PUBLICATIONS 1985



Horticultural Research, 1985--Overton

Research Center



THE TEXAS AGRICULTURAL EXPERIMENT STATION / Neville P. Clarke, Director / The Texas A&M University System / College Station, Texas

THE COSTS OF PRODUCING ROSE BUSHES Gerald C. Cornforth Extension Economist-Management - District 5 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 tandom 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

Management - District

Variable C Month	osts Activity	Amour	nt Units	\$/Unit	Value	Your Estimate
August	Soil Test	1	Acre	1.40	1.40	tuit
	Soil Disease Test	1	Acre	1.25	1.25	92 O.D.
	DISK	10 per	Acre	2.42	2.42	300
	Lime	1.5	Tons	25.00	37.50	band ada
	Chisel (2 times)	A	Acre	1.08	1.08	d:11
September	Disk	1. 1.	Acre	2.42	2.42	CLEW
October	Disk	daop 194	Acre	2.42	2.42	La .
November	Bedding	IAJOJ WS	Acre	2.49	2.49	051
November	Cut Budwood	20	Thousands	11.4	228.00	alf
December	Cut Understock	20	Thousands	40.00	800.00	Also
	De-eye		Thousands	4.85	97.00	bna
	Plant		Thousands	3.20	64.00	alb f
	Operating Interest	34.77	Dollars	.14	4.87	
Total Varia	able Costs				1244.85	
				•		
Fixed Costs	lor to establishment					
	ation, Interest, Wash					
Machin	nery				14.91	. E
Land-0	Cash Rent				165.25	4.
Total Fixed	1 Costs				180.16	

Total Costs

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.

1425.01

TABLE II

ROSES, 1ST YEAR

Sarring-off L Acre

Variable Costs

							Your
Month	Activity		Amoun	t Units	\$/Unit	Value	Estimate
January	Herbicide	Acre	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	Self
June	Herbicide	Acre	1	Acre	11.30	11.30	
November	Cover Eyes		10	Acre	2.14	2.14	
December	Operating Intere	st 69	97.92	Dollars	.14	97.71	

Total Variable Costs

(asmid 4) obio 1169.29 (asmid 4) gniverga (asmid 2) sitviilio

Depreciation, Interest, Ins. & Taxes			, times) , times)		
Machinery					6.62
Land-Cash Rent				ingicide travine	25.00
Establishment Cost	1425	.01	Dollars		99.50

Total Fixed Costs

1400.41

Total Costs

TABLE III ROSES, 2ND YEAR

ROSES I

Variable Costs

Month	Ac	tiv	ity	Amount	Units	\$/Unit	Value	Your Estimate
March	Barring-of	f		1	Acre	2.14	2.14	
	Raking Soi	1		9	Hour	4.00	36.00	
	Topping			1	Acre	138.00	138.00	non
	Herbicide			noA 1	Acre	10.00	10.00	Lanuar
	Fertilizer	(12	2-12-12	2) 300	Pounds	.109	32.70	
April	Top Mowing		times)		Acre	7.26	7.26	Trade
. 00	Fungicide		times)		Acre	50.84	50.84	
	Spraying	-	times)		Acre	20.24	20.24	
	Cultivate		times)		Acre	5.72	5.72	Nay.
May	Fungicide		times)		Acre	50.84	50.84	
	Spraying		times)		Acre	20.24	20.24	
	Cultivate		times)		Acre	5.72	5.72	SHEE
	Fertilizer			300	Pounds	.109		Amaron
	Weeding			18	Hour	4.00	72.00	
June	Fungicide	(4	times)		Acre	50.84	50.84	dawoaG
	Spraying	-	times)		Acre	20.24	20.24	
	Cultivate		times)		Acre	5.72	5.72	
	Suckering	(-	01mc0)	1	Acre	5.00	5.00	
July	Fungicide	(4	times)		Acre	50.84	50.84	Tener
oury	Spraying	-	times)		Acre	20.24	20.24	Contract of the
	Cultivate		times)		Acre	5.72	5.72	
	Weeding	(-	crineb)	18	Hour	4.00	72.00	
August	Fungicide	(4	times)		Acre	50.84	50.84	
nuguse	Spraying		times)		Acre	20.24	20.24	
	Cultivate		times)		Acre	5.72	5.72	
	Suckering	(2	cimes)	1	Acre	5.00	5.00	Parti
September	Fungicide	(1.	times)		Acre	50.84	50.80	a st
September	-		times)		Acre	20.24	20.20	1
	Spraying Cultivate		times)		Acre	5.72	5.72	
October		-	times)		Acre	50.84	50.84	
occoper 00	Fungicide		times)		Acre	20.24	20.24	1
	Spraying Cultivate	(4	cimes)	to0 10.8	Acre	2.86	2.86	
December				15	Thousand	47.50	712.80	8
December	Harvest	Tata			Dollars	.14	68.18	
	Operating :	Ince	erest	486.99	DOILAIS	• 14	00.10	12301
Total Varia	able Costs						1728.22	
Fixed Cost:	s 1400							Istal
Deprecia	ation, Inter	rest	Ξ,					
	& Taxes						161.36	
Land-Ca:	sh Rent						25.00	
Establi	shment		1	425.01	Dollars	.14	199.50	
1st Yea:	r		1	400.41	Dollars	.14	196.06	
Total Fixe	d Costs						581.92	
Total Cost	S						2310.14	

84

TABLE IV

- COST SUMMARY

Cost Category	Value	Percent of Total Costs
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	ote: Tetal cos
Fertilizer		gnidfuas-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 D

Percent

TABLE V

AVERAGE COST PER ROSE PLANT

Percent Loss	Plants Harvested	Total <u>Costs</u>	Average Cost Per Plant Harvested
25	15,000	\$5135.56	0.34
35	13,000 00.008	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

			Р	ercenta	ge Dist	ributio	on	
	Price	A	В	С	D	E	F	G
No. 1	.90	15	20	25	30	35	40	45
No. 1 ¹ / ₂	.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
	. 32							
No. 2	0	.29	.37	.41	.50	.58	.62	.71
Difference		.20	.17	.18	.15	.12	.10	.05
	50							

THE EFFECT OF GRADES ON AVERAGE PRICES OF ROSE BUSHES

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

The average price per plant is based on grading percentage dis butions (A=0) from Table VI.

87

PROFIT PER PLANT FROM ROSE PRODUCTION FOR VARIOUS COSTS AND PRICES

	0.0			Percentes		Ave	rage Cost	Per .	Plant	
Average Price Per Plant				\$0.61 (8 T/A)		\$0.49 (10 T/A)	\$0.44 (11.2 T/		\$0.39 (13 T/A)	\$0.34 (15 T/A)
				- 25	25	20	ex.		a a a a a a a a a a a a a a a a a a a	1
Selling	g 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
		N O								
Not Sel		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

			Ave	age Cost Per	Plant	
verage Price 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)
Sellin	g No. 2's	as benusio	They are c	rarod Arp W Bord	nder as	tenen
\$0.49	(A)	-960	0 100	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
	lling No. 2's					
				-1680	-1300	-750
	(B)			-784		
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

PROFIT PER ACRE FROM ROSE PRODUCTION FOR VARIOUS COSTS AND PRICES

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

\$0.71 (G) 800 2200 3024 4160 5550

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