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WHAT DOES IT COST YOU TO GROW ALFALFA SEED
IN THE RIVERSIDE COUNTY DESERT VALLEYS

(Based on Yield of 500⁰⁰ per acre and 3 tons of Hay)

TOTAL COSTS PER ACRE

ITEMS	Labor & Field Power	Materials	Total
<u>Pre-Harvest Costs</u>			
Renovate	\$ 2.00	\$ -	\$ 2.00
Fertilize P ₂ O ₅	1.00	8.00	9.00
Irrigate 12x	4.80	12.00	16.80
Spraying 2x.	2.00	8.00	10.00
Miscellaneous.	2.00	-	2.00
PRE-HARVEST TOTAL	\$11.80	\$28.00	\$39.80
<u>Harvesting - Hay Crop</u>			
Mow 3x	\$ 3.75	.....	\$ 3.75
Windrow 3x	3.75	.....	3.75
Bale \$4.00 per ton	12.00	.....	12.00
Haul & stack @ 8¢.	4.00	.....	4.00
HAY HARVEST TOTAL	\$23.50	.....	\$23.50
<u>Harvesting - Seed Crop</u>			
Spray--weed oil 15 gal	\$ -	\$ 3.00	\$ 3.00
Dinitro-1 pt.	-	1.30	1.30
Application.	1.00	.....	1.00
Combine (bulk)	10.00	.....	10.00
Bale & stack straw $\frac{1}{4}$ ton . . .	2.00	.....	2.00
Clean and haul.	4.00	.....	4.00
Sacks 4 @ 90¢.	-	3.90	3.90
SEED HARVEST TOTAL	\$17.00	\$ 7.90	\$24.90
CASH OVERHEAD TOTAL	\$10.00	.....	\$10.00
Depreciation (3 yrs)	\$11.00	.....	\$11.00
TOTAL CASH COSTS	\$73.30	\$35.90	\$109.20
<u>Other costs to be added</u>			
Land rent or interest. . . . .	-	.....	\$40.00
Management--estimate your own	-	.....	.....

TOTAL COST OF SEED CROP PER ACRE

Spraying	10.00
Depreciation.	5.30
Combine	10.00
Clean & haul	4.00
Bale & haul straw.	2.00
Sacks	3.60
Fertilize 50%.	4.50
Bees (3 colonies).	9.00
Irrigate 25%	4.20
Miscellaneous 25%. . . . .	.50
Cash Overhead 50%.	5.00
Depreciation	5.50
TOTAL CASH COSTS	\$63.60
CASH COSTS PER CWT.	\$12.72

TOTAL COST OF HAY CROP PER ACRE

Mow and windrow	\$ 7.50
Bale	12.00
Haul & stack.	4.00
Irrigate 75%.	12.60
Fertilize 50%	4.50
Miscellaneous 75%	1.50
Cash Overhead 50%	5.00
Depreciation	5.50
TOTAL CASH COSTS	\$52.60
COSTS PER TON.	\$17.53

The above sample costs are based on commercial or contract rates and average yields and were developed with the help of growers in the area. Costs will vary widely--compute your own costs by filling in the last two columns. UC Cooperative Extension

ALFALFA SEED PRODUCTION
DESERT VALLEYS OF RIVERSIDE COUNTY

Yields of 800 or more pounds of alfalfa seed plus three tons of hay per acre per year are possible in the Palo Verde Valley under careful management.

VARIETIES: Common alfalfa is the most general variety but the certified varieties such as California Common 49, Caliverde, Ranger, Atlantic, and Buffalo can be produced providing the field is 500 feet from all other alfalfa and has been out of alfalfa for two previous years during which time all volunteer alfalfa plants have been removed (consult farm advisor for full certification details and for pre-planting inspection).

METHODS: The solid stand or border check method is preferred in the desert area except for varieties in which foundation seed stocks are in short supply in which case the row method of production is used. Under the border check method, the operation is similar to handling hay except the field is allowed to bloom and go to seed after 2 to 3 hay cuttings. The row method is handled similarly except that cultivation and furrow irrigation are used. Field should be planted in the fall (25 $\frac{1}{2}$ per acre for border check, 1-1 $\frac{1}{2}$ pounds per acre for row method).

FERTILIZER: In areas where the soil is phosphate deficient, applications of 60-80 pounds per acre of actual phosphate are advised (i.e. 130-175 pounds of treble superphosphate per acre). Properly inoculated alfalfa supplies its own nitrogen.

INSECTS: Lygus bugs, mites, stink bugs, and several species of caterpillars are the most destructive insects. Applications of toxaphene at 3 pounds per acre, or DDT at 1 $\frac{1}{2}$ to 2 pounds per acre as spray or dust will control lygus bugs and caterpillars. Sulphur should be incorporated in all dust applications as a knockout for the Atlantic spider mite, and as a depressant for other mite species. Stink bugs require 6 to 8 pounds of toxaphene as a spray or dust. If mites become a serious problem, applications of 3% aramite dust at 35 pounds per acre or systox @ 6 to 8 oz. per acre as a spray should give a satisfactory control.

POLLINATION: For maximum seed yields, 3-4 stand strength colonies (hives) of bees should be placed in groups 600 feet apart in the field. A standard strength colony contains 5 frames of brood (young undeveloped bees) and a cluster of bees covering 15 frames by July 1. Insecticide application should be made only in the early morning and late evening when bees are not actively working bloom.

HARVEST: The seed crop may be prepared for thrashing by windrowing or by drying the field with weed oils. Because of high velocity winds in the desert area many fields are handled by the oil method - usually 10-20 gallons per acre of a commercial weed oil fortified with $\frac{1}{2}$ pint dinitro general. In oil dried fields direct combining is practiced, preferably with a ground driven pick-up reel attachment. On windrowed fields the thrasher should have a ground driven pick-up attachment.

AVERAGE PRICE RECEIVED BY CALIFORNIA PRODUCERS PER CWT: (Includes common & certified)

1949	1950	1951	1952	1953	1954	1955
27.20	25.60	39.90	36.50	25.20	35.00	23.00

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