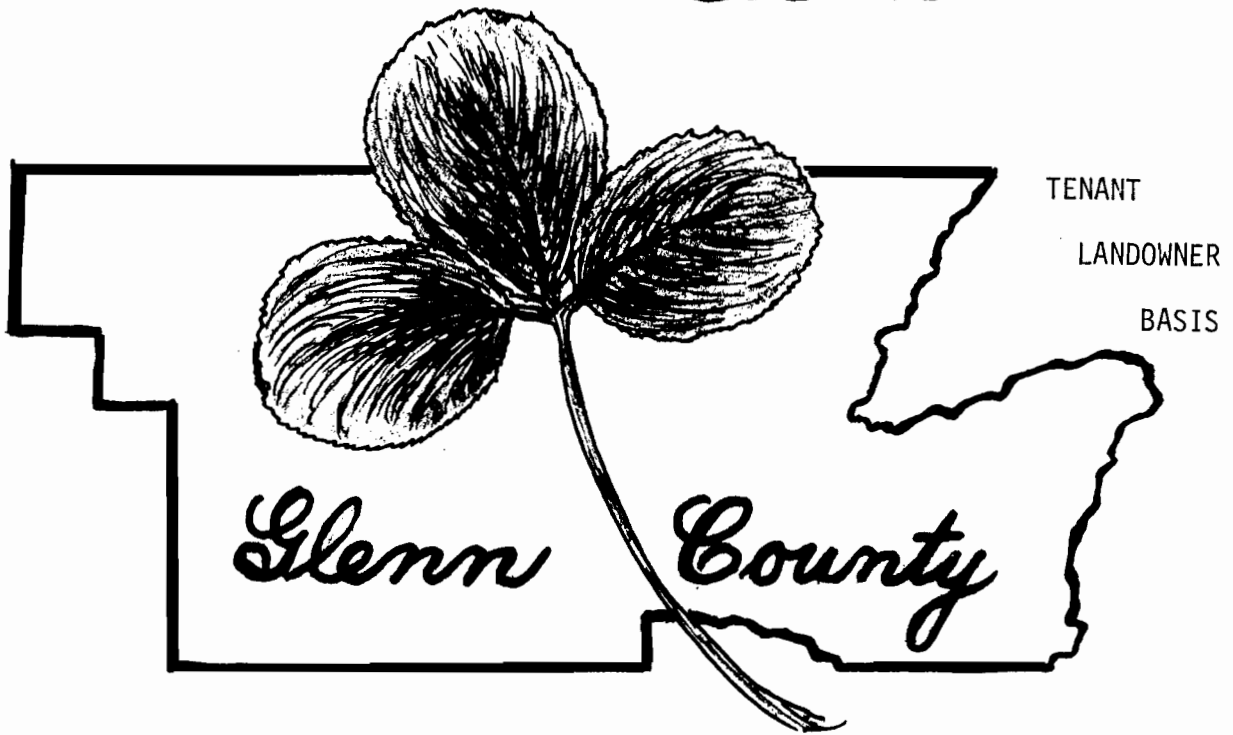


*Production Costs
for
Ladino Clover
Seed*



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SAMPLE COSTS TO ESTABLISH LADINO CLOVER SEED
Glenn County 1986

Labor rate 7.25 /hr. tractor operator
Labor rate 5.00 /hr. field labor

Operation	Hours per Acre	Labor	Fuel & Repairs	Materials & Application Kind and Quantity	Cost Per Applied Acre	Percent Acreage Treated	Average Cost Per Acre	Total Cost Per Acre
CULTURAL								
Burn *								
Irrigate 1x	.33	1.65		5 ac.in @ \$12.00/ac.ft	5.00	100	5.00	6.65
Fertilize ** (Phosphorous)				500 lbs (100 lbs. P205) Application Cost	37.13 4.50	100	37.13 4.50	41.63
Chisel 1x	.33	2.39	6.01					8.40
Disc 2x	.50	3.63	11.27					14.89
Laiser Level every other crop				Custom \$50/acre	50.00	50	25.00	25.00
Triolane 2x	.50	3.63	9.11					12.73
Make Levees Seed	.10	.73	.72	3 lbs/acre @ \$5.00/lb. Application by air	15.00 4.00	100	15.00 4.00	1.45 19.00
Irrigate (3x)	.99	4.95		10 ac.in @ \$12/ac.ft	10.00		10.00	14.95
Weed Control								
Winter	.07	.51	.42	Materials	26.20	100	26.20	27.12
Spring-1/2 acreage	.04	.25	.21	Materials	9.36	50	4.68	5.14
Misc. (*burning field, downtime, etc.)	.50	3.63	1.00					4.63
Interest on operating capital @ 12.5%								22.70
TOTAL CULTURAL COSTS		21.35	28.73					204.29

** Not all Ladino seed growers use phosphorous

SAMPLE COSTS TO PRODUCE LADINO CLOVER SEED
Gienn County 1966

Labor rate 7.25 /hr. tractor operator
Labor rate 5.00 /hr. field labor

Yield 425 pounds clover seed/acre

Operation	Hours Per Acre	Labor	Fuel & Repairs	Materials & Application Kind, and Quantity	Applied Cost Per Acre	Percent Acreage Treated	Average Cost Per Acre	Total Cost Per Acre
Cultural:								
Irrigate (3x)	.99	4.95		12 ac.in. @ \$12/ac ft	12.00	100	12.00	16.95
Herbicides in Fall								
Broadleaf	.07	.51	.42	Herbicide	2.59	100	2.59	3.51
Grass/Broadleaf	.07	.51	.42	Herbicide	26.20	100	26.20	27.12
Roll	.20	1.45	1.35					2.80
Herbicides in Spring								
Broadleaf: 1/2 acreage	.04	.25	.21	Material	9.36	50	4.68	5.14
Water Run: 1/2 acreage				Material	20.54	50	10.27	10.27
Removal of spring growth*								
Contact Herbicide:								
1/4 acreage	.02	.13	.10	Material	15.44	25	3.86	4.09
Cleanup Insecticide:								
1/2 acreage	.04	.25	.21	Material	3.52	50	1.76	2.22
Pre-emergence Herbicide:								
1/4 acreage	.02	.13	.10	Material	8.12	25	2.03	2.26
Pest Control 2x	.14	1.02	.83	2 Lygus sprays and 1.5 Spider mite sprays	40.24	100	40.24	42.09
Pollination				1 hive/acre	10.00	100	10.00	10.00
Irrigation Apr-Jul (10x)	3.33	16.65		48 ac.in @ \$12/ac.ft	48.00	100	48.00	64.65
Defoliate	.07	.51	.42	Material	15.00	100	15.00	15.92
Spot weed and Rodent control				Material	7.50	100	7.50	7.50
Interest @ 12.5%								33.02
TOTAL PRE-HARVEST COSTS		26.35	4.06				184.13	237.55
HARVEST COSTS								
Harvest (direct combine)				Contract @ \$62/acre				62.00
Mow borders				Contract @ \$2/acre				2.00
Haul (40% cleanout basis)				708 lbs in dirt @ \$.20/cwt				1.42
Clean, sampling bags, etc (20% landlord contribution)				\$.125/lb on clean weight (425 lbs * 80%)				42.50
TOTAL HARVEST COSTS								107.92
Cash Overhead:								
Misc., office, etc. (88%)								27.64
Taxes								1.21
Rent 20% of 425 lbs/acre clean seed @ \$1.50/lb.								127.50
TOTAL CASH OVERHEAD COSTS								156.35
TOTAL CASH COSTS								501.82
Investment								
				Per Acre	Depreciation	Annual Cost Interest @ 12.5%		
Buildings and equipment				121.10	9.14	7.57		16.71
Establishment costs @ 33 1/3% based on 3 yr life of clover								68.10
TOTAL INVESTMENT COSTS								84.81
TOTAL COST PER ACRE - ANNUAL PULS ESTABLISHMENT COSTS								586.63
TOTAL COST PER POUND - ANNUAL PLUS ESTABLISHMENT COSTS (@425 lbs/acre)								1.38

* Removed as green chop returning some income or shredded which is a cost.
Procedure varies from field to field. For this study, no net income
or cost is included.

EQUIPMENT AND BUILDING LIST

Interest on capital is 12.5%

ITEM	ORIGINAL COST	ANNUAL USE (ACRES)	COST PER ACRE	LIFE (YEARS)	---ANNUAL DEPREC- ATION	COST--- INTEREST AT 12.5%	REPAIR COST/ HOUR	FUEL COST HOUR
Tractors								
160 HP wheel diesel	65000	1000	65.00	15	4.33	4.06	5.41	10.40
70 HP wheel diesel	12500	1000	12.50	10	1.25	.78	1.25	4.55
Chisel, 12'	5000	1000	5.00	15	.33	.31	2.40	
Disk, offset, 14'	14000	1000	14.00	15	.93	.88	6.72	
Triplane, 14'	10000	1000	10.00	15	.67	.63	2.40	
Spiketooth harrow, 14'	2000	1000	2.00	10	.20	.13	.96	
Levee maker	3000	1000	3.00	15	.20	.19	1.44	
Shredder, 12'	10000	600	16.67	12	1.39	1.04	2.40	
Cultipacker, 14'	3500	1000	3.50	20	.18	.22	1.68	
Smooth roller, 14'	2000	1000	2.00	20	.10	.13	.96	
Spray rig (complete) SP	10000	600	16.67	15	1.11	1.04	4.00	1.95
Pickup	10000	1000	10.00	5	2.00	.63		
Pickup (used)	3000	1000	3.00	5	.60	.19		
2 Ton truck (used)	6000	1000	6.00	10	.60	.38		
Shop Building	25000	1000	25.00	30	.83	1.56		
Shop tools	7500	1000	7.50	15	.50	.47		
TOTAL COST	188500		201.83		15.23	12.61		
60% OF NEW COSTS	113100		121.10		9.14	7.57		

Cost of Producing Ladino Clover Seeds at Varying Yield

	POUNDS PER ACRE				
	300	425	500	600	700
Cultural costs	237.55	237.55	237.55	237.55	237.55
Harvest cost	95.00	107.92	115.67	120.00	136.33
Cash overhead	117.81	156.35	179.47	209.81	241.12
Total cash cost	450.36	501.81	532.68	567.36	615.00
Investment cost	84.81	84.81	84.81	84.81	84.81
Total cost	535.17	586.62	617.49	652.17	699.81

Income Above Cash Costs at Varying Yields & Prices

\$/lb.	POUNDS PER ACRE				
	300	425	500	600	700
1.40	-30.36	93.19	167.32	272.64	365.00
1.50	-.36	135.69	217.32	332.64	435.00
1.60	29.64	178.19	267.32	392.64	505.00
1.70	59.64	220.69	317.32	452.64	575.00
1.80	89.64	263.19	367.32	512.64	645.00

Income Above Total Costs at Varying Yields & Prices

\$/lb.	POUNDS PER ACRE				
	300	425	500	600	700
1.40	-115.17	8.38	82.51	187.83	280.19
1.50	-85.17	50.88	132.51	247.83	350.19
1.60	-55.17	93.38	182.51	307.83	420.19
1.70	-25.17	135.88	232.51	367.83	490.19
1.80	4.83	178.38	282.51	427.83	560.19

BASIS OF LADINO CLOVER SEED COST STUDY

1. This cost study is based on a 1,000 acre field crop operation with 200 acres of Ladino seed. Other crops grown on the acreage on rotation with clover seed might include small grains, grain hay, grain sorghum, field corn, etc. The equipment listed for this study is considered a fixed cost and is charged against the entire 1,000 acres. Irrigation is based on underground pipe and valves.

This cost study is figured on a tenant-landowner basis with the landlord receiving 20% of the gross crop return of clean seed. The landlord contributes 20% to the cost of seed cleaning, sampling and bagging.

The cost study includes a cost to establish the stand and the production costs for a one year period of an established stand. The clover is planted in the fall and the first year seed harvest made the following summer. The annual production cost in this study represents a second or third year production cost. In the cost study, the establishment costs are shown separate and 33 1/3% (3 year life) of the cost of stand establishment is added to the annual cost to obtain a total annual cost. Seed is produced on some Ladino clover plantings for a 4 year period when stands remain adequate and relatively clean. In such cases the cost of stand establishment could be spread over a 4 year period.

The yield basis for the crop is 425 lbs. of clover seed per acre. While this yield of Ladino clover may be above the normal average Ladino seed yield in Glenn County, the level used is perhaps a reasonable goal for growing Ladino for seed. An estimated price of \$1.50 per pound is used for this study. Returns for different varieties will vary and the \$1.50 per lb. used in the cost study is at best an estimate taking into consideration current situations. Consult contracting companies should you have interest in price outlook for Ladino clover seed.

The cultural, pesticide and fertilizer inputs into the production of Ladino seed vary considerably from grower to grower and field to field. While a field can produce certified seed for four years, weed conditions may reduce this period one or more years. The inputs used in this cost study serve as only a sample or guide; variation as to cultural inputs can be significant.

In discussion with growers assisting with this cost study it was decided to use contract price for direct combine harvest. If a grower is doing his own harvesting, equipment to carry out this operation would need to be inventoried accordingly and labor, fuel and repairs, depreciation, interest, etc. determined as a cost of production.

2. In allocating the equipment cost per acre the following calculations were made: (a) "Original Cost" of equipment is the new cost including sales tax. (b) "Depreciation" is the new cost per acre divided by the years of life. The new cost per acre is figured as the new cost per acre divided by the acres the

equipment will be used on. (c) "Interest" on investment is figured as one-half of the new cost per acre multiplied by $13\frac{1}{2}\%$. One-half of the new cost is the average value of the equipment during its useful life. (d) The investment per acre used in the cost study is calculated at 60% of the depreciation and interest costs for all equipment to reflect a mix of the new and used equipment.

3. Miscellaneous expenses are calculated at 8% of the total cultural and harvest costs. They include such costs as insurance on equipment, use of pickup truck, office, liability insurance, operation of pickup, road preparation, road maintenance, etc.
4. Labor costs are based on a \$7.25 hourly rate for skilled labor and \$5.00 hourly rate for irrigators. Included are cash wages, compensation insurance, Social Security, unemployment insurance, and other benefits that the employer might pay.
5. Payment for the crop is extended over several months. An 11.5% interest rate for operating monies is extended over a six month period.
6. These estimated costs to produce Ladino clover seed does not attempt to represent the cost of any one individual grower. However, growers may base their decisions as to which crops to grow by comparing cultural and harvest costs for specific crops with estimated gross income from crops. This cost study should assist in this aspect of decision making as well as related investment and other fixed costs.
7. Operations and cost vary and growers are encouraged to compare individual costs with this study which in turn should assist with budget questions as well as evaluate cost-income relationship with Ladino clover seed.
8. Several Glenn County Ladino seed producers assisted in furnishing information for this study. Appreciation is expressed to these growers. Input from other sources is also acknowledged and appreciated.

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