

CORN SILAGE

SAMPLE PRODUCTION COSTS FOR THE SAN JOAQUIN VALLEY

1961

This sheet is for use as a guide in determining corn silage inputs and costs for a specific set of conditions. It is designed to help growers analyze their practices with a view towards increasing efficiency of production. Along with similar sheets on other crops, it also can be used as a basis for making cost comparisons in choosing the most profitable alternatives. The figures in the tables are not intended to represent average costs for corn silage production in the San Joaquin Valley. Yields and costs may vary widely between individual situations.

Prepared by Farm Advisors G. H. Voskuil, W. B. Hight, E. A. Libra, R. N. Eide, E. A. Yearly, H. S. Etchegaray, M. J. Hogan, E. Olson, and Extension Economist B. B. Burlingame.

FARM & HOME ADVISORS OFFICE
Rm. 400 — County Administration Center
2555 Mendocino Avenue — LI 2-4312
Santa Rosa, California

University of California Agricultural Extension Service

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George B. Alcorn, Director, California Agricultural Extension Service.

**SAMPLE COSTS OF PRODUCING CORN SILAGE
(DOUBLE CROPPED) IN THE SAN JOAQUIN VALLEY - 1961***

COST ANALYSIS WORK SHEET

	COST PER ACRE	
	Sample Cost	Your Cost
Preharvest cash costs:		
Land preparation: disk, harrow, float, etc.—2 hours man and tractor	\$ 5.20	
Plant: 2 men and tractor—0.3 hours	1.19	
Seed: 16 lbs. @ 25¢	4.00	
Fertilize: contract	1.50	
Fertilizer: 100 lbs. N @ 10¢	10.00	
Cultivate: man and tractor—1 hour	2.60	
Irrigate: (1 pre and 5 crop) 5 manhours	6.75	
Water: pumping power—3 acre feet @ \$2.75	8.25	
Miscellaneous: 1 manhour, ½ tractor hour, material 50¢	2.48	
County taxes: 60% of \$7.50	4.50	
Office, car, interest on operating capital, etc.	2.50	
Repairs: irrigation system \$1.50, equipment \$1	2.50	
Total Preharvest Cash Cost	\$51.47	
Depreciation:		
Irrigation system: (original cost \$100) 75% of \$6	\$ 4.50	
Buildings: (original cost \$10—20 years life) 60% of 50¢	.30	
Tractor: 3.8 hours @ 60¢	2.28	
Other equipment: (cost \$25—10 years life) 60% of \$2.50	1.50	
Total Depreciation Cost	\$ 8.58	
Interest on investment @ 6%:		
Irrigation system: on ½ cost (\$50) x 75%	\$ 2.25	
Buildings: on ½ cost (\$5) x 60%	.18	
Tractor: 3.8 hours @ 25¢	.95	
Other equipment: on ½ cost (\$12.50) x 60%	.45	
Land: at \$700 x 60% (share for double crop)	25.20	
Total Interest on Investment	\$29.03	
TOTAL PRODUCTION COSTS EXCEPT HARVESTING	\$89.08	

Harvesting and Total Costs per Ton into Silo	COST PER TON	
	Sample Cost	Your Cost
Total cost except harvesting	\$ 4.05	
Chop, haul and pack—contract	3.00	
Cover material @ 16¢ per ton into silo	.16	
TOTAL COST OF PRODUCTION PER TON INTO SILO	\$ 7.21	

* Based on a yield of 22 tons per acre into silo. Man labor @ \$1.35 per hour, including Social Security and Compensation Insurance; medium tractor per hour cash cost \$1.25; depreciation 60¢; interest 25¢.

TOTAL COSTS PER TON INTO SILO AT VARYING YIELDS

Yield, tons per acre	15	20	25	30
Total cost per ton	\$9.10	\$7.61	\$6.72	\$6.13

Note: See following page for costs per ton on a fed basis

TOTAL SILAGE COST PER TON – FED BASIS
 With 20% loss – 22 tons per acre in and 17.6 tons fed

	COST PER TON	
	Sample	Yours
<u>Trench Silo</u>		
Depreciation, interest and upkeep on silo	\$.16	
Feeding	1.20	
Production cost (fed basis)	9.01	
Total Cost—Fed Basis	\$10.37	
<u>Self-Feeding Silo</u>		
Depreciation 50¢; interest 31¢; cash 10¢	\$.91	
Feeding	.15	
Production cost (fed basis)	9.01	
Total Cost—Fed Basis	\$10.07	

TOTAL COST PER TON – FED BASIS AT VARYING YIELDS

Yield, tons in	15	20	25	30
Yield, tons fed	12	16	20	24
Trench Silo Cost	\$12.74	\$10.87	\$9.76	\$9.02
Self-Feeding Silo Cost	12.44	10.57	9.46	8.72

COMPARING CORN SILAGE COSTS WITH OTHER FORAGE CROPS

The feeding value of corn silage in terms of total digestible nutrients is generally considered to be approximately one-third that of hay. In comparing corn silage costs with alternative forage crops, they usually should be figured on a fed basis. Thus, if corn silage were costing \$10 per ton fed, alfalfa hay at \$30 per ton fed would provide nutrients at an equivalent cost. However, the 3 to 1 ratio will not always hold true due to variations in quality of both silage and hay. This should be considered when making comparisons.

Losses in feed nutrients in the silo due to surface spoilage, fermentation and seepage greatly influence silage costs on a fed basis. Such losses may range from 10% or less to more than 35% depending on methods, type of silo and cover.

The sample costs on this sheet show production costs into the silo (including cover) at \$7.21 per ton. Total cost per ton on a fed basis, however, comes to over \$10 after adding silo overhead, feeding and allowing for a 20% loss.