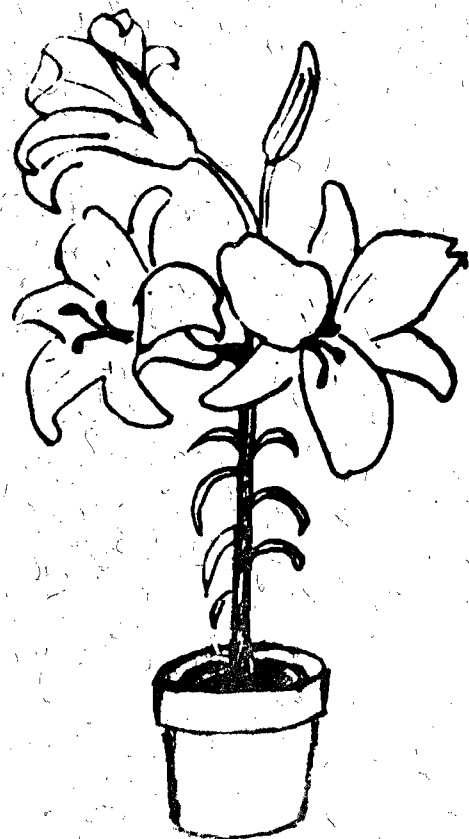


Sample Costs to Produce

EASTER LILY

BULBS

1966



AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF CALIFORNIA
HUMBOLDT AND DEL NORTE COUNTIES

INTRODUCTION TO
SAMPLE COSTS TO PRODUCE EASTER LILY BULBS

By

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Easter lily bulb production has developed in this area over the last twenty-five years. It is now the major agricultural endeavor in Del Norte County.

The yield in bulbs can be drastically influenced by weather and many other conditions in any given year, and with the rapidly changing technology these data are for the situation prevailing in 1966, and may not fit any single operation exactly.

The cost of producing lily bulbs is based on the production data listed on the following sheets -- that is a two-year planting left in place. Typically, actual farming operations contain a portion of the crop left in for two years, and a portion which is dug and replanted each year. A study of this latter cultural practice and its costs is being contemplated.

Also, typically, ten acres of land are required to rotate for each acre of commercial bulbs that are produced. These costs of land ownership or enterprises other than growing bulbs are not included in this study. Due to the wide variations in soil types and land conditions, some of the cultural practices used in this study will not apply to all production fields.

A committee of knowledgeable farm operators, with considerable experience in this type enterprise, has assisted in establishing these figures.

SAMPLE COSTS TO PRODUCE EASTER LILY BULBS

PRODUCTION DATA:

2 year planting (left in place)
 Typical yield 40,000 bulbs per acre -
 commercial size 6.5" and up, Ace variety

Labor: Common \$1.55
 Semi-skilled 1.85
 Skilled 2.50

Operation	Man hrs. per acre	Labor	Fuel & Repairs	Materials		Total
				Kind & Quantity	Cost	
<u>Cultural Costs</u>						
Rototill 3 x	6.0	15.00	33.60			48.60
Soil Insect.	.6	1.25	.95	BHC @ .40	1.20	3.40
Nematode Fumigant	1.0	2.50	1.70	Telone 40 gal.	64.00	68.20
Cultipack	1.0	2.50	1.20			3.70
Sub soil 2 x	3.0	7.50	5.55			13.05
Plow 2 x	2.0	5.00	4.00			9.00
Disk 6x	3.0	7.50	4.80			12.30
Landplane 4 x	2.0	5.00	3.70			8.70
Deep Till 3 x	1.5	3.75	2.78			6.53
Liming 2 m.	2.0	3.40	(1.20 (2.00	Lime 2 tons @ \$20.00	40.00	46.60
Fertilizer) Preplant)	.3	.75	.95	60# N @ 13¢	7.80	9.50
<u>Planting</u>				75,000 bulblets (Grower handling cost)	282.24	282.24
Driver, Tractor	4.0	10.00	5.20			15.20
Driver, Truck	4.0	10.00	8.00			18.00
Swamper, 2 M.	8.0	14.80				14.80
Fertilizer	.7	1.70	1.40	1,000# 6-20-20	38.68	41.78
Planters, 20 M.	80.0	124.00				124.00
Insecticide	1.5	3.75	1.73	Thimet 100# of 10%	27.00	32.48
Hilling 2 x	1.0	2.50	1.30			3.80
Weed Control	2.1	5.25	3.99	1 - Pre-emerg. 2 - Simazine (3# @ 3.70)	9.00 11.10	29.34
Handwork	96.7	150.00		(Where no chemicals, can cost up to \$600.00)		150.00
Fertilizer & Sidedress 2 x	2.5	5.00	2.30	(400# Am.Sulfate (400# 16-20-0	10.00 15.00	32.30
BALANCE CARRIED FORWARD						973.52

1b 4b 7b 7e + 5

Sample Costs to Produce Easter Lily Bulbs
 Work Sheet - June 1966 = Page 2

Operation	Man hrs. per acre	Labor	Fuel & Repairs	Materials		Total
				Kind & Quantity	Cost	
				Balance Brought Forward		973.52
<u>Foliar Sprays</u>						
Botrytis 20 x	10.0	25.00	19.00	(Manzate @ 1.05 (or (Bordeaux Spreader	(42.00) 45.00 5.00	94.00
Add. Insect. 4 x	2.0	5.00	3.80	Meta Systox	15.00	23.80
Disbud	16.0	24.80				24.80
Roguing 2 x	20.0	37.00				37.00
Cultivation 10 x	10.0	25.00	9.00			34.00
Irrigation 6 x (8.5 hr. 1.85) (8.0 hr. 1.55)	16.7	28.50		Pumping	15.00	43.50
Topping 3 M. (8.0 hr. 2.50) (4.0 hr. 1.55)	12.0	26.20	22.80			49.00
Mole & Gopher	7.0	12.95		Poison & Traps	.60	13.55
TOTALS		565.60	140.95		586.62	1,293.17
2nd YEAR						
Hilling 2 x	2.0	5.00	2.60			7.60
Fertilize	1.5	3.75	2.03	1000# 6-20-20	38.68	44.46
Weed Sprays	2.1	5.25	3.99	1. IPC, Dinitro, Oil 2x Simazine 3# @ 3.70	9.00 11.10	29.34
Thinning, Hand Weeding	129.0	200.00				200.00
Foliar Sprays (Botrytis 20 x)	10.0	25.00	19.00	Bordeaux - Spreader -	45.00 5.00	94.00
(Insect. 4 x)	2.0	5.00	3.80	Meta Systox	15.00	23.80
Fertilizer - Side dress	2.50	6.25	2.88	400# Am. Sulfate 400# 16-20	10.00 15.00	34.13
Roguing 4 x	56.0	103.60				103.60
Disbudding	40.0	62.00				62.00
Cultivating 10 x	10.0	25.00	9.00			34.00
Irrigating 7 x (10 x 1.55) (9.5 x 1.85)	19.5	33.23		Pumping	17.00	50.23
Mole/Gopher	7.0	12.95		Poisons & Traps	60	13.55
TOTALS		487.03	43.30		166.38	696.71

Sample Costs to Produce Easter Lily Bulbs
 Work Sheet - June 1966 - Page 3

Operation	Man hrs. per acre	Fuel & Repairs		Materials		Total
		Labor		Kind & Quantity	Cost	
<u>Cultural Costs</u>						
1st Year		565.60	140.95		586.62	1,293.17
2nd Year		487.03	43.30		166.38	696.71
TOTAL CULTURAL COSTS		1,052.63	184.25		753.00	1,989.88
<u>Harvest Costs:</u>						
Field box handling	4.0	7.40	8.00			15.40
Boxes to shed 3 M.	24.0	37.20	16.00			53.20
Hand Topping	64.0	99.20				99.20
Stem Handling* 5 M.	10.0	19.80	2.60			22.40
Digging 9 M.	6.0		30.90			30.90
1 man @ 2.50	6.0	15.00)				
2 men @ 1.85	12.0	22.20)	-			93.00
6 men @ 1.55	36.0	55.80)				
Grading -	8.0		16.00			
2 men @ 1.85	16.0	29.60)				169.60
10 men @ 1.55	80.0	124.00)				
Packing				(Peat-28 bales @ 3.35	93.80	
10 men @ 1.55	80.0	124.00)	-	(200 boxes @ 1.00	200.00	469.20
3 men @ 1.85	24.0	44.40)		(Nails, Tape/ac	7.00	
Stencil Load:						
2 men @ 1.85	16.0	29.60				29.60
Miscellaneous & cleanup - 1 Man @ 1.85	8.0	14.80				14.80
TOTAL HARVEST COSTS		623.00	73.50		300.80	997.30
TOTAL		1,675.63	257.75		1,053.80	2,987.18
Additional Fuel & Repairs			77.32**			77.32
TOTAL CULTURAL & HARVEST COSTS		1,675.63	335.07		1,053.80	3,064.50

BULBLET HANDLING COST						
Stem handling			1/2 commercial bulb harvest cost			22.40
Picking	120.0	186.00				186.00
Box handling	1.5	2.78	2.25 Pickup	1.50		5.03
Washing	1.5		9.33			
4 men @ 1.55	6.0	9.30)				24.18
2 men @ 1.85	3.0	5.55)				
Hot Water & Dip	2.2		13.33 (6.06/hr boiler tank)			
1 man @ 2.50	2.2	5.50)	Fuel	5.00)		
1 man @ 1.85	2.2	4.07)	PCNB 15# @ 85¢	12.75)		44.63
			Fermate 7.5# @ 53¢	3.98)		
TOTAL BULBLET HANDLING COSTS						282.24

*1/2 to bulblets handling costs.

**30% of fuel and repairs (or \$257.75) for adjustment from "Machinery Cost and Performance".

Compiled by A. D. Reed

UC Cooperative Extension

Sample Costs to Produce Easter Lily Bulbs
 Work Sheet - June 1966 - Page 4

Production data (continued)

Cash overhead

Fire Insurance, Interest paid, Misc., Office, Etc.	10% x \$3,064.50	\$ 306.45
Taxes - Land	\$1500 x .24 x .08 x 2 yrs.	57.60
Equip. & Personal Property	2274 + 2 x .24 x .08 x 2 yrs.	43.66
TOTAL CASH OVERHEAD		407.71
TOTAL CASH COST		3,472.21
Management - Charge per acre		460.00

<u>Investment</u>	<u>Per Acre</u>	<u>2 Year Crop Cost (x 2)</u>		
		<u>Depreciation</u>	<u>Interest</u>	
Land	1,500.00	---	90.00	
Irrigation System	273.00	10.22	8.19	
Buildings	520.00	17.34	15.60	
Equipment	2,274.00	227.40	68.22	
Annual Total		254.96	182.01	
Total	4,567.00			
	2 Year Total	509.92	364.02	\$ 873.94
TOTAL COST PER ACRE				\$ 4,806.15

Item	Cost	Annual use (Acres)	Cost per Acre	Life (yrs)	Depreciation	Interest	Cash Costs per Hour		
							Fuel	Repairs	Total
1 Wheel Tractor 50 HP	\$6,300.00	30	210	10					1.45
2 Wheel Tractors 35 HP	8,000.00	30	267	10					1.10
1 Wheel Tractor 35 HP	4,000.00	150	27	10					
1 Wheel Tractor 25 HP	3,100.00	150	21	10					
1 Wheel Tractor 25 HP	3,100.00	30	103	10					.90
1 Wheel Tractor 20 HP	3,000.00	30	100	10					.80
1 Wheel Diesel 80 HP	10,000.00	30	333	10					1.60
Sprayer - 300 gal.	2,000.00	30	67	10					.80
Land Plane 10 x 30	1,250.00	150	8	10					.40
Plow 2-16 2-way	700.00	150	5	10					.40
Rototiller	2,400.00	30	80	10			\$3-5		4.00
Disk 10' Tandem	800.00	150	5	10					.25
Disk 6'	600.00	30	20	10					.20
Spike Harrow 12'	300.00	150	2	10					.05
Cultiraker 10'	800.00	150	5	10					.10
Tiller 6'	700.00	30	23	10					.25
Fumigator 6'	600.00	30	20	10					.25
Subsoiler 6'	1,000.00	30	33	10					.25
Lime Spreader 10'	400.00	150	3	10					.10
Side Dress Attchment	450.00	30	15	10					.25
Planter - 2 row	300.00	30	10	10					.20
Cultivator Tool Box Att.	1,600.00	30	53	10					.10
1½ to 2 Ton Truck	800.00	150	5	10					2.00
1 Pickup	2,500.00	30	83	10					1.50
1 Used Pickup	1,000.00	150	7	10					1.50
1 Dump Trailer	1,200.00	30	40	10					.15
1 Digger	5,500.00	30	183	10			12%	\$660+180 hrs.	3.70
1 Hot Water Boiler & Tank	2,000.00	30	67	10			10%	200+ 33 hrs	6.06
1 Bulb Washer	1,400.00	30	47	10			10%	140+22.5 hrs	6.22
1 Grader	4,000.00	30	133	10			6%	240+120 hrs.	2.00
1 Peat Moss Shredder	250.00	30	8	10					
Roller Conveyors	1,000.00	30	33	10					
Misc. Equipment	1,000.00	30	33	10					
Shop Tools	3,000.00	150	20	10					
Fld Lug Boxes 4200 @ 1.25	5,250.00	30	175	10					
Trailer	600.00	30	20	10					
Hoist	300.00	30	10	10					
TOTAL	\$ 81,200.00		2,274.00		\$227.40	\$68.22			

Item	Cost	Annual use (acres)	Cost per acre	Life (yrs.)	Depreciation	Interest	Cash Costs Per Hour		
							Fuel	Repairs	Total
Land (30 acres)	45,000.00	30	1,500			90.00			
Packing Shed 80' x 80'	15,000.00	30	500	30	16.67	15.00			
Shop & Equipment Shed 20 x 100	3,000.00	150	20	30	.67	.60			
Total			520		17.34	15.60			
IRRIGATION									
Well 50' deep 30' lift 12" diam. Pump & Motor	800.00 1,200.00	30 30	27) 40)	20) 20)	3.35	2.01			
Pipe									
3", 27 lengths @ 40'=1080' @ 50¢	540.00	30	18)	15)					
4", mainline 1500' @ 70¢	1,050.00	30	35)	15)	6.87	6.18			
6", mainline to field 4000' @ 1.15	4,600.00	30	153)	15)					
Total	8,190.00		273		10.22	8.19			