

ALFALFA FOR SEED IN FRESNO COUNTY

Alfalfa seed has become an important crop in Fresno County. It has a definite place in crop rotations on diversified farms because of its soil building ability. Usually one and possibly two crops of hay can be harvested as well as a crop of seed during the year. This is particularly so for solid plantings since the hay crop of row plantings is relatively small. Straw remaining after seed harvest can also be used for feed provided proper applications of defoliant have been made. Certified seed may be produced provided certification requirements are met.

Soil Requirements: Alfalfa will do well on a wide range of soil textures once established, however, requires a good deep soil being only moderately tolerant to alkali or salts.

Irrigation: For maximum yields about four irrigations are required totaling about 2.5 to 3.0 acre-feet per acre. For varieties requiring later season seed set 3.0 to 3.5 acre-feet will be required.

Fertilization: Fertilization is not recommended. Tests with phosphate fertilization have not resulted in any response in seed yield. Studies are being continued.

Planting Recommendations: Row plantings should be seeded at a rate of 1 to 2 pounds per acre; solid plantings at 20 to 25 pounds per acre in either the fall or spring. Fall planting is done from September 15, to December 1; spring planting from February 1 to March 15. No significant difference in seed yield is obtained between solid and row plantings up to 40 inch row spacings. Row spacing is usually made the same as cotton plantings to facilitate cultivation without cultivator changeover.

Depth of planting will vary with moisture conditions but should not be over 1 inch. Row plantings in known woody fields are best made in the spring in order to cut down the cost of spring hand hoeing.

Pollination: Cross pollination is essential to the production of alfalfa seed and, other things being equal, the more pollinators there are on the blossoms, the greater will be the seed yield. About 2 or 3 colonies of bees per acre are required during the blossom period. Application of insecticides during bloom period should be made in early morning or late evening when bees are not active.

Defoliation: Defoliation is usually necessary, particularly for the late maturing crop and dense growths where direct combine harvesting is to be done. Materials are DiNitro and oil or endothal applied at rates of 10 gallons per acre. Fields are normally ready for harvest 2 to 3 days after application and subject to shatter from 7 to 9 days after application.

Harvest: Either direct combining or mowing and windrowing may be done. Proper harvester adjustment is critical to prevent seed losses. The harvest period is usually from August 15 through October.

Yields: Yields are very variable. With proper management average yields run 500 to 750 pounds clean seed per acre. Local varieties and Eastern Buffalo and Ranger will yield about the same, while Atlantic, Vernal, and Narragansett will average about 15% less. Yields vary from 200 to 1200 pounds per acre for the different varieties.

Jan/1955

WHAT WILL IT COST TO GROW ALFALFA SEED IN FRESNO COUNTY - MATURE STAND

Based on a yield of 500 lbs. of cleaned seed per acre - 1954
 Labor at \$.90 per hr. and light tractor at \$1.20 per hour

Sample Costs		My Costs	
Per Acre	Per Pound	Per Acre	Per Pound

LABOR COSTS:

Irrigation - 5 times - 6 man hrs.	\$ 5.40	
Pest control - dust by plane 2 times	3.00	
Weed control; hand work 16 man hrs. av. per year	14.40	
Renovating; 1/2 man & 1/2 tractor hours	1.05	
Harvesting; contract at 3 1/2¢ per lb.	17.50	
Hauling; at \$2.00 per ton	.50	
Total Labor Cost	41.85	8.4¢

MATERIAL COSTS:

Irrigation water; power to pump 2 1/2 - 3 acre ft.	6.25	
Dust material; 60 lbs. DDT at 10¢	6.00	
Sacks & twine; 6 at 90¢	5.40	
Total Material Cost	17.65	3.5¢

CASH OVERHEAD COSTS:

General expense	3.26	
County taxes	6.30	
Repairs, compensation ins. & misc.	2.00	
Bee rental	28.00	
Certified seed fees (inspection; bag fees, etc.)	2.75	
Total Cash Overhead Cost	42.31	8.5¢

TOTAL CASH, LABOR, & FIELD POWER COST

104.26 20.4¢

DEPRECIATION COSTS:

Stand; net cost end 1st yr. - 5 yr. life	6.00	
Irrigation facilities & other equipment	6.20	
Total Depreciation Cost	12.20	2.5¢

INTEREST ON INVESTMENT AT 5%:

Facilities & equipment \$53.50 av. avlue	2.68	
Land; at \$400	20.00	
Total Interest on Investment	22.68	4.5¢

TOTAL COST OF PRODUCTION

136.29 27.4¢

Credit for Value of Hay in Field 3/4 ton

16.00 3.2¢

NET COST OF PRODUCTION OF SEED

120.29 24.2¢