

HORTICULTURE FIELD DAY REPORT - 1998

**TEXAS A&M UNIVERSITY AGRICULTURAL
RESEARCH and EXTENSION CENTER
at OVERTON**

**Texas Agricultural Experiment Station
Texas Agricultural Extension Service
Texas A&M University**

June 18,1998

Research Center Technical Report 98-2

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EAST TEXAS SEEDLESS WATERMELON EVALUATIONS - 1997

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Background. Seedless (triploid) watermelons have become popular with today's consumers. Seedless cultivars are currently demanded in 10 percent of the commercial market. It has been estimated that this share could increase to 20 percent, or even 50, in the near future. There has been an increased interest in growing seedless watermelons in the East Texas area using plasticulture techniques, drip irrigation and transplants. Seedless watermelon production evaluations have been conducted by scientists with the Texas Agricultural Experiment Station and the Texas Agricultural Extension Service since 1990. Further studies were implemented in the spring of 1997 in order to provide more information on production potential and quality of the varieties currently on the market. In the spring of 1997, 19 varieties of seedless watermelons were evaluated in replicated trials at the Texas A&M University Research and Extension Center at Overton. Seedless watermelon plants were set three feet apart in the row on 9 May on raised beds mulched with six feet wide black plastic spaced eight feet apart in a randomized complete block with three replications. A hybrid pollinator was planted to provide fruit set. One super hive of bees was placed in the field. Irrigation was by drip under the plastic mulch. Fertilization was 700 lbs 13-13-13/ac banded 23 April 1997.

Research Findings. 'Buttercup' was the highest yielding variety in the trial with 71,663 lb/ac (1997 Seedless Table). The second highest yielding variety was 'Scarlet Trio' with 71,115 lb/ac. The largest percentage of the top two producing watermelons weighed 15 to 19 lbs each. 'W4016', 'Big Charlie', and 'Monarch' produced the largest percent of watermelons in the 25-29 lb or larger range while 'W4016', 'Dulce Verde', and 'Big Charlie' had the largest percent of watermelons in the 20-24 lb range.

Application. This information can be used by growers to determine which seedless varieties have the potential for profitable production in the East Texas area. Seedless watermelon varieties are larger in size and are producing more watermelons at harvest over 20 lbs. Investigative plantings should be made at first before entering full-scale seedless watermelon production.

Acknowledgment. This research was supported in part by trial entry fees paid by cooperating seed companies.

1997 TAEX Statewide Seedless (triploid) Watermelon Trial at Overton

Entry	Seed Source	Total Yield (lbs/A)	% Fruit harvested/Size range (lbs)					
			<30	25-29	20-24	15-19	10-14	>10
Buttercup	3	71,663	0.0	8.8	0.0	42.1	36.1	13.0
Scarlet Trio	4	71,115	0.0	0.0	10.5	42.1	32.4	15.0
Big Charlie	3	65,990	0.0	19.6	24.8	31.1	24.6	0.0
Gal	3	64,088	0.0	0.0	0.0	47.8	47.2	4.9
3F-1004	1	52,450	0.0	9.0	17.2	19.5	42.2	12.1
Sweet Carolina Imp.	3	51,923	0.0	0.0	9.7	46.0	40.0	4.4
Dulce Verde	3	48,874	0.0	0.0	28.3	25.9	40.4	5.4
WM 210	2	45,121	0.0	0.0	9.6	47.3	35.2	7.8
Gem Dandy	7	45,041	0.0	5.0	10.2	37.7	43.9	3.3
Favorite Ball	1	42,304	0.0	0.0	0.0	8.5	76.4	15.1
SXW 3053	6	41,295	0.0	0.0	20.9	49.1	21.0	9.0
W4016	6	40,827	0.0	40.0	33.6	27.4	0.0	0.0
Premiere	5	36,503	0.0	0.0	12.3	23.4	51.9	12.4
Crimson Trio	4	35,273	0.0	0.0	0.0	53.6	37.8	8.5
Monarch	5	34,561	0.0	19.5	9.0	36.1	15.2	20.2
3F-1004	1	30,568	0.0	0.0	0.0	11.8	78.9	9.2
SXW 3022	6	26,996	0.0	8.5	14.1	48.3	22.0	7.0
SXW 5001	6	20,244	0.0	0.0	11.8	37.0	51.0	0.0
Imperial	5	19,410	0.0	8.4	13.4	58.1	20.0	0.0
LSD (P=0.05)		29,904	NS	20.6	25.5	36.3	39.1	17.7

Seed Source: 1 = CDM Fast Track; 2 = DeRuiter; 3 = De Palmer; 4 = Rogers Sandoz; 5 = Shamrock; 6 = SunSeeds; 7 = Willhite

Established: May 9 on 8' wide raised beds mulched with black plastic

Harvested Once-over July 21

Irrigation: Drip as needed

Fertilization: 700 lbs 13-13-13/A banded April 23

Design: Randomized complete block with 3 replicates

****NOTE** = YIELD PROJECTIONS BASED ON ASSUMED 100% PLANTED ACRES.**