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IRISH POTATO PRODUCTION COSTS IN SAN BERNARDINO COUNTY

The Irish potato acreage in San Bernardino County has ranged from a high of 4000 acres in 1953 to a low of 2800 acres in 1959. Irish potatoes are adapted to the basin area of San Bernardino County. Fair yields have been obtained on the desert.

VARIETIES: White Rose is the main variety grown. There are a few plantings of different red varieties.

SOILS: Potatoes can be grown on a wide variety of soils. However, the best tuber formations and yields are obtained on loose textured soils such as loam and sandy loam. Soil should be well-drained and reasonably free of salt. Avoid soils high in alkali, and irrigation waters high in boron.

PLANTING: Depending on weather conditions, the spring crop is usually planted from March 1st to the middle of April for harvest in July.

SOIL PREPARATION: Except in dry years, no pre-irrigation is required for the spring crop. The ground is plowed or disked and worked into a fine seed bed condition. If pre-irrigation is required, it is usually done by sprinkler, leaving the beds flat. At planting time, the beds are made and seed pieces are planted at the rate of 1800 pounds per acre.

FERTILIZERS: Potatoes require heavy nitrogen applications for maximum production. One-half to two-thirds of the nitrogen should be applied at planting time and the remainder side-dressed when the plants are 8 to 10 inches high. The second application of nitrogen can be side-dressed 6 inches from the row and 3 inches to the side. From 180 to 240 pounds of actual nitrogen is usually sufficient in San Bernardino County. The ammoniacal nitrogen (ammonium form of nitrogen) is recommended. If phosphate is deficient, 80 to 120 pounds per acre will be required for maximum yield. Potassium deficiency occurs occasionally. If deficiency is suspected, at least 200 pounds of K_2O per acre should be side-dressed at planting time. A small amount of potassium has little value. Phosphate and potassium should be side-dressed just below and 2 to 3 inches from the side of the seed piece.

IRRIGATION: Potatoes require frequent irrigation. Some soils need irrigation every two to four days, depending on the weather. Do not allow potatoes to suffer from lack of moisture. Water should be available on call. A 'rule of thumb' is to use 4 acre feet of water per acre. Under sprinklers, the water requirement is less.

HARVESTING: Potatoes are usually dug, picked, hauled, washed, graded and sorted by contract operators. The digging and vine beating is occasionally done by the grower. Eighty to 90 per cent of the field-run potatoes are marketable. About 70 per cent of the field yield is usually number one grade.

INSECT AND DISEASE CONTROL: Wireworm - the soil should be treated with Aldrin (3 to 5 pounds of actual material) prior to planting. Other pests are tuber moth and nematode. To obtain latest recommendations, contact local farm advisors' office.

Scab - where scab is serious, rotation is necessary. Sometimes sulfur applied to the soil reduces scab infestation for crops planted eight to 12 months later but is impractical on high lime soils. Manure from cattle fed cull potatoes is one method of introducing scab to clean fields. Rhizoctonia - a soil fungus. Only known control is rotation. Alfalfa should not be directly followed by potatoes. Seed-borne diseases - many rots, mosaics, and wilts are introduced and spread through infected tubers used for seed. The only practical control is to use disease-free seed. Where knowledge is lacking on locally produced seed, certified seed should be used.

IRISH POTATO PRODUCTION COSTS PER ACRE IN SAN BERNARDINO COUNTY

Labor - $1.25 per hour
Interest - 6 per cent*

Marketable Yield of 300 - 100# Sacks

Operation	Total Hours	Labor	Equipment	Material	Costs	Combined Costs	Total Cost
Land Preparation							
Irrigate	1.0	$ 1.25	$ --	Water - 6 acre inches	$ 2.75	$ 4.00	$
Disc	0.5	.65	.50			1.15	
Fumigate	-			By Contract	15.00	15.00	
Fertilize	-			By Contract - Organic - 650 cu. ft.	20.00	20.00	40.15
Planting							
Cut Seed	7.2	9.00	--	Seed - 1800# @ $4.00/cwt.	72.00	81.00	
Plant	1.1	1.40	2.30	Fertilizer - 10-10-0 - 900#	26.10	29.80	110.80
Cultural							
Cultivate & Furrow 4x	3.0	4.20	2.95			7.15	
Cultivate & Fertilize	1.6	2.00	1.75	Ammonium Sulfate - 350#	8.75	12.50	
Irrigate - Furrow 20x	20.0	4.75	--	Water - 4 acre ft.	20.00	24.75	
Pest Control	-	--	--	Insecticide	11.50		
				Application	7.50	19.00	63.40
Harvest							
Dig, Beat, Remove Vines)							
Pick, Sack, Haul)				All by Contract @ $1.15/Sack	345.00	345.00	
Wash, Grade, and Pack)							
Inspection				300 Sacks @ 3¢/Sack	9.00	9.00	354.00
TOTAL PREPARATORY, CULTURAL & HARVEST COSTS	$23.25	$7.50			$537.60		$568.35
Cash Overhead							
General Expense (Insurance, accounting, transportation, stationery, phone)						18.75	
Rent						70.00	88.75
					TOTAL CASH COSTS		$657.10

Non-Cash Overhead

	Investment	Depreciation	Interest	
Building	$ 72.00	$ 2.40	$2.15	
Equipment & Sprinkler Piping	108.00	10.80	3.25	
	$180.00	$13.20	$5.40	18.60
			TOTAL ALL COSTS	$675.70
			Cost Per Cwt.	2.25

*Interest on Investment computed on one-half of original investment

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