

# **PUBLICATIONS**

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# **FIELD DAY REPORT - 1992**

**Texas A&M University Agricultural Research and  
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at Overton**

**Texas Agricultural Experiment Station  
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## CANTALOUPE VARIETY EVALUATIONS - 1991

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**Background.** Cantaloupe represents 9 percent of retail fresh fruit volume at mid-summer. Texas is third in providing supplies of cantaloupe to the United States. Peak months are June, July, and August.

Resistance to disease and productivity are important aspects among the varieties. Some state promotion boards have established a 10% soluble solids minimum for cantaloupe sales. Only a vine-ripe mature melon will provide the sweetness, texture, flavor, and juiciness that characterize cantaloupe. It does not increase in sugar content after picking, although it will soften and change types of sugars. A variety should produce fruit 5 inches or larger in diameter, well-netted or webbed with a smoothly rounded, depressed scar at the tip end. A melon should be judged on its appearance, aroma, juiciness, taste, and softness. Attention should be given to color enhancement of orange flesh, since many are halved and overwrapped for the foodservice industry.

Due to growers' mid-summer marketing interest in cantaloupe for local sales, newer varieties were evaluated in a cooperative effort between the Texas Agricultural Experiment Station and the Texas Agricultural Extension Service at the Texas A&M University Agricultural Research and Extension Center, Overton in the summer of 1991.

**Research Findings.** Data were obtained from three harvests on August 2, 5 and 8, 1991. Well-netted or webbed cantaloupe with a smooth rounded, depressed scar at the tip end were harvested. The results are presented in the table below.

Caravelle had the highest soluble solids with 11.5% and marketable yields of 11,253 lbs/acre. Sunre-7052 had the highest marketable yields of 12,396 lbs/acre and 10.5% soluble solids. Sunex-7030 had 11.4% soluble solids and produced 12,233 marketable lbs/acre and was rated number 2 overall in quality and production.

**Application.** Consumers purchasing cantaloupe at local fresh markets are demanding higher quality produce with high sugar content. Melons should have firm flesh that will not soften or deteriorate rapidly after purchase. All of the varieties rated more than 8.4% soluble solids and greater than 7,000 marketable lbs/acre had firm flesh and excellent orange color.

Producers should look at this study to determine the opportunity for sales of mid-summer harvested cantaloupe varieties with the mentioned good qualities which lend themselves to retailers interested in local farmer market.

**YIELD SUMMARY - SEEDED CANTALOUPE VARIETY TRIAL - OVERTON, TEXAS-1991**

| VARIETY       | SEED SOURCE | MKTBL. YIELD (LBS/A) | TOTAL <sup>2</sup> YIELD (LBS/A) | % OF MKT. YIELD |      | AVG. MKT. MELONS WT. (LBS) |      | NO. MKT. MELONS PER ACRE |      | SOLUBLE SOLIDS (%) |      |      |
|---------------|-------------|----------------------|----------------------------------|-----------------|------|----------------------------|------|--------------------------|------|--------------------|------|------|
|               |             |                      |                                  | LRG.            | MED. | LRG.                       | MED. | LRG.                     | MED. |                    | SML. | SML. |
| SUNRE 7042    | 6           | 12396                | 15255                            | 19              | 63   | 5.0                        | 2.9  | 1.8                      | 454  | 2813               | 1180 | 10.5 |
| SUNEX 7030    | 6           | 12233                | 15518                            | 8               | 77   | 1.3                        | 2.4  | 1.9                      | 363  | 3539               | 998  | 11.4 |
| PRONTO        | 1           | 11425                | 13231                            | 25              | 46   | 1.5                        | 2.8  | 1.1                      | 1361 | 1452               | 635  | 8.4  |
| CARAVELLE     | 2           | 11253                | 12687                            | 32              | 54   | 3.2                        | 3.0  | 2.0                      | 998  | 1815               | 545  | 11.5 |
| MISSION       | 2           | 9792                 | 11371                            | 19              | 71   | 2.0                        | 3.7  | 1.1                      | 545  | 1906               | 454  | 9.1  |
| DURANGO       | 5           | 9674                 | 12115                            | 16              | 61   | 4.2                        | 2.8  | 1.9                      | 363  | 2178               | 1089 | 9.4  |
| MAGNUM 45     | 5           | 9129                 | 10427                            | 17              | 71   | 3.0                        | 2.4  | 1.0                      | 454  | 2450               | 817  | 8.9  |
| PRIMO         | 4           | 8993                 | 10209                            | 23              | 67   | 2.4                        | 2.8  | 1.2                      | 635  | 2087               | 454  | 9.1  |
| MAIN PAK      | 6           | 7968                 | 10609                            | 30              | 67   | 2.8                        | 3.1  | 1.1                      | 817  | 1361               | 182  | 10.1 |
| LEGUNA        | 2           | 7668                 | 9574                             | 29              | 66   | 3.0                        | 2.7  | 1.2                      | 635  | 1724               | 91   | 9.7  |
| PREMIER       | 1           | 7378                 | 7950                             | 6               | 80   | 1.3                        | 2.5  | 1.8                      | 91   | 2359               | 545  | 10.3 |
| TASTY SWEET   | 6           | 6815                 | 9257                             | 43              | 57   | 3.4                        | 2.2  | 0.0                      | 726  | 1361               | 0    | 10.6 |
| LOREDO        | 5           | 6262                 | 7278                             | 8               | 65   | 1.4                        | 2.4  | 1.0                      | 182  | 1634               | 998  | 7.6  |
| SUNRE 7029    | 6           | 6126                 | 7968                             | 9               | 76   | 2.0                        | 2.3  | 1.3                      | 182  | 1724               | 817  | 8.7  |
| SUNSHINE      | 3           | 5590                 | 6988                             | 0               | 75   | 0.0                        | 3.2  | 1.8                      | 0    | 1361               | 726  | 9.3  |
| HY-MARK       | 5           | 5245                 | 6398                             | 30              | 69   | 1.3                        | 1.9  | 0.8                      | 454  | 998                | 272  | 6.2  |
| EXPLORER      | 4           | 4964                 | 7569                             | 44              | 56   | 3.1                        | 2.9  | 0.0                      | 546  | 726                | 0    | 7.1  |
| SUNRE 7044    | 6           | 4129                 | 6706                             | 0               | 82   | 0.0                        | 1.7  | 1.2                      | 0    | 1361               | 363  | 8.8  |
| LSD (P = .05) |             | NS                   | NS                               | 40              | NS   | 3.7                        | 1.4  | 1.5                      | 1319 | 1817               | 1005 | 2.7  |

<sup>1</sup> LRG + MED + SML + CULL  
<sup>2</sup> SEED SOURCE: 1) ABBOT & COBB  
 2) ASGROW  
 3) FERRY-MORSE  
 4) NORTHRUP KING  
 5) PETOSEED  
 6) SUNSEEDS

DATE SEEDED: MAY 31, 1991  
 SEEDED THROUGH WHITE ON BLACK PLASTIC MULCH  
 DRIP IRRIGATED  
 800 LBS. 6-24-24 BANDED  
 RANDOMIZED COMPLETE BLOCK WITH 3 REPS  
 12" IN ROW SPACING; 96" BETWEEN ROWS  
 20 PLANTS/REP/ENTRY

HARVEST DATES: AUGUST 2, 5 & 8  
 1991  
 COOPERATORS: TAEX & TAES  
 Merry Baker  
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