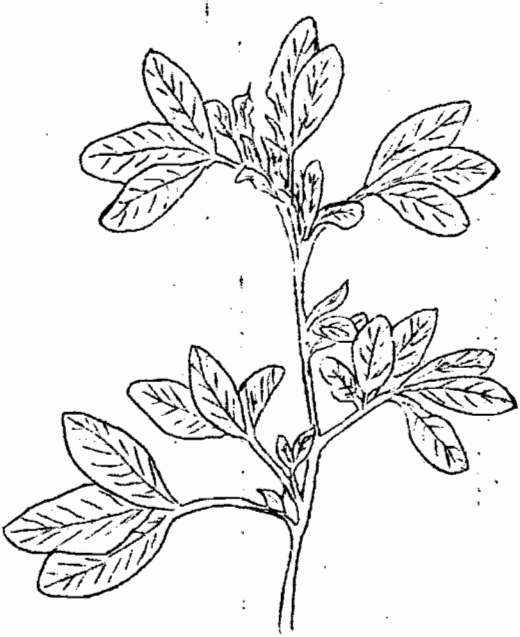
alfalfa

sample costs and production



Agricultural Extension Service
University of California
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Court House, El Centro

Cost Data Sheet No. 1

ALFALFA--SAMPLE PRODUCTION COSTS

Mechanical operations at custom rates. Hand labor at $1.90 per hour ($1.50 plus Social Security, unemployment insurance, and fringe benefits).

Yield based on 7 tons per acre.

OPERATION	Custom Rate	MATERIALS Type	MATERIALS Cost	HAND LABOR Hours	HAND LABOR Dollars	SAMPLE COSTS Per Acre
LAND PREPARATION						
Fertilize	1.00	0-45-0 (300#)	11.25			12.25
Plow	8.00					8.00
Disc 2x	2.00					4.00
Landplane 2x	2.75					5.50
Border (bucked)	3.50					3.50
Float or corrugate	1.75					1.75
TOTAL LAND PREPARATION						35.00
COST OF ESTABLISHMENT						
Weed Control	4.00	herbicide	11.00			15.00
Planting	3.00	20# seed @ 35¢	7.00			10.00
Irrigate 2x		water 1 acre ft	2.00	1.0	2.00	4.00
Renovating & reseed (end of 2nd year)	6.00	20# seed @ 35¢	7.00			13.00
COST OF ESTABLISHMENT						42.00
TOTAL COST OF STAND ESTABLISHMENT						77.00

ANNUAL COSTS OF HAY PRODUCTION - 3 YEAR LIFE

Irrigate 16x		water 8 acre ft	16.00	8.4	16.00	32.00
Fertilize	1.00	200# (0-45-0)	7.50			8.50
Insect Control 3x	1.50	insecticides	4.50			9.00
TOTAL ANNUAL COSTS						49.50
HARVEST COSTS						
Swather 6x	3.00					18.00
Bale (7 tons) @	4.25 per Ton					29.75
Haul & Stack	.10/bale					11.90
TOTAL ANNUAL HARVEST COSTS						59.65
Land Rent						50.00
Cash overhead 15% of above						23.87
Depreciation on stand 1/3 of cost of stand						25.67
TOTAL ALL COSTS						$ 208.69

Cost per ton = $27.81

SOIL PREPARATION

A uniform seed bed is a prerequisite to a good stand. High points 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.

VARIETIES

Certified Moapa or Sonora alfalfa are recommended because of their resistance to the spotted alfalfa aphid. Sonora is a newer variety which was released in 1963. Tests show it to be slightly higher in yield especially in winter and early spring. A few commercial varieties also look promising.

FERTILIZATION

Approximately 100 lbs. 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.

Additional annual applications of 100 pounds of phosphate per acre should be applied.

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.

PLANTING RATES

One pound of seed per acre will provide 4 to 5 seeds per square foot. At this rate, 15 lbs. are equal to 60 to 75 seeds per square foot.

Growers use 15 to 30 lbs. seed depending on condition of their field, cost of seed, method of planting and time of planting.

IRRIGATION

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

PESTS AND DISEASES

The spotted alfalfa aphid usually causes damage on non-resistant alfalfas. 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 severe problems.

See the Pest Control Recommendations for Imperial County Field Crops for more specific information on pests and control.

PESTICIDE RESIDUES

All precautions should be taken to produce hay without illegal pesticide residues.

Hay can be analyzed by the stack or load for residues.

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.

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.

Prepared by
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Agricultural Extension Service
Staff
Revised November 1966

Co-operative Extension work in Agriculture and Home Economics, College of Agriculture, University of California, and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. George B. Alcorn, Director, California Agricultural Extension Service.