

## BEAN PRODUCTION

During the past five years Butte County produced an average of 8556 acres of dry beans with a yield of 1680 cwt. A few hundred acres were also grown in Glenn and Tehama Counties.

These counties produce pink, red kidney and a limited acreage of small whites and blackeye beans. These varieties are grown because they prefer a warm climate and are not as susceptible to heat injury.

The major bean-producing area is north of Durham where they are grown in rotation with sugar beets, milo, corn and alfalfa.

Most of the beans are cleaned and stored at one of the following warehouses - Chico Bean Growers Association, Durham Warehouse, Sacramento Valley Milling Company at Ord Bend or at the Walter Jansen & Son Warehouse, Gridley.

Selling is done by the grower. Buyers are usually contacted through the warehouse manager who keeps his customers informed as to the demand and price.

Yields are affected by the temperatures during the blooming period. Extremely hot weather causes the blossoms to drop, which reduces the yield. The largest crops are obtained following a relatively cool summer when yields over 20 cwt. are common. It is necessary to plant at a sufficiently early date to prevent crop injury or loss from fall rain.

Pink beans are planted from June 20 to July 10. A later planting date greatly increases the risk of rain loss. Plantings made during May or early June have not produced as large yields as have later plantings. Planting dates are not as important with the other varieties as long as the planting is completed by early July.

Beans may be grown as a second crop following oat hay. Barley for grain is usually ready for harvest in mid-June. This makes it possible to double crop with beans but harvesting and soil preparation must progress rapidly. Usually it is only possible to double crop following barley on a limited acreage. Oats and wheat for grain are later in maturing than barley and therefore are not adaptable for double cropping.

When planting pink and kidney beans, the use of certified seed is strongly recommended as these varieties have been injured by common bean mosaic. The best method of control is to use certified seed which contains few or no beans carrying the disease.

40 H.P. crawler tractor diesel \$1.40 per hr. - cash costs  
 30 H.P. wheel tractor, gas \$.95 per hr.  
 20 H.P. wheel tractor, gas .80 per hr.

Skilled labor \$1.7  
 Common Labor 1.35

SAMPLE COSTS TO PRODUCE BEANS

Yield - 20 cwt.

Butte County

Operation	Hours Per Acre	Cash and Labor Cost Per Acre			Total
		Labor	Fuel and Repairs	Materials	
<b>CULTURAL</b>					
Weeding	1.50	2.03			2.03
Land plane (every 4th yr)	.10	.18	.18		.36
Repair ditch pad	.25	.44	.38		.82
Plow or chisel	.50	.88	.95		1.83
Disc 4X	1.00	1.75	1.90		3.65
Fertilize	.25	.44	.35	Fert. appl. 25#/A + fert. \$6.60 = 6.85	7.64
Harrow	.25	.44	.26		.70
Bedding	.25	.44	.43		.87
Pre-irrigate	1.25	1.69	- -		1.69
Ditching 3X	.30	.53	.44		.97
Work down beds	.40	.70	.50		1.20
Plant	.40	.70	.42	Seed \$7.20	8.32
Cultivate & furrow 3X	1.00	1.75	1.25		3.00
Ditching removal 3X	.30	.53	.44		.97
Irrigate 4X	3.20				4.32
Water				Power costs @ \$1.85 /acre foot	4.81
Insect control - contract 2 1/2 X				Plane \$5, material \$13.75 = \$18.75	18.75
<b>TOTAL CULTURAL</b>					<b>\$ 61.93</b>
<b>HARVEST</b>					
Cutting	.40	.70	.97		1.67
Raking	.50	.88	1.20		2.08
Turning end of row by hand	.40	.54	- -		.54
Thrashing (1 man)	.50	.88	1.71		2.59
Hauling	.30	.53	.63		1.16
Warehouse					
Cleaning				20 cwt @ \$7/T = \$7	7.00
Storage				20 cwt @ \$5/T = \$5	5.00
Sacks				20 sa. @ .25 = \$5	5.00
<b>TOTAL HARVEST</b>					<b>\$ 25.04</b>
<b>TOTAL CULTURAL &amp; HARVEST</b>					<b>\$ 86.97</b>
Misc. overhead 5% of above (office, int. on money used, phone, pickup operation, etc.)					4.35
Management - 5% of gross (20 cwt. x \$8.72)					8.72
<b>TOTAL OVERHEAD COSTS</b>					<b>\$ 13.07</b>
<b>TOTAL CASH &amp; LABOR COST</b>					<b>\$100.04</b>

Butte county.  
 Ext. Serv.  
 Agric.  
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<u>INVESTMENT</u>	<u>PER ACRE</u>	<u>Annual Cost</u>		<u>Taxes &amp; Insurance</u>	
		<u>Depreciation</u>	<u>Interest</u>		
Land	\$600	-	\$36.00	\$10.00	
Irrigation	60	3.00	1.80	.90	
Equipment	192	18.00	5.78	2.88	
Buildings	10	.40	.30	.15	
Total	\$862	\$21.40	\$43.88	\$13.93	\$79.21

Total cost per acre

\$179.25

Cost per cwt @ 20 cwt

Yield = \$8.96