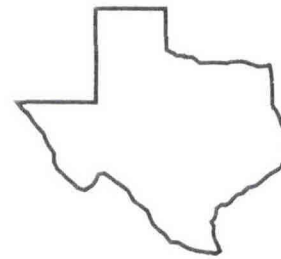
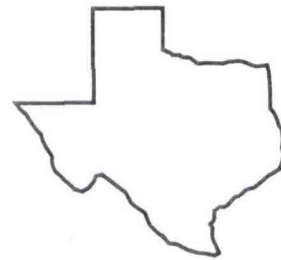
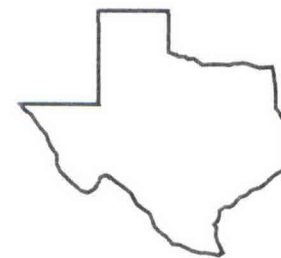


Texas Agricultural Experiment Station
Texas Agricultural Extension Service
The Texas A&M University System



Overton Field Day Report - 1994



**1994
Research Center
Technical
Report**

No. 94-1

SEEDLESS (TRIPLOID) WATERMELON EVALUATIONS - 1993

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

Background. Interest in seedless watermelon production has increased in recent years. The number of first-time consumers purchasing seedless watermelons increased from 4% in 1988 to 12% in 1992. Seedless cultivars are currently estimated at 5% of the commercial market, with a potential share of 15% to 20%. Food service and retail outlets are choosing seedless melons because of their size which makes them easier to handle. Much of these sales are cut melons for produce counters, salad bars, institutional servings, and other outlets which emphasize merchandising. Most seedless melons are now sold packed 3 to 6 melons per box, with each melon weighing 15 to 18 lbs. Although production input requirements for seedless watermelons are greater than standard types, they fit well into small-scale farming operations. These melons offer a high return cropping alternative with direct sales and local market potential in Texas. Seedless watermelons will comprise an increasing share of the Texas market in the future if current trends continue.

Research Findings. Seedless watermelon plants were set 3 ft apart in the row on 29 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 from one harvest date (8 July). Yields were low due to premature breakdown of the plastic mulch used, and excessive early season rainfall which encouraged severe weed competition. 'SsuperSweet 5244' was the highest yielding in trial with 20,954 lbs/ac, followed closely by 'Revelation' (19,520 lbs/ac), and 'SsuperSweet 5032' (18,731 lbs/ac). The majority of melons produced weighed within the 9 to 14 lb range. 'Tiffany' produced the greatest percentage in this range (87%), followed by SsuperSweet 5244 (62%) and 'Genesis' (58%). Revelation produced the most in the range of 15 lb or greater with 60%. All entries had very high soluble solids concentrations ranging from 11.0 to 12.4%.

Application. Traditional watermelon growers are reluctant to enter the seedless market, due to uncertainty of the production potential of varieties and high input cost. With data from continuing studies, this reluctance can be overcome enabling East Texas to become one of the major seedless watermelon producing areas in Texas and possibly the southeastern United States.

Additional Information. More detailed information can be obtained from the authors or your local county agent by requesting TAES progress report number PR-5148 titled "Seedless (Triploid) Watermelon Evaluations For East Texas: A Four-Year Study".

Table 1. Total yield, percent of melons in 3 weight ranges, and percent soluble solids concentration of 5 seedless watermelons evaluated at Overton, Texas - 1993.

Entry	Seed source ^Z	Total yield (lbs/ac)	Weight Range (lbs)			Soluble solids conc. (%)
			<8	9-14	>15	
			-----%-----			
SsuperSweet 5244	2	20,954	13	62	25	11.8
Revelation	3	19,520	8	32	60	11.0
SsuperSweet 5032	2	18,731	4	48	48	11.0
Tiffany	1	15,482	13	87	0	12.4
Genesis	3	12,179	21	58	21	11.8
LSD (.05)		NS	27	38	31	-----

^ZSeed source: 1 - Asgrow; 2 - Abbott & Cobb; 3 - Shamrock

Date transplanted - April 29

Date harvested - July 8

Total 1993 rainfall - 13.73 inches

Dates irrigated - none

Plant population - 1,875/ac (8 ft x 3 ft)

Pollinator - Star Brite