

Trial Report: Seedless Watermelon Variety Evaluation 2015

Conducted by:

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Production

Location: Tifton, GA

Entries: 32 varieties and advanced selections

Planting Date: Seeded on into 200 cell trays Feb 19. Transplanted 31 March.

Plant Spacing: 6' centers black TIF plastic mulch, 42" in-row spacing (2074 per acre pop.)

Plot size: 10 plants per plot (2-row plots with 5 plants per row) with 14' alleys between adjacent plots.

Fumigation: Trifecta applied in Feb. when plastic laid.

Fertility: 1000 lbs/acre 5-10-15 preplant under plastic with weekly fertigations with 7-0-7 of 12 lbs/N acre for a total of 170 lb/acre N. Magnesium sulfate applied through drip at fruit set at a rate of 3 lb/acre Mg.

Irrigation: 1 inch per week until full vine, then 2 inches per week, reduced to 1 inch per week in early June.

Herbicide: Between rows: Dual Magnum + Curbit + Valor, Select Max applied for grasses during season.

Pest Control: Weekly fungicide sprays according to UGA recommendations (+ copper for *Pseudomonas* after transplant).

Imidacloprid at planting followed by bifenthrin + Lannate (squash bug), Agrimek (mites), and Venom during growth.

Pollenizer: SP-6 placed after every 3rd and 5th plant in a plot (4 per plot, 2/row).

Pollination Services: 2 bumblebee quads located in planting and 6 honeybee hives located approximately 500 feet from planting.

Data Collection

Stand count conducted: 20 April

Harvest Date: 16, 23, 29 June. A final harvest was conducted on 6 July, but fruit were too small to be marketable and were not included in results. Fruit were harvested when tendrils had turned brown and ground-spots were yellow. Each fruit was weighed and graded into 60, 45, 36, and 30-count classes. The following classes and weights were determined by the National Watermelon Research and Development Group to be used for watermelon variety trials to aid in unifying trial results:

60 count: 9-13.5 lb, 45 count: 13.6-17.5 lb, 36 count: 17.6-21.4 lb, 30 count: 21.5+ lb

Fruit from the first and second harvest (5 fruit per variety per replicate) were utilized for quality measurements. Average firmness was determined using an 11 mm probe with a hand-held firmness tester from 2 locations in 5 melons (10 readings) per replication. Average brix was obtained from a teaspoon sample of flesh from each of the 5 melon subset per replicate which was crushed using a hand-held lemon press and read using a hand-held refractometer. Average number of hard seed was determined by counting the total number of hard seed per 5-melon subsample. Each melon was quartered and the number of black, hard seed counted in all 4 quarters of each melon (pips were not included in this rating).

Average hollow heart was rated by slicing melons in half (length-wise) and ranking melons on a 0-5 scale (See Figure 1 below). On this scale: 0= no visible cracking in melons; 1 < 0.25 inch-wide, cracking in one direction, still marketable; 2 =0.25-0.5 inch, cracking in a single or multiple directions marketable; 3= 0.5-1.0 cracking in one or multiple directions, not marketable; 4 > 1.0 inch cracking in multiple directions with fruit center still intact, not marketable; and 5 > 1.5 inch cracking with center cavity of fruit exposed. Statistics were conducted using SAS version 9.3. Proc GLM and Fisher's least significant test were conducted when appropriate. Subsampling procedures were used for firmness and hollow heart ratings.

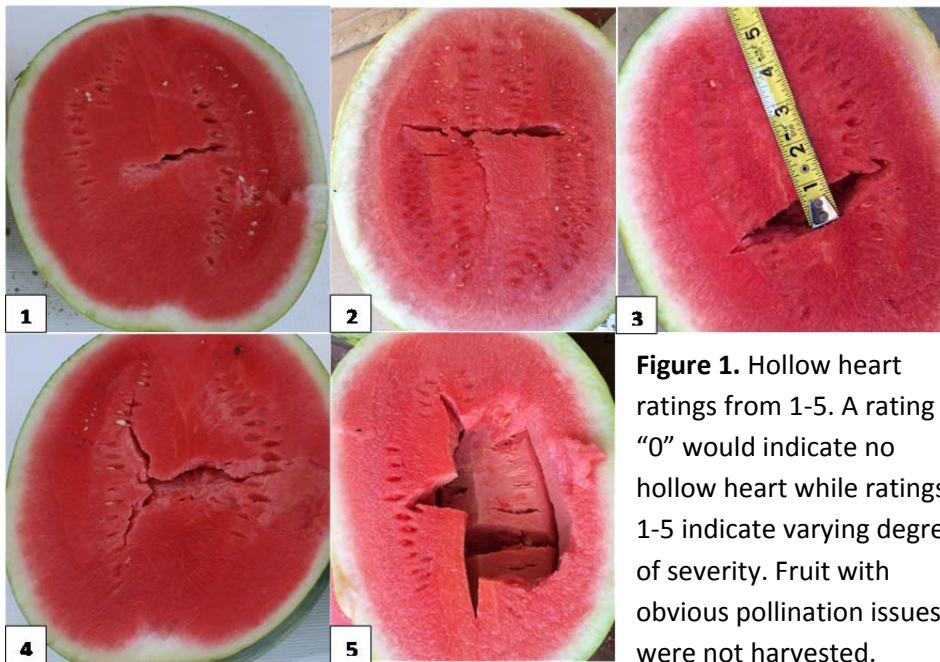


Figure 1. Hollow heart ratings from 1-5. A rating of “0” would indicate no hollow heart while ratings of 1-5 indicate varying degrees of severity. Fruit with obvious pollination issues were not harvested.

Table 1. Entries in the Spring 2015 Variety Trial.

Harris Moran	High Mark	Nunhems	Origene	Seminis	Siegers	Syngenta	Tri-Hishtil	US Agriseeds
Crunchy Red	7015	7167	Lucille	SV0241WA	Sweet Polly	Captivation	Grafted	USAWR11376
Troubadour	Razorback	7187 HQ	Maxima	SV7112WA		Exclamation	Fascination	USAWR11379
Traveler	Wolverine	7197 HQ	Talca	Joy Ride		Fascination		USAWX90020
		ACX 6177		Road Trip		Melody		
		Nun31208		Summer		Sugar Fresh		
		Warrior		Breeze		Sweet Dawn		
						TriX 313		

Results

Tables 2-10 show results for yield and quality data. Personal-size melons (USAWR11376 and USAWR11379) are not included in statistical analysis for yield with larger melons but were analyzed separately. For quality attributes all entries were analyzed together. The largest average fruit was SV7112WA at 19.1lb/fruit for all harvests, while the highest yielding variety was Summer Breeze at 141,860 lbs/acre. The variety with the highest yield of 60-ct fruit was Troubadour, and the variety with the greatest yield of 45-ct fruit was Melody. The variety with the most 36-ct fruit was Wolverine and the variety with the most 30-ct fruit was Sugar Fresh. Average fruit weights across nearly all varieties were higher in 2015 than in 2014 with much higher yields of 30-ct fruit. Average total yields were similar in 2014 and 2015. Quality data (Table 10) indicated that SV7112WA had the highest Brix content while Troubadour and Crunchy Red were firmest. Hard seed counts are based on total number of hard seed counted in all melons analyzed. Varieties with high numbers of seed present were typically the result of 1 or 2 fruit with hard seeds.

***We would like to thank all participating companies for their continued support.
Pictures of new entries for 2015 available if desired.***

Table 2. Total yield and average weight for watermelons grown in Tifton, GA 2015.

Variety	Average Weight	Total Yield	60 Count	45 Count	36 Count	30 Count
	(lbs)					
	(lbs/acre)					
Summer Breeze	17.8 a-d ²	141860 a	14150 d-i	42830 b-g	38390 a-e	46490 a
Wolverine	17.9 a-d	138450 ab	14200 d-i	43890 a-f	56140 a	24220 a-d
Talca	16.8 c-g	134120 abc	22230 a-e	45750 a-d	40950 a-e	25190 a-d
Sugar Fresh	18.3 abc	132420 abc	15450 c-i	32800 b-g	37250 a-e	46930 a
Lucille	17.4 b-e	126280 abc	16240 bb-i	43730 a-f	35250 b-e	31070 a-d
7187 HQ	17.2 b-f	125860 abc	15770 c-i	41570 b-g	37010 a-e	31500 a-d
Melody	15.7 f-i	123620 abc	21180 a-f	63560 a	23400 cde	15480 bcd
ACX6177	17.5 a-e	121260 abc	14150 d-i	35760 b-g	42760 a-d	28590 a-d
7015	16.0 e-i	120960 a-d	25870 a-d	48640 abc	32760 b-e	13700 bcd
SV7112WA	19.1 a	118380 a-d	5760 i	23020 g	50130 ab	39470 ab
Joy Ride	18.6 ab	117870 a-d	7900 ghi	28120 d-g	45160 abc	36680 abc
USAWX90020	17.4 b-e	116240 a-d	14980 c-i	36620 b-g	41160 a-e	20480 a-d
Captivation	17.5 a-e	114180 a-d	9490 f-i	41880 b-g	45930 abc	16870 bcd
TriX 313	17.4 b-e	113290 a-d	11630 e-i	33330 b-g	45600 abc	22740 a-d
Traveler	15.5 ghi	110120 a-d	26410 abc	49340 abc	22070 e	12300 cd
Fascination	15.5 ghi	109630 a-d	22310 a-e	52940 ab	22990 de	11400 cd
Crunchy Red	17.7 a-d	108450 a-d	10030 f-i	34540 b-g	40730 a-e	23150 a-d
Nun31208	16.4 d-h	106290 a-d	17250 b-i	39890 b-g	26690 cde	22470 a-d
Razorback	17.1 b-g	106080 a-d	17770 b-h	30640 c-g	36180 a-e	21490 a-d
Sweet Polly	16.9 c-g	105960 a-d	14910 c-i	33090 b-g	37090 a-e	20870 a-d
Road Trip	16.6 d-h	105770 a-d	14920 c-i	39150 b-g	36540 a-e	15150 bcd
7197 HQ	17.3 b-e	105280 a-d	8560 ghi	38690 b-g	38140 a-e	19900 a-d
Exclamation	15.9 e-i	104780 a-d	19100 b-g	44270 a-e	30630 b-e	10780 cd
Sweet Dawn	18.4 abc	103320 bcd	9740 f-i	26930 efg	38400 a-e	28220 a-d
7167	16.4 d-h	102080 bcd	15710 c-i	42410 b-g	30410 b-e	13560 bcd
SV0241WA	15.1 ghi	101910 bcd	27890 ab	47316 a-d	21990 e	4740 d
Maxima	18.4 abc	100300 bcd	7470 ghi	27400 d-g	32230 b-e	33200 abc
Warrior	17.5 a-e	99890 cd	6990 hi	36410 b-g	41820 a-e	14670 bcd
Troubadour	14.7 i	99220 cd	31830 a	39820 b-g	23050 de	4510 d
Grafted Fascination	17.3 b-e	83060 d	7390 ghi	23780 gf	37240 a-e	14670 bcd
Personal Melons						
	Average Weight (lb)	Total Yield (lb/acre)	Yield Count (no./acre)	² Means within the same column followed by the same letters are not significantly different according to Fisher's least significant difference test, $P < 0.05$.		
USAWR11376	7.3 a	78010 a	10650 a			
USAWR11379	7.4 a	75220 a	10300 a			

Table 3. Yield in pounds and bins per acre for the first watermelon harvest. Varieties ranked in descending order based on total yield in lb/acre.

Variety	Total Yield (lb/acre)	60 Count		45 Count		36 Count		30 Count		Percent 60 Count	Percent 45 Count	Percent 36 Count	Percent 30 Count
		(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)				
										%			
Wolverine	40299	2	1264	13	9817	29	20380	13	8838	3	24	51	22
Lucille	38644	2	1483	18	12359	14	9855	21	14948	4	32	26	39
Melody	37413	5	3758	29	20030	10	6469	10	7155	10	54	17	19
Talca	36546	2	1218	18	12902	22	15281	9	7145	3	35	42	20
SV7112WA	36244	0	0	2	1729	28	19360	21	15155	0	5	53	42
Sweet Dawn	33400	2	1136	9	6772	18	12435	19	13057	3	20	37	39
Exclamation	32495	1	740	26	18668	16	11359	3	1728	2	57	35	5
7197 HQ	32358	0	0	14	9369	23	15862	10	7128	0	29	49	22
Joy Ride	31514	0	0	3	1981	20	13789	22	15745	0	6	44	50
7015	31347	2	1475	18	12655	13	8976	12	8240	5	40	29	26
Road Trip	30401	2	1143	17	11936	17	11661	8	5661	4	39	38	19
Warrior	29518	3	2002	15	10673	17	11316	8	5527	7	36	38	19
Maxima	29148	0	0	13	8888	15	10189	14	10072	0	30	35	35
Summer Breeze	28867	1	674	10	6779	16	10754	14	10660	2	23	37	37
ACX6177	28222	1	674	13	9160	13	9703	12	8685	2	32	34	31
Grafted Fascination	27848	2	1514	13	8720	18	12453	7	5161	5	31	45	19
7187 HQ	27721	3	2283	15	10176	13	9135	8	6128	8	37	33	22
Troubadour	26326	7	5306	20	13976	10	7043	0	0	20	53	27	0
Sweet Polly	24539	0	0	17	11678	16	10959	3	1901	0	48	45	8
USAWX90020	24120	1	669	7	4628	16	11306	10	7517	3	19	47	31
7167	23841	4	2781	7	5173	12	8685	10	7201	12	22	36	30
Fascination	22807	4	2665	16	11726	10	6750	2	1666	12	51	30	7
Razorback	22158	0	0	8	6339	17	11849	6	3969	0	29	53	18
Crunchy Red	21169	0	0	14	9692	10	6568	7	4908	0	46	31	23
Traveler	20646	4	3209	8	5926	6	4086	10	7425	16	29	20	36
TriX 313	19015	1	691	7	5057	14	9543	6	3723	4	27	50	20
Sugar Fresh	18463	0	0	4	2653	8	5560	14	10249	0	14	30	56
Nun31208	16906	0	0	12	8236	5	3186	7	5483	0	49	19	32
Captivation	14155	0	0	8	5979	10	6585	2	1590	0	42	47	11
SV0241WA	13513	3	1835	9	6284	6	4091	2	1302	14	47	30	10
Personal Melons													
Variety	Avg. Wt. (lb)		Total Yield (lb/acre)		Yield Count (no./acre)								
USAWR11376	8.5	a	6242 a		737 a								
USAWR11379	8.5	a	5623 a		664 a								

Table 4. Yield in pounds and bins per acre for the second watermelon harvest. Varieties ranked in descending order based on total yield in lb/acre.

Variety	Total Yield	60 Count		45 Count		36 Count		30 Count		Percent 60 Count	Percent 45 Count	Percent 36 Count	Percent 30 Count
	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(%)			
Summer Breeze	41084	0	0	17	11582	20	14120	22	15382	0	28	34	37
SV7112WA	39571	1	684	12	8219	18	12220	25	18447	2	21	31	47
Traveler	38506	10	7177	24	17055	17	11987	3	2287	19	44	31	6
Maxima	37517	1	823	10	7022	17	11591	24	18082	2	19	31	48
Exclamation	37063	6	4609	18	11917	22	15451	7	5086	12	32	42	14
7167	36258	3	2127	19	13784	24	16507	6	3839	6	38	46	11
SV0241WA	35623	4	3184	28	19296	15	10851	3	2292	9	54	30	6
ACX6177	35613	1	634	13	9168	22	15065	15	10746	2	26	42	30
Talca	35086	3	2061	14	9102	18	12548	15	11375	6	26	36	32
7187 HQ	34773	0	0	10	7511	17	11361	23	15901	0	22	33	46
Captivation	34234	2	1859	20	13994	18	11941	10	6440	5	41	35	19
Lucille	33432	4	2884	10	7502	18	12715	14	10331	9	22	38	31
7015	33361	4	3254	18	13192	16	11456	7	5459	10	40	34	16
Joy Ride	33091	0	0	8	6055	18	12719	20	14317	0	18	38	43
Wolverine	32953	0	0	11	7804	26	17987	9	7162	0	24	55	22
Troubadour	32083	17	12303	12	8463	10	6810	7	4507	38	26	21	14
Nun31208	31223	3	1846	13	9286	13	9349	16	10743	6	30	30	34
Sugar Fresh	30519	0	0	5	3878	12	8172	26	18469	0	13	27	61
Crunchy Red	29375	2	1645	6	4383	19	13066	14	10280	6	15	44	35
Melody	28863	6	3982	23	15733	10	7074	2	2074	14	55	25	7
7197 HQ	27803	0	0	8	5456	22	14881	11	7466	0	20	54	27
Sweet Dawn	26891	0	0	11	8224	15	10446	10	8221	0	31	39	31
Sweet Polly	26791	0	0	6	4736	17	11722	15	10333	0	18	44	39
Road Trip	26706	0	0	15	10796	13	9012	10	6899	0	40	34	26
Fascination	26194	1	809	24	16802	10	6937	2	1645	3	64	26	6
USAWX90020	26111	3	1890	15	10667	14	9654	6	3900	7	41	37	15
Razorback	24058	1	664	7	5043	13	9278	12	9073	3	21	39	38
TriX 313	21609	2	1158	6	4718	15	10567	7	5165	5	22	49	24
Warrior	17892	0	0	11	8130	14	9762	0	0	0	45	55	0
Grafted Fascination	17732	2	1438	6	4795	9	5907	8	5592	8	27	33	32
Personal Melons													
Variety	Avg. Wt. (lb)		Total Yield (lb/acre)		Yield Count (no./acre)								
USAWR11376	7.5	a	35419	a	4733	a							
USAWR11379	7.5	a	32947	a	4395	a							

Table 5. Yield in pounds and bins per acre for the third watermelon harvest. Varieties ranked in descending order based on total yield in lb/acre.

Variety	Total Yield	60 Count		45 Count		36 Count		30 Count		Percent 60 Count	Percent 45 Count	Percent 36 Count	Percent 30 Count
	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(bin/acre)	(lb/acre)	(%)			
Sugar Fresh	83433	21	15445	37	26264	34	23516	25	18209	19	31	28	22
TriX 313	72670	14	9780	33	23553	37	25492	19	13846	13	32	35	19
Summer Breeze	71909	19	13478	35	24473	19	13512	28	20446	19	34	19	28
USAWX90020	66008	17	12423	35	24328	29	20198	13	9059	19	37	31	14
Captivation	65790	11	7633	31	21910	40	27405	12	8842	12	33	42	13
Wolverine	65200	18	12933	38	26269	26	17774	11	8224	20	40	27	13
7187 HQ	63364	19	13491	36	23881	24	16518	13	9474	21	38	26	15
Talca	62487	27	18950	35	23749	19	13119	9	6669	30	38	21	11
Fascination	60633	27	18840	36	24407	14	9298	12	8089	31	40	15	13
Razorback	59859	24	17104	28	19252	21	15053	12	8450	29	32	25	14
Nun31208	58162	22	15406	32	22363	21	14155	9	6238	26	38	24	11
Crunchy Red	57906	12	8379	29	20463	31	21099	12	7964	14	35	36	14
ACX6177	57427	19	12844	25	17435	27	17988	12	9161	22	30	31	16
Melody	57339	19	13436	41	27799	14	9857	9	6247	23	48	17	11
7015	56252	30	21139	32	22788	18	12325	0	0	38	41	22	0
Sweet Polly	54628	21	14914	25	16670	21	14403	13	8640	27	31	26	16
Lucille	54204	17	11867	35	23869	19	12682	8	5786	22	44	23	11
Joy Ride	53259	11	7895	28	20087	27	18656	9	6621	15	38	35	12
SV0241WA	52778	32	22856	32	21735	11	7046	2	1141	43	41	13	2
Warrior	52478	7	4989	26	17609	30	20739	13	9141	10	34	40	17
Traveler	50968	23	16024	38	26357	9	6000	3	2587	31	52	12	5
Road Trip	48667	19	13781	24	16421	23	15871	4	2594	28	34	33	5
7197 HQ	45115	12	8558	33	23863	10	7393	8	5302	19	53	16	12
Sweet Dawn	43025	12	8606	17	11935	22	15542	9	6941	20	28	36	16
SV7112WA	42567	7	5070	19	13076	27	18550	9	5871	12	31	44	14
7167	41983	15	10798	34	23452	8	5212	3	2520	26	56	12	6
Troubadour	40806	21	14225	25	17380	13	9202	0	0	35	43	23	0
Grafted Fascination	37475	6	4433	15	10266	28	18881	5	3895	12	27	50	10
Exclamation	35220	20	13754	20	13688	6	3816	5	3961	39	39	11	11
Maxima	33634	10	6650	17	11486	15	10452	7	5046	20	34	31	15
Personal Melons													
Variety	Avg. Wt. (lb)		Total Yield (lb/acre)		Yield Count (no./acre)								
USAWR11376	7.0	a	36350	a	5180	a							
USAWR11379	7.0	a	36653	a	5243	a							

Table 6. Total yield for full size watermelons grown in Tifton, GA. Varieties ranked in order based on yield of 60 count fruit.

Variety	Total Yield	60 Count	45 Count	36 Count	30 Count
(lbs/acre)					
Troubadour	99220 cd ²	31830 a	39820 b-g	23050 de	4510 d
SV0241WA	101910 bcd	27890 ab	47316 a-d	21990 e	4740 d
Traveler	110120 a-d	26410 abc	49340 abc	22070 e	12300 cd
7015	120960 a-d	25870 a-d	48640 abc	32760 b-e	13700 bcd
Fascination	109630 a-d	22310 a-e	52940 ab	22990 de	11400 cd
Talca	134120 abc	22230 a-e	45750 a-d	40950 a-e	25190 a-d
Melody	123620 abc	21180 a-f	63560 a	23400 cde	15480 bcd
Exclamation	104780 a-d	19100 b-g	44270 a-e	30630 b-e	10780 cd
Razorback	106080 a-d	17770 b-h	30640 c-g	36180 a-e	21490 a-d
Nun31208	106290 a-d	17250 b-i	39890 b-g	26690 cde	22470 a-d
Lucille	126280 abc	16240 bb-i	43730 a-f	35250 b-e	31070 a-d
7187 HQ	125860 abc	15770 c-i	41570 b-g	37010 a-e	31500 a-d
7167	102080 bcd	15710 c-i	42410 b-g	30410 b-e	13560 bcd
Sugar Fresh	132420 abc	15450 c-i	32800 b-g	37250 a-e	46930 a
USAWX90020	116240 a-d	14980 c-i	36620 b-g	41160 a-e	20480 a-d
Road Trip	105770 a-d	14920 c-i	39150 b-g	36540 a-e	15150 bcd
Sweet Polly	105960 a-d	14910 c-i	33090 b-g	37090 a-e	20870 a-d
Wolverine	138450 ab	14200 d-i	43890 a-f	56140 a	24220 a-d
Summer Breeze	141860 a	14150 d-i	42830 b-g	38390 a-e	46490 a
ACX6177	121260 abc	14150 d-i	35760 b-g	42760 a-d	28590 a-d
TriX 313	113290 a-d	11630 e-i	33330 b-g	45600 abc	22740 a-d
Crunchy Red	108450 a-d	10025 f-i	34540 b-g	40730 a-e	23150 a-d
Sweet Dawn	103320 bcd	9740 f-i	26930 efg	38400 a-e	28220 a-d
Captivation	114180 a-d	9490 f-i	41880 b-g	45930 abc	16870 bcd
7197 HQ	105280 a-d	8560 ghi	38690 b-g	38140 a-e	19900 a-d
Joy Ride	117870 a-d	7900 ghi	28120 d-g	45160 abc	36680 abc
Maxima	100300 bcd	7470 ghi	27400 d-g	32230 b-e	33200 abc
Grafted Fascination	83060 d	7390 ghi	23780 gf	37240 a-e	14670 bcd
Warrior	99890 cd	6990 hi	36410 b-g	41820 a-e	14670 bcd
SV7112WA	118380 a-d	5760 i	23020 g	50130 ab	39470 ab

² Means within the same column followed by the same letters are not significantly different according to Fisher's least significant difference test, $P < 0.05$.

Table 7. Total yield for full size watermelons grown in Tifton, GA. Varieties ranked in order based on yield of 45 count fruit.

Variety	Total Yield	45 Count	60 Count	36 Count	30 Count
(lbs/acre)					
Melody	123620 abc ²	63560 a	21180 a-f	23400 cde	15480 bcd
Fascination	109630 a-d	52940 ab	22310 a-e	22990 de	11400 cd
Traveler	110120 a-d	49340 abc	26410 abc	22070 e	12300 cd
7015	120960 a-d	48640 abc	25870 a-d	32760 b-e	13700 bcd
SV0241WA	101910 bcd	47316 a-d	27890 ab	21990 e	4740 d
Talca	134120 abc	45750 a-d	22230 a-e	40950 a-e	25190 a-d
Exclamation	104780 a-d	44270 a-e	19100 b-g	30630 b-e	10780 cd
Wolverine	138450 ab	43890 a-f	14200 d-i	56140 a	24220 a-d
Lucille	126280 abc	43730 a-f	16240 b-i	35250 b-e	31070 a-d
Summer Breeze	141860 a	42830 b-g	14150 d-i	38390 a-e	46490 a
7167	102080 bcd	42410 b-g	15710 c-i	30410 b-e	13560 bcd
Captivation	114180 a-d	41880 b-g	9490 f-i	45930 abc	16870 bcd
7187 HQ	125860 abc	41570 b-g	15770 c-i	37010 a-e	31500 a-d
Nun31208	106290 a-d	39890 b-g	17250 b-i	26690 cde	22470 a-d
Troubadour	99220 cd	39820 b-g	31830 a	23050 de	4510 d
Road Trip	105770 a-d	39150 b-g	14920 c-i	36540 a-e	15150 bcd
7197 HQ	105280 a-d	38690 b-g	8560 ghi	38140 a-e	19900 a-d
USAWX90020	116240 a-d	36620 b-g	14980 c-i	41160 a-e	20480 a-d
Warrior	99890 cd	36410 b-g	6990 hi	41820 a-e	14670 bcd
ACX6177	121260 abc	35760 b-g	14150 d-i	42760 a-d	28590 a-d
Crunchy Red	108450 a-d	34540 b-g	10025 f-i	40730 a-e	23150 a-d
TriX 313	113290 a-d	33330 b-g	11630 e-i	45600 abc	22740 a-d
Sweet Polly	105960 a-d	33090 b-g	14910 c-i	37090 a-e	20870 a-d
Sugar Fresh	132420 abc	32800 b-g	15450 c-i	37250 a-e	46930 a
Razorback	106080 a-d	30640 c-g	17770 b-h	36180 a-e	21490 a-d
Joy Ride	117870 a-d	28120 d-g	7900 ghi	45160 abc	36680 abc
Maxima	100300 bcd	27400 d-g	7470 ghi	32230 b-e	33200 abc
Sweet Dawn	103320 bcd	26930 efg	9740 f-i	38400 a-e	28220 a-d
Grafted Fascination	83060 d	23780 gf	7390 ghi	37240 a-e	14670 bcd
SV7112WA	118380 a-d	23020 g	5760 i	50130 ab	39470 ab

² Means within the same column followed by the same letters are not significantly different according to Fisher's least significant difference test, $P < 0.05$.

Table 8. Total yield for full size watermelons grown in Tifton, GA. Varieties ranked in order based on yield of 36 count fruit.

Variety	Total Yield	36 Count	45 Count	60 Count	30 Count
(lbs/acre)					
Wolverine	138450 ab ²	56140 a	43890 a-f	14200 d-i	24220 a-d
SV7112WA	118380 a-d	50130 ab	23020 g	5760 i	39470 ab
Captivation	114180 a-d	45930 abc	41880 b-g	9490 f-i	16870 bcd
TriX 313	113290 a-d	45600 abc	33330 b-g	11630 e-i	22740 a-d
Joy Ride	117870 a-d	45160 abc	28120 d-g	7900 ghi	36680 abc
ACX6177	121260 abc	42760 a-d	35760 b-g	14150 d-i	28590 a-d
Warrior	99890 cd	41820 a-e	36410 b-g	6990 hi	14670 bcd
USAWX90020	116240 a-d	41160 a-e	36620 b-g	14980 c-i	20480 a-d
Talca	134120 abc	40950 a-e	45750 a-d	22230 a-e	25190 a-d
Crunchy Red	108450 a-d	40730 a-e	34540 b-g	10025 f-i	23150 a-d
Sweet Dawn	103320 bcd	38400 a-e	26930 efg	9740 f-i	28220 a-d
Summer Breeze	141860 a	38390 a-e	42830 b-g	14150 d-i	46490 a
7197 HQ	105280 a-d	38140 a-e	38690 b-g	8560 ghi	19900 a-d
Sugar Fresh	132420 abc	37250 a-e	32800 b-g	15450 c-i	46930 a
Grafted Fascination	83060 d	37240 a-e	23780 gf	7390 ghi	14670 bcd
Sweet Polly	105960 a-d	37090 a-e	33090 b-g	14910 c-i	20870 a-d
7187 HQ	125860 abc	37010 a-e	41570 b-g	15770 c-i	31500 a-d
Road Trip	105770 a-d	36540 a-e	39150 b-g	14920 c-i	15150 bcd
Razorback	106080 a-d	36180 a-e	30640 c-g	17770 b-h	21490 a-d
Lucille	126280 abc	35250 b-e	43730 a-f	16240 b-i	31070 a-d
7015	120960 a-d	32760 b-e	48640 abc	25870 a-d	13700 bcd
Maxima	100300 bcd	32230 b-e	27400 d-g	7470 ghi	33200 abc
Exclamation	104780 a-d	30630 b-e	44270 a-e	19100 b-g	10780 cd
7167	102080 bcd	30410 b-e	42410 b-g	15710 c-i	13560 bcd
Nun31208	106290 a-d	26690 cde	39890 b-g	17250 b-i	22470 a-d
Melody	123620 abc	23400 cde	63560 a	21180 a-f	15480 bcd
Troubadour	99220 cd	23050 de	39820 b-g	31830 a	4510 d
Fascination	109630 a-d	22990 de	52940 ab	22310 a-e	11400 cd
Traveler	110120 a-d	22070 e	49340 abc	26410 abc	12300 cd
SV0241WA	101910 bcd	21990 e	47316 a-d	27890 ab	4740 d

² Means within the same column followed by the same letters are not significantly different according to Fisher's least significant difference test, $P < 0.05$.

Table 9. Average fruit weight at each harvest and average percent per count for watermelons grown in Tifton, GA in Spring 2015.

Variety	Avg. Fruit Weight (total)	Avg. Fruit Wt. (harvest 1)	Avg. Fruit Wt. (harvest 2)	Avg. Fruit Wt. (harvest 3)	60 count	45 count	36 count	30 count
	(lbs)				%			
SV7112WA	19.1	20.9	20.3	17.1	17	29	34	20
Joy Ride	18.6	20.5	20.6	16.6	14	31	35	20
Maxima	18.4	19.2	20.4	15.9	13	32	35	18
Sweet Dawn	18.4	19.8	19.8	16.9	8	37	36	19
Sugar Fresh	18.3	19.7	21.5	17.1	24	45	20	11
Wolverine	17.9	19.7	19.7	16.1	9	29	45	18
Summer Breeze	17.8	19.3	19.5	16.6	9	32	38	21
Crunchy Red	17.7	18.6	19.1	16.8	17	51	19	13
ACX6177	17.5	19.1	19.7	15.8	13	35	28	25
Captivation	17.5	17.8	17.6	17.4	13	33	29	25
Warrior	17.5	18.0	17.6	17.2	32	40	23	5
Lucille	17.4	19.0	18.9	15.8	7	24	38	31
TriX 313	17.4	18.2	19.3	16.6	27	46	22	5
USAWX90020	17.4	19.4	17.5	16.8	7	36	42	15
7197 HQ	17.3	18.6	18.5	15.9	12	25	28	35
Grafted Fascination	17.3	18.3	16.7	16.3	5	19	42	33
7187 HQ	17.2	17.4	19.7	16.0	17	34	31	19
Razorback	17.1	19.3	19.8	15.7	10	29	40	20
Sweet Polly	16.9	17.5	20.1	15.7	18	42	29	10
Talca	16.8	18.5	18.8	15.3	9	26	37	27
Road Trip	16.6	17.4	19.3	15.3	16	38	25	21
7167	16.4	17.9	17.6	14.9	10	32	41	17
Nun31208	16.4	18.0	18.2	15.0	13	35	50	5
7015	16	19.1	17.3	14.6	10	30	27	33
Exclamation	15.9	16.9	17.0	14.1	12	29	35	24
Melody	15.7	16.8	15.5	15.4	8	37	40	15
Fascination	15.5	16.9	16.8	14.4	21	40	27	11
Traveler	15.5	17.7	15.9	14.7	15	42	30	13
SV0241WA	15.1	18.0	16.5	13.9	20	48	21	10
Troubadour	14.7	15.5	14.5	14.3	7	27	32	33

Table 10. Average firmness, brix, hollow heart and hard seed ratings for watermelons grown in Tifton, GA in Spring 2015.

Variety	Brix (%)	Firmness ^z (lbs)	Hollow Heart ^y (0-5)	Hard Seed ^x (Total no.)
SV7112WA	12.6 a	3.19 c-g	0.30 d-g	3
Wolverine	12.3 ab	3.53 a-e	0.70 c-g	73
TriX 313	12.3 ab	3.16 c-g	0.25 efg	3
Joy Ride	12.2 a-c	3.62 abc	0.60 c-g	1
7015	12.2 a-d	3.65 abc	0.50 c-g	2
7167	12.0 a-e	3.24 b-f	0.85 c-f	19
7187 HQ	12.0 a-e	3.29 b-f	0.45 d-g	1
Summer Breeze	12.0 a-e	3.29 b-f	0.15 fg	3
ACX 6177	12.0 a-e	3.65 abc	0.10 fg	2
Razorback	11.9 a-e	3.47 a-f	0.55 c-g	0
Road Trip	11.9 a-e	3.61 abc	0.10 fg	6
Exclamation	11.9 a-e	3.17 c-g	0.00 g	27
Troubadour	11.8 a-e	3.84 a	0.40 d-g	11
SV0241WA	11.7 a-e	3.40 a-f	0.40 d-g	4
Traveler	11.7 b-e	3.66 abc	0.05 fg	4
Sweet Dawn	11.6 b-f	3.44 a-f	0.15 fg	56
Talca	11.6 b-f	2.97 fgh	0.00 g	10
Warrior	11.5 b-f	3.19 c-g	0.65 c-g	4
Sugar Fresh	11.5 b-f	3.30 b-f	0.50 c-g	0
7197 HQ	11.5 b-f	3.65 abc	0.25 efg	0
Crunchy Red	11.5 b-f	3.74 ab	0.20 efg	7
USAWR11379	11.4 c-f	2.58 h	2.15 a	23
Fascination	11.4 c-f	3.00 d-g	1.85 ab	43
USAWX90020	11.4 c-f	2.98 e-g	1.10 bcd	2
Sweet Polly	11.4 c-f	3.28 b-f	0.85 c-f	3
Nun31208	11.3 def	3.16 c-g	0.60 c-g	23
Melody	11.3 c-f	2.66 gh	0.55 c-g	4
Grafted Fascination	11.2 ef	3.25 b-f	1.30 abc	29
USAWR11376	11.1 ef	3.13 c-g	1.00 cde	15
Captivation	11.1 ef	3.19 c-g	0.20 efg	9
Lucille	10.8 f	2.93 fgh	0.60 c-g	12
Maxima	10.7 f	3.54 a-d	0.00 g	9

^zFirmness is the average of 10 readings per replication and 4 replications (40 total readings per variety) using a Wagner hand-held firmness tester.

^yHollow Heart determined using the rating scale in Figure 1. Values represent the average of 5 fruit per replication and 4 replicates (20 fruit total).

^xHard seed counts represent the *total* number of seed counted in 4 quarters of 5 melons per replicate with 4 replicates (80 quarters of fruit). This is not the average but total number for each variety.