Texas Agricultural Experiment Station
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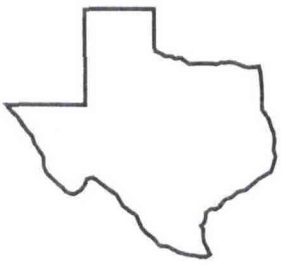
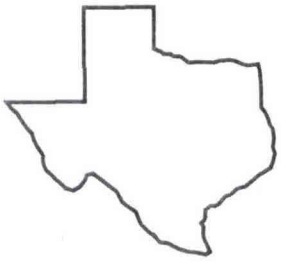
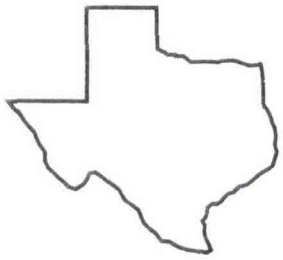
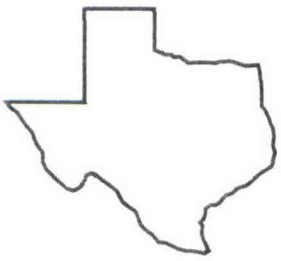




Overton Field Day Report - 1994





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CANTALOUPE EVALUATIONS - 1993

D. R. Earhart, M. L. Baker, and F. J. Dainello

Background. Texas is third in cantaloupe production which also accounts for 9 percent of the state's total retail fresh fruit volume at mid-summer. Historically, East Texas has not been a major cantaloupe producing area. Production has been limited to home gardens or small plots for local sale. Recently there has been increased interest in larger scale production for direct marketing through farmers' 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. Eleven varieties were evaluated in the 1993 study.

Research Findings. Cantaloupe plants were set 2 ft apart in the row on 26 April on raised beds spaced 8 ft apart. The beds were covered with black plastic mulch. Irrigation was by drip. Fertilization was by recommendation by the Texas A&M University Soil Testing Lab.

The data presented in Table 1 were obtained from a once-over harvest on 8 July. The cantaloupes were graded according to size (small, 23's-30's; mediums, 15's-18's; 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) were obtained for each variety.

Yields were exceptionally low in this study. This could possibly be explained based on weed competition due to premature breakdown of the plastic mulch used and excessive rainfall. 'Super 45' produced the greatest amount of melons in this study with 9,378 lbs/ac followed closely by 'Supreme' with 8,434 lbs/ac. The greatest percentage of melons produced by all entries tested were in the medium size grades (12's-18's). 'Forerunner' produced the greatest amount of small melons with 20.8% and 'Caravelle' the greatest amount of large melons with 13.4%. Soluble solids concentration of all varieties was low which was probably due to excessive rainfall during fruit sizing, although several still produced soluble solids above 9%.

Application. Information gained from these studies, coupled with innovative cultural practices such as planting date, plastic mulches, and fertigation, can be used by growers to develop cantaloupe production in East Texas beyond its present level to that of a major direct marketed crop.

Additional Information. More detailed information can be obtained from the authors or your local county agent by requesting TAES progress report number PR-5150 titled "Cantaloupe Evaluations For East Texas: A Three-Year Study".

Table 1. Total Marketable Yield, Percent of Marketable Yield Within 6 Grades, and Percent Soluble Solids Concentration of 11 Cantaloupes Evaluated at Overton, Texas - 1993.

Entry	Seed Source[Z]	Total Marketable Yield (lbs/ac)	Grades						Soluble Solids Conc. (%)
			30's	23's	18's	15's	12's	9's	
			% of Total Marketable						
Super 45	5	9,378	0.0	0.0	17.9	67.9	10.7	3.5	10.0
Supreme	5	8,434	8.3	27.2	30.6	30.6	5.6	2.7	8.4
Main Pak	4	7,345	18.5	7.4	18.5	48.1	7.5	0.0	8.6
Cristobal	2	7,187	16.7	12.5	16.7	33.3	20.8	0.0	9.4
XPH 6112	2	6,740	9.1	13.6	31.8	27.3	13.6	4.6	8.9
Pronto	1	6,377	0.0	12.5	25.0	37.5	25.0	0.0	9.7
XPH 6110	2	6,195	0.0	15.8	21.1	36.8	21.1	5.2	8.0
Forerunner	3	5,808	20.8	25.0	37.5	12.5	4.2	0.0	8.4
Tasty Sweet	4	5,687	18.2	9.1	36.4	31.8	0.0	4.5	8.5
Caravelle	2	5,167	0.0	13.3	26.7	33.3	13.3	13.4	6.5
Scout	3	4,949	0.0	11.8	23.5	29.4	29.4	5.9	5.9
LSD (.05)		NS	NS	16.3	NS	24.4	20.8	8.1	---

[Z] Seed Source: 1 - Abbott & Cobb; 2 - Asgrow; 3 - Shamrock; 4 - Sunseeds; 5 - Willhite
Date Transplanted - April 29
Date Harvested - July 8
Total 1993 Rainfall - 13.73 inches
Dates Irrigated - None
Plant Population - 2,722/ac. (8 ft x 2 ft)