

# alfalfa

## sample costs and production



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

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Cost Data Sheet No. 1

UC Cooperative Extension

ALFALFA--SAMPLE PRODUCTION COSTS

Mechanical operations at custom rates. Labor at \$2.25 per hour (\$2.00 plus Social Security, unemployment insurance, and fringe benefits).

Yield - 7.3 tons per acre.

OPERATION	Custom Rate	MATERIALS		HAND LABOR		SAMPLE COSTS Per Acre
		Type	Cost	Hours	Dollars	
LAND PREPARATION						
Fertilize	\$1.25	0-45-0 (300#)	\$11.92			\$13.17
Plow	9.00					9.00
Disc 2x	2.50					5.00
Landplane 2x	3.00					6.00
Border	3.50					3.50
Float	2.00	(Corrugate 2.50)				2.00
TOTAL LAND PREPARATION						\$38.67

COST OF ESTABLISHMENT

Weed Control 2x	2.00	herbicide	11.00			15.00
Planting	3.00	20# seed @ 58¢	11.60			14.60
Irrigate (2-3x)		water 1 ac ft	2.30	1.0	2.25	4.55
Renovating & reseed (end of 2nd year)	6.00	20# seed @ 58¢	11.60			17.60
COST OF ESTABLISHMENT						\$51.75
TOTAL COST OF STAND ESTABLISHMENT						\$90.42

ANNUAL COSTS OF HAY PRODUCTION - 3 YEAR LIFE

Irrigate 16x		water 7 ac ft	16.10	8.4	18.90	35.00
Fertilize (waterrun)		200# 0-52-0	9.48			9.48
Insect control 3x	1.75	insecticides	6.00			11.25
TOTAL ANNUAL COSTS						\$55.73
Land Rent						\$55.00
Cash Overhead - 15% of preharvest costs and land rent						21.81
Depreciation - 1/3 on total cost of stand establishment						30.14
TOTAL PREHARVEST COSTS						\$162.68

HARVEST COSTS

Swather 7x	3.00					21.00
Rake 7x	1.00					7.00
Bale 7 tons @	4.25					29.75
Haul & stack	.11/bale					13.61
TOTAL ALL COSTS						\$234.04

Cost per ton = \$32.06

GENERAL INFORMATION

The average yields for alfalfa hay during the last five years have ranged from 6.1 to 7.0 tons per acre with average selling prices of \$26.50 to \$32.10 per ton.

SOIL PREPARATION

A uniform seed bed is a prerequisite to a good stand. High spots in the field cause an uneven germination irrigation and poor stands. A well drained field is also necessary to lessen the likelihood of salinity, scald, and root rot problems.

PLANTING RATES

One pound of seed per acre will provide 4 to 5 seeds per square foot. At this rate, 15 pounds are equal to 60 to 75 seeds per square foot. Growers use 15 to 30 pounds seed depending on condition of their field, cost of seed, method of planting and time of planting.

## PLANTING DATES

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

## VARIETIES

Certified Mesa Sirsa alfalfa is recommended because of its resistance to the spotted alfalfa aphid and its superior yielding ability. A number of commercial varieties also have good spotted alfalfa aphid resistance and are very good yielders.

## FERTILIZATION

Approximately 100 pounds of phosphate is taken from the soil by each 7-8 tons of alfalfa. This must be replaced to maintain maximum hay production. A preliminary application of at least 100-150 pounds of phosphate per acre is recommended prior to planting. On soil low in nitrogen 20 to 30 pounds of nitrogen stimulates seedling growth. A deficiency in nitrogen may occur on soils recently brought into production. Additional annual applications of 100 pounds of phosphate per acre should be applied.

## IRRIGATION

Two or three irrigations per cutting are necessary depending on the type of soil and time of year.

## WEED CONTROL

Broadleaf weeds can be controlled with 2,4-DB in seedling or established alfalfa. Winter annual grasses can be controlled with IPC granules. Consult Weed Control Recommendations - Imperial County.

## PESTS AND DISEASES

The spotted alfalfa aphid usually causes damage on nonresistant alfalfa. Control is sometimes necessary for Egyptian alfalfa weevil and pea aphid in February and March and the alfalfa caterpillar and beet armyworm in mid-to late summer. Occasionally cutworm outbreaks occur in fall and spring months. Root rot (*Rhizoctonia* and *Phytophthora*) also can be a severe problem. See the Pest Control Recommendations for Imperial County Field Crops for more specific information on pests and control.

## HARVESTING

Alfalfa is normally baled from March until October. During winter months both pasturing and green chopping are practiced. Both

pasturing and green chop may return from \$20 to \$40 per acre for the winter months. There is 20 to 30 percent of the alfalfa greenchopped annually.

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To simplify our information it is sometimes necessary to use trade names of products or equipment. No endorsement of named products is intended nor is criticism implied of similar products which are not mentioned.  
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