FIELD DAY REPORT - 1992

Texas A&M University Agricultural Research and Extension Center at Overton

Texas Agricultural Experiment Station
Texas Agricultural Extension Service

Overton, Texas

April 30, 1992

Research Center Technical Report 92-1

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[y] SOURCE	MKTBL. YIELD (LBS/A)	TOTAL[z] YIELD (LBS/A)	% OF MKT. YIELD			AVG.MKT.MELONS WT. (LBS)			NO.MKT.MELONS PER ACRE			SOLUBLE SOLIDS (%)
				LRG.	MED.	SML.	LRG.	MED.	SML.	LRG.	MED.	SML.	
SUNRE-7042	6	12396	15255	19	63	18	5.0	2.9	1.8	454	2813	1180	10.5
SUNEX-7030	6	12233	15518	8	77	15	1.3	2.4	1.9	363	3539	998	11.4
PRONTO	1	11425	13231	25	46	29	1.5	2.8	1.1	1361	1452	635	8.4
CARAVELLE	2	11253	12687	32	54	13	3.2	3.0	2.0	998	1815	545	11.5
MISSION	2	9792	11371	19	71	10	2.0	3.7	1.1	545	1906	454	9.1
DURANGO	5	9674	12115	16	61	22	4.2	2.8	1.9	363	2178	1089	9.4
MAGNUM 45	5	9129	10427	17	71	11	3.0	2.4	1.0	454	2450	817	8.9
PRIMO	4	8993	10209	23	67	10	2.4	2.8	1.2	635	2087	454	9.1
MAIN PAK	6	7968	10609	30	67	3	2.8	3.1	1.1	817	1361	182	10.1
LEGUNA	2	7668	9574	29	66	5	3.0	2.7	1.2	635	1724	91	9.7
PREMIER	1	7378	7950	6	80	14	1.3	2.5	1.8	91	2359	545	10.3
TASTY SWEET	6	6815	9257	43	57	0	3.4	2.2	0.0	726	1361	0	10.6
LOREDO	5	6262	7278	8	65	26	1.4	2.4	1.0	182	1634	998	7.6
SUNRE 7029	6	6126	7968	9	76	16	2.0	2.3	1.3	182	1724	817	8.7
SUNSHINE	3	5590	6988	0	75	25	0.0	3.2	1.8	0	1361	726	9.3
HY-MARK	5	5245	6398	30	69	9	1.3	1.9	0.8	454	998	272	6.2
EXPLORER	4	4964	7569	44	56	0	3.1	2.9	0.0	546	726	0	7.1
SUNRE 7044	6	4129	6706	0	82	18	0.0	1.7	1.2	0	1361	363	8.8
LSD (P=.05)		NS	NS	40	NS	24	3.7	1.4	1.5	1319	1817	1005	2.7

[z] LRG + MED + SML + CULL

[y] 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

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