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. Being shallow rooted, onions need a friable soil which retains moisture about the roots especially after cultivation. Avoid saline, 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 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 cut, sacked and hauled to sheds for grading, sack, loading and shipping. During storage adequate ventilation is important.

---

Prepared by Imperial County Agricultural Extension Staff
Revised August '74

---

University of California Cooperative Extension work is available to all without regard to race, color, or national origin.

Cooperative Extension work in agriculture and home economics is provided by the University of California and the United States Department of Agriculture in cooperation. Distributed furtherance of the Acts of Congress of May 8, and June 30.

M. George B. Alcorn, Director, California Agricultural Extension.

---

Agricultural Extension Service
University of California
Imperial County
Court House, El Centro

Cost Est. Sheet No. 16
UC Cooperative Extension
# ONIONS FRESH MARKET - SAM LE PRODUCTION COSTS

Mechanical operations at custom rates. Hand labor at $3.00 per hour ($2.53 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 Type</th>
<th>Cost</th>
<th>HAND LABOR Hours</th>
<th>DOLLARS</th>
<th>SAMPLE COSTS Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LAND PREPARATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow or subsoil</td>
<td>$12.00</td>
<td></td>
<td></td>
<td></td>
<td>$12.00</td>
<td></td>
</tr>
<tr>
<td>Disc 2x</td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>Border &amp; break</td>
<td>4.00</td>
<td>Bound</td>
<td>2.00</td>
<td></td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td>Water .75 ft/A</td>
<td>2.00</td>
<td></td>
<td></td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>Fertilize</td>
<td>2.50</td>
<td>300# 11-48-0</td>
<td>46.00</td>
<td></td>
<td>48.50</td>
<td></td>
</tr>
<tr>
<td>Disc 2x</td>
<td>3.50</td>
<td></td>
<td></td>
<td></td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>Landplane 2x</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>List</td>
<td>4.50</td>
<td></td>
<td></td>
<td></td>
<td>4.50</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL LAND PREPARATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$ 95.00</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GROWING PERIOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant</td>
<td>6.50</td>
<td>Seed 2# $20.00</td>
<td>40.00</td>
<td></td>
<td>62.50</td>
<td></td>
</tr>
<tr>
<td>Herbicide 2x</td>
<td>2.50</td>
<td></td>
<td></td>
<td></td>
<td>31.00</td>
<td></td>
</tr>
<tr>
<td>Cultivate 4x</td>
<td>4.00</td>
<td></td>
<td></td>
<td></td>
<td>16.00</td>
<td></td>
</tr>
<tr>
<td>Fertilize side dress 2x</td>
<td>4.00</td>
<td>250# N @ 20#</td>
<td>50.00</td>
<td>17</td>
<td>51.00</td>
<td>51.00</td>
</tr>
<tr>
<td>Weed 2x</td>
<td>3.20</td>
<td></td>
<td></td>
<td></td>
<td>17.00</td>
<td></td>
</tr>
<tr>
<td>Sprinklers</td>
<td>2.20</td>
<td></td>
<td></td>
<td></td>
<td>30.00</td>
<td></td>
</tr>
<tr>
<td>Irrigate 12x</td>
<td>4.00</td>
<td>Water 4 ac ft</td>
<td>10.80</td>
<td>17</td>
<td>51.00</td>
<td>61.80</td>
</tr>
<tr>
<td>Fast Control 2x</td>
<td>3.00</td>
<td>Pesticides</td>
<td>6.00</td>
<td></td>
<td>12.00</td>
<td></td>
</tr>
<tr>
<td><strong>GROWING PERIOD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$357.30</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GROWING PERIOD &amp; LAND PREP COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$452.30</strong></td>
<td></td>
</tr>
<tr>
<td>Land Rent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$125.00</strong></td>
<td></td>
</tr>
<tr>
<td>Cash Overhead (10% of preharvest costs and land rent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>57.73</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL PREHARVEST COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$635.03</strong></td>
<td></td>
</tr>
<tr>
<td><strong>HARVEST COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dig, top, haul, pack, sacks, selling commission for 600 sacks at $1.65 per 50# sack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$990.00</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL ALL COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1625.03</strong></td>
</tr>
</tbody>
</table>

Cost per sack = $2.71

**YIELDS**

Normal yields range 400 to 800 fifty pound sacks per acre, although top yields have exceeded 900 sacks. The Agricultural Commissioner's reports show seasonal average price per ton during the past five years varied from a low of $54.90 in 1971 to a high of $242.46 in 1973. There were 1500 acres grown in 1973.

**PLANTING**

Most acreage is direct seeded from mid-October to mid-November. Forty two inch beds with 4 to 6 lines are used.

**VARIETIES**

Because 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 Grano 502, White Granex, Early Premium and Dass. Seed costs may vary from $7.00-$22.00 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. Being shallow rooted, onions need a friable soil which retains moisture about the roots especially after cultivation. Avoid sandy, 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 include the use of sprinklers for germination. Also included are costs for shoveling 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 side dressings of nitrogen.

PESTS AND DISEASES

Mites, thrips, armyworms, leafminers, 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 cut, sacked and hauled to sheds for grading, packing, loading and shipping. During storage adequate ventilation is important.

Prepared by
Imperial County Agricultural Extension Staff
Revised August '74

---

University of California Cooperative Extension programs are available to all without regard to race, color, or national origin.

---

Cooperative Extension work in Agriculture and Home Economics is an equal opportunity program administered by the University of California and the United States Department of Agriculture co-operating. Distributed furtherance of the Acts of Congress of May 8, and June 30, 1914. George B. Alcorn, Director, California Agricultural Extension.

Agricultural Extension Service
University of California
Imperial County
Court House, El Centro

Cost Est. Sheet No. 16
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. Being shallow rooted, onions 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 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, leafminers, 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 cut, sacked and hauled to sheds for grading, sacking, loading and shipping. During storage adequate ventilation is important.

Prepared by
Imperial County
Agricultural Extension Staff
Revised August 1974

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

Operative Extension work in Agriculture and Home Economics is a vision of Agricultural Sciences, University of California and the United States Department of Agriculture co-operating. Distributed furtherance of the Acts of ingress of May 8, and June 30
4. George B. Alcorn, Director, California Agricultural Extension.

Agricultural Extension Service
University of California
Imperial County
Court House, El Centro

Cost Est. Sheet No. 16

UC Cooperative Extension