SOYBEANS

Sample
Costs of Production
Suggestions on Growing

University of California
Farm and Home Advisor's Office
2610 M Street
Kern County
Revised January, 1967
UC Cooperative Extension
ABOUT THESE COST DATA-----

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.

These cost data do not represent industry averages.
SUGGESTIONS ON GROWING SOYBEANS

By
Roy M. Barnes, Farm Advisor

SOIL REQUIREMENTS:

The soybean will succeed on nearly all types of soil but best results are obtained on fertile loams or sandy loams. In general, the soil requirements are about the same as for corn and cotton.

USE OF SOYBEANS:

Soybeans are grown for three purposes; dry bean production, forage and for a cover crop.

VARIETIES:

There are more than 100 named varieties now being handled by seedmen, and they are under test by USDA and state experiment stations. Soybean varieties are grouped into early or late, depending upon when they ripen. In Kern County, tests have shown that Clark, Lincoln and Blackhawk, in that order, were well-suited for this climate. They all ripen at the same time.

Because of superiority in yield and other observations made during growth and harvest, Clark variety can be recommended for commercial production.

SEED TREATMENT:

For seed decay, treat with Arason SFX 1 1/3

UC Cooperative Extension
## COST ANALYSIS WORK SHEET

SAMPLE COSTS TO PRODUCE SOYBEANS IN KERN COUNTY - 1966

Based on man labor at $1.20 and $1.40 per hour; 135 H.P. wheel tractor cash cost per hour $1.10; Depreciation $.60; Interest $.23

<table>
<thead>
<tr>
<th>* Roy M. Barnes</th>
<th>** Burt B. Burlingame</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operation</strong></td>
<td><strong>Hours Per Acre</strong></td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td><strong>Per Acre</strong></td>
</tr>
<tr>
<td>Cultural: Land preparation</td>
<td>2.5</td>
</tr>
<tr>
<td>Plant:</td>
<td>.5</td>
</tr>
<tr>
<td>Irrigate: 1 pre 6 crop</td>
<td>8.0</td>
</tr>
<tr>
<td>Cultivate: 3 times</td>
<td>1.5</td>
</tr>
<tr>
<td>Taxes</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous overhead</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cultural Costs</strong></td>
<td></td>
</tr>
<tr>
<td>Harvest: Combine</td>
<td></td>
</tr>
<tr>
<td>Haul</td>
<td></td>
</tr>
<tr>
<td><strong>Total Harvest Costs</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cash and Labor Costs</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Costs at Varying Yields</strong></th>
<th><strong>Investment</strong></th>
<th><strong>Per Acre</strong></th>
<th><strong>Annual Cost</strong></th>
<th><strong>Per Cwt. @ 2,500 lb. yield</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pounds Per Acre Cost Per Cwt.</td>
<td>Land</td>
<td>$900.00</td>
<td>$54.00</td>
<td>$64.92</td>
</tr>
<tr>
<td>1,500</td>
<td>$10.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,000</td>
<td>8.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,500</td>
<td>6.60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,000</td>
<td>5.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,500</td>
<td>4.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Farm Advisor

** Extension Economist
oz. (slurry) per 100 lbs. of seed, or Spergon
3 oz. (dust) or Spergon SL 2 oz. (slurry).

For wireworm and seed corn maggot, treat
with Lindane 0.66 ozs. of the 75% spray or
dust per 100 lbs. of seed. Fungicide and
insecticide should be applied together.

PREPARATION OF SOIL AND PLANTING:

A well prepared seedbed is essential for a
good stand. Pre-irrigation is essential to
provide sufficient moisture to germinate the
seed and to promote normal early growth.

Rows are usually spaced 24 to 32 inches apart.
In-the-row spacing should be about 1 inch
(12 seeds to the foot). A two or four row
plate-type planter is commonly used.

PLANTING RATE:

Sixty to seventy lbs. per acre are sufficient
when planted in 24 or 32 inch rows.

PLANTING TIME:

In Kern County, April 15 to May 20 is a good
time to plant soybeans.

PLANTING DEPTH:

The depth of planting should not exceed 2 1/2
inches.

FERTILIZATION:

Soybeans are a legume and normally the ap-
lication of nitrogen is not necessary. If
phosphate is now being used on cotton or
other crops in your area, the application of
from 80 to 100 lbs. of P₂O₅ may be profitable.
Phosphate should be applied only if it has been proven deficient by actual tests.

**IRRIGATION:**

The plants should be fully supplied with water during growth. Irrigation should not be postponed until the plants suffer. Normally it will require about 7 irrigations.

**CULTIVATION:**

Cultivation is to destroy weeds only. If no weeds grow, cultivation is of no measurable benefit. Unnecessary cultivation may destroy feeder roots growing close to the surface, thus reducing your crop.

**HARVESTING:**

Harvesting begins soon after the leaves drop from plants and the pods have turned brown. Shatter may occur if harvest is prolonged beyond this point. Soybeans can be direct combined.

**YIELDS:**

On good soil and with proper management, soybean yields of from 2,000 to 3,000 lbs. per acre may be expected in a normal season.

**DISEASES:**

Soybeans are susceptible to the root rots which are common to other beans.

**INSECTS:**

Soybeans should not be planted on nematode infested land. It may also be necessary to treat for spider mites if they become infested in early growth.