

Corn Silage
San Joaquin Valley

TOTAL SILAGE COST PER TON - FED BASIS
With 16% loss - 25 tons per acre in and 21.0 tons fed

FOR BUNKER-TYPE SILO	COST PER TON	
	Sample	Yours
Cost into silo (25 ton yield basis).	\$ 8.82	\$
Adjustment for loss to 21 ton basis	1.41	
Depreciation, interest, and upkeep on silo	.30	
Feeding	.80	
TOTAL COST - FED BASIS (21 tons per A.)	\$11.33	

COST PER TON AT VARYING YIELDS

	20.0	25.0	30.0
Yield per acre, tons in	20.0	25.0	30.0
Yield per acre, tons fed	16.8	21.0	25.2
Cost per ton, into silo	10.42	8.82	7.75
Cost per ton - fed basis	13.19	11.33	10.09

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

Losses of 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 30%, depending on methods, type of silo, and cover.

The sample costs on this sheet show production costs into the silo (including cover) at \$7.45 per ton with a 25 ton per acre yield. Total costs per ton on a fed basis, however, comes to \$9.82 after adding silo overhead, feeding, and allowing for a 16% loss.

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SAMPLE COSTS OF PRODUCING OAT SILAGE - 1973^{1/}
 (DOUBLE CROPPED) IN THE SAN JOAQUIN VALLEY

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	COST PER ACRE	
	Sample Cost	Your Cost
Pre-Harvest Cash Costs:		
Land preparation: plow, disc, harrow, float, etc.- 2 hrs. man and tractor	\$ 8.40	
Preplant - fertilize: contract including 80 lbs. N - applied	11.00	
Plant: man and tractor .- 0.3 hours	1.26	
Seed: 100 lbs. @ 6¢	6.00	
Irrigate: (1 pre and 2 crop) 4 man hours	10.40	
Water: pumping power - 1½ acre feet @ \$5.00 ^{2/}	7.50	
Miscellaneous: 1 man hour, ½ tractor hour, material 75¢*	4.15	
County taxes: 40% of \$16.00 ^{2/}	6.40	
Office, car, interest on operating capital, etc.	6.12	
Repairs: irrigation system \$2.00, equipment \$2.00	4.00	
TOTAL PRE-HARVEST CASH COST	\$ 65.23	
Depreciation:		
Irrigation system: (cost \$160 - 16 years life) 25% of \$10	\$ 2.50	
Tractor: 3.8 hours @ \$1.30	4.94	
Other equipment & buildings: (cost \$40 - 10 years life) 40% of \$4.00	1.60	
TOTAL DEPRECIATION COST	\$ 9.04	
Interest on Investment at 7%:		
Irrigation system: on ½ cost (\$80) x 25%	\$ 1.40	
Tractor: 3.8 hours @ 66¢	2.51	
Other equipment & buildings: on ½ cost (\$20) x 40%	.56	
Land: at \$800 x 40% (share for double crop) ^{2/}	22.40	
TOTAL INTEREST ON INVESTMENT	\$ 26.87	
TOTAL PRODUCTION COSTS EXCEPT HARVESTING	\$101.14	

HARVESTING AND TOTAL COSTS PER TON INTO SILO	COST PER TON	
	Sample Cost	Your Cost
Total cost except harvesting	\$ 7.10	
Chop, haul and pack - contract \$2.50/ton	2.50	
Cover material @ 14¢ per ton into silo	.14	
TOTAL COST OF PRODUCTION PER TON INTO SILO	\$ 9.74	

1/ Based on a yield of 15 tons per acre into silo. Man labor \$2.60 per hour, including Social Security and Compensation Insurance; 50 h.p. tractor per hour cash cost \$1.60, depreciation \$1.30 and interest 66¢.

2/ Water costs will vary from nil in certain irrigation districts to over \$30 per acre in some areas. Annual county property taxes can range from \$8 to over \$20 per acre depending on the assessed value and tax rate. Interest at 7% on land values may be figured from \$36 to \$60 or more per year. It will be noted that 40% of the annual per acre costs for the last two items are charged to the oats and vetch for silage. See the table on the following page to adjust costs per ton for differences in costs per acre as shown in the above table.

Rented Land: Total costs per acre will usually be less on cash-rented land, because the rent paid generally will not cover taxes, other landlord costs, and allow a 7% return on the land value.

*If fertilizers other than Nitrogen, insecticides and herbicides are used these costs must be added.

Oat Silage
San Joaquin Valley

TOTAL SILAGE COST PER TON - FED BASIS
With 20% loss - 15 tons per acre in and 12.0 tons fed

For Bunker-Type Silo	Cost Per Ton	
	Sample	Yours
Cost into silo (15 tons yield basis)	\$ 9.74	
Adjustment for loss to 12.0 ton basis	1.95	
Depreciation, interest and upkeep on silo	.30	
Feeding	.80	
Total Cost -		
Fed Basis (12 tons per A.)	\$ 12.79	

COST PER TON AT VARYING YIELDS

Yield per acre, tons in	12	16	20
Yield per acre, tons fed	9.6	12.8	16
Cost per ton into silo	\$11.52	\$ 9.30	\$ 7.97
Cost per ton - fed basis	14.92	12.26	10.66
Increase or decrease for each \$10 change from sample costs			
Cost per ton into silo	+ .83	+ .62	+ .50
Cost per ton - fed basis	+ 1.00	+ .74	+ .60

COMPARING OAT SILAGE COSTS WITH OTHER FORAGE CROPS:

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

Losses of 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 30%, depending on methods, type of silo, and cover.

The sample costs on this sheet show production costs into the silo (including cover) at \$9.74 per ton with a 15 ton per acre yield. Total cost per ton on a fed basis, however, comes to \$12.79 after adding silo overhead, feeding, and allowing for a 20% loss.

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