NARROW ROW COTTON TRIAL

Yuma Valley Experiment Station Agricultural Extension Agent--J.R. Hazlitt

<table>
<thead>
<tr>
<th>Variety</th>
<th>Row Spacing (inches)</th>
<th>Plant Population Plants/Acre</th>
<th>Turnout (%)</th>
<th>Lint (lb/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPL - 16</td>
<td>36</td>
<td>25,000</td>
<td>28.8</td>
<td>787</td>
</tr>
<tr>
<td>Dunn 56C</td>
<td>12</td>
<td>75,000</td>
<td>28.8</td>
<td>797</td>
</tr>
<tr>
<td>Tamcot 788</td>
<td>12</td>
<td>58,000</td>
<td>28.0</td>
<td>761</td>
</tr>
<tr>
<td>Lockett 4789A</td>
<td>12</td>
<td>40,000</td>
<td>27.6</td>
<td>567</td>
</tr>
<tr>
<td></td>
<td></td>
<td>71,000</td>
<td>28.0</td>
<td>643</td>
</tr>
</tbody>
</table>

1/ Planting rates differed with seed size but were about 30 lb/A.

CROP HISTORY: PLANTED: 4/1/70 with International Harvester precision planters in a mulch. HARVESTED: 10/20/70. PREVIOUS CROP: 1969 fallow (summer sudangrass green manure crop). IRRIGATION: Preplant 3/14/70, first 5/19/70, second 6/18/70, third 7/7/70. Final irrigation 7/25/70. Total amount of irrigation water applied approximately 24 inches. FERTILIZER: Preplant incorporated 300 lb/A ammonium nitrate (99 lb N). WEED CONTROL: Treflan 3/4 lb/A + Karmex 1 1/2 lb/A applied flat and shallow disc incorporated 3 inches. Both chemicals were mixed together in one spray tank and applied before the preplant irrigation. DEFOILIATION: DEF 2 pt/A on 9/4/70. Paraquat 1 1/2 pt/A on 10/15/70.

OBSERVATIONS: Emergence of Tamcot was poor, resulting in midseason breakthrough of ground cherry. Dunn variety flowered and set bolls earlier than other varieties. On 8/13/70 most bottom bolls had boll rot. One month later on 9/9/70, 50% of all bolls had boll rot. Boll rot organisms enter bolls through pink bollworm exit holes and is especially prevalent at a high relative humidity as was the case in August.

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NARROW ROW COTTON TRIAL

Lee Mauldin Ranch--Lower Gila Valley Agricultural Extension Agent--J.R. Hazlitt

<table>
<thead>
<tr>
<th>Variety</th>
<th>Row Spacing</th>
<th>Lint 1bs/Acre*</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPL-16</td>
<td>20&quot; rows</td>
<td>800</td>
</tr>
<tr>
<td>DPL-16</td>
<td>conventional</td>
<td>1000</td>
</tr>
</tbody>
</table>

* Value given for conventional row cotton yield based on first picking only. The 20 inch row plots were not harvested until a month after defoliation which resulted in considerable cotton loss on the ground.
CROP HISTORY: PLANTED: 3/16/70 with Flex planters in a mulch, planting rate was 35 lb/A. HARVESTED: 10/15/70. PREVIOUS CROP: Cotton. IRRIGATION: Preplant 2/3/70, first 5/29/70, second 6/13/70, third 7/4/70. Final irrigation 7/23/70. Conventional grown cotton had two more irrigations. FERTILIZER: 50 lb/A nitrogen as urea applied at first irrigation. Conventional grown cotton received 250 lb/A of 11-48-0 and 150 lb/A nitrogen from anhydrous ammonia. WEED CONTROL: Treflan 1/2 lb/A + Karmex 1 1/4 lb/A applied flat and incorporated with power tiller to depth of 2 1/2 inches. Both chemicals were mixed together in a spray tank and applied with mulching operation on 3/6/70. INSECT CONTROL: Pink bollworm control - six applications of Azodrin starting 7/15/70. The conventional grown cotton received two additional applications of Azodrin. DEFOLIATION: DEF at 2 pt/A and 1 pt/A Accelerate applied 9/1/70.

*NARROW ROW COTTON TRIAL*

Bogle Farms--Maricopa

<table>
<thead>
<tr>
<th>Variety</th>
<th>Turnout 1/ (%)</th>
<th>Lint (lb/A)</th>
<th>Length (Average)</th>
<th>Grade</th>
<th>Micronaire 2/ (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPL-16</td>
<td>27.9</td>
<td>795</td>
<td>1 1/16</td>
<td></td>
<td>4.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9 bales M</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 bales MLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 bale SIM</td>
<td></td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Quality measurements made by actual gin sample methods.

These values do not include any ground cotton.

*NARROW ROW COTTON TRIAL*

Joe Sheely--Tolleson

<table>
<thead>
<tr>
<th>Variety</th>
<th>Turnout 1/ (%)</th>
<th>Population (Percent)</th>
<th>Lint (lb/A)</th>
<th>Length (Average)</th>
<th>Grade</th>
<th>Micronaire 2/ (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lockett 4789A</td>
<td>29.9</td>
<td>65,000</td>
<td>423</td>
<td>1 1/16</td>
<td>SIM</td>
<td>3.70</td>
</tr>
<tr>
<td>Paymaster 909</td>
<td>31.7</td>
<td>34,000</td>
<td>522</td>
<td>1 1/16</td>
<td>1 bale SIM</td>
<td>4.20</td>
</tr>
<tr>
<td>Dunn 56C</td>
<td>30.5</td>
<td>44,000</td>
<td>595</td>
<td>1 1/16</td>
<td>2 bales SIM</td>
<td>4.10</td>
</tr>
<tr>
<td>DPL-16</td>
<td>30.5</td>
<td>55,000</td>
<td>723</td>
<td>1 1/16</td>
<td>2 bales SIM</td>
<td>4.0</td>
</tr>
</tbody>
</table>

99
1/ Percent turnout based upon actual gin results.

2/ Quality measurements made by actual gin sample methods.

CROP HISTORY: PLANTED: 3/30/70. HARVESTED: 10/20/70. PREVIOUS CROP: Wheat and maize (double crop-1969). IRRIGATION: Irrigated up with five additional irrigations. The last of which was July 29. FERTILIZER: 300 lb/A 16-20-0 as a preplant. WEED CONTROL: Cultivated twice, hand-hoed once. INSECT CONTROL: Six times. AREA HARVESTED FOR TEST: DPL-16 plot size was 2.22 acres. Other varieties plot size was 1.46 acres.

* This trial was planted twice.

** * * * * * * * * * * * * * *

NARROW ROW COTTON TRIAL

Martin Talla Farm--Stanfield Agricultural Extension Agent--Sam Stedman

<table>
<thead>
<tr>
<th>Variety</th>
<th>Turnout 1/ (%)</th>
<th>Lint (lb/A)</th>
<th>Length</th>
<th>Grade</th>
<th>Micro- naire 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lockett</td>
<td>28.3</td>
<td>615</td>
<td>3 bales 1 1/32</td>
<td>MLS</td>
<td>4.20</td>
</tr>
<tr>
<td>DPL-16</td>
<td>29.2</td>
<td>913</td>
<td>6 bales 1 1/32</td>
<td>5 bales 5MLS</td>
<td>4.10</td>
</tr>
<tr>
<td>(North)</td>
<td></td>
<td></td>
<td>1 bale 1 1/16</td>
<td>21 bales MLS</td>
<td></td>
</tr>
<tr>
<td>DPL-16</td>
<td>28.9</td>
<td>637</td>
<td>5 bales 1 1/16</td>
<td>5 bales M</td>
<td>4.60</td>
</tr>
<tr>
<td>(South)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Quality measurements made by actual gin sample methods.

CROP HISTORY: PLOT SIZE: Total acres of narrow row cotton - 9.6 acres - planted on 40" beds - two rows of cotton 14" apart - no ground cotton. Because of soil difference, the field of DPL-16 was divided in half and harvested as separate fields. The entire field of 9.6 acres, including both varieties, DPL-16 and Lockett, averaged 744 lbs/acre. No ground cotton. IRRIGATION: The field was irrigated three times after stand established. Last irrigation 7/21/70.

** * * * * * * * * * * * * * *
NARROW ROW COTTON TRIAL

Jay Wilson--Stanfield Agricultural Extension Agent--Sam Stedman

<table>
<thead>
<tr>
<th>Variety</th>
<th>Turnout 1/ (%)</th>
<th>Lint (lb/Area)</th>
<th>Length</th>
<th>Grades 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoneville 213</td>
<td>29</td>
<td>1003</td>
<td>1 1/16</td>
<td>11 bales MSL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 1/16</td>
<td>2 bales M white</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 1/16</td>
<td>9 bales SL white</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1&quot;-ground</td>
<td>1 bale LM white</td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Quality measurements made by actual gin sample methods.

CROP HISTORY: PLANTED: March 20 - irrigated up. Emerged April 15, 1970. Planting rate was 32 lbs. per acre. Disyston seed treated PCNB + Cerasan. IRRIGATION: Four irrigations, last irrigation August 1. Pump was used for source. WEED CONTROL: Treflan at .8 lb/A incorporated over the beds preplant. INSECT CONTROL: Pink bollworm control. PLANT POPULATION: 57,000 plants/A. DEFOLIANT: August 27, DEF + Paraquat; second application, Chlorate. AREA HARVESTED FOR TEST: Two rows/ bed 14" apart 40" beds. 11.2 acres. FERTILIZER: 50 lb/A N from NH₃.

Petiole Analysis

<table>
<thead>
<tr>
<th>ppm NO₃</th>
<th>ppm NO₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/4</td>
<td>2,050</td>
</tr>
<tr>
<td>6/11</td>
<td>9,790</td>
</tr>
<tr>
<td>6/18</td>
<td>9,130</td>
</tr>
</tbody>
</table>

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NARROW ROW COTTON TRIAL

Jim Burns--Casa Grande Agricultural Extension Agent--Sam Stedman

<table>
<thead>
<tr>
<th>Turnout 1/ (%)</th>
<th>Lint (lb/A)*</th>
<th>Length</th>
<th>Grade</th>
<th>Micronaire 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.0</td>
<td>532</td>
<td>1 1/16</td>
<td>3 bales MSL</td>
<td>not available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 1/16</td>
<td>4 bales SMLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 1/16</td>
<td>4 bales SL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 1/16</td>
<td>1 bale SLM</td>
<td></td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Quality measurements made by actual gin sample methods.

* Approximately 1 bale was picked up off the ground and is not figured in the above yield figure.

No insect control. $4.20 NH₃ run in water.

* * * * * * * * * * * * *

NARROW ROW COTTON TRIAL

Dave Nelson--Maricopa Agricultural Extension Agent--Sam Stedman

<table>
<thead>
<tr>
<th>Variety</th>
<th>Lint (lbs/A)</th>
<th>Turnout 1/ (%)</th>
<th>Length</th>
<th>Grade</th>
<th>Micronaire 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tarmac 788</td>
<td>499</td>
<td>25.0</td>
<td>3 bales-</td>
<td>3 bales MLS</td>
<td>3 bales 40-42-43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 1/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lockett 4789A</td>
<td>371</td>
<td>22.6</td>
<td>2 bales-</td>
<td>2 bales SLM</td>
<td>2 bales 36-35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 1/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stoneville 213</td>
<td>541</td>
<td>24.9</td>
<td>3 bales-</td>
<td>SLM SLM MLS</td>
<td>3 bales 42-46-46</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 1/16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dunn 56 C</td>
<td>446</td>
<td>23.4</td>
<td>3 bales-</td>
<td>SLM SLM SLM</td>
<td>3 bales 38-38-43</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 1/16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Quality measured by actual gin sample methods.

CROP HISTORY: PLOT SIZE: Each variety - 3 acres
Ground cotton was not taken in this trial.
Approximately 50% stand

* * * * * * * * * * * * *

NARROW ROW COTTON TRIAL
(SOIL AND PLANT TYPE)

Travis Jones--Buckeye Agricultural Extension Agent--C.R. Farr

<table>
<thead>
<tr>
<th>Plant Height</th>
<th>Seeding Rate (lb/A)</th>
<th>Population (Plants/A)</th>
<th>Soil Type</th>
<th>Seed Cotton Boll Wt 1/ (lb/A)</th>
<th>Bolls/lb Grams/Boll Seed Cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-34&quot;</td>
<td>35</td>
<td>130,000</td>
<td>Sandy Loam</td>
<td>2794</td>
<td>3.48</td>
</tr>
<tr>
<td>42-50&quot;</td>
<td>35</td>
<td>110,000</td>
<td>Silt Loam</td>
<td>3202</td>
<td>4.63</td>
</tr>
<tr>
<td>25-32&quot;</td>
<td>50</td>
<td>153,000</td>
<td>Sandy Loam</td>
<td>2712</td>
<td></td>
</tr>
<tr>
<td>40-50&quot;</td>
<td>50</td>
<td>148,000</td>
<td>Silt Loam</td>
<td>3352</td>
<td></td>
</tr>
</tbody>
</table>
Weight measurements consisted of first two bolls collected from bottom of 25 plants. Bolls were collected below the 15th lateral in two different soil types.


NARROW ROW COTTON TRIAL
(IRRIGATION METHODS)*

<table>
<thead>
<tr>
<th>Irrigation Method</th>
<th>Seed Cotton (lb/A)</th>
<th>Turnout 1/ (%)</th>
<th>Lint (lb/A)</th>
<th>Length (UHM)</th>
<th>Strength (Pressley 1/8&quot;)</th>
<th>Micro- naire 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Row</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-hr sets</td>
<td>2954</td>
<td>37.1</td>
<td>1096</td>
<td>1.09</td>
<td>3.34</td>
<td>5.03</td>
</tr>
<tr>
<td>Alternate Row</td>
<td>3052</td>
<td>35.9</td>
<td>1096</td>
<td>1.07</td>
<td>3.19</td>
<td>4.60</td>
</tr>
</tbody>
</table>

* Comparisons made on sandy loam soil.

1/ Percent turnout based upon laboratory gin results.

2/ Quality measurements made at the University of Arizona Cotton Laboratory.


NARROW ROW COTTON TRIAL
(NITROGEN FERTILIZER RATE)*

<table>
<thead>
<tr>
<th>Nitrogen Rate (lb/A)</th>
<th>Seed Cotton (lb/A)</th>
<th>Turnout 1/ (%)</th>
<th>Lint (lb/A)</th>
<th>Length (UHM)</th>
<th>Strength (Pressley 1/8&quot;)</th>
<th>Micro- naire 2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>135</td>
<td>2095</td>
<td>29.4</td>
<td>616</td>
<td>1.05</td>
<td>2.95</td>
<td>3.98</td>
</tr>
<tr>
<td>180</td>
<td>2827</td>
<td>27.4</td>
<td>775</td>
<td>1.08</td>
<td>3.02</td>
<td>4.00</td>
</tr>
<tr>
<td>225</td>
<td>2741</td>
<td>29.2</td>
<td>800</td>
<td>1.08</td>
<td>3.15</td>
<td>3.85</td>
</tr>
</tbody>
</table>
* Urea used as a source of nitrogen in four applications on a sandy loam soil.

1/ Percent turnout based upon laboratory gin results.

2/ Quality measurements made at the University of Arizona Cotton Laboratory.

---

**CROP HISTORY:** PLANTED: 4/6/70. HARVESTED: 11/16/70. PREVIOUS CROP: Safflower, wheat, and cotton. IRRIGATION: Final irrigation 8/25/70. SOIL TYPE: Sandy loam. AREA HARVESTED FOR TEST: Two rows per bed, 195 feet in length. VARIETY: DPL-16.

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**NARROW ROW COTTON TRIAL**

(WARIETY TEST)

<table>
<thead>
<tr>
<th>Dougherty Ranch--Higley</th>
<th>Agricultural Extension Agent--C.R. Farr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety</td>
<td>Turnout 1/ (%)</td>
</tr>
<tr>
<td>Tamcot 788</td>
<td>33.1</td>
</tr>
<tr>
<td>Stoneville 213</td>
<td>35.4</td>
</tr>
<tr>
<td>Dunn 56</td>
<td>31.2</td>
</tr>
<tr>
<td>DPL-16</td>
<td>35.9</td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon laboratory gin results.

2/ Quality measurements made at the University of Arizona Cotton Laboratory.

---

**CROP HISTORY:** PLANTED: 4/12/70. HARVESTED: 10/15/70. PREVIOUS CROP: Sorghum, cotton. IRRIGATION: Final irrigation on 8/15/70. FERTILIZER: 40 lb/A nitrogen, 50 lb/A P2O5. SOIL TYPE: Clay loam. AREA HARVESTED FOR TEST: Two rows on a bed, 300 feet in length.

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**NARROW ROW COTTON TRIAL**

(ROW-SPACING)

<table>
<thead>
<tr>
<th>W.A. Heiden &amp; Son--Buckeye</th>
<th>Agricultural Extension Agent--C.R. Farr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row Spacing</td>
<td>Turnout 1/ (%)</td>
</tr>
<tr>
<td>Single Row-38&quot;</td>
<td>32.7</td>
</tr>
<tr>
<td>Double Row-12&quot;-26&quot;</td>
<td>26.8</td>
</tr>
<tr>
<td>Double Row-18&quot;-20&quot;</td>
<td>26.8</td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Quality measurements made at the University of Arizona Cotton Laboratory.
CROP HISTORY: PLANTED: 3/31/70. HARVESTED: 11/20/70. PREVIOUS CROP: Safflower 1969 - Safflower 1968 - Cotton 1967. IRRIGATION: 8 irrigations with the last being made on 9/1/70. FERTILIZER: 10 tons of manure. INSECT CONTROL: 8 applications the last of which was on 9/25/70. SOIL TYPE: Sandy loam. AREA HARVESTED FOR TEST: 2 rows, 1194 feet in length. VARIETY: DPL-16.

** NARROW ROW COTTON TRIAL **

<table>
<thead>
<tr>
<th>Variety</th>
<th>Turnout (%)</th>
<th>Lint 2/ (lb/A)</th>
<th>Length (inches)</th>
<th>Grade</th>
<th>Micronaire 3/ (Average)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPL-16</td>
<td>28.0</td>
<td>791</td>
<td>17 bales 1 1/32</td>
<td>24 bales MLS</td>
<td>3.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13 bales 1</td>
<td>6 bales SMLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 bale 31/32</td>
<td>1 bale MS</td>
<td></td>
</tr>
<tr>
<td>DPL-Smooth Leaf</td>
<td>32.0</td>
<td>784</td>
<td>7 bales 1 1/32</td>
<td>4 bales MLS</td>
<td>3.90</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 bales 1</td>
<td>7 bales SMLS</td>
<td></td>
</tr>
<tr>
<td>DPL-45A</td>
<td>27.4</td>
<td>750</td>
<td>2 bales 1 1/32</td>
<td>4 bales MLS</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 bales 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stoneville 213</td>
<td>27.3</td>
<td>811</td>
<td>3 bales 1 1/32</td>
<td>5 bales MLS</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 bales 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.

2/ Values include ground cotton.

3/ Quality measurements based upon actual gin sample methods.


- June 4: 4,900 ppm - nitrate
- June 11: 11,030 ppm - nitrate
- June 18: 11,999 ppm - nitrate
- June 25: 11,990 ppm - nitrate
- July 2: 8,690 - nitrate
- July 9: 4,070 - nitrate
- July 16: 440 - nitrate

WEED CONTROL: 3/26/70 - applied Treflan at 1 lb/A over the bed. Incorporated twice. One incorporation with sidewinder and once with a lilliston cultivator. Hand-hoed once in July. Cultivated on 5/24/70, 6/2/70, 6/17/70. INSECT CONTROL: 7/10/70, Lygus control-Dylox. 7/17/70 Lygus control-Dylox. 7/23/70 Lygus control Methyl parathion and toxaphene. Pink bollworm - Rossered blooms found in June, one exit hole found 7/21/70.
**AREA HARVESTED FOR TEST:**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Plants/A</th>
<th>DPL-16 Fertilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST-213 Fertilized</td>
<td>62,000</td>
<td>6/04 3,550</td>
</tr>
<tr>
<td>ST-213 Non-Fertilized</td>
<td>58,000</td>
<td>6/11 10,670</td>
</tr>
<tr>
<td>DPL-16 Fertilized</td>
<td>88,000</td>
<td>6/18 9,130</td>
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<tr>
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</tr>
<tr>
<td></td>
<td></td>
<td>7/02 8,360</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7/09 5,550</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7/16 1,870</td>
</tr>
</tbody>
</table>

**NARROW ROW COTTON TRIAL**

**Buster Brown--Casa Grande Agricultural Extension Agent--Sam Stedman**

<table>
<thead>
<tr>
<th>Variety Treatment</th>
<th>Stripped Cot.1/ (lb/A)</th>
<th>Ground Cot.2/ (%)</th>
<th>Total 3/ (lb/A)</th>
<th>Strength (Press-Lint Turnout Lint Turnout Lint Length (lb/A) (lb/A) (%) (lb/A) (UHM) 1/8&quot;) naire</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST-213 Fertilized</td>
<td>792.9</td>
<td>29.6</td>
<td>76</td>
<td>26.64</td>
</tr>
<tr>
<td>ST-213 Non-Fertilized</td>
<td>757.0</td>
<td>29.6</td>
<td>76</td>
<td>26.64</td>
</tr>
<tr>
<td>DPL-16 Fertilized</td>
<td>887.0</td>
<td>30.1</td>
<td>76</td>
<td>26.64</td>
</tr>
<tr>
<td>DPL-16 Non-Fertilized</td>
<td>687.0</td>
<td>30.1</td>
<td>76</td>
<td>26.64</td>
</tr>
</tbody>
</table>

1/ Percent turnout based upon actual gin results.
2/ Ground cotton lint and percent turnout based on entire field.
3/ Quality measurements made at the University of Arizona Cotton Laboratory.

**CROP HISTORY:**

**PLANTED:** 3/17/70. Planted in dry bed and irrigated up.

**HARVESTED:** 9/17/70. **PREVIOUS CROP:** Cotton 1969 and Barley 1968. **IRRIGATION:** 3/17/70 with six other irrigations. The second irrigation was at germination time to break crust. The final irrigation was on 8/1/70. **SOURCE OF WATER:** Well, 450' deep. **FERTILIZER:** 83 lb/A N from NH3 injected as a preplant on the fertilizer test plots. No fertilizer applied on rest of field. **WEED CONTROL:** 3/12/70. Dacthal flown on bed before planting. 4/5/70 cultivated with best cultivator. **INSECT CONTROL:** Twice in July for Lygus. **DEFOLIANT:** 2 gal. sodium chlorate + 3/4 pt. Paraquat. **AREA HARVESTED FOR TEST:** 1 acre plots. 40" beds, two rows per bed. 14" apart.

**Petiole Analysis**

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