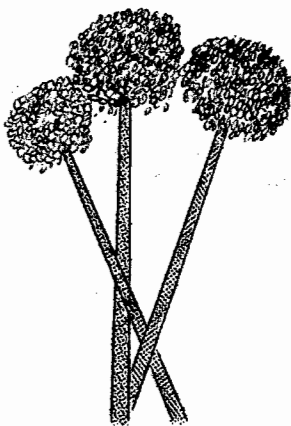


onion seed
sample costs
and
production



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

Cost Data Sheet No. 22

ONION SEED--SAMPLE COSTS AND PRODUCTION
(Based on custom rates and 300 & 800 lbs/acre)

ITEMS	SAMPLE COSTS		
	Per Acre	Per Pound @ 300#/A (Hybrid)	Per Pound @ 800#/A (Open Poll.)
LAND PREPARATION			
Plow 1x	8.00		
Disc 1x	2.00		
Landplane 2x	5.00		
Float 2x	3.50		
Border	1.00		
Irrigate 1x	2.00		
Knock down borders	.75		
Disc 2x	4.00		
Broadcast fertilizer	1.75		
List	2.50		
Ditching	.75		
TOTAL LAND PREPARATION	31.25	.10	.04
CULTURAL LABOR & FIELD POWER^{1/}			
Shape beds and plant	3.00		
Roll beds	1.25		
Cultivate &/or spike 2-5x	10.00		
Sidedress fertilizer 5x	10.00		
Weed control 2x	45.00		
Irrigation 12x	18.00		
Ditching & knocking down ditches	2.50		
TOTAL CULTURAL LABOR & POWER	89.75	.30	.12
MATERIALS			
Water 7 acre ft. @ \$4/sec. ft.	14.00		
Seed on exchange basis			
Fertilizer 200# N + 200# P ₂ O ₅	43.70		
Pollination 2 hives	8.00		
Insecticide 2x	6.00		
TOTAL MATERIALS	71.70	.24	.09
CASH OVERHEAD			
General expense (10% of the above)	19.30	.06	.02
LAND RENT	65.00	.22	.08
TOTAL CULTURAL COSTS	277.00	.92	.35

ITEMS	SAMPLE COSTS		
	Per Acre	Per Pound @ 300#/A (Hybrid)	Per Pound @ 800#/A (Open Poll.)
HARVEST COSTS			
Cut, spread & turn on canvas	175.00	.69	.29
Threshing	30.00	.12	.05
Transporting seed	2.00	.01	.01
TOTAL HARVEST COSTS	207.00	.82	.35
TOTAL ALL COSTS	\$ 485.00	1.6%	\$1.64
^{1/} Labor costs are based on \$1.00 per hour.			

GENERAL INFORMATION

Because of Imperial County's favorable climate, onion seed may be grown from either mother bulb-to-seed or seed-to-seed. The latter practice predominates. Supply and demand of seed determines which varieties are contracted out to growers by the seed companies.

Production and harvest costs fluctuate to great extremes being affected primarily by temperatures, weeds and winds which in turn affect the amount of required hand labor. During 1961-62 expenses were unusually high. Hand weeding costs often exceeded \$100 per acre. Where high winds blew over mature seed stalks, many additional man-hours were required for the hand harvesting operations. In addition, yields were reduced because seed in contact with the ground became unmarketable.

YIELDS

An average yield for most open pollinated (O.P.) varieties is 800 pounds. In favorable years under good management, yields have exceeded 1200 lbs. per acre. Hybrid varieties normally yield from 300 to 400 pounds per acre.

SOIL REQUIREMENTS

Medium-textured sandy loams are the most desirable types. Onions are shallow rooted and need a friable soil in which to easily expand and one which retains moisture about the roots. Avoid salty, hard, and weed-infested soils.

PLANTING

Onions need a well prepared seed-bed. Most acreage for O.P. seed

HARVESTING

During June the seed heads are cut off by hand, put into large bags, then spread out on canvases to dry. They should be turned daily to aid the drying. After threshing, the seed is further cleaned by the seed company.

dehydrator onions, seed onions are allowed to go dry during December and January in order to initiate bolting (seed stalk development). However, after irrigation is resumed the plants should not suffer for lack of water until it is withdrawn about 10 days from harvest.

WEED CONTROL

Weed control, particularly during cool, wet years may be the most expensive cultural operation. Some fields in 1961-62 cost well over \$100 per acre to hoe. Hand weeding and hoeing is still the common practice. Research is continuing on chemical weed control. For the latest information, consult your farm advisor.

PESTS AND DISEASES

Disease problems are presently unimportant. Thrips may cause damage. Extreme care on timing and application of materials must be used or damage to the tender seeds and death of bees will result. For the latest information on insect and disease control along with precautions on the use of insecticides, consult your farm advisor.

POLLINATION

The use of honeybees for pollination is a must. Two hives per acre have given good results.

is planted October 10 to 15 on beds with 40 to 42 inch centers, two rows per bed spaced 13 to 14 inches center to center. The seed is supplied by the seed company on a pound for pound exchange basis at harvest. This is planted shallow ($\frac{1}{4}$ to $\frac{1}{2}$ inch deep), 5 pounds per acre and is spread wide by using a scatter shoe.

Seedlings will emerge easier in soils which crust easily if the surface is kept wet until after emergence. Rows should run in a north-south direction.

FERTILIZERS

Although many growers use considerably higher rates, top yields have resulted from good management in using 100 to 200 lbs. of actual nitrogen per acre and about 200 lbs. P_2O_5 . Normally, 700 to 800 lbs. single superphosphate or 300 to 400 lbs. 11-48-0 are broadcast before listing. As the seed heads begin forming, about 50 lbs. per acre of phosphoric acid is applied in the water. Nitrogen is sidedressed twice usually as ammonium nitrate, followed by one or two applications of N (liquid or gas) in the water.

IRRIGATION

Onions are germinated by subbing the beds. Unlike market and

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