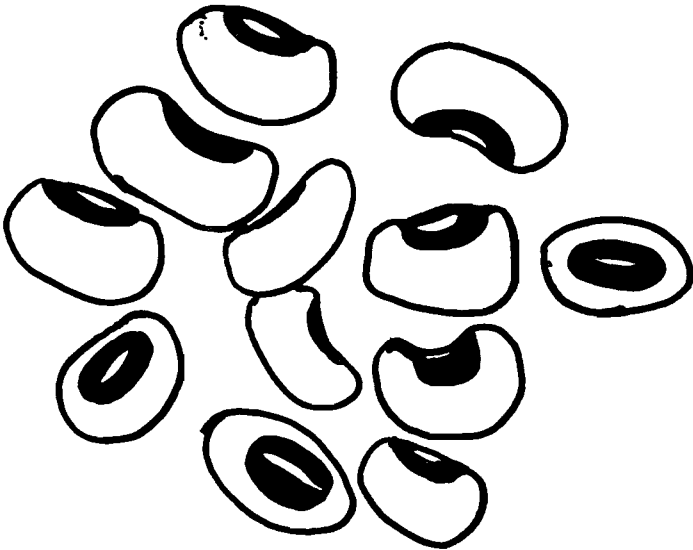


# BLACKKEYES

## COSTS & GENERAL HINTS ON PRODUCTION



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# SUGGESTIONS ON GROWING BLACKKEYES

By

David R. Woodruff, Farm Advisor

## SOIL REQUIREMENTS:

Blackeyes are best adapted to light sandy loam soils. They grow satisfactorily on well drained heavy soils but the yields are usually less than on the lighter soils. Saline and alkali soils should be avoided.

## VARIETY:

The most common variety grown in Kern County is California Blackeye 5. Blackeye 3 is the major variety in the northern San Joaquin Valley. Blackeye 5 and its prostrate growth habit makes it difficult to irrigate as it matures. It is best to plant certified seed to be assured of quality.

## SEED TREATMENT:

If untreated seed is planted, seedling diseases can seriously affect stand and yield. Practically all seed is treated commercially with a fungicide and insecticide at the warehouse before sold.

## PREPARATION OF SOIL:

A well prepared seedbed is essential for a good stand. Over working the soil is not necessary but if compaction is present then chiseling should be done. Pre-irrigation is necessary to provide sufficient moisture for germination and

early growth of the crop. Deep furrows should be avoided to assure minimum losses of beans during the harvest operations.

#### ROW SPACING AND PLANTING:

Row spacing ranges from 30 to 40 inches. The most common is 30 inches and the best yields are obtained at that spacing. Care must be taken not to crack the seed when planting since this will reduce germination. In-row spacing should be about 4 to 6 inches.

#### PLANTING RATE:

Twenty to 30 pounds of seed per acre should be sufficient with the higher seeding rate to be used when seedbed conditions are unfavorable.

#### PLANTING TIME:

The best yields are obtained from full season production. Planting time would be during May, however, when double cropping the planting date may extend to July 15. Reduced yields may be expected from these later plantings.

#### PLANTING DEPTH:

For maximum germination seeds should be placed at least one inch in moist soil. If planted late when soils dry faster, then plant a little deeper--about 1 1/2 inches into moist soil.

#### FERTILIZATION:

Nitrogen, phosphorus and potassium treatments rarely affect blackeye production. In phosphorus deficient soils application of phosphorus fertilizers have proven beneficial. Usually 80 to 100 pounds of  $P_2O_5$  are adequate when phosphorus is needed.

COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE BLACKKEYES IN KERN COUNTY - 1975

Based on man labor at \$3.00 and \$3.60 per hour, including compensation insurance and Social Security;  
Medium wheel tractor cash cost per hour \$2.50; Depreciation .85; Interest .40.

David R. Woodruff

Operation	Hours Per Acre	Cash and Labor Cost Per Acre				Sample Costs	My Costs
		Labor	Fuel and Repairs- Equipment	Materials and Other Costs			
<b>Cultural:</b>							
Land preparation	2.5	\$ 9.00	\$ 6.25			\$ 15.25	
Plant	.5	1.80	1.25	Seed: 25 lbs. @ .30	\$ 7.50	10.55	
Irrigate: 1 pre, 3 crop	6.0	18.00	5.50	Water: 2½ ft. @ \$10.00	25.00	48.50	
Cultivate: 3 times	1.5	5.40	3.75			9.15	
Taxes					13.80	13.80	
Miscellaneous overhead		10.00	9.50		9.00	28.50	
<b>Total Cultural Costs</b>		<b>\$44.20</b>	<b>\$26.25</b>		<b>\$55.30</b>	<b>\$125.75</b>	
<b>Harvest:</b>							
Cut and windrow - 50 A/day			Contract:		\$11.00	\$ 11.00	
Combine - 50 A/day			Contract:	\$8.00 + .80/cwt.	24.00	24.00	
Haul			Contract:	\$3.25/ton	3.25	3.25	
Reclean, sacks, fumigate, storage			Contract:		25.00	25.00	
<b>Total Harvest Costs</b>						<b>\$ 63.25</b>	
<b>Total Cash and Labor Costs</b>						<b>\$189.00</b>	
				Cash and Labor Cost per cwt. @ 2,000 lb. yield		<b>(\$ 9.45)</b>	
<b>Investment</b>							
		<u>Per Acre</u>		<u>Annual Cost</u>			
Land		\$800.00		<u>Depreciation</u>	<u>Interest 9%</u>		
Irrigation system		250.00		\$20.00	11.25		
Tractor: 6 hrs.				5.10	2.40		
Equipment		30.00		3.00	1.35		
<b>Total</b>				<b>\$28.10</b>	<b>\$87.00</b>	<b>\$115.10</b>	
<b>TOTAL COST PER ACRE</b>						<b>\$304.10</b>	
<b>TOTAL COST PER CWT. @ 2,000 LB. YIELD</b>						<b>\$ 15.20</b>	

The costs of production in any agricultural enterprise will vary considerably from ranch to ranch. The input and cost data in this booklet are sample costs. They are intended to be used only as educational guides in assisting you to appraise and plan your own crop and livestock program.

ABOUT THESE COST DATA - - -

*These cost data do not represent industry averages.*

## IRRIGATION:

Over-irrigation of blackeyes should be avoided. When over-irrigated, iron deficiency is induced and fungus diseases are favored. During seed pod formation ample water must be supplied for maximum yield. Irrigation should stop when two-thirds of the pods are yellow and the lower portion of the plant is defoliating.

## CULTIVATION:

Cultivation is for weed control and if no weeds are present, then do not cultivate. If you do cultivate, depth of cultivation should be as shallow as possible to avoid root pruning and excessive moisture loss.

## PESTS AND DISEASES:

Lygus Bugs - Lygus bugs feeding on the flowers and green pods are usually the most damaging pest to blackeyes. When blackeyes start to bloom and set pods, 10 two-row sweep counts should be taken at several locations in the fields. When the count reaches one-half lygus per sweep control measures should be taken immediately.

It is important to check lygus frequently and regularly because lygus population can increase rapidly.

Mites - Blackeyes have fair tolerance to mites but occasionally do require treatment.

Nematodes - *Meloidogyne javanica* causes plants to wilt because their feeding on the roots do not allow these tissues to translocate sufficient water and nutrients from the soil. The nematode infested roots show galls and other distortions.

Fusarium wilt - Fusarium wilt is by far the most common and serious disease of blackeyes. When this disease is present the stem becomes swollen with a black interior. Infected plants turn yellow and shed some of their bottom leaves. There is no control of this disease and infections remain in the soil for many years.

#### HARVESTING:

Harvest begins when most of the pods have turned yellow. Cutting and windrowing should start when the pods are tough enough to keep shatter losses at a minimum. Threshing should be done carefully so as not to damage the seed.

#### YIELD:

On good soil with proper management yields from 2,000 to 3,500 pounds per acre in a normal season may be expected.

*(Revised 3/75 750 cc)*

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