	\$5,800.00
EXP	\$9,634.64	\$3,055.18	\$4,059.11	\$2,031.48	\$4,038.03	\$2,209.92	\$2,209.92	\$2,209.92	\$2,209.92	\$2,209.92	\$2,209.92	\$2,209.92	\$2,209.92
INC-EXP	-\$9,634.64	-\$3,055.18	-\$3,334.11	\$2,318.52	\$1,761.97	\$3,590.08	\$3,590.08	\$3,590.08	\$3,590.08	\$3,590.08	\$3,590.08	\$3,590.08	\$3,590.08
BREKEV	-\$9,634.64	-\$12,689.82	-\$16,023.94	-\$13,705.42	-\$11,943.45	-\$8,353.37	-\$4,763.29	-\$1,173.21	\$2,416.87	\$6,006.95	\$9,597.03	\$13,187.11	\$16,777.19



UNIVERSITY OF
MARYLAND
EXTENSION
Solutions in your community

INCOME		
GRAPE SALES	TON	\$1,350.00
VARIABLE COSTS		
LABOR (skilled)	HOUR	\$18.00
LABOR (unskilled)	HOUR	\$8.00
SOIL TEST	UNIT	\$2.33
SOIL/TISSUE TEST	UNIT	\$20.00
GRASS SEED - FESCUE K-31	POUND	\$1.20
GRAPEVINES	UNIT	\$3.75
FERTILIZER		
FERTILIZER (10-10-10)	POUND	\$0.59
NITROGEN	POUND	\$0.20
PHOSPHOROUS	POUND	\$0.20
POTASH	POUND	\$0.19
LIME	TON	\$45.00
PESTICIDES		
	UNIT	AVERAGE COST
HERBICIDES ESTABLISHMENT	ACRE	\$21.11
INSECTICIDES ESTABLISHMENT	ACRE	\$126.67
FUNGICIDES ESTABLISHMENT	ACRE	\$274.45
HERBICIDES YEAR 1-5	ACRE	\$24.12
INSECTICIDES YEAR 1-5	ACRE	\$144.73
FUNGICIDES YEAR 1-5	ACRE	\$313.58
HARVEST LUGS	UNIT	\$10.75
FIXED COSTS		
	UNIT	AVERAGE COST
FERTILIZER APPLICATION	ACRE	\$6.90
DRILL SEED PLANTING	ACRE	\$17.30
PESTICIDE APPLICATIONS	ACRE	\$7.90
HAND TOOLS	UNIT	\$550.00
SAFETY EQUIPMENT	UNIT	\$250.00
IRRIGATION	ACRE	\$95.00
LAND CHARGE	ACRE	\$63.00
MACHINERY STARTUP COSTS		
		TOTAL COST
55-hp, 4-wd tractor w/ spray cab		\$30,000
4-wd pick-up truck		\$20,000
50-gal herbicide sprayer		\$2,700
300-gal airblast sprayer		\$12,500
5-ft rotary mower		\$1,600
Fertilizer spreader/broadcaster		\$1,500
Post driver		\$2,000
Auger		\$1,200
Trailer (harvest, etc.)		\$2,000

INPUTS

UNIVERSITY OF
MARYLAND
 EXTENSION
Solutions in your community

ESTABLISHMENT COSTS		
<i>TRESLLISING MATERIALS</i>	UNIT	QUANTITY
3"X4"X8' TREATED POSTS CCA	ACRE	150
5"X10' TREATED END POSTS CCA	ACRE	20
12.5 GAUGE ALUMINUM CLAD WIRE	FEET	4500
14 GAUGE ALUMINUM CLAD WIRE	FEET	5000
TIGHTENERS	UNIT	38
WIRE CRIMPING SLEEVES	UNIT	6
BAMBOO SUPPORTS	UNIT	1500
EARTH ANCHORS	UNIT	75
TAPENERS & VINE TIES	UNIT	2
<i>TRELLISING LABOR</i>		
FIELD PREPARATION (UNSKILLED)	HOUR	20
LAYOUT, DISTRIBUTE AND DRIVE POSTS (SKILLED)	HOUR	15
LAYOUT, DISTRIBUTE AND DRIVE POSTS (UNSKILLED)	HOUR	20
AUGER AND SET END POST (SKILLED)	HOUR	3
AUGER AND SET END POST (UNSKILLED)	HOUR	3
MARK LINE POST FOR WIRES (UNSKILLED)	HOUR	2
DRILL END POST FOR WIREVISES (UNSKILLED)	HOUR	4
INSTALL LINE POST STAPLES FOR WIRE (UNSKILLED)	HOUR	8
INSTALL END POST ANCHOR STURUCTURE (SKILLED)	HOUR	10
INSTALL BAMBOO STAKES (UNSKILLED)	HOUR	6
VINE PLANTING (UNSKILLED)	HOUR	55