

### SWEET POTATO PRODUCTION IN FRESNO COUNTY

The sweet potato is a crop that is well adapted to the conditions existing in Fresno County. Well drained, sandy soils are preferred. Alkali soil and recently leveled land are undesirable.

**Varieties:** Porto Rico is the moist or yam type. The skin of the roots range from pale rose to red. The flesh is orange yellow to salmon color. There is considerable variation in the shape. The strains of this group include regular Porto Rico, Improved Red, Key West or Velvet, and Double Red.

Yellow Jersey is a dry type. The roots have light golden yellow skins and flesh. They are generally quite uniform in shape.

**Hot Beds:** Seed potatoes are planted in hot beds as early as March 1. Cotton hulls or manure are often used for supplemental heat. From 300 to 500 pounds of seed is needed per acre. This will require 120 to 200 square feet of space in the bed. The optimum soil temperature for sprout development is 75 to 80 degrees. A temperature of 90 degrees would cause injury. Watering influences the temperature and can be withheld to aid in hardening the plants. A desirable plant for transplanting is well hardened, stocky, 6 to 8 inches high with  $2\frac{1}{2}$  to 4 inches of the stem below the ground level and is free of disease and pests.

**Field Culture:** Soil fumigation for the control of wireworms and nematode is desirable. The crop is grown on ridges 8 to 12 inches high with 36 to 42 inches between rows from center to center. Transplanting begins April 15. June 15 is considered the latest desirable date of planting. Spacing in the row ranges from 10 to 18 inches depending on the variety. From 10,000 to 15,000 plants are required per acre.

Sixty pounds of actual nitrogen side-dressed early in the season should satisfy the fertilizer requirements. Good weed control aids yield and the harvest operation. Plants should not suffer for moisture at any time during the growing period. Weekly irrigations may be needed during part of the season.

**Harvesting and Marketing:** The date of harvest is determined by the number of marketable sized potatoes and the market conditions. Fair yields can be obtained in 100 days after planting. The harvest operation consists of cutting the vines, lifting the hills out of the ground, snapping the potatoes from the vines and packing or field piling. During the early part of the season potatoes are marketed as they are harvested. Most of the crop is sold on consignment to California marketing points.

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WHAT WILL IT COST TO GROW SWEET POTATOES IN FRESNO COUNTY

Based on a total yield of 11,750 lbs. per acre - 8,750 lbs. (175 bu. baskets)  
 3,000 lbs. seed and culls - Labor at \$ .90 - Light tractor at \$1.20, truck at \$1.50

	<u>Sample Costs</u>		<u>My Costs</u>	
	<u>Per</u>	<u>Per</u>	<u>Per</u>	<u>Per</u>
	<u>Acre</u>	<u>Cwt.</u>	<u>Acre</u>	<u>Cwt.</u>
<u>LABOR COSTS:</u>				
Hotbed work - 10 man & 1 tractor hr.		\$ 10.20		
Land preparation; 4 man & 4 tractor hrs.		8.40		
Pulling and planting; 12 man, 2 tractor, 1 truck hr.		14.70		
Fertilizing; 2 man & 1 tractor hr.		3.00		
Crop cultivation; 4 man & 4 tractor hrs.		8.40		
Hoeing; 10 man hrs.		9.00		
Irrigating; Av. 12 times - 13 man hrs.		11.70		
Cut vines & plow out; 5 man & 3 tractor hrs.		8.10		
Pull & stack, break, sort & field pack - 80 man hrs.		72.00		
Hauling; 5 man & 5 truck hrs.		12.00		
Misc. labor; 4 man, 1 tractor, 1 truck hr.		6.30		
<u>Total Labor &amp; Field Power Cost</u>		<u>163.80</u>	<u>1.92</u>	
<u>MATERIAL COSTS:</u>				
Irrigation water; 3 ac. ft.		7.20		
Fertilizer; 80 lbs. actual nitrogen		13.00		
Hot bed (gin cleanings)		5.00		
Seed; 400 lbs. at 6¢		24.00		
Soil treatment		25.00		
Misc.		2.00		
<u>Total Material Cost</u>		<u>76.00</u>	<u>.87</u>	
<u>CASH OVERHEAD COSTS:</u>				
General expense		11.75		
County taxes		5.50		
Repairs, insurance, misc. cash costs		3.50		
<u>Total Cash Overhead Cost</u>		<u>20.75</u>	<u>.23</u>	
<u>Total Cash, Labor &amp; Field Power Costs</u>		<u>265.05</u>	<u>3.02</u>	
<u>DEPRECIATION:</u>				
Bldgs. & irrigation facilities - \$80 cost - 20 yrs. life		4.00		
Tillage & other equip. - \$25 cost - 10 yrs. life		2.50		
<u>Total Depreciation Cost</u>		<u>6.50</u>	<u>.08</u>	
<u>INTEREST ON INVESTMENT AT 5%:</u>				
Bldgs. & irrigation facilities @ $\frac{1}{3}$ orig. cost		2.00		
Tillage & other equipment @ $\frac{1}{3}$ orig. cost		.63		
Land at \$250		12.50		
<u>Total Interest on Investment</u>		<u>15.13</u>	<u>.17</u>	
<u>TOTAL COST OF PRODUCTION</u>		<u>286.68</u>	<u>3.27</u>	
<u>CREDIT FOR VALUE OF SEED &amp; CULLS 3,000 LBS.</u>		<u>35.00</u>	<u>.40</u>	
<u>NET COST OF PRODUCING 8,750 LBS. MARKETABLE</u>		<u>251.68</u>	<u>2.87</u>	

The above suggested costs do not include any allowance for management, containers, loading or storage.