



Horticultural Research, 1985--Overton

Research Center

T	ECHNICAL
R	REPORT

NO.

85-1

THE COSTS OF PRODUCING ROSE BUSHES
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October 1984

The growing of rose bushes in East Texas is a beautiful idea for many producers but as the following budgets suggest, there may be some less than beautiful financial requirements. The total cost per acre can be more than \$5,000.00 primarily spread over a three-year period. However, profits can be as high as \$6,000+ per acre for those who are willing to meet the challenge. The \$5,000.00 per acre cost is only an estimate based on the assumptions listed below, the costs and prices listed in the budgets and a set schedule of cultural practices and crop activities detailed within the budgets. An East Texas rose grower would want to use the "Your Estimate" blank to the far right of the budget pages to adjust the costs to reflect an individual operation. Simply fill in your own estimate of the cost of an operation if it is different from the printed cost. New totals can then be calculated based upon your own costs. A grower may want to delete from or add to the list of cultural practices and crop activities listed in these budgets. Also, included with these budgets are some relationships between percent loss and average costs per plant harvested, grade distributions and average prices, grade distributions and profit per plant, grade distributions and profit per acre, and selling and not selling No. 2's, all based on information generated from the budgets.

Assumptions

1. Land is left idle for four years prior to establishment.
2. No land or brush clearing is necessary.
3. Dolomitic limestone is available at \$25.00 per ton.
4. Machinery inventory was as follows:
 - 70 hp. tractor
 - 35 hp. tractor
 - shredder
 - cultivator
 - high-pressure sprayer
 - tandem disk
 - chisel plow
 - barring-off implement
5. No irrigation was assumed.
6. Fertilizer is 12-12-12 in 50-pound bags costing \$5.45 per bag.
7. Fungicide material is manzate at \$3.80 per bag, one bag per 100 gallons of water. Also, one ounce of spreader sticker per 100 gallons of water, costing \$7.00 per gallon. Fungicide solution applied at 300 gallons per acre.

TABLE I
ROSE ESTABLISHMENT

Variable Costs							Your
Month	Activity	Amount	Units	\$/Unit	Value		Estimate
August	Soil Test	1	Acre	1.40	1.40		
	Soil Disease Test	1	Acre	1.25	1.25		
	Disk	1	Acre	2.42	2.42		
	Lime	1.5	Tons	25.00	37.50		
	Chisel (2 times)	1	Acre	1.08	1.08		
September	Disk	1	Acre	2.42	2.42		
October	Disk	1	Acre	2.42	2.42		
November	Bedding	1	Acre	2.49	2.49		
November	Cut Budwood	20	Thousands	11.4	228.00		
December	Cut Understock	20	Thousands	40.00	800.00		
	De-eye	20	Thousands	4.85	97.00		
	Plant	20	Thousands	3.20	64.00		
	Operating Interest	34.77	Dollars	.14	4.87		
Total Variable Costs					1244.85		
Fixed Costs							
Depreciation, Interest, Ins. & Taxes							
Machinery					14.91		
Land-Cash Rent					165.25		
Total Fixed Costs					180.16		
Total Costs					1425.01		

Note: Operating interest was calculated as a total of the interest for each expenditure at 14 percent for the remainder of the calendar year.

Land-Cash rent is \$25/acre for four previous years compounded at 14 percent plus \$25/acre for the current year.

TABLE II
ROSES, 1ST YEAR

Variable Costs						Your
Month	Activity	Amount	Units	\$/Unit	Value	Estimate
January	Herbicide	1	Acre	10.00	10.00	
April	Barring-off	1	Acre	2.14	2.14	
	Raking Soil	9	Hour	4.00	36.00	
May	Budding Labor	20	Thousands	46.50	930.00	
	Budding Rubbers	10	Pounds	8.00	80.00	
June	Herbicide	1	Acre	11.30	11.30	
November	Cover Eyes	1	Acre	2.14	2.14	
December	Operating Interest	697.92	Dollars	.14	97.71	
Total Variable Costs					1169.29	
Fixed Costs						
Depreciation, Interest, Ins. & Taxes						
Machinery					6.62	
Land-Cash Rent					25.00	
Establishment Cost					1425.01	Dollars
Total Fixed Costs					231.12	
Total Costs					1400.41	

TABLE III
ROSES, 2ND YEAR

Variable Costs

Month	Activity	Amount	Units	\$/Unit	Value	Your Estimate
March	Barring-off	1	Acre	2.14	2.14	
	Raking Soil	9	Hour	4.00	36.00	
	Topping	1	Acre	138.00	138.00	
	Herbicide	1	Acre	10.00	10.00	
	Fertilizer (12-12-12)	300	Pounds	.109	32.70	
April	Top Mowing (2 times)	1	Acre	7.26	7.26	
	Fungicide (4 times)	1	Acre	50.84	50.84	
	Spraying (4 times)	1	Acre	20.24	20.24	
	Cultivate (2 times)	1	Acre	5.72	5.72	
	Fungicide (4 times)	1	Acre	50.84	50.84	
May	Spraying (4 times)	1	Acre	20.24	20.24	
	Cultivate (2 times)	1	Acre	5.72	5.72	
	Fertilizer	300	Pounds	.109	32.70	
	Weeding	18	Hour	4.00	72.00	
	Fungicide (4 times)	1	Acre	50.84	50.84	
June	Spraying (4 times)	1	Acre	20.24	20.24	
	Cultivate (2 times)	1	Acre	5.72	5.72	
	Suckering	1	Acre	5.00	5.00	
	Fungicide (4 times)	1	Acre	50.84	50.84	
	Spraying (4 times)	1	Acre	20.24	20.24	
July	Cultivate (2 times)	1	Acre	5.72	5.72	
	Weeding	18	Hour	4.00	72.00	
	Fungicide (4 times)	1	Acre	50.84	50.84	
	Spraying (4 times)	1	Acre	20.24	20.24	
	Cultivate (2 times)	1	Acre	5.72	5.72	
August	Suckering	1	Acre	5.00	5.00	
	Fungicide (4 times)	1	Acre	50.84	50.84	
	Spraying (4 times)	1	Acre	20.24	20.24	
	Cultivate (2 times)	1	Acre	5.72	5.72	
	Suckering	1	Acre	5.00	5.00	
September	Fungicide (4 times)	1	Acre	50.84	50.80	
	Spraying (4 times)	1	Acre	20.24	20.20	
	Cultivate (2 times)	1	Acre	5.72	5.72	
October	Fungicide (4 times)	1	Acre	50.84	50.84	
	Spraying (4 times)	1	Acre	20.24	20.24	
	Cultivate	1	Acre	2.86	2.86	
December	Harvest	15	Thousand	47.50	712.80	
	Operating Interest	486.99	Dollars	.14	68.18	

Total Variable Costs 1728.22

Fixed Costs

Depreciation, Interest,						
Ins. & Taxes					161.36	
Land-Cash Rent					25.00	
Establishment	1425.01	Dollars	.14	199.50		
1st Year	1400.41	Dollars	.14	196.06		
Total Fixed Costs					581.92	
Total Costs					2310.14	

TABLE IV

COST SUMMARY

<u>Cost Category</u>	<u>Value</u>	<u>Percent of Total Costs</u>
Land Preparation	\$ 50.98	1
Cut Budwood	228.00	4
Cut Understock	800.00	16
De-eye	97.00	2
Plant	64.00	1
Budding	1050.28	20
Topping	183.40	4
Weed Control	212.48	4
Suckering	10.00	---
Fertilizer	65.40	1
Fungicide Spraying	497.56	10
Harvest	712.50	14
Operating and Capital Interest	806.07	16
Fixed Machinery	182.89	4
Land Rent	175.00	3
Total Costs	\$5135.56	100

TABLE V

AVERAGE COST PER ROSE PLANT

<u>Percent Loss</u>	<u>Plants Harvested</u>	<u>Total Costs</u>	<u>Average Cost Per Plant Harvested</u>
25	15,000	\$5135.56	0.34
35	13,000	5040.56	0.39
44	11,200	4955.06	0.44
50	10,000	4898.06	0.49
60	8,000	4803.06	0.61

Note: Total costs are lower on a per acre basis due to lower harvest costs resulting from a higher percentage loss of bushes.

TABLE VI

THE EFFECT OF GRADES ON AVERAGE PRICES OF ROSE BUSHES

	Price	Percentage Distribution						
		A	B	C	D	E	F	G
No. 1	.90	15	20	25	30	35	40	45
No. 1½	.75	20	25	25	30	35	35	40
No. 2	.50	40	35	35	30	25	20	10
Culls	0	25	20	15	10	5	5	5
Average Price		.49	.54	.59	.65	.70	.72	.76
No. 2	0	.29	.37	.41	.50	.58	.62	.71
Difference		.20	.17	.18	.15	.12	.10	.05

Note: Percentage distribution of grades (A-G) are examples of possible distributions to illustrate the difference in production quality levels.

TABLE VII

PROFIT PER PLANT FROM ROSE PRODUCTION FOR VARIOUS COSTS AND PRICES

Average Price Per Plant	Average Cost Per Plant				
	\$0.61 (8 T/A)	\$0.49 (10 T/A)	\$0.44 (11.2 T/A)	\$0.39 (13 T/A)	\$0.34 (15 T/A)
Selling No. 2's					
\$0.49 (A)	-.12	.00	.05	.10	.15
\$0.54 (B)	-.07	.05	.10	.15	.20
\$0.59 (C)	-.02	.10	.15	.20	.25
\$0.65 (D)	.04	.16	.21	.26	.31
\$0.70 (E)	.09	.21	.26	.31	.36
\$0.72 (F)	.11	.23	.28	.33	.38
\$0.76 (G)	.15	.27	.32	.37	.42
Not Selling No. 2's					
\$0.29 (A)	-.32	-.20	-.15	-.10	-.05
\$0.37 (B)	-.24	-.12	-.07	-.02	-.03
\$0.41 (C)	-.20	-.08	-.03	.02	.07
\$0.50 (D)	-.11	.01	.06	.11	.16
\$0.58 (E)	-.03	.09	.14	.19	.24
\$0.62 (F)	.01	.13	.18	.23	.28
\$0.71 (G)	.10	.22	.27	.32	.37

Note: The average price per plant is based on grading percentage distributions (A-G) from Table VI.

The average cost per plant is based on percent loss from Table V.
T/A is thousand plants per acre.

TABLE VIII

PROFIT PER ACRE FROM ROSE PRODUCTION FOR VARIOUS COSTS AND PRICES

Average Price Per Plant	Average Cost Per Plant				
	\$0.61 (8 T/A)	\$0.49 (10 T/A)	\$0.44 (11.2 T/A)	\$0.39 (13 T/A)	\$0.34 (15 T/A)
Selling No. 2's					
\$0.49 (A)	-960	0	560	1300	2250
\$0.54 (B)	-560	500	1120	1950	3000
\$0.59 (C)	-160	1000	1680	2600	3750
\$0.65 (D)	320	1600	2352	3380	4650
\$0.70 (E)	720	2100	2912	4030	5400
\$0.72 (F)	880	2300	3136	4290	5700
\$0.76 (G)	1200	2700	3584	4810	6300
Not Selling No. 2's					
\$0.29 (A)	-2560	-2000	-1680	-1300	-750
\$0.37 (B)	-1920	-1200	-784	-260	450
\$0.41 (C)	-1600	-800	-336	260	1050
\$0.50 (D)	-880	100	672	1430	2400
\$0.58 (E)	-240	900	1568	2470	3600
\$0.62 (F)	80	1300	2016	2990	4200
\$0.71 (G)	800	2200	3024	4160	5550

Note: The average price per plant is based on grading percentage distributions (A-G) from Table VI.

The average cost per plant is based on percent loss from Table V.
T/A is thousand plants per acre.