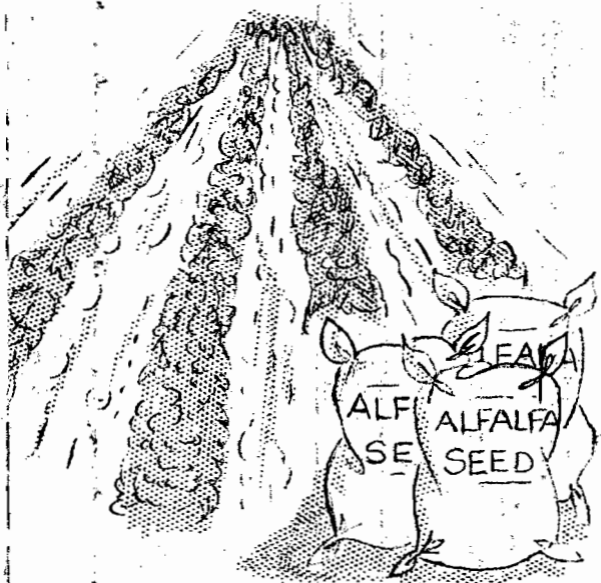


bed planted
alfalfa seed
sample costs
and
production



Cooperative Agricultural Extension
University of California
Imperial County
Court House, El Centro

Cost Data Sheet No.24

BED PLANTED ALFALFA SEED--PROJECTED PRODUCTION COSTS

Mechanical operations at custom rates. Labor at \$4.50 per hour (\$3.70 plus Social Security, unemployment insurance, and fringe benefits).

Yield - 700 pounds clean seed, double cropped - 2 tons hay and 2 pasturings.

OPERATIONS	Custom Rate	MATERIALS		HAND LABOR		SAMPLE COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Plow or subsoil	\$15.75					\$ 15.75
Disc 2x	5.50					11.00
Build and break border	9.00					9.00
Flood		Water .3 ac ft	4.00	1.9	4.25	8.25
Disc 2x	5.00					10.00
Fertilize	3.75	200# (0-45-0)	18.00			21.75
Float						
List	6.50					6.50
TOTAL LAND PREPARATION						37.25

COST OF ESTABLISHMENT

Plant	8.00	Seed 1-2 lbs. ^a	4.00			12.00
Irrigate 2x		Water .3 ac ft	4.00	1.0	4.50	8.50
COST OF ESTABLISHMENT						\$ 20.50
TOTAL COST OF STAND ESTABLISHMENT						\$ 107.75

ANNUAL COSTS

Irrigate 16x		Water 6 ac ft	30.00	8.0	36.00	66.00
Cultivate 2x	6.00					12.00
Fertilize	3.75	200# (0-45-0)	18.00			21.75
Insect Control 7x	3.50	Insecticides	40.00			64.50
Bees 2x	11.00	3 colonies		1x =(33.00)		66.00 ^b
Defoliation 2x	4.50		10.50	1x =(15.00)		30.00
TOTAL ANNUAL COSTS						\$ 260.25

Land Rent (new lease)						125.00
Depreciation 1/3 on total cost of stand establishment						35.85
Cost Overhead - 10% of preharvest cost and land rent						42.11
TOTAL PREHARVEST						\$ 463.21

HAY HARVEST COSTS

Swather 2x	5.00	green chopping may be preferred				10.00
Bale 2 tons	8.00/ton	2 pasturing also return	\$35.00			16.00
Haul and Stack	.16/bales					5.76
TOTAL HAY HARVEST COST						\$ 31.76

SEED HARVEST & POST HARVEST COSTS

Combining 2x	25.00					50.00
Hauling	5.00/ton					1.75
Cleaning seed	3.50/cwt plus cost of bags					24.50
Bags	1.00/cwt					7.00
TOTAL SEED HARVEST & POST HARVEST COSTS						\$ 83.25
TOTAL ALL COSTS						\$ 578.22

Value of pasturing \$35 - 2x = \$70.00
 Value of hay \$80 - 2 tons = \$160.00
 Total \$230.00 -\$49.75 cost per lb.
 Total all cost \$578.22 less return 230.00 = \$348.22 seed cost

^a/ Plant heavier if soil is saline.

^b/ This is for twenty days at \$.50 per colony. For each extra colony-day add \$.50.

GENERAL INFORMATION: The average yields for non-certified alfalfa seed during the last five years has ranged from 240 to 415 pounds per acre with average selling prices ranging from \$.66 to \$1.06 per pound. Certified alfalfa seed yields over the last two years have ranged from 204 to 800 pounds per acre and selling prices ranged from \$.80 to \$1.50. A part of the certified seed is planted on beds. Yields of over 1,000 pounds per acre have been obtained in the Imperial Valley.

PLANTING DATES: Late September through November is the preferred time for plantings. Later plantings often result in poor germination. Spring plantings, if necessary, are suggested in February and March.

SEEDING RATES

Plant 1 to 2 pounds of seed per acre on double row 40 inch beds. (14" by 26"). Approximately 100,00 plants per acre have given good yields. This would mean a spacing of 3 inches between plants. Options for plant populations are: planting to a stand, random thinning or synchronous thinning.

VARIETIES

A number of non-dormant varieties are grown in Imperial County. Varieties that are resistant to the spotted alfalfa aphid, such as CUF 101, UC cargo and Mesa Sirsa, are recommended.

STARTING DATES

Double cropping alfalfa seed in the Imperial Valley requires an early starting date. This date in general, should be between the last of April and the first of May. The first seed crop avoids a part of the Lygus, stink bug and alfalfa seed chalcid infestations which build up from early spring till late fall when the weather breaks. The late crop maturing in September may be damaged by rain and seed chalcid.

IRRIGATION

Allow the plants to become slightly stressed for water up until the bloom period to prevent rank growth; after bloom begins, the plants should be irrigated no more frequently than necessary to prevent wilting and to help produce well filled seed pods. The flowers of a slightly stressed plant contain higher concentrations of nectar and are more attractive to bees. Tensiometers help to obtain a better irrigation. Call the Farm Advisor's Office for further information.

PEST CONTROL

Early crop control of Lygus is necessary and more important than later in the crop. Stink bugs can cause damage to maturing seed and should be controlled. See the Pest Control Recommendations for Imperial County Field Crops for more specific information on pests and control.

Control for the alfalfa seed chalcid has not proven successful and none is recommended.

POLLINATION

"Bees" are the only pollinators of any value on alfalfa. In Imperial County it is necessary to rely on honey bees because of a lack of sufficient solitary pollen collecting bees. Usually, at least 3 colonies of bees per acre

are used in the higher yielding fields.

Five or more colonies are suggested on seed fields with both high plant and flower populations.

HARVESTING

Most seed alfalfa is defoliated using a dinitro general spray applied by airplane at from 1 to 3 pints in 8 to 12 gallons of diesel oil per acre.

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