

ALFALFA SEED

Sample

Costs of Production

Suggestions on Growing

University of California,
Farm and Home Advisor's Office
2610 'M' Street
Kern County
Revised May, 1965

About These Cost Data---

The costs of production in any agricultural enterprise will vary considerably from ranch to ranch. The input and cost data in this booklet are sample costs. They are intended to be used only as educational guides in assisting you to appraise and plan your own crop and livestock program.

These cost data do not represent industry averages.

SUGGESTIONS ON GROWING ALFALFA FOR SEED

By
Roy M. Barnes - Farm Advisor

LAND QUALIFICATIONS:

Ask for "Standards for Certified Seed in California", and "Can I Grow Certified Seed". These publications will furnish all the standards connected with producing certified seed.

SOIL REQUIREMENTS:

Soils that grow other crops will grow good alfalfa for seed.

VARIETY:

The most popular varieties for seed production are: Ranger, Buffalo, Atlantic, Vernal, Lahontan, Williamsburg, DuPuits, Cody, Moapa, Culver and several foreign varieties.

SEED TREATMENT:

Ordinarily, seed treatment will not be necessary.

PREPARATION OF SOIL AND PLANTING:

A well prepared seed bed is essential for a good stand. It should be firm and moist. A ring roller is excellent to firm a loose and open soil. Row planting is the general practice. Any convenient row width is satisfactory. Pre-irrigation is best to provide the desired moisture at planting time.

PLANTING RATE:

One pound per acre is sufficient when planting in rows. For solid seeding use about 10 pounds.

COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE ALFALFA SEED IN KERN COUNTY - Mature Stand - 1965

Based on man labor at \$1.20 and \$1.40 per hour; 35 H.P. wheel tractor cash cost per hour \$1.10; Depreciation \$.60; Interest \$.23

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**Burt B. Burlingame

| Operation | Hours Per Acre | Cash and Labor Cost Per Acre | | | | Sample Costs | My Costs |
|--|-----------------------------|------------------------------|--------------------------|--------------------------|-----------------|--------------|----------|
| | | Labor | Fuel & Repairs Equipment | Material and Other Costs | | | |
| Cultural: | | | | | | | |
| 1/3 - 1st yr. added costs | 1.7 | \$ 2.38 | \$ 1.10 | Seed 33¢; Water \$1.00 | \$ 1.33 | \$ 4.81 | |
| Irrigate: 4 times | 8.0 | 9.60 | 2.50 | Water: 2 1/2 ft. @ \$6 | 15.00 | 27.10 | |
| Pest Control: 1/ 3 times | | | | Material: | 15.00 | | |
| | | | | Application: | 6.00 | 21.00 | |
| Weed Control: | 16.0 | 19.20 | | | | 19.20 | |
| Renovate & Cultivate: 4 times | 1.6 | 2.24 | 1.76 | | | 4.00 | |
| Bee Rental: | | | | 3 Hives @ \$5.00 | 15.00 | 15.00 | |
| Taxes: | | | | | 12.50 | 12.50 | |
| Miscellaneous overhead: | | 2.60 | 1.10 | | 5.30 | 9.00 | |
| Total Cultural Costs | | \$36.02 | \$ 6.46 | | \$70.13 | \$112.61 | |
| Harvest: | | | | | | | |
| Defoliate: | | | | Defoliant: 1 qt. Dinitro | | | |
| | | | | + 15 gal. Diesel fuel | \$ 4.75 | \$ 4.75 | |
| | | | | Plane: | 3.25 | 3.25 | |
| Harvest: | | | | 500 lbs. @ 3¢ | 15.00 | 15.00 | |
| Haul: | | | | 500 lbs. @ \$3 per ton | .75 | .75 | |
| Seed Certification, cleaning and bags: | | | | | 9.25 | 9.25 | |
| Total Harvest Costs | | | | | | \$ 33.00 | |
| Total Cash and Labor Costs | | | | | | \$145.61 | |
| Cash and Labor Cost per lb. @ 500 lbs. Yield | | | | | | (29.1¢) | |
| <u>Costs at Varying Yields</u> | | <u>Investment</u> | <u>Per Acre</u> | <u>Annual Cost</u> | | | |
| <u>Pounds Seed Per Acre</u> | <u>Total Cost Per Pound</u> | | | <u>Depreciation</u> | <u>Interest</u> | | |
| 300 | 68.7¢ | Land | \$900.00 | | \$54.00 | | |
| 600 | 36.8¢ | Irrigation System | 200.00 | \$15.00 | 6.00 | | |
| 900 | 26.2¢ | Tractors 3.0 hrs. | | 1.80 | .69 | | |
| 1,200 | 20.9¢ | Equipment | 15.00 | 1.50 | .45 | | |
| | | Total | | \$18.30 | \$61.14 | \$ 79.44 | |
| TOTAL COST PER ACRE | | | | | | \$225.05 | |
| Credit for Hay or Pasture | | | | | | 9.00 | |
| NET COST OF SEED | | | | | | \$216.05 | |
| TOTAL COST PER LB. @ 500 LBS. YIELD | | | | | | 43.2¢ | |

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** Extension Economist

1/ Additional cost for spotted alfalfa aphid and/or mite control is \$5.00 to \$15.00 per application

PLANTING TIME:

Alfalfa for seed may be seeded either in early spring (February and March) or in the fall (November to December 1). Fall planting is favored over spring planting. Plants should have about six weeks growth to sustain heavy frosts.

PLANTING DEPTH:

Depth of seeding should not exceed 1 inch in the light soil or 3/4 inch in heavier soils.

FERTILIZATION:

Generally, in Kern County alfalfa does not require fertilization. In two or three areas in the county, however, tests have shown a phosphorus deficiency. If phosphate has proven profitable on other crops, then the application of phosphate would be profitable on alfalfa. 80 to 100 pounds of actual phosphate, in most cases, will be sufficient.

IRRIGATION:

Irrigations will depend upon the kind of soil and its ability to retain moisture. Over-irrigation will result in excess vegetative growth, which usually does not set seed. Water should be applied often enough to keep the plants in a healthy condition. Avoid late irrigation which may shatter seed from ripened pods and darken seed.

WEED CONTROL:

The presence of primary noxious weeds or an abundance of other weeds is the most common cause of field rejections. It is, therefore, important to keep fields free from weeds by

any method convenient to the grower. Planting fields for seed production when any noxious weeds are known to be present, or when the fields are badly infested with weeds in general, is not recommended.

POLLINATORS:

Domestic bees are necessary to trip the flowers. A good plan to follow is to place one strong hive per acre when the field is about 25% bloom, then an additional two strong hives per acre when the field is approaching 50% bloom. Space hives in groups over the field as nearly as possible 500 to 600 feet apart.

CONTROL OF HARMFUL INSECTS:

To produce high yields, the control of harmful insects is necessary. For detailed recommendations on insect pest control, call at the Kern County Farm and Home Advisors' Office for this publication.

HARVESTING:

Harvesting may be done either by windrowing, then threshing, or by combining direct. Either method is effective. Which to use will depend upon the rankness of growth and/or the amount of unripe pods. Most important is the proper adjustment and speed of the cylinder to avoid injuring the seed. Injured seed will not germinate. Such speeds and adjustments may be obtained at the Kern County Farm and Home Advisors' Office, 2610 'M' Street, Bakersfield.