FIELD DAY REPORT - 1993

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

Texas Agricultural Experiment Station
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CANTALOUPE EVALUATIONS - 1992

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Background. Texas is third in the United States in cantaloupe production. However, East Texas is not a major cantaloupe producing area. Past production was mainly in home gardens or small plots for local sales. In recent years, there has been increased interest in larger scale production for farmer markets and grocery chain sales.

In a cooperative effort between the Texas Agricultural Experiment Station and the Texas Agricultural Extension Service, an ongoing cantaloupe variety evaluation trial was established at the Texas A&M University Agricultural Research and Extension Center at Overton in spring, 1992. Seventeen varieties were evaluated in replicated trial.

Research Findings. Cantaloupe plants were set 2 ft apart in the row on 22 April on raised beds spaced 8 ft apart. The beds were covered with white on black plastic mulch. Irrigation was by drip. Fertilization was by recommendation by the Texas A&M Soil Testing Lab.

The data presented in table 1 were from 4 harvest dates (30 June, 1, 6, 9 July). The cantaloupes were graded according to size (small, 23's-30's; mediums, 15's-18's; and large, 9's-12's) which is based on the number of melons that will fit into a 45 lb box. Soluble solids (percent sugar) was obtained for each variety.

The majority of melons produced by all varieties were in the size 12 and 15 classes. The highest producers in these two classes were 'Tasty Sweet', 'Mission', 'Explorer', and 'Sunre 7045'. The variety 'Laredo' produced the greatest amount of large melons while 'Tasty Sweet', and 'Sunre 7030' produced the greatest amount of small melons. 'Explorer' gave the highest percent soluble solids with 11.2%. Others that showed very high sugar content were 'Sunre 7030', 'Primo', 'Laguna', and 'Durango'.

Application. The information presented in this report can be used by individuals in all degrees of production, whether it be home gardens or large scale farming. The results will enable growers to make decisions on what varieties to grow that will meet their individual or market demand. Since consumer demand is for high quality with high sugar content, the information derived from this study can be used by growers to determine which varieties demonstrate these favorable traits.

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Table 1. Total yield per acre within 6 grades, and percent soluble solids of 17 cantaloupe varieties grown at Overton, Texas.

Variety	Seed source[z]	Grades						Soluble solids (%)
		30's	23's	18's	15's	12's	9's	
		----------Total yield/ac (lbs)----------						
Tasty Sweet	5	799	1162	2456	7853	13733	3908	8.8
Sunex 7029	5	254	0	472	799	7308	8797	7.4
Pronto	1	0	0	0	424	1028	1089	6.2
Mission	2	0	0	0	6413	10309	7142	9.2
Sunre 7030	5	170	1174	3194	7466	4925	956	10.8
Magnum 45	4	0	0	545	5898	3569	0	9.2
Primo	3	0	242	278	5360	6800	14641	10.0
Main Pak	5	0	545	3618	9002	3303	0	7.0
Laguna	2	0	847	847	4283	8325	8591	10.0
Premier	1	0	206	545	2868	4259	4804	6.2
Caravelle	2	0	411	3812	5881	7611	1089	7.4
Laredo	4	0	581	2638	3993	7042	11737	8.4
Durango	4	0	157	919	5309	4163	4538	10.2
Hymark	4	0	0	1077	5651	4259	569	7.0
Explorer	3	266	605	2771	13697	8276	508	11.2
Sunre 7045	5	133	520	4731	13056	5227	0	9.0
Galleon	2	448	387	484	6776	4719	944	8.2
LSD (0.05)		569	1082	2892	5091	5264	6218	---

[z]Seed Source: 1 - Abbott & Cobb; 2 - Asgrow; 3 - Northrup King; 4 - Petoseed; 5 - Sun Seeds.