SOILS

Medium textured sandy loams are the most desirable. Onions are shallow rooted and need a friable soil which retains moisture about the roots especially after cultivation. Avoid salty, hard, or weed-infested soils.

IRRIGATION

Until two or three weeks before intended harvest, onions should never suffer for lack of water. Weather and soil conditions determine the number of irrigations. Seven to 12 times are normal. Irrigation costs listed, include the use of sprinklers for germination. Also included are costs for shovel work, pipe setting and grading.

FERTILIZERS

Generally, between 200 and 250 lbs of actual nitrogen per acre and 144 and 200 lbs of P_2O_5 are applied. All P_2O_5 and 33 to 50 lbs of nitrogen are usually broadcast before listing followed by two sidedressings of nitrogen.

PESTS AND DISEASES

Mites, thrips, armyworms, leaf-miners, maggots, downy mildew and nematodes may be problems. Pink root is a soil-borne disease affecting onions. Varieties resistant to pink root are available.

HARVESTING

Harvesting takes place from late March through May after 25% of the tops have fallen over. Bulbs are dug, hand topped and roots trimmed. They are sacked in burlap and hauled to sheds for grading, re-sacking, loading and shipping. During storage adequate ventilation is important.

Prepared by
Imperial County
Agricultural Extension Staff
Revised September 1975

The University of California's Agricultural Extension programs are available to all, without regard to race, color, or national origin.

Co-operative Extension work in Agriculture and Home Economics, Division of Agricultural Sciences, University of California and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. J.B. Kendrick, Jr., Director, California Agricultural Extension

Agricultural Extension
University of California
Imperial County
Court House, El Centro
Cost Data Sheet No. 16
ONIONS FRESH MARKET—PROJECTED PRODUCTION COSTS

Mechanical operations at custom rates. Hand labor at $3.75 per hour ($3.00 plus Social Security, unemployment insurance, transportation, supervision and fringe benefits).

Yield - 600 50# sacks per acre (15 tons). 150+ days to maturity.

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>Custom Rate</th>
<th>MATERIALS</th>
<th>HAND LABOR*</th>
<th>SAMPLE COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Type</td>
<td>Cost</td>
<td>Hours</td>
</tr>
<tr>
<td>LAND PREPARATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsoil</td>
<td>$12.50</td>
<td></td>
<td></td>
<td>$12.50</td>
</tr>
<tr>
<td>Disc 2x</td>
<td>4.50</td>
<td></td>
<td></td>
<td>9.00</td>
</tr>
<tr>
<td>Border &amp; break</td>
<td>4.50</td>
<td></td>
<td></td>
<td>4.50</td>
</tr>
<tr>
<td>Flood</td>
<td>Water .75 ft/A 2.63</td>
<td>1</td>
<td>3.75*</td>
<td>6.38</td>
</tr>
<tr>
<td>Fertilize</td>
<td>3.00 300# 11-48-0 40.00</td>
<td>43.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disc 2x</td>
<td>4.50</td>
<td></td>
<td></td>
<td>9.00</td>
</tr>
<tr>
<td>Landplane 2x</td>
<td>5.00</td>
<td></td>
<td></td>
<td>10.00</td>
</tr>
<tr>
<td>List</td>
<td>5.00</td>
<td></td>
<td></td>
<td>4.00</td>
</tr>
<tr>
<td>TOTAL LAND PREPARATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GROWING PERIOD

| Plant           | 6.50 | Seed 2# @ 20.00 40.00 | 10.00 | 56.50 |
| Herbicide 2x    | 3.00 | 37.00 Dacthal®       |       | 43.00 |
| Cultivate 4x    | 4.00 | 16.00                |       |       |
| Fertilize - side - dress 2x | 4.50 250# N @ 25# 62.50 | 17 63.75 | 71.50 |
| Weed 2x         |      | Rent 35.00           | 9 33.75 | 68.75 |
| Sprinklers      |      | 15.75                | 15 56.25* | 72.00 |
| Irrigate 12x    |      | Pesticides 10.00     |       | 16.00 |
| Past Control 2x | 3.00 |                      |       |       |
| GROWING PERIOD  |     | $407.20              |       |       |

GROWING PERIOD & LAND PREP COSTS

| Land Rent (new lease) | $150.00 |
| Cash Overhead - 12% of preharvest costs and land rent | $78.95 |
| TOTAL PREHARVEST COSTS | $735.83 |

HARVEST COSTS

| Dig, top, haul, pack, sacks, selling commission for 600 sacks at $2.00 per 50# sack | $1200.00 |
| TOTAL ALL COSTS | $1935.83 |

Cost per sack = $3.23

*Includes shoveling work, pipe setting and tractor work.

YEAR | ACRES | YIELD/ACRE (TONS) | VALUE/TON |
1970 | 1800  | 14.00          | $94.44    |
1971 | 1950  | 12.82          | $59.40    |
1972 | 1900  | 13.68          | $110.00   |
1973 | 1500  | 17.33          | $262.46   |
1974 | 1700  | 12.50          | $105.79   |

PLANTING: Most acreage is direct seeded from mid-October to mid-November. Forty-two-inch beds with 4 to 6 lines are used. Some plantings have been made with three lines on narrow beds.

*VARIETIES: Onions are sensitive to day length and temperature. Only the early maturing, short day types are grown. The most popular types are Yellow Granex, Texas Early Granex 502, White Granex, Early Premium and Dessex. Seed costs may vary from $11.00 - $30.00 per pound or higher depending upon variety and season.

WEED CONTROL: Herbicides are commonly applied pre-emergence. Consult your Farm Advisor for latest recommendations. Some postplant applications are made with corresponding additional costs.
SOILS

Medium textured sandy loams are the most desirable. Onions are shallow rooted and need a friable soil which retains moisture about the roots especially after cultivation. Avoid salty, hard, or weed-infested soils.

IRRIGATION

Until two or three weeks before intended harvest, onions should never suffer for lack of water. Weather and soil conditions determine the number of irrigations. Seven to 12 times are normal. Irrigation costs listed, include the use of sprinklers for germination. Also included are costs for shovel work, pipe setting and grading.

FERTILIZERS

Generally, between 200 and 250 lbs of actual nitrogen per acre and 144 and 200 lbs of P<sub>2</sub>O<sub>5</sub> are applied. All P<sub>2</sub>O<sub>5</sub> and 33 to 50 lbs of nitrogen are usually broadcast before listing followed by two sidedressings of nitrogen.

PESTS AND DISEASES

Mites, thrips, armyworms, leaf-miners, maggots, downy mildew and nematodes may be problems. Pink root is a soil-borne disease affecting onions. Varieties resistant to pink root are available.

HARVESTING

Harvesting takes place from late March through May after 25% of the tops have fallen over. Bulbs are dug, hand topped and roots trimmed. They are sacked in burlap and hauled to sheds for grading, re-sacking, loading and shipping. During storage adequate ventilation is important.

Prepared by
Imperial County Agricultural Extension Staff
Revised September 1975

The University of California's Agricultural Extension programs are available to all, without regard to race, color, or national origin.

Co-operative Extension work in Agriculture and Home Economics, Division of Agricultural Sciences, University of California and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. J.B. Kendrick, Jr., Director, California Agricultural Extension

Agricultural Extension
University of California
Imperial County
Court House, El Centro
Cost Data Sheet No. 16
SOILS

Medium textured sandy loams are the most desirable. Onions are shallow rooted and need a friable soil which retains moisture about the roots especially after cultivation. Avoid salty, hard, or weed-infested soils.

IRRIGATION

Until two or three weeks before intended harvest, onions should never suffer for lack of water. Weather and soil conditions determine the number of irrigations. Seven to 12 times are normal. Irrigation costs listed include the use of sprinklers for germination. Also included are costs for shovel work, pipe setting and grading.

FERTILIZERS

Generally, between 200 and 250 lbs of actual nitrogen per acre and 144 and 200 lbs of P₂O₅ are applied. All P₂O₅ and 33 to 50 lbs of nitrogen are usually broadcast before listing followed by two sidedressings of nitrogen.

PESTS AND DISEASES

mites, thrips, armyworms, leaf-miners, maggots, downy mildew and nematodes may be problems. Pink root is a soil-borne disease affecting onions. Varieties resistant to pink root are available.

Harvesting

Harvesting takes place from late March through May after 25% of the tops have fallen over. Bulbs are dug, hand topped and roots trimmed. They are sacked in burlap and hauled to sheds for grading, re-sacking, loading and shipping. During storage adequate ventilation is important.

Prepared by
Imperial County
Agricultural Extension Staff
Revised September 1975

The University of California's Agricultural Extension programs are available to all, without regard to race, color, or national origin.

Co-operative Extension work in Agriculture and Home Economics, Division of Agricultural Sciences, University of California and United States Department of Agriculture co-operating. Distributed in furtherance of the Acts of Congress of May 8, and June 30, 1914. J.B. Kendrick, Jr., Director, California Agricultural Extension

Agricultural Extension
University of California
Imperial County
Court House, El Centro
Cost Data Sheet No. 16