



# IRISH POTATOES

## COSTS & GENERAL HINTS ON PRODUCTION

University of California  
Agricultural Extension Service  
Kern County  
Revised January 1956

# Briefs on Growing Potatoes

David N. Wright - Farm Advisor

## SOIL REQUIREMENTS

Potatoes can be grown on a variety of soils, but like any other crop, thrive best on certain types. The most favorable soils for potatoes are fertile, well-drained and of rather loose texture.

## VARIETY

The majority of the potatoes grown in Kern County are of the White Rose variety. Other types grown in limited quantities include round, red varieties, predominantly Pontiac and some Bliss Triumph; processing varieties of which Kennebec predominates.

## SEED

Seed is certified by two agencies: The Kern County Seed Potato Growers' Association and the State of California, Department of Agriculture. Potato growers are advised to plant only certified seed to guard against unnecessary losses from seed-borne diseases.

## SOIL PREPARATION AND PLANTING

Prior to planting it is usually necessary to pre-irrigate, after which the ground is worked to prepare a fine seed bed. The potato planting machine makes the beds and plants the seed while placing the fertilizer, all in one operation. Usually the rows are spaced 32 inches apart. The seed is generally planted 6 to 8 inches below the top of the bed.

## PLANTING RATE

The amount of seed planted per acre will vary somewhat, depending on the number and spacing of the  
(Cont'd. on Page 3)

WHAT WILL IT COST TO GROW EARLY POTATOES IN KERN COUNTY?  
Revised December, 1955

1-56

Based upon a gross yield of 300 sacks per acre with 270 sacks marketable.  
Man labor at \$1.00 per hour, except when indicated otherwise.

David N. Wright\*

Burt B. Burlingame\*\*

Pre-harvest Labor and Material Costs:

Land preparation: includes Pre-irrig. prep.  
Cut and dip seed - 15 sacks @ 50¢  
Seed cost - 15 sacks @ \$3.50  
Plant and fertilize; 3 men and tractor - D-4  
Haul seed and fertilizer, 1 man  
Fertilizer  
Shape beds and cultivate  
Weeding  
Ditch work and Irrig. prep. - 2 men & tractor 1/2 hour  
Irrig. - including pre-irrig. - 12 man hours  
Water-power for 2-1/2 A. ft. - 200 ft. lift @ \$4.50  
Pest control - application 2 times  
Dust - DDT, etc. - 60 lbs. @ \$7.00  
Miscellaneous labor & materials - gyp., etc.  
Total pre-harvest labor, field power & material

Harvesting Costs:

Vine removal - Potobeating contract @ \$3.00/A.  
Digging - contract  
Picking - 300 Cwt. @ 14¢ (includes contractor)  
Hauling @ \$2.20 per ton up to 5 mi. haul  
Shed costs (includes field & market sacks) 270 @ 60¢  
Total harvesting cost

Cash Overhead Costs:

General expense (5% of labor & material costs)  
County taxes  
Miscellaneous repairs, insurance, etc.  
Total cash overhead  
Total cash, labor and field power costs

Depreciation:

Irrigation facilities (original cost \$200)  
Crop equipment (except tractors & harvesting) cost \$36  
Total depreciation

Interest on Investment @ 5%:

Irrigation facilities on 1/2 original cost - \$100  
Crop equipment on 1/2 cost - \$18  
Land at \$700  
Total interest on investment

Total gross costs of production  
Credit for 3000 pounds of culls

Net cost of producing 270 sacks market potatoes

\* Farm Advisor, Kern County

	Sample Costs	My Costs		
	Per Acre	Per Cwt.	Per Acre	Per Cwt.
\$ 13.00				
7.50				
52.50				
4.63				
1.50				
37.00				
5.00				
3.00				
1.90				
12.00				
11.25				
3.00				
5.40				
17.00				
\$174.68	\$ .58			
3.00				
11.00				
42.00				
33.00				
162.00				
\$251.00	\$ .93			
21.28				
6.25				
5.00				
\$ 32.53	\$ .13			
\$458.21	\$ 1.70			
15.00				
4.00				
\$ 19.00	\$ .07			
5.00				
.90				
35.00				
\$ 40.90	\$ .15			
\$518.11	\$ 1.92			
\$ 6.00	\$ .02			
\$512.11	\$ 1.90			

Production Costs for Renter Operator  
Paying Cash Rent of \$100 per Acre

Total Net Costs per Acre excluding taxes, irrigation facilities, overhead and re- pairs and interest on land	\$456.86
Cash rent \$100	<u>100.00</u>
Total Net Cost	\$556.86
Cost per Cwt. on 270 sacks market potatoes	\$ 2.06

Costs for renter operator paying 1/5 share of crop	54 sacks of mkt. potatoes
Pre-harvest labor	- \$174.68
Harvest costs less sacks and inspection for landlord's share	- 240.20
Cash overhead costs	- 26.28
Depreciation of crop equipment	- 4.00
Interest on crop equipment	- <u>.90</u>
Total Net Cost for producing 216 sacks	- \$446.06
Total Net Cost per Cwt. market potatoes	- \$ 2.06

(Cont'd from Page 1)  
eyes on the seed potatoes. Usually about 1500 to 1700 pounds per acre are adequate.

PLANTING TIME

Planting for the spring crop starts in the Edison district about the last week in November. In most of the rest of the county in the valley floor, planting begins in early January and is completed by March 1.

IRRIGATION

Potatoes require ample moisture throughout the growing period. Normally about 30 acre inches of water are required to produce an acre of potatoes.

After the plants have emerged from the ground when the irrigation season starts, the general practice is to irrigate alternate rows on alternate days.

### FERTILIZERS

Heavy applications of fertilizer are needed to produce a good crop of potatoes. Various mixtures are used, as well as simple fertilizers such as ammonium sulfate. In terms of units of nutrients, a general recommendation is 125 units of ammoniacal nitrogen. The response to phosphorus is quite variable in the different areas. In the general area north of Bakersfield, a small yield increase will result from up to 60 units of  $P_2O_5$ . South of Bakersfield in the Wheeler Ridge area, phosphorus is quite deficient. As much as 150 units of  $P_2O_5$  per acre have been profitably applied.

### CULTIVATION AND WEEDING

After planting but just before the shoots emerge, potato fields are cultivated to destroy the young weeds which may have started. The crust which may have formed is broken and the beds are shaped at the same time.

### HARVESTING

Potato harvest in Kern County is done mostly by contract. Mechanical diggers bring the potatoes to the top of the ground. They are placed in canvas "stub" sacks by hand and hauled to the packing shed where they are washed, graded and sacked.

### YIELDS

Average yield in Kern County is about 250 - 100-pound sacks per acre of marketable potatoes. Many growers achieve yields of 300 to 400 sacks per acre.