2006 Cucurbit Cultivar Evaluations

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Cucurbit
Cultivar Evaluations

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General Cultural Practices

All watermelon and squash trials were grown on black plastic mulch and fertigated with drip irrigation. Pesticides used on all plots were chemicals labeled for that crop, (2006 North Carolina Agricultural Chemicals Manual, (http://ipm.ncsu.edu/Agchem/agchem.html).

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Disclaimer
This publication presents data from the cultivar evaluation trials conducted during 2006. Information in this report is believed to be reliable but should **not** be relied upon as a sole source of information. Limited accompanying narrative detail is included but may exclude some pertinent information, which may aid interpretation.

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Diploid and Triploid Watermelon Cultural Practices for 2006 Cultivar Trials, Central Crops Research Station, Clayton, NC

Introduction

Watermelon is an important crop grown in North Carolina as the state was ranked seventh in production among U.S. states nationally in 2005. Approximately 6,100 acres valued at nearly $7.3 million were produced in 2005. Growers in NC need to remain competitive in the market place and must grow and sell the best cultivars. In the tables that follow, the adaptability of the various red-flesh watermelons is evaluated, both for yields and quality. This should help the watermelon industry make informed decisions regarding newly released red-flesh cultivars or those that are being considered for release.

Materials and Methods

We have evaluated red-flesh watermelon types annually since 1989. Before the growing season, companies which sell watermelon seeds were contacted to obtain seed for the watermelon cultivar trials.

Once all seed were obtained, they were planted into LE 1803 transplant trays (Landmark Plastics Corp.; Akron, OH). The red-flesh triploid and diploid test were sown on 13 April, 2006. The planting medium used was Fafard 4P, a commercial soil less mix (Conrad Fafard, Inc.; Agawam, ME). Approximately 3 to 4 weeks after seeding, the plants were placed in a cold frame and hardened before being established in the field on 10 May, 2006. Fertilizer, 30 lb/acre N and 80 lb/acre K_20, was incorporated into the bed on 5 April prior to the laying of black polyethylene plastic (0.70 mil thick, 48 inches wide; B.B. Hobbs, Clinton, NC) on 10 and 11 April. Fumigant (Telone C-17) was injected on 10 and 11 April at 9.9 gallons/acre when the plastic was laid. Curbit at 4 pints/acre, Glyfus Xtra at 3 pints/acre, and Alanap L at 6 quarts/acre were applied between the plastic beds for weed control on 5 May. Spacing between row middles was 10 feet and in-row spacing was 2.5 feet. Plot size was one row, 10 plants per plot, 25 feet long with 8 feet alleys between plots. At time of transplant, a starter solution was applied using 20-20-20 (0.5 lb/50 gallons water) and 0.5 lb Diazinon per 50 gallons water for insect control. Plots with missing plants were replanted approximately 7 days after planting to achieve 100% stand in most cases. Trickle irrigation was utilized (T-tape, 8 mil, 12 inch spacing, 4.5 gph; T-Systems International, Inc. San Diego, California) over the growing season. Fertigation was initiated two weeks after planting and applied weekly during the planting season. The first fertilizer drip application was 12 May, the last was 9 August. A total of 69 lb/acre N and 117 lb/acre K_2O was drip applied through the season using a liquid carrier. Cumulative amount of fertilizer applied for the season was 99, 0 and 197 lb/acre of N, P_2O_5, and K_2O, respectively. Insecticides were applied every week as a preventative measure beginning 2 June and on the following dates (9, 16, 17, 22, 28 June; 7, 12, 19 July; and 1, 4, 25, 29 August; and 8 September). The following products were alternated during consecutive spray applications to avoid insect resistance: Asana XL, Endosulfan, Kelthane, and Perm Up. Similarly, the following fungicide products were used: Kocide DF, Previcur Flex, Maneb 75DF, Cabrio, Nova 40W, Procure, Pristine, and Bravo Weather Stik; and applied on the following dates: 2, 9, 16, 20, 22, 28, and 29 June; 6, 7, 12, 14, and 19 July; and 4, 25, and 29 August.

There were five diploid harvests and four triploid harvests. The first harvest for the diploid test was 21 July, and subsequent harvests were 28 July; 17 and 29 August; and 13 September. The first harvest date for the triploid test was 26 July; subsequent harvests were 7 and 23 August; and 13 September. Each fruit was harvested when ripe, weighed and categorized statistically by size category. Evaluations of each watermelon entry included yield, fruit size, production earliness, soluble solids using a hand held refractometer, fruit shape and size, exterior and interior descriptions (rind pattern, length/width ratio, seed trace size, occurrence of hard seeds, hollow heart incidence and severity, and flesh color). Due to smaller fruit that are usually not used in the market, the fifth harvest for the diploid watermelons was not included in the statistical analysis. Most of the quality measurements were taken at first harvest.

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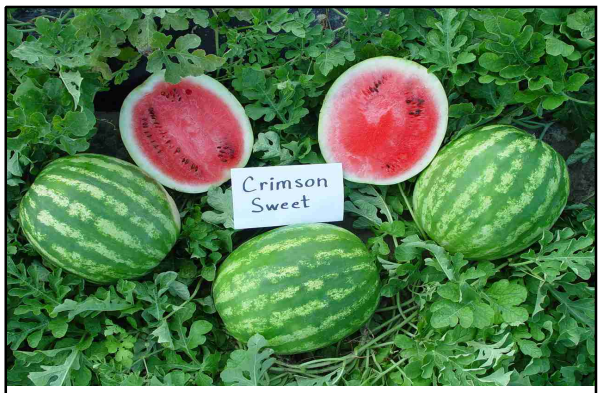
In addition to seed companies, this program has been supported by the College of Life & Agricultural Sciences, North Carolina Agricultural Research Service, and the North Carolina Cooperative Extension Service.

Table 1. Diploid Red-Flesh Watermelon Cultivar Descriptions and Seed Sources; Clayton, 2006.

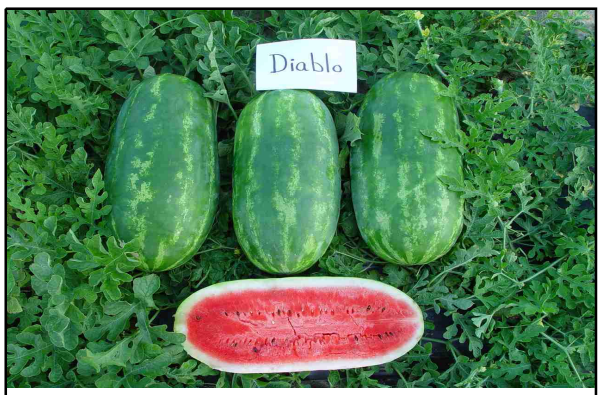
Entry No.	Cultigen	Company	Description
1	Chiquita	Willhite	Indistinct, wide, dark green stripes on light green background; blocky; uniform shape and size;
2	Crimson Sweet	Hollar Seed	Distinct, med width, med-dark green stripes on light green background; round-oval shape; uniform fruit size and shape
3	Diablo	Willhite	Indistinct, very wide, dark green stripes on light green background; elongated fruit shape; slightly constricted at stem end; fairly uniform fruit shape; size variable
4	Escarlett	Syngenta	Indistinct, very wide, medium to dark green stripes on a light green background; blocky fruit; few fruit slightly constricted at stem end; fairly uniform shape and size
5	Estrella	Syngenta	Indistinct, very wide, medium to dark green stripes on light green background; block to short elongated fruit; few fruit slightly constricted at stem end; uniform shape and size
6	Fiesta	Syngenta	Indistinct/distinct, wide, medium to dark green stripes on light green background; blocky fruit; very uniform shape and size
7	Jamboree	Syngenta	Indistinct, wide, medium to dark green stripes on light green background; blocky/elongated fruit; somewhat variable shape and size
8	Mardi Gras	Syngenta	Indistinct, wide, medium to dark green stripes on light green background; elongated fruit; uniform shape and size
9	Summer Flavor 800	Abbott & Cobb	Indistinct, very wide, medium-dark green stripes on light green background; blocky fruit shape; uniform shape and size
10	SSX 8247	Sakata	Indistinct, wide, medium to dark green stripes on light green background; blocky fruit; uniform shape; somewhat variable size
11	SSX 8513	Sakata	Indistinct, very wide, medium to dark green stripes on light green background; mainly very elongated with some blocky fruit; uniform shape and size
12	Topgun	Syngenta	Mainly distinct, medium wide, medium-dark green stripes on light green background; round to oval fruit shape; uniform shape; variable fruit size

Figure 1: 2006 Diploid Trial

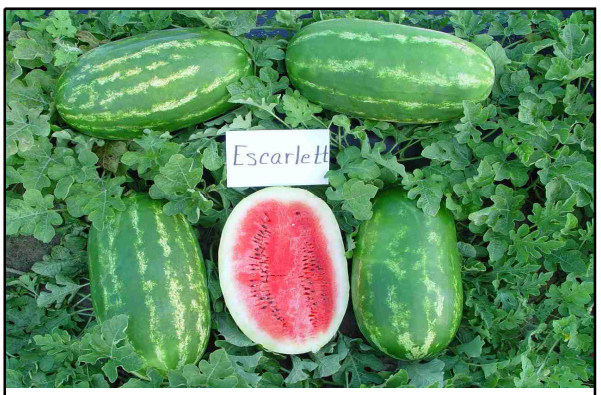


Crimson Sweet

Chiquita

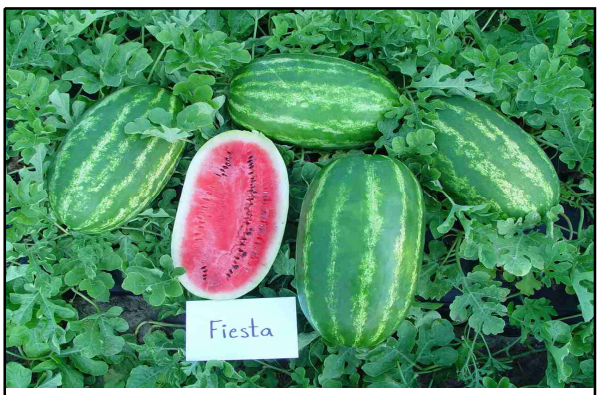


Diablo



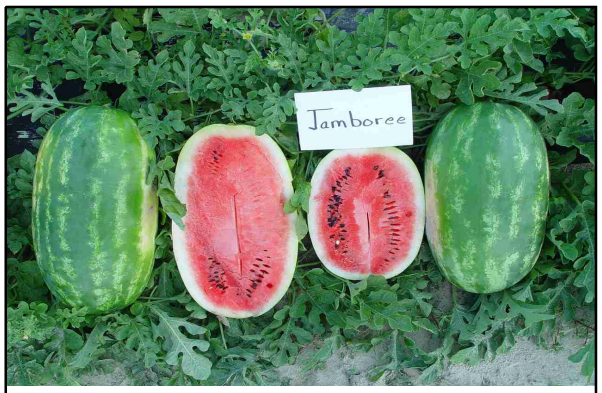
Escarlett

Estrella

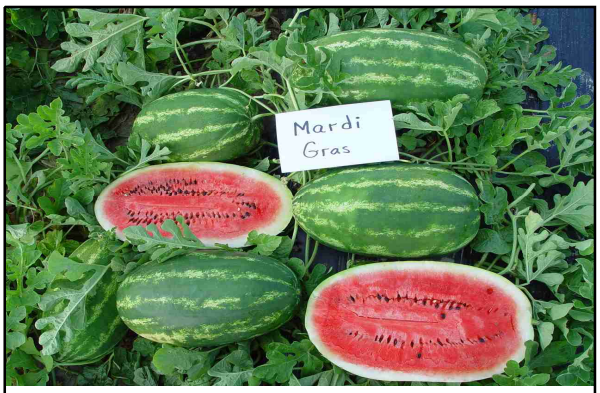


Fiesta

Figure 1: 2006 Diploid Trial



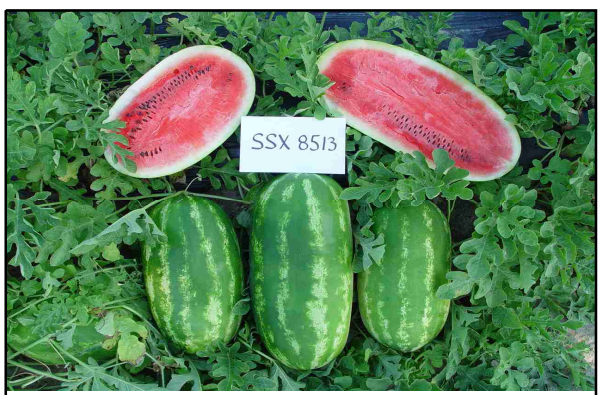
Jamboree



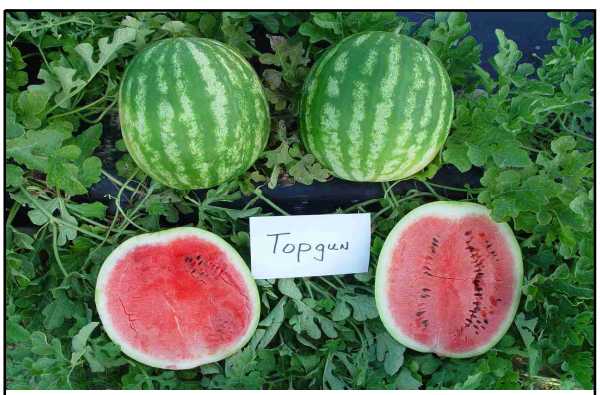
Mardi Gras

Summer Flavor 800

SSX 8247



SSX 8513



Topgun

Table 2. Diploid Red-Flesh watermelon hybrid cultivar trial**. Number** of fruit harvested during **first harvest** by various weight classes (per acre) plus average fruit size. **Clayton, N.C., 2006.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	**Rank[1]**	**<8**	**8-15.9**	**16-23.9**	**24 +**	**Total**	**Mkt[2]**	**(lb)**
Chiquita	4	0	174	610	87	871	697	19.2
Crimson Sweet	1	44	174	871	174	1263	1045	19.9
Diablo	11	44	44	392	479	958	871	22.6
Escarlett	9	131	261	218	305	915	523	18.7
Estrella	7	218	87	479	392	1176	871	20.0
Fiesta	12	0	87	305	174	566	479	19.2
Jamboree	10	131	174	261	348	915	610	20.6
Mardi Gras	2	131	174	740	218	1263	958	19.1
Summer Flavor 800	8	0	44	436	305	784	740	22.0
SSX 8247	3	218	131	740	87	1176	828	17.5
SSX 8513	5	87	131	566	131	915	696	19.3
Topgun	6	87	44	610	131	871	740	18.6
Average	- -	91	127	519	236	973	755	19.7
LSD(0.05)	**- -**	**214**	**187**	**278**	**249**	**432**	**325**	**4.1**

[1] Ranked according to total marketable weight.

[2] Includes fruit ≥ 16 pounds.

Table 3. Diploid Red-Flesh watermelon hybrid cultivar trial. Percentage fruit harvested by **number** within each size category for **harvest 1**. **Clayton, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Chiquita	0	20	70	10
Crimson Sweet	3	14	69	14
Diablo	5	5	41	50
Escarlett	14	29	24	33
Estrella	19	7	41	33
Fiesta	0	15	54	31
Jamboree	14	19	29	38
Mardi Gras	10	14	59	17
Summer Flavor 800	0	6	56	39
SSX 8247	19	11	63	7
SSX 8513	10	14	62	14
Topgun	10	5	70	15
Average	9	13	53	25
LSD (0.05)	**16**	**17**	**30**	**26**

[1] Fruit weight (per cultivar weight class) divided by the total weight (per cultivar) times 100. Percentages are rounded to the nearest whole number.

Table 4. Diploid Red-Flesh watermelon hybrid cultivar trial**. Number** of fruit harvested during **second harvest** by various weight classes (per acre) plus average fruit size. **Clayton, N.C., 2006.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	**Rank[1]**	**<8**	**8-15.9**	**16-23.9**	**24 +**	**Total**	**Mkt[2]**	**(lb)**
Chiquita	4	0	610	784	131	1524	915	17.2
Crimson Sweet	10	0	261	566	218	1045	784	18.8
Diablo	5	44	87	479	392	1002	871	22.0
Escarlett	5	0	348	436	436	1219	871	21.3
Estrella	11	44	436	566	131	1176	697	18.0
Fiesta	2	131	305	784	392	1611	1176	19.1
Jamboree	3	0	305	436	523	1263	958	22.4
Mardi Gras	9	87	174	523	305	1089	828	19.2
Summer Flavor 800	5	0	523	740	131	1394	871	18.6
SSX 8247	5	44	261	697	174	1176	871	18.9
SSX 8513	1	174	261	958	261	1655	1219	17.4
Topgun	12	0	174	566	44	784	610	18.6
Average	- -	44	312	628	261	1245	889	19.3
LSD(0.05)	**- -**	**148**	**305**	**435**	**326**	**426**	**384**	**3.3**

[1] Ranked according to total marketable weight.

[2] Includes fruit ≥ 16 pounds.

Table 5. Diploid Red-Flesh watermelon hybrid cultivar trial. Percentage fruit harvested by **number** within each size category for **harvest 2**. **Clayton, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Chiquita	0	40	51	9
Crimson Sweet	0	25	54	21
Diablo	4	9	48	39
Escarlett	0	29	36	36
Estrella	4	37	48	11
Fiesta	8	19	49	24
Jamboree	0	24	34	41
Mardi Gras	8	16	48	28
Summer Flavor 800	0	38	53	9
SSX 8247	4	22	59	15
SSX 8513	11	16	58	16
Topgun	0	22	72	6
Average	3	25	51	21
LSD (0.05)	**9**	**23**	**33**	**26**

[1] Fruit weight (per cultivar weight class) divided by the total weight (per cultivar) times 100. Percentages are rounded to the nearest whole number.

Table 6. Diploid Red-Flesh watermelon hybrid cultivar trial**. Number** of fruit harvested during **third harvest** by various weight classes (per acre) plus average fruit size. **Clayton, N.C., 2006.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	**Rank[1]**	**<8**	**8-15.9**	**16-23.9**	**24 +**	**Total**	**Mkt[2]**	**(lb)**
Chiquita	4	218	871	566	0	1655	566	12.4
Crimson Sweet	10	44	610	348	0	1002	348	13.7
Diablo	7	44	305	261	218	828	479	16.7
Escarlett	4	44	392	436	131	1002	566	17.6
Estrella	11	0	305	174	87	566	261	16.3
Fiesta	8	0	479	436	0	915	436	15.9
Jamboree	2	44	261	436	174	915	610	18.2
Mardi Gras	9	0	261	174	218	653	392	18.7
Summer Flavor 800	2	0	305	523	87	915	610	17.9
SSX 8247	1	0	305	871	261	1437	1132	19.8
SSX 8513	4	0	131	479	87	697	566	20.6
Topgun	12	0	305	44	0	348	44	14.2
Average	- -	33	377	396	105	911	501	16.8
LSD(0.05)	**- -**	**109**	**334**	**429**	**195**	**623**	**460**	**3.6**

[1] Ranked according to total marketable weight.

[2] Includes fruit ≥ 16 pounds.

Table 7. Diploid Red-Flesh watermelon hybrid cultivar trial. Percentage fruit harvested by **number** within each size category for **harvest 3**. **Clayton, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Chiquita	13	53	34	0
Crimson Sweet	4	61	35	0
Diablo	5	37	32	26
Escarlett	4	39	43	13
Estrella	0	54	31	15
Fiesta	0	52	48	0
Jamboree	5	29	48	19
Mardi Gras	0	40	27	33
Summer Flavor 800	0	33	57	10
SSX 8247	0	21	61	18
SSX 8513	0	19	69	13
Topgun	0	88	13	0
Average	3	44	41	12
LSD (0.05)	**13**	**25**	**33**	**19**

[1] Fruit weight (per cultivar weight class) divided by the total weight (per cultivar) times 100. Percentages are rounded to the nearest whole number.

Table 8. Diploid Red-Flesh watermelon hybrid cultivar trial**. Number** of fruit harvested during **fourth harvest** by various weight classes (per acre) plus average fruit size. **Clayton, N.C., 2006.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	**Rank[1]**	**<8**	**8-15.9**	**16-23.9**	**24 +**	**Total**	**Mkt[2]**	**(lb)**
Chiquita	12	305	479	0	0	784	0	9.5
Crimson Sweet	11	0	915	44	0	958	44	12.6
Diablo	7	44	697	218	0	958	218	13.9
Escarlett	1	0	348	523	44	915	566	16.8
Estrella	2	44	566	348	0	958	348	14.7
Fiesta	8	44	479	174	0	697	174	15.4
Jamboree	4	0	479	261	0	740	261	14.5
Mardi Gras	9	0	740	87	0	828	87	12.2
Summer Flavor 800	4	0	653	261	0	915	261	13.4
SSX 8247	2	0	479	348	0	828	348	13.7
SSX 8513	4	44	305	261	0	610	261	14.7
Topgun	9	0	697	87	0	784	87	12.5
Average	- -	40	570	218	4	831	221	13.6
LSD(0.05)	**- -**	**183**	**438**	**379**	**36**	**554**	**382**	**3.2**

[1] Ranked according to total marketable weight.

[2] Includes fruit 16 - 24+ pounds.

Table 9. Diploid Red-Flesh watermelon hybrid cultivar trial. Percentage fruit harvested by **number** within each size category for **harvest 4**. **Clayton, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Chiquita	39	61	0	0
Crimson Sweet	0	95	5	0
Diablo	5	73	23	0
Escarlett	0	38	57	5
Estrella	5	59	36	0
Fiesta	6	69	25	0
Jamboree	0	65	35	0
Mardi Gras	0	89	11	0
Summer Flavor 800	0	71	29	0
SSX 8247	0	58	42	0
SSX 8513	7	50	43	0
Topgun	0	89	11	0
Average	5	68	26	0
LSD (0.05)	**14**	**41**	**42**	**4**

[1] Fruit weight (per cultivar weight class) divided by the total weight (per cultivar) times 100. Percentages are rounded to the nearest whole number.

Table 10. Diploid Red-Flesh watermelon hybrid cultivar trial. Cumulative **fruit number** over four harvests by various weight classes (per acre). **Clayton, N.C.**, **2006.**

		Fruit size category (lb)					
Cultivar	**Rank[1]**	**<8**	**8-15.9**	**16-23.9**	**24+**	**Total**	**Total Mkt[2]**
Chiquita	1	523	2134	1960	218	4834	2178
Crimson Sweet	3	87	1960	1829	392	4268	2221
Diablo	12	174	1132	1350	1089	3745	2439
Escarlett	8	174	1350	1611	915	4050	2526
Estrella	7	305	1394	1568	610	3876	2178
Fiesta	6	174	1350	1699	566	3789	2265
Jamboree	10	174	1219	1394	1045	3832	2439
Mardi Gras	9	218	1350	1524	740	3832	2265
Summer Flavor 800	4	0	1524	1960	523	4007	2482
SSX 8247	2	261	1176	2657	523	4616	3179
SSX 8513	5	305	828	2265	479	3876	2744
Topgun	11	87	1219	1307	174	2787	1481
Average	- -	207	1386	1760	606	3959	2366
LSD (0.05)	**- -**	**296**	**678**	**809**	**555**	**955**	**885**

[1] Ranked according to total marketable number.
[2] Includes fruit ≥ 16.

Table 11. Diploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** over four harvests within each fruit size category. **Clayton, NC., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Chiquita	11	44	41	5
Crimson Sweet	2	46	43	9
Diablo	5	30	36	29
Escarlett	4	33	40	23
Estrella	8	36	40	16
Fiesta	5	36	45	15
Jamboree	5	32	36	27
Mardi Gras	6	35	40	19
Summer Flavor 800	0	38	49	13
SSX 8247	6	25	58	11
SSX 8513	8	21	58	12
Topgun	3	44	47	6
Average	5	35	44	15
LSD (0.05)	**8**	**14**	**15**	**10**

[1] Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100. Percentages are rounded to the nearest whole number.

Table 12. Diploid Red-Flesh watermelon hybrid cultivar trial**.** Cumulative **weight** (x 100) of fruit harvested over four harvests by various weight classes (per acre) plus average fruit size. **Clayton, N.C., 2006.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	Rank[1]	<8	8-15.9	16-23.9	24 +	Total	Mkt[2]	(lb)
Chiquita	11	30	262	372	58	722	430	14.7
Crimson Sweet	10	6	236	363	102	707	466	16.6
Diablo	3	11	144	264	311	730	575	19.2
Escarlett	5	9	180	316	248	753	564	18.7
Estrella	8	16	158	307	175	684	482	17.5
Fiesta	9	7	172	326	149	653	475	17.3
Jamboree	2	11	153	283	297	744	580	19.5
Mardi Gras	7	10	163	299	204	675	502	17.6
Summer Flavor 800	6	0	195	386	139	720	525	17.9
SSX 8247	1	11	143	527	144	825	671	17.8
SSX 8513	4	15	112	446	127	699	573	18.1
Topgun	12	5	154	254	46	460	300	16.4
Average	- -	11	173	345	167	695	512	17.6
LSD(0.05)	**- -**	**17**	**90**	**158**	**157**	**206**	**206**	**2.3**

[1] Ranked according to total marketable weight.

[2] Includes fruit ≥ 16.

Table 13. Diploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **weight** over **four harvests** within each fruit size category. **Clayton, NC., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Chiquita	4	36	52	8
Crimson Sweet	1	33	51	14
Diablo	2	20	36	43
Escarlett	1	24	42	33
Estrella	2	23	45	26
Fiesta	1	26	50	23
Jamboree	2	21	38	40
Mardi Gras	1	24	44	30
Summer Flavor 800	0	27	54	19
SSX 8247	1	17	64	17
SSX 8513	2	16	64	18
Topgun	1	34	55	10
Average	2	25	50	23
LSD (0.05)	**3**	**14**	**15**	**15**

[1] Fruit weight (per cultivar weight class) divided by the total weight (per cultivar) times 100. Percentages are rounded to the nearest whole number.

Table 14. Diploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, NC, 2006.**[1]

Cultivar	SS[2]	Color[3]	Seed Size[4]	Flesh Pressure[5]	LD[6]	Rind[7]	Hollow Heart Ratings[8]				
							HH0	HH1	HH2	HH3	HH4
Chiquita	10.9	6.6	3.1	2.3	1.5	14.2	55	10	10	20	5
Crimson Sweet	11.9	6.0	3.0	2.1	1.1	16.2	60	25	15	0	0
Diablo	12.2	7.8	3.5	2.7	2.0	14.2	25	45	25	5	0
Escarlett	12.3	8.0	2.1	2.5	1.7	16.0	55	25	20	0	0
Estrella	12.7	8.6	2.4	2.1	1.6	15.8	80	10	5	0	5
Fiesta	12.1	7.6	3.4	2.5	1.6	15.3	15	65	10	10	0
Jamboree	11.6	7.2	4.1	2.4	1.7	14.7	10	50	25	15	0
Mardi Gras	12.1	7.8	3.8	2.4	1.9	15.7	50	30	5	15	0
Summer Flavor 800	12.1	7.2	3.6	2.5	1.6	16.4	85	5	10	0	0
SSX 8247	12.1	7.4	3.4	2.7	1.6	14.9	70	5	20	5	0
SSX 8513	11.7	6.8	3.3	2.6	1.8	14.2	70	20	5	5	0
Topgun	11.8	7.2	4.3	2.3	1.1	13.5	85	10	0	5	0
Average	11.9	7.4	3.3	2.4	1.6	15.1	55	25	13	7	1
LSD(0.05)	**0.5**	**0.8**	**0.4**	**0.3**	**0.1**	**2.1**	**29**	**24**	**19**	**12**	**6**

[1] Most measurements were obtained from fruits in harvest 1.

[2] SS = Soluble solids indicates sweetness, average of 5 melons per replication (20 total).

[3] Rating: 2 = white, 4 = pink, 6 = red, 8 = medium-dark red, 10 = blood red.

[4] Rating: 1 = small, 3 = medium (i.e. Crimson Sweet), 5 = large (i.e. Jubilee).

[5] Pressure was taken from four corners of fruit flesh on 5 fruit per replication.

[6] LD = Length and diameter ratio, average of 5 melons per replication (20 total).

[7] Rind = Rind thickness (mm), measured from rind to where white and colored flesh meet, average of 5 melons per replication (20 total).

[8] Five fruits per replication were rated for hollow heart incidence and severity (20 total).

Hollow Heart Ratings (Percentage occurrence in each category).

HH0 = Fruit with no hollow heart, (Marketable fruit).

HH1 = Fruit with minimal / hairline crack in flesh; (Marketable fruit).

HH2 = Fruit with small crack in flesh; (Marketable fruit).

HH3 = Fruit with medium to large flesh seperations; (Non marketable fruit).

HH4 = Fruit with flesh seperation to rind; (Non marketable fruit).

Table 15. Triploid Red-Flesh Watermelon Seed Sources and Descriptions; 2006.

Entry No.	Cultigen	Company	Description
1	3130	Southwestern Seed	Indistinct, medium width, medium to dark green stripes on light green background; oval/blocky; uniform shape and size
2	33318	Nunhems	Indistinct, medium width, medium to dark green stripes on light green background; oval and round; shape and size variable
3	33354	Nunhems	Indistinct, medium to wide width, medium to dark green stripes on light green background; short oval; uniform shape, variable size
4	ACR 4674	Abbott & Cobb	Indistinct, wide width, medium to dark green stripes on light green background; oval; fairly uniform shape and size
5	ACR 5534	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; short to long oval/blocky; variable shape and size
6	Candy	Willhite	Indistinct, medium width, medium to dark green stripes on light green background; oval to round; variable shape and size
7	Constitution	Nunhems	Indistinct, medium width, dark green stripes on medium green background; oval/round; uniform shape and size
8	Crimson Jewel	Clifton Seed	Indistinct, medium width, dark green stripes on medium green background; round; very uniform shape and size
9	CSC 4203	Clifton Seed	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape; variable size
10	CSC 4806	Clifton Seed	Indistinct, medium width, medium to dark green stripes on light green background; mainly round to short oval; uniform shape; variable size
11	Freedom	Nunhems	Distinct, narrow width, dark green stripes on light green background; block to elongated; fairly uniform size and shape
12	HMX 4915	Harris Moran	Indistinct, medium width, dark green stripe on a medium green background; oval/blocky fruit; uniform shape and size
13	HMX 5910	Harris Moran	Indistinct; medium width, dark green stripes on light to medium green background; round to short oval; uniform shape and size
14	Imagination	Syngenta	Solid, dark green; round; uniform shape; very variable size
15	Independence	Nunhems	Indistinct, medium to wide width, dark green stripes on medium green background; round to oval; shape and size variable
16	Intruder	Southwestern Seed	Indistinct, medium width, medium to dark green stripes on light green background; round; uniform shape; somewhat variable size
17	Liberty	Nunhems	Indistinct, medium width, medium to dark green stripes on light to medium green background; oval; uniform shape; variable size
18	Matrix	Syngenta	Indistinct, very wide, dark green stripes on light to medium green background; blocky to elongated; uniform shape; variable size

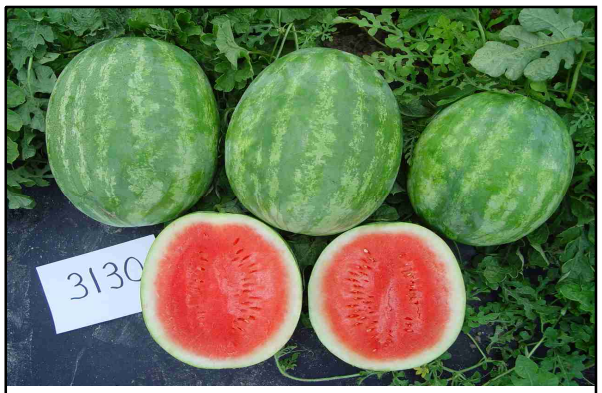
Table 15. Cont.

Entry No.	Cultigen	Company	Description
19	PX 8033	Seminis	Indistinct, very wide, dark green stripes on light green background; mainly blocky; shape and size is fairly uniform
20	Revolution	Nunhems	Indistinct, wide, dark green stripes on light green background; blocky-elongated; uniform shape and size
21	RWT 8173	Syngenta	Distinct, very narrow, very dark green stripes on dark green background; blocky; uniform shape; variable size
22	RWT 8174	Syngenta	Indistinct, medium width, very dark green stripes on dark green background; the stripe fades and is not distinguishable as fruit ripens; round to long oval/blocky; variable shape and size
23	RWT 8202	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; uniform shape and size
24	Slice-n-Serve	Southwestern Seed	Indistinct, medium width, medium to dark green stripes on light green background; mainly oval shape; fairly uniform in shape, shape somewhat variable as some fruit were assymetrical
25	SR 3010	Nunhems	Generally distinct, narrow width, dark green stripes on light green background; round; shape and size very uniform
26	SSX 7401	Sakata	Indistinct, medium width, medium to dark green stripes on on light green background; short oval; uniform shape and size
27	SSX 7608	Sakata	Indistinct, medium width, medium to dark green stripes on light green background; oval and round; variable shape and size
28	SSX 7619	Sakata	Distinct, narrow width, dark green stripes on light green background; round, uniform shape and size
29	Summer Sweet 5244	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; short to long oval; uniform shape; variable size
30	Super Seedless 7167	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; mainly oval/blocky, some round; shape and size somewhat variable
31	Super Seedless 7177	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape and size
32	Super Seedless 9651	Abbott & Cobb	No stripes. Hazy medium to dark solid green; oval; uniform shape and size
33	Sweet Delight	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; short to regular oval; uniform shape and size
34	Sweet Slice	Willhite	Indistinct, medium width, medium to dark green stripes on light green background; oval; fairly uniform shape and size
35	Sweet Slice Plus	Willhite	Indistinct, medium to wide, medium to dark green stripes on light green background; oval; uniform shape and size
36	Tomcat	Southwestern Seed	Indistinct, medium width, medium to dark green stripes on light green background; oval/blocky; very uniform shape and size
37	Tri-X-212	Syngenta	Indistinct, medium width, medium to dark green stripes on light green backgound; short oval to round; uniform shape and size

Table 15. Cont.

Entry No.	Cultigen	Company	Description
38	Tri-X-313	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; short to long oval; uniform shape; variable size
39	Tri-X-Palomar	Syngenta	Distinct, narrow width, dark green stripes on medium to dark green background; round; uniform shape; somewhat variable size
40	Tri-X-Triple Threat	Syngenta	Distinct, narrow width, dark green stripes on medium to dark green background; round; fairly uniform shape and size
41	Vagabond	Harris Moran	Indistinct, medium to wide, dark green stripes on medium green background; short oval to blocky; uniform shape and size

Figure 2: Triploid Photographs, 2006



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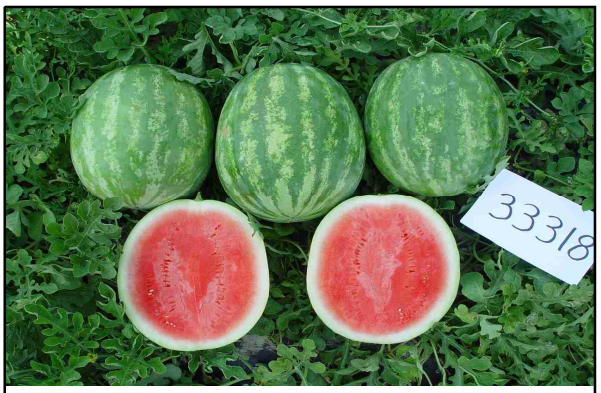

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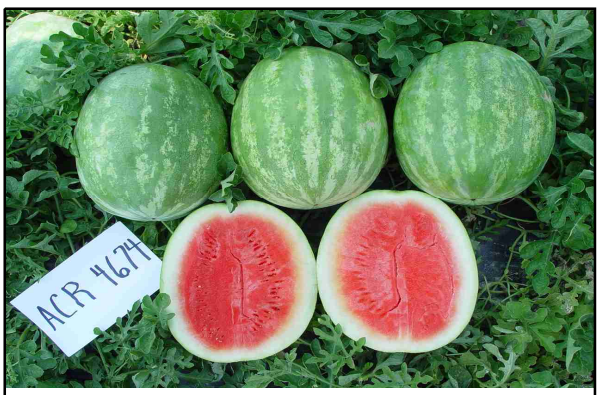


ACR 4674

ACR 5534

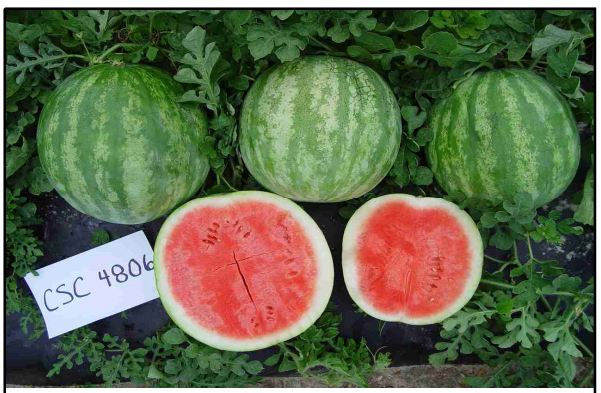
Candy

Figure 2: Triploid Photographs, 2006

Constitution

Crimson Jewel

CSC 4203



CSC 4806

Freedom

HMX 4915

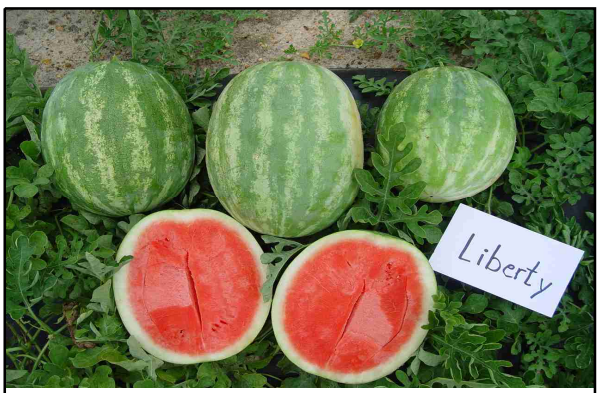
Figure 2: Triploid Photographs, 2006

HMX 5910

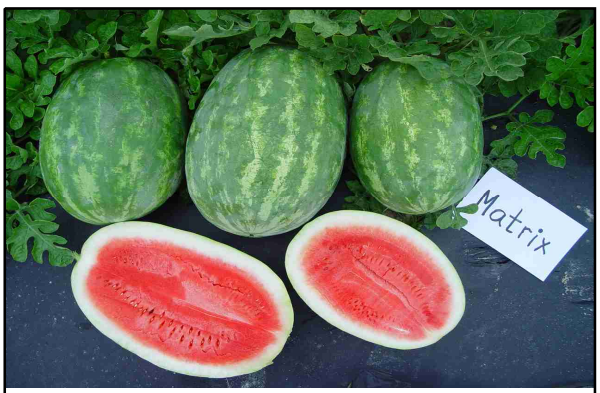
Imagination

Independence

Intruder

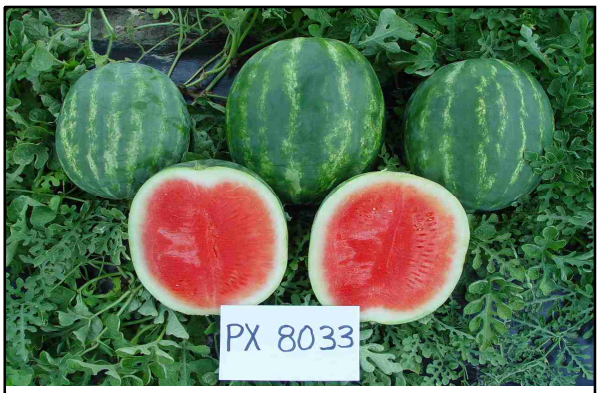


Liberty

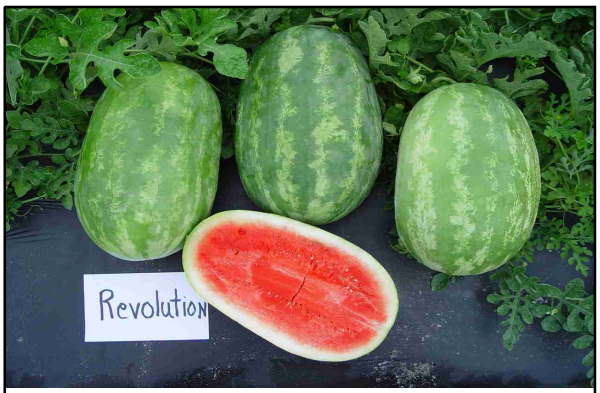


Matrix

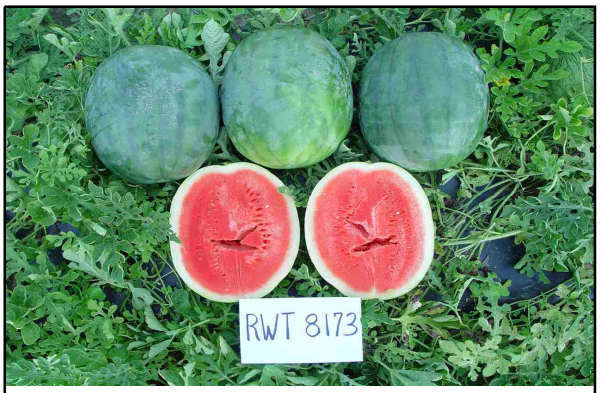
Figure 2: Triploid Photographs, 2006



PX 8033



Revolution



RWT 8173

RWT 8174

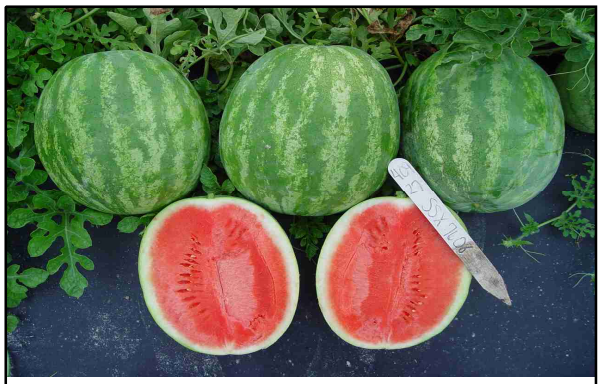
RWT 8202

Slice -n- Serve

Figure 2: Triploid Photographs, 2006

SR 3010

SSX 7401



SSX 7608

SSX 7619

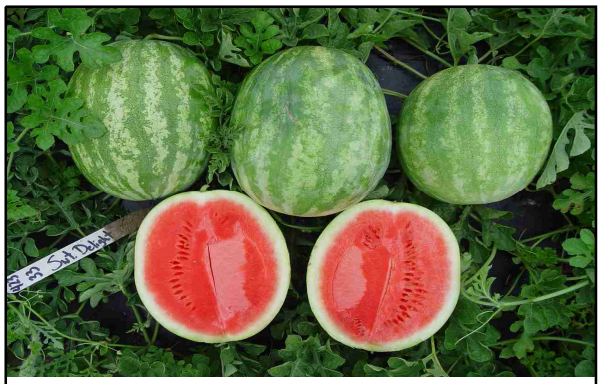
Summer Sweet 5244

Super Seedless 7167

Figure 2: Triploid Photographs, 2006

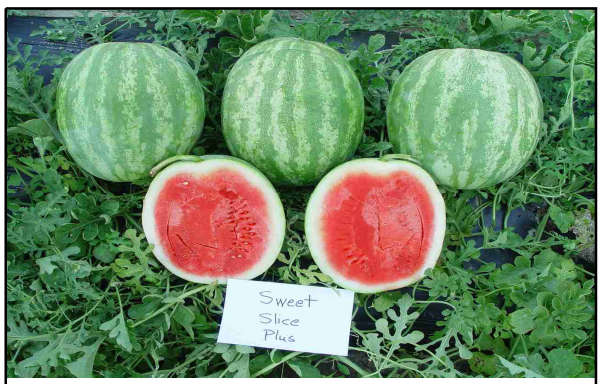
Super Seedless 7177

Super Seedless 9651



Sweet Delight

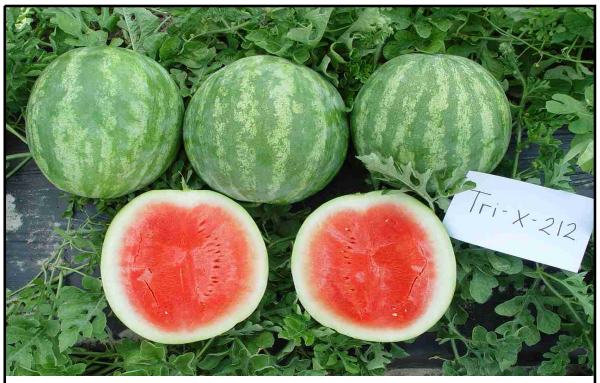
Sweet Slice



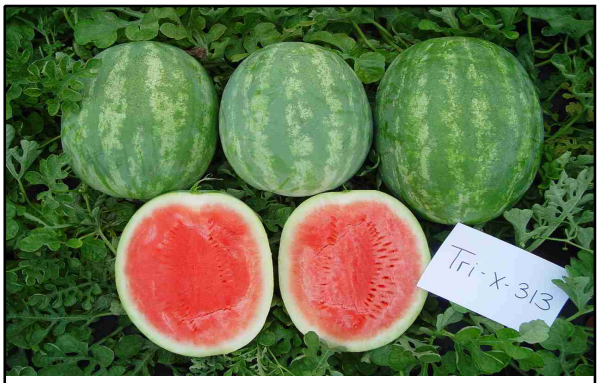
Sweet Slice Plus

Tomcat

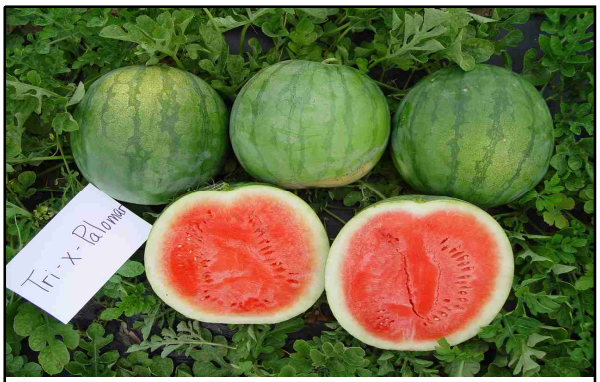
Figure 2: Triploid Photographs, 2006



Tri-X-212

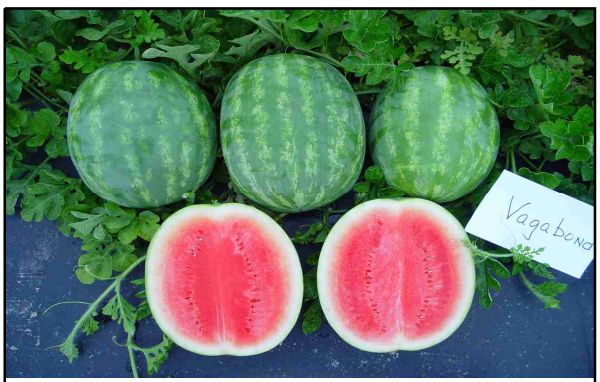


Tri-X-313



Tri-X-Palomar

Tri-X-Triple Threat



Vagabond

Table 16. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **first** harvest by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2006.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb)						Total No./ Acre	Mkt No./ Acre[3]	Avg lb/ fruit
			<8	8-14	14.1-18	18.1-22	22.1-30	30 +			
3130	Southwestern Seed	12	44	653	610	436	0	0	1742	1699	15.5
33318	Nunhems	13	0	523	697	479	0	0	1699	1699	15.8
33354	Nunhems	31	44	218	653	392	218	0	1524	1263	17.4
ACR 4674	Abbott & Cobb	28	0	958	348	131	44	0	1481	1437	13.7
ACR 5534	Abbott & Cobb	39	87	174	479	348	131	0	1219	1002	16.5
Candy	Willhite	24	0	610	653	305	0	0	1568	1568	14.8
Constitution	Nunhems	4	0	697	1045	131	0	0	1873	1873	14.6
Crimson Jewel	Clifton Seed	5	0	1045	784	44	0	0	1873	1873	13.4
CSC 4203	Clifton Seed	6	0	348	1176	305	87	0	1916	1829	16.2
CSC 4806	Clifton Seed	8	0	1002	523	261	44	0	1829	1786	14.0
Freedom	Nunhems	36	0	131	566	479	87	0	1263	1176	18.1
HMX 4915	Harris Moran	18	0	1132	392	87	0	0	1611	1611	13.1
HMX 5910	Harris Moran	30	131	958	305	44	0	0	1437	1307	12.7
Imagination	Syngenta	16	261	1307	348	0	44	0	1960	1655	11.6
Independence	Nunhems	32	87	653	523	87	44	0	1394	1263	13.5
Intruder (SW-1)	Southwestern Seed	7	0	566	1002	261	44	0	1873	1829	15.3
Liberty	Nunhems	25	131	392	871	261	131	0	1786	1524	15.5
Matrix	Syngenta	17	0	348	610	697	131	44	1829	1655	18.0
PX 8033 (5335)	Seminis	40	44	653	305	44	0	0	1045	1002	13.3
Revolution	Nunhems	20	0	261	740	610	87	44	1742	1611	19.7
RWT 8173	Syngenta	37	44	392	479	261	44	0	1219	1132	15.5
RWT 8174	Syngenta	29	44	653	479	218	44	0	1437	1350	14.7
RWT 8202	Syngenta	15	44	697	697	261	0	0	1699	1655	14.3
Slice -n- Serve	Southwestern Seed	9	0	697	697	392	0	0	1786	1786	15.3
SR3010	Nunhems	38	0	566	523	0	0	0	1089	1089	13.6
SSX 7401	Sakata	11	44	610	871	218	131	0	1873	1699	15.0
SSX 7608	Sakata	22	131	697	828	44	0	0	1699	1568	13.2
SSX 7619	Sakata	14	87	653	871	131	0	0	1742	1655	14.4
Summer Sweet 5244	Abbott & Cobb	3	0	958	740	218	0	0	1916	1916	14.3
SuperSeedless 7167	Abbott & Cobb	2	44	523	1132	305	44	0	2047	1960	15.7
SuperSeedless 7177	Abbott & Cobb	23	0	348	958	261	0	0	1568	1568	15.8
SuperSeedless 9651	Abbott & Cobb	19	0	392	915	305	0	0	1611	1611	16.1
Sweet Delight	Syngenta	21	87	218	1002	392	44	0	1742	1611	16.0
Sweet Slice	Willhite	26	44	740	610	174	44	0	1611	1524	14.3
Sweet Slice Plus	Willhite	1	44	479	1002	697	87	0	2308	2178	16.5
Tomcat (SW-2)	Southwestern Seed	41	0	218	436	305	44	0	1002	958	16.6
Tri-X-212	Syngenta	10	0	784	915	87	0	44	1829	1786	16.8
Tri-X-313	Syngenta	27	44	261	653	610	174	0	1742	1524	17.2
Tri-X-Palomar	Syngenta	34	131	566	392	261	44	0	1394	1219	13.2
Tri-X-Triple Threat	Syngenta	33	44	958	305	0	0	0	1307	1263	12.1
Vagabond	Harris Moran	35	44	436	610	131	0	0	1219	1176	14.5
Average		- -	**41**	**597**	**677**	**260**	**44**	**3**	**1622**	**1534**	**15.1**
LSD (0.05)		**- -**	**129**	**485**	**417**	**279**	**121**	**33**	**563**	**562**	**2.3**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

[2] Ranked according to total marketable weight.

[3] Includes fruit 8 - 22 pounds.

Table 17. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **first harvest**. **Clayton, NC, 2006.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<8**	**8.1-14**	**14.1-18**	**18.1-22**	**22.1 - 30**	**30 +**
3130	3	38	35	25	0	0
33318	0	31	41	28	0	0
33354	3	14	43	26	14	0
ACR 4674	0	65	24	9	3	0
ACR 5534	7	14	39	29	11	0
Candy	0	39	42	19	0	0
Constitution	0	37	56	7	0	0
Crimson Jewel	0	56	42	2	0	0
CSC 4203	0	18	61	16	5	0
CSC 4806	0	55	29	14	2	0
Freedom	0	10	45	38	7	0
HMX 4915	0	70	24	5	0	0
HMX 5910	9	67	21	3	0	0
Imagination	13	67	18	0	2	0
Independence	6	47	38	6	3	0
Intruder (SW-1)	0	30	53	14	2	0
Liberty	7	22	49	15	7	0
Matrix	0	19	33	38	7	2
PX 8033 (5335)	4	63	29	4	0	0
Revolution	0	15	43	35	5	3
RWT 8173	4	32	39	21	4	0
RWT 8174	3	45	33	15	3	0
RWT 8202	3	41	41	15	0	0
Slice -n- Serve	0	39	39	22	0	0
SR3010	0	52	48	0	0	0
SSX 7401	2	33	47	12	7	0
SSX 7608	8	41	49	3	0	0
SSX 7619	5	38	50	8	0	0
Summer Sweet 5244	0	50	39	11	0	0
SuperSeedless 7167	2	26	55	15	2	0
SuperSeedless 7177	0	22	61	17	0	0
SuperSeedless 9651	0	24	57	19	0	0
Sweet Delight	5	13	58	23	3	0
Sweet Slice	3	46	38	11	3	0
Sweet Slice Plus	2	21	43	30	4	0
Tomcat (SW-2)	0	22	43	30	4	0
Tri-X-212	0	43	50	5	0	2
Tri-X-313	3	15	38	35	10	0
Tri-X-Palomar	9	41	28	19	3	0
Tri-X-Triple Threat	3	73	23	0	0	0
Vagabond	4	36	50	11	0	0
Average	3	37	41	16	3	0
LSD	**8**	**26**	**24**	**18**	**8**	**2**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

Table 18. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **second** harvest by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2006.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb)						Total No./ Acre	Mkt No./ Acre[3]	Avg lb./ fruit
			<8	8-14	14.1-18	18.1-22	22.1-30	30 +			
3130	Southwestern Seed	19	87	653	392	218	44	0	1394	1263	13.4
33318	Nunhems	22	0	566	392	261	131	0	1350	1219	16.0
33354	Nunhems	26	44	348	566	261	131	0	1350	1176	16.1
ACR 4674	Abbott & Cobb	6	44	871	610	87	0	0	1611	1568	12.9
ACR 5534	Abbott & Cobb	21	0	174	479	566	305	0	1524	1219	18.7
Candy	Willhite	35	0	305	436	261	44	0	1045	1002	16.1
Constitution	Nunhems	37	131	523	261	87	0	0	1002	871	13.3
Crimson Jewel	Clifton Seed	17	0	871	174	218	0	0	1263	1263	14.1
CSC 4203	Clifton Seed	7	44	566	436	523	131	0	1699	1524	15.9
CSC 4806	Clifton Seed	14	0	436	653	218	44	0	1350	1307	15.0
Freedom	Nunhems	30	0	305	436	305	218	0	1263	1045	17.4
HMX 4915	Harris Moran	28	0	392	566	131	0	0	1089	1089	15.1
HMX 5910	Harris Moran	13	44	566	697	87	44	0	1437	1350	14.0
Imagination	Syngenta	40	131	523	131	44	131	0	958	697	12.8
Independence	Nunhems	9	0	610	697	174	87	0	1568	1481	15.0
Intruder (SW-1)	Southwestern Seed	25	0	610	436	131	0	44	1219	1176	18.4
Liberty	Nunhems	29	44	261	523	305	87	0	1219	1089	16.1
Matrix	Syngenta	24	0	392	479	305	218	0	1394	1176	17.0
PX 8033 (5335)	Seminis	20	87	915	348	0	0	0	1350	1263	13.1
Revolution	Nunhems	39	44	0	479	348	87	0	958	828	18.4
RWT 8173	Syngenta	31	0	479	305	261	131	0	1176	1045	17.0
RWT 8174	Syngenta	16	87	610	436	218	87	0	1437	1263	14.3
RWT 8202	Syngenta	1	44	740	915	261	44	0	2003	1916	15.5
Slice -n- Serve	Southwestern Seed	38	87	261	436	174	218	0	1176	871	17.0
SR3010	Nunhems	10	44	566	697	131	0	0	1437	1394	13.8
SSX 7401	Sakata	34	0	131	697	174	218	0	1219	1002	17.2
SSX 7608	Sakata	27	0	479	566	87	0	0	1132	1132	14.0
SSX 7619	Sakata	41	44	348	218	131	0	0	740	697	14.1
Summer Sweet 5244	Abbott & Cobb	15	0	610	436	261	87	0	1394	1307	14.7
SuperSeedless 7167	Abbott & Cobb	36	87	305	392	218	0	0	1002	915	14.6
SuperSeedless 7177	Abbott & Cobb	4	0	566	828	261	87	0	1742	1655	15.5
SuperSeedless 9651	Abbott & Cobb	2	87	392	958	523	0	0	1960	1873	16.3
Sweet Delight	Syngenta	32	44	305	392	305	0	0	1045	1002	15.0
Sweet Slice	Willhite	12	87	523	740	87	44	0	1481	1350	14.4
Sweet Slice Plus	Willhite	23	44	653	261	305	0	0	1437	1219	15.3
Tomcat (SW-2)	Southwestern Seed	8	0	392	523	566	131	0	1611	1481	17.5
Tri-X-212	Syngenta	11	0	610	479	305	131	0	1524	1394	15.2
Tri-X-313	Syngenta	33	87	174	566	261	44	0	1132	1002	16.5
Tri-X-Palomar	Syngenta	18	44	392	610	261	0	0	1307	1263	14.5
Tri-X-Triple Threat	Syngenta	5	0	828	479	305	0	0	1611	1611	14.2
Vagabond	Harris Moran	3	0	523	828	436	44	0	1829	1786	16.0
Average		- -	**36**	**482**	**511**	**245**	**72**	**1**	**1352**	**1239**	**15.4**
LSD (0.05)		- -	**118**	**464**	**471**	**298**	**168**	**19**	**752**	**738**	**3.1**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

[2] Ranked according to total marketable weight.

[3] Includes fruit 8 - 22 pounds.

Table 19. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **second harvest**. **Clayton, NC, 2006.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<8**	**8.1-14**	**14.1-18**	**18.1-22**	**22.1 - 30**	**30 +**
3130	6	47	28	16	3	0
33318	0	42	29	19	10	0
33354	3	26	42	19	10	0
ACR 4674	3	54	38	5	0	0
ACR 5534	0	11	31	37	20	0
Candy	0	29	42	25	4	0
Constitution	13	52	26	9	0	0
Crimson Jewel	0	69	14	17	0	0
CSC 4203	3	33	26	31	8	0
CSC 4806	0	32	48	16	3	0
Freedom	0	24	34	24	17	0
HMX 4915	0	36	52	12	0	0
HMX 5910	3	39	48	6	3	0
Imagination	14	55	14	5	14	0
Independence	0	39	44	11	6	0
Intruder (SW-1)	0	50	36	11	0	4
Liberty	4	21	43	25	7	0
Matrix	0	28	34	22	16	0
PX 8033 (5335)	6	68	26	0	0	0
Revolution	5	0	50	36	9	0
RWT 8173	0	41	26	22	11	0
RWT 8174	6	42	30	15	6	0
RWT 8202	2	37	46	13	2	0
Slice -n- Serve	7	22	37	15	19	0
SR3010	3	39	48	9	0	0
SSX 7401	0	11	57	14	18	0
SSX 7608	0	42	50	8	0	0
SSX 7619	6	47	29	18	0	0
Summer Sweet 5244	0	44	31	19	6	0
SuperSeedless 7167	9	30	39	22	0	0
SuperSeedless 7177	0	33	48	15	5	0
SuperSeedless 9651	4	20	49	27	0	0
Sweet Delight	4	29	38	29	0	0
Sweet Slice	6	35	50	6	3	0
Sweet Slice Plus	3	45	18	21	0	0
Tomcat (SW-2)	0	24	32	35	8	0
Tri-X-212	0	40	31	20	9	0
Tri-X-313	8	15	50	23	4	0
Tri-X-Palomar	3	30	47	20	0	0
Tri-X-Triple Threat	0	51	30	19	0	0
Vagabond	0	29	45	24	2	0
Average	3	36	38	18	5	0
LSD	**10**	**29**	**26**	**22**	**12**	**1**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted amc triploid plants, 3, 6, and 9.

Table 20. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **third** harvest by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2006.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb)						Total No./ Acre	Mkt No./ Acre[3]	Avg lb./ fruit
			<8	8-14	14.1-18	18.1-22	22.1-30	30 +			
3130	Southwestern Seed	9	87	1132	218	44	0	0	1481	1394	12.1
33318	Nunhems	5	87	697	653	218	44	0	1699	1568	13.8
33354	Nunhems	17	44	610	479	174	44	0	1350	1263	14.9
ACR 4674	Abbott & Cobb	4	131	1219	305	87	0	0	1742	1611	12.7
ACR 5534	Abbott & Cobb	22	87	566	392	305	87	0	1437	1263	14.9
Candy	Willhite	29	44	653	348	44	0	0	1089	1045	12.7
Constitution	Nunhems	13	218	958	305	87	0	0	1568	1350	12.0
Crimson Jewel	Clifton Seed	28	0	697	348	44	44	0	1132	1089	13.2
CSC 4203	Clifton Seed	38	44	523	174	44	44	0	828	740	13.3
CSC 4806	Clifton Seed	19	44	915	305	44	44	0	1350	1263	12.8
Freedom	Nunhems	40	0	174	305	174	44	0	697	653	16.8
HMX 4915	Harris Moran	12	218	915	392	44	0	0	1568	1350	11.4
HMX 5910	Harris Moran	24	44	784	348	131	0	0	1307	1263	12.7
Imagination	Syngenta	30	523	828	131	0	44	0	1524	958	10.5
Independence	Nunhems	36	87	479	305	0	0	0	871	784	12.5
Intruder (SW-1)	Southwestern Seed	7	44	784	479	218	0	0	1524	1481	13.4
Liberty	Nunhems	27	44	436	566	87	0	0	1132	1089	14.4
Matrix	Syngenta	10	0	523	479	392	174	0	1568	1394	16.8
PX 8033 (5335)	Seminis	18	174	1002	218	44	0	0	1437	1263	11.2
Revolution	Nunhems	34	0	305	392	174	131	0	1002	871	15.9
RWT 8173	Syngenta	32	87	523	218	174	44	0	1045	915	14.6
RWT 8174	Syngenta	11	174	1002	348	44	44	0	1611	1394	11.7
RWT 8202	Syngenta	1	87	1045	523	174	44	0	1873	1742	13.6
Slice -n- Serve	Southwestern Seed	6	0	1002	305	218	0	0	1524	1524	13.6
SR3010	Nunhems	14	44	915	348	44	0	0	1350	1307	12.8
SSX 7401	Sakata	39	131	523	131	44	0	0	828	697	11.8
SSX 7608	Sakata	16	0	828	436	44	0	0	1307	1307	12.1
SSX 7619	Sakata	26	87	566	479	87	0	0	1219	1132	13.8
Summer Sweet 5244	Abbott & Cobb	25	44	1002	87	174	44	0	1350	1263	12.8
SuperSeedless 7167	Abbott & Cobb	15	87	958	305	44	0	0	1394	1307	12.5
SuperSeedless 7177	Abbott & Cobb	23	0	828	261	174	0	0	1263	1263	13.8
SuperSeedless 9651	Abbott & Cobb	35	87	261	392	131	0	0	871	784	13.3
Sweet Delight	Syngenta	21	44	828	348	87	87	0	1394	1263	13.1
Sweet Slice	Willhite	37	174	392	348	0	44	0	958	740	13.0
Sweet Slice Plus	Willhite	33	174	653	131	87	0	0	1045	871	11.9
Tomcat (SW-2)	Southwestern Seed	41	0	305	218	87	131	0	740	610	16.0
Tri-X-212	Syngenta	3	0	958	610	44	0	0	1611	1611	13.2
Tri-X-313	Syngenta	31	0	392	479	44	87	0	1002	915	15.2
Tri-X-Palomar	Syngenta	20	87	828	348	87	0	0	1350	1263	12.6
Tri-X-Triple Threat	Syngenta	2	44	1045	436	174	44	0	1742	1655	13.1
Vagabond	Harris Moran	8	44	653	566	261	131	0	1655	1481	15.1
Average		- -	**81**	**724**	**353**	**112**	**34**	**0**	**1303**	**1189**	**13.4**
LSD (0.05)		- -	**190**	**559**	**342**	**184**	**111**	**0**	**752**	**709**	**2.4**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

[2] Ranked according to total marketable weight.

[3] Includes fruit 8 - 22 pounds.

Table 21. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **third harvest**. **Clayton, NC, 2006.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<8**	**8.1-14**	**14.1-18**	**18.1-22**	**22.1 - 30**	**30 +**
3130	6	76	15	3	0	0
33318	5	41	38	13	3	0
33354	3	45	35	13	3	0
ACR 4674	8	70	18	5	0	0
ACR 5534	6	39	27	21	6	0
Candy	4	60	32	4	0	0
Constitution	14	61	19	6	0	0
Crimson Jewel	0	62	31	4	4	0
CSC 4203	5	63	21	5	5	0
CSC 4806	3	68	23	3	3	0
Freedom	0	25	44	25	6	0
HMX 4915	14	58	25	3	0	0
HMX 5910	3	60	27	10	0	0
Imagination	34	54	9	0	3	0
Independence	10	55	35	0	0	0
Intruder (SW-1)	3	51	31	14	0	0
Liberty	4	38	50	8	0	0
Matrix	0	33	31	25	11	0
PX 8033 (5335)	12	70	15	3	0	0
Revolution	0	30	39	17	13	0
RWT 8173	8	50	21	17	4	0
RWT 8174	11	62	22	3	3	0
RWT 8202	5	56	28	9	2	0
Slice -n- Serve	0	66	20	14	0	0
SR3010	3	68	26	3	0	0
SSX 7401	16	63	16	5	0	0
SSX 7608	0	63	33	3	0	0
SSX 7619	7	46	39	7	0	0
Summer Sweet 5244	3	74	6	13	3	0
SuperSeedless 7167	6	69	22	3	0	0
SuperSeedless 7177	0	66	21	14	0	0
SuperSeedless 9651	10	30	45	15	0	0
Sweet Delight	3	59	25	6	6	0
Sweet Slice	18	41	36	0	5	0
Sweet Slice Plus	17	63	13	8	0	0
Tomcat (SW-2)	0	41	29	12	18	0
Tri-X-212	0	59	38	3	0	0
Tri-X-313	0	39	48	4	9	0
Tri-X-Palomar	6	61	26	6	0	0
Tri-X-Triple Threat	3	60	25	10	3	0
Vagabond	3	39	34	16	8	0
Average	6	55	28	9	3	0
LSD	**14**	**28**	**26**	**18**	**11**	**0**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

Table 22. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **fourth** harvest by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2006.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb)						Total No./ Acre	Mkt No./ Acre[3]	Avg lb./ fruit
			<8	8-14	14.1-18	18.1-22	22.1-30	30 +			
3130	Southwestern Seed	35	348	697	348	87	0	0	1481	1132	11.4
33318	Nunhems	15	523	1263	392	0	0	0	2178	1655	11.1
33354	Nunhems	13	523	1176	436	131	0	0	2265	1742	11.6
ACR 4674	Abbott & Cobb	17	784	1263	348	44	0	0	2439	1655	10.6
ACR 5534	Abbott & Cobb	27	305	1176	174	0	0	0	1655	1350	10.5
Candy	Willhite	20	392	1176	348	87	0	0	2003	1611	11.6
Constitution	Nunhems	22	740	1481	44	0	0	0	2265	1524	9.1
Crimson Jewel	Clifton Seed	38	740	915	131	0	0	0	1786	1045	9.2
CSC 4203	Clifton Seed	9	392	1437	218	131	0	0	2178	1786	11.1
CSC 4806	Clifton Seed	14	784	1437	261	0	0	0	2482	1699	9.7
Freedom	Nunhems	19	392	1176	392	44	0	0	2003	1611	10.6
HMX 4915	Harris Moran	21	697	1219	305	44	0	0	2265	1568	10.2
HMX 5910	Harris Moran	3	1219	1568	348	44	0	0	3179	1960	9.1
Imagination	Syngenta	39	828	740	44	87	0	0	1699	871	9.0
Independence	Nunhems	7	436	1786	87	0	0	0	2308	1873	9.6
Intruder (SW-1)	Southwestern Seed	10	653	1655	131	0	0	0	2439	1786	10.0
Liberty	Nunhems	24	479	1089	305	87	0	0	1960	1481	11.0
Matrix	Syngenta	11	261	1219	436	87	0	0	2003	1742	12.1
PX 8033 (5335)	Seminis	41	915	392	0	0	0	0	1307	392	7.4
Revolution	Nunhems	16	261	1176	392	87	0	0	1916	1655	12.0
RWT 8173	Syngenta	37	348	784	261	44	0	0	1437	1089	11.3
RWT 8174	Syngenta	32	566	1045	218	0	0	0	1829	1263	10.3
RWT 8202	Syngenta	1	348	1829	610	87	0	0	2874	2526	11.3
Slice -n- Serve	Southwestern Seed	18	566	1437	174	44	0	0	2221	1655	10.3
SR3010	Nunhems	31	915	1263	44	0	0	0	2221	1307	9.0
SSX 7401	Sakata	23	610	1176	348	0	0	0	2134	1524	10.3
SSX 7608	Sakata	34	653	1002	174	0	0	0	1829	1176	9.8
SSX 7619	Sakata	40	566	610	174	0	0	0	1350	784	10.3
Summer Sweet 5244	Abbott & Cobb	8	218	1394	392	44	0	0	2047	1829	11.4
SuperSeedless 7167	Abbott & Cobb	25	697	1263	174	0	0	0	2134	1437	9.5
SuperSeedless 7177	Abbott & Cobb	6	436	1655	218	0	0	0	2308	1873	10.5
SuperSeedless 9651	Abbott & Cobb	4	610	1829	87	44	0	0	2570	1960	10.1
Sweet Delight	Syngenta	29	479	871	348	87	0	0	1786	1307	11.2
Sweet Slice	Willhite	28	740	1219	131	0	0	0	2090	1350	9.4
Sweet Slice Plus	Willhite	2	610	1655	348	0	0	0	2613	2003	10.3
Tomcat (SW-2)	Southwestern Seed	33	436	1089	131	0	0	0	1655	1219	10.3
Tri-X-212	Syngenta	26	523	1219	87	44	44	0	1916	1350	10.2
Tri-X-313	Syngenta	5	305	1568	305	44	0	0	2221	1916	10.9
Tri-X-Palomar	Syngenta	30	261	1263	44	0	0	0	1568	1307	10.3
Tri-X-Triple Threat	Syngenta	36	305	1002	131	0	0	0	1437	1132	9.9
Vagabond	Harris Moran	12	871	1524	218	0	0	0	2613	1742	10.0
Average		- -	**554**	**1237**	**238**	**34**	**1**	**0**	**2065**	**1509**	**10.3**
LSD (0.05)		**- -**	**498**	**635**	**299**	**108**	**19**	**0**	**833**	**691**	**1.7**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted among the triploid plants, 3, 6, and 9.

[2] Ranked according to total marketable weight.

[3] Includes fruit 8 - 22 pounds.

Table 23. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **fourth harvest**. **Clayton, NC, 2006.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<8**	**8.1-14**	**14.1-18**	**18.1-22**	**22.1 - 30**	**30 +**
3130	24	47	24	6	0	0
33318	24	58	18	0	0	0
33354	23	52	19	6	0	0
ACR 4674	32	52	14	2	0	0
ACR 5534	18	71	11	0	0	0
Candy	20	59	17	4	0	0
Constitution	33	65	2	0	0	0
Crimson Jewel	41	51	7	0	0	0
CSC 4203	18	66	10	6	0	0
CSC 4806	32	58	11	0	0	0
Freedom	20	59	20	2	0	0
HMX 4915	31	54	13	2	0	0
HMX 5910	38	49	11	1	0	0
Imagination	49	44	3	5	0	0
Independence	19	77	4	0	0	0
Intruder (SW-1)	27	68	5	0	0	0
Liberty	24	56	16	4	0	0
Matrix	13	61	22	4	0	0
PX 8033 (5335)	70	30	0	0	0	0
Revolution	14	61	20	5	0	0
RWT 8173	24	55	18	3	0	0
RWT 8174	31	57	12	0	0	0
RWT 8202	12	64	21	3	0	0
Slice -n- Serve	25	65	8	2	0	0
SR3010	41	57	2	0	0	0
SSX 7401	29	55	16	0	0	0
SSX 7608	36	55	10	0	0	0
SSX 7619	42	45	13	0	0	0
Summer Sweet 5244	11	68	19	2	0	0
SuperSeedless 7167	33	59	8	0	0	0
SuperSeedless 7177	19	72	9	0	0	0
SuperSeedless 9651	24	71	3	2	0	0
Sweet Delight	27	49	20	5	0	0
Sweet Slice	35	58	6	0	0	0
Sweet Slice Plus	23	63	13	0	0	0
Tomcat (SW-2)	26	66	8	0	0	0
Tri-X-212	27	64	5	2	2	0
Tri-X-313	14	71	14	2	0	0
Tri-X-Palomar	17	81	3	0	0	0
Tri-X-Triple Threat	21	70	9	0	0	0
Vagabond	33	58	8	0	0	0
Average	27	59	12	2	0	0
LSD	**21**	**23**	**15**	**5**	**1**	**0**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

Table 24. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for cumulative harvests, (4), by various weight classes (per acre)[1]. **Clayton, N.C., 2006.**

		Fruit size category (lb)						Total	Total
Cultivar	Rank[2]	<8	8.1-14	14.1-18	18.1-22	22.1 - 30	30 +	Number	Mkt. No.[3]
3130	20	566	3136	1568	784	44	0	6097	5487
33318	9	610	3049	2134	958	174	0	6925	6141
33354	21	653	2352	2134	958	392	0	6489	5444
ACR 4674	5	958	4312	1611	348	44	0	7273	6271
ACR 5534	35	479	2090	1524	1219	523	0	5836	4834
Candy	26	436	2744	1786	697	44	0	5705	5226
Constitution	17	1089	3658	1655	305	0	0	6707	5618
Crimson Jewel	25	740	3528	1437	305	44	0	6054	5270
CSC 4203	14	479	2874	2003	1002	261	0	6620	5879
CSC 4806	11	828	3789	1742	523	131	0	7012	6054
Freedom	36	392	1786	1699	1002	348	0	5226	4486
HMX 4915	19	915	3658	1655	305	0	0	6533	5618
HMX 5910	13	1437	3876	1699	305	44	0	7360	5879
Imagination	40	1742	3397	653	131	218	0	6141	4181
Independence	22	610	3528	1611	261	131	0	6141	5400
Intruder (SW-1)	6	697	3615	2047	610	44	44	7055	6271
Liberty	27	697	2178	2265	740	218	0	6097	5183
Matrix	12	261	2482	2003	1481	523	44	6794	5966
PX 8033 (5335)	41	1219	2961	871	87	0	0	5139	3920
Revolution	33	305	1742	2003	1219	305	44	5618	4965
RWT 8173	39	479	2178	1263	740	218	0	4878	4181
RWT 8174	24	871	3310	1481	479	174	0	6315	5270
RWT 8202	1	523	4312	2744	784	87	0	8449	7839
Slice -n- Serve	15	653	3397	1611	828	218	0	6707	5836
SR3010	30	1002	3310	1611	174	0	0	6097	5095
SSX 7401	34	784	2439	2047	436	348	0	6054	4921
SSX 7608	29	784	3005	2003	174	0	0	5966	5183
SSX 7619	37	784	2178	1742	348	0	0	5052	4268
Summer Sweet 5244	3	261	3963	1655	697	131	0	6707	6315
SuperSeedless 7167	18	915	3049	2003	566	44	0	6576	5618
SuperSeedless 7177	2	436	3397	2265	697	87	0	6881	6358
SuperSeedless 9651	7	784	2874	2352	1002	0	0	7012	6228
Sweet Delight	28	653	2221	2090	871	131	0	5966	5183
Sweet Slice	32	1045	2874	1829	261	131	0	6141	4965
Sweet Slice Plus	4	871	3441	1742	1089	261	0	7404	6271
Tomcat (SW-2)	38	436	2003	1307	958	305	0	5008	4268
Tri-X-212	10	523	3571	2090	479	174	44	6881	6141
Tri-X-313	23	436	2395	2003	958	305	0	6097	5357
Tri-X-Palomar	31	523	3049	1394	610	44	0	5618	5052
Tri-X-Triple Threat	16	392	3832	1350	479	44	0	6097	5662
Vagabond	8	958	3136	2221	827	174	0	7316	6184
Average	- -	713	3041	1778	651	155	4	6343	5470
LSD(0.05)	**- -**	**557**	**951**	**698**	**508**	**262**	**39**	**1129**	**1080**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

[2] Ranked according to total marketable weight.

[3] Includes fruit 8 - 22 pounds.

Table 25. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category.**Clayton, NC., 2006.**

	Percentages[1] (%) by Fruit Size Category (lb)					
Cultivar	**<8**	**8.1-14**	**14.1-18**	**18.1-22**	**22.1 - 30**	**30 +**
3130	9	51	26	13	1	0
33318	9	44	31	14	3	0
33354	10	36	33	15	6	0
ACR 4674	13	59	22	5	1	0
ACR 5534	8	36	26	21	9	0
Candy	8	48	31	12	1	0
Constitution	16	55	25	5	0	0
Crimson Jewel	12	58	24	5	1	0
CSC 4203	7	43	30	15	4	0
CSC 4806	12	54	25	7	2	0
Freedom	8	34	33	19	7	0
HMX 4915	14	56	25	5	0	0
HMX 5910	20	53	23	4	1	0
Imagination	28	55	11	2	4	0
Independence	10	57	26	4	2	0
Intruder (SW-1)	10	51	29	9	1	1
Liberty	11	36	37	12	4	0
Matrix	4	37	29	22	8	1
PX 8033 (5335)	24	58	17	2	0	0
Revolution	5	31	36	22	5	1
RWT 8173	10	45	26	15	4	0
RWT 8174	14	52	23	8	3	0
RWT 8202	6	51	32	9	1	0
Slice -n- Serve	10	51	24	12	3	0
SR3010	16	54	26	3	0	0
SSX 7401	13	40	34	7	6	0
SSX 7608	13	50	34	3	0	0
SSX 7619	16	43	34	7	0	0
Summer Sweet 5244	4	59	25	10	2	0
SuperSeedless 7167	14	46	30	9	1	0
SuperSeedless 7177	6	49	33	10	1	0
SuperSeedless 9651	11	41	34	14	0	0
Sweet Delight	11	37	35	15	2	0
Sweet Slice	17	47	30	4	2	0
Sweet Slice Plus	12	46	24	15	4	0
Tomcat (SW-2)	9	40	26	19	6	0
Tri-X-212	8	52	30	7	3	1
Tri-X-313	7	39	33	16	5	0
Tri-X-Palomar	9	54	25	11	1	0
Tri-X-Triple Threat	6	63	22	8	1	0
Vagabond	85	278	197	73	15	0
Average	13	53	32	12	3	0
LSD	**8**	**13**	**11**	**8**	**4**	**1**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after triploid plants, 3, 6, and 9 within the plot.

Table 26. Triploid Red-Flesh watermelon hybrid cultivar trial. **Cumulative** weight per acre, (x100), of fruit harvested over four harvests by various weight classes plus average fruit size[1]. **Clayton, N.C. 2006.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb)						Total Wt./ Acre	Mkt Wt./ Acre[3]	Avg lb./ fruit
			≤8	8-14	14.1-18	18.1-22	22.1-30	30 +			
3130	Southwestern Seed	18	38	361	253	153	10	0	815	766	13.3
33318	Nunhems	5	42	346	344	186	41	0	960	876	13.8
33354	Nunhems	12	45	273	346	189	93	0	945	807	14.6
ACR 4674	Abbott & Cobb	14	64	487	253	67	10	0	880	806	12.2
ACR 5534	Abbott & Cobb	27	30	237	243	243	125	0	878	723	15.0
Candy	Willhite	23	30	313	285	138	11	0	777	736	13.6
Constitution	Nunhems	26	75	403	264	59	0	0	800	726	11.9
Crimson Jewel	Clifton Seed	30	46	400	224	58	10	0	738	683	12.2
CSC 4203	Clifton Seed	10	33	321	315	200	61	0	930	836	14.1
CSC 4806	Clifton Seed	15	54	421	269	101	32	0	877	791	12.5
Freedom	Nunhems	33	28	199	269	203	85	0	785	672	15.0
HMX 4915	Harris Moran	24	58	411	259	57	0	0	785	727	12.0
HMX 5910	Harris Moran	20	85	433	269	59	10	0	856	761	11.6
Imagination	Syngenta	40	110	383	101	25	51	0	670	509	10.8
Independence	Nunhems	28	40	388	252	53	32	0	765	693	12.4
Intruder (SW-1)	Southwestern Seed	9	48	395	322	121	11	75	971	837	13.7
Liberty	Nunhems	21	42	245	361	145	51	0	843	751	13.9
Matrix	Syngenta	2	18	286	329	294	131	14	1072	909	15.7
PX 8033 (5335)	Seminis	41	79	326	139	17	0	0	561	482	10.9
Revolution	Nunhems	19	19	200	324	243	74	57	916	766	16.3
RWT 8173	Syngenta	38	31	247	204	145	50	0	677	596	13.9
RWT 8174	Syngenta	29	59	365	232	92	42	0	790	689	12.5
RWT 8202	Syngenta	1	31	494	435	149	21	0	1130	1078	13.3
Slice -n- Serve	Southwestern Seed	13	43	387	257	164	51	0	902	807	13.4
SR3010	Nunhems	36	65	366	248	33	0	0	711	647	11.7
SSX 7401	Sakata	31	45	274	321	86	82	0	808	681	13.3
SSX 7608	Sakata	34	50	324	312	35	0	0	720	670	12.0
SSX 7619	Sakata	39	52	247	275	69	0	0	642	590	12.8
Summer Sweet 5244	Abbott & Cobb	8	19	438	265	135	30	0	886	837	13.2
SuperSeedless 7167	Abbott & Cobb	17	64	347	313	112	10	0	845	772	12.9
SuperSeedless 7177	Abbott & Cobb	4	29	384	359	135	22	0	930	878	13.5
SuperSeedless 9651	Abbott & Cobb	3	54	318	381	191	0	0	945	891	13.5
Sweet Delight	Syngenta	22	44	248	325	172	34	0	821	744	13.8
Sweet Slice	Willhite	35	71	325	287	49	30	0	762	662	12.5
Sweet Slice Plus	Willhite	6	58	382	275	216	61	0	993	873	13.4
Tomcat (SW-2)	Southwestern Seed	37	29	234	207	189	73	0	732	630	14.8
Tri-X-212	Syngenta	11	37	400	329	94	39	59	959	823	14.1
Tri-X-313	Syngenta	16	25	273	318	190	75	0	881	781	14.5
Tri-X-Palomar	Syngenta	32	32	338	217	121	10	0	718	676	12.8
Tri-X-Triple Threat	Syngenta	25	27	424	209	93	11	0	763	726	12.5
Vagabond	Harris Moran	7	66	350	355	163	41	0	975	868	13.4
Average		**- -**	**47**	**341**	**282**	**128**	**37**	**5**	**839**	**751**	**13.2**
LSD (0.05)		**- -**	**36**	**110**	**111**	**100**	**62**	**50**	**167**	**154**	**1.4**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

[2] Ranked according to total marketable weight.

[3] Includes fruit 8 - 22 pounds.

Table 27. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested over four harvests by **weight** within each fruit size category. **Clayton, NC, 2006.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<8**	**8.1-14**	**14.1-18**	**18.1-22**	**22.1 - 30**	**30 +**
3130	5	44	31	19	1	0
33318	4	36	36	19	4	0
33354	5	29	37	20	10	0
ACR 4674	7	55	29	8	1	0
ACR 5534	3	27	28	28	14	0
Candy	4	40	37	18	1	0
Constitution	9	50	33	7	0	0
Crimson Jewel	6	54	30	8	1	0
CSC 4203	4	34	34	22	7	0
CSC 4806	6	48	31	11	4	0
Freedom	4	25	34	26	11	0
HMX 4915	7	52	33	7	0	0
HMX 5910	10	51	31	7	1	0
Imagination	16	57	15	4	8	0
Independence	5	51	33	7	4	0
Intruder (SW-1)	5	41	33	12	1	8
Liberty	5	29	43	17	6	0
Matrix	2	27	31	27	12	1
PX 8033 (5335)	14	58	25	3	0	0
Revolution	2	22	35	26	8	6
RWT 8173	5	37	30	21	7	0
RWT 8174	7	46	29	12	5	0
RWT 8202	3	44	39	13	2	0
Slice -n- Serve	5	43	28	18	6	0
SR3010	9	51	35	5	0	0
SSX 7401	6	34	40	11	10	0
SSX 7608	7	45	43	5	0	0
SSX 7619	8	38	43	11	0	0
Summer Sweet 5244	2	49	30	15	3	0
SuperSeedless 7167	8	41	37	13	1	0
SuperSeedless 7177	3	41	39	15	2	0
SuperSeedless 9651	6	34	40	20	0	0
Sweet Delight	5	30	40	21	4	0
Sweet Slice	9	43	38	6	4	0
Sweet Slice Plus	6	38	28	22	6	0
Tomcat (SW-2)	4	32	28	26	10	0
Tri-X-212	4	42	34	10	4	6
Tri-X-313	3	31	36	22	8	0
Tri-X-Palomar	4	47	30	17	1	0
Tri-X-Triple Threat	3	56	27	12	1	0
Vagabond	7	36	36	17	4	0
Average	6	41	33	15	4	1
LSD	**5**	**13**	**12**	**11**	**7**	**5**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 plants were interplanted among th triploid plants, 3, 6, and 9.

Table 28. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, N.C., 2006.**[1]

Cultivar	SS[2]	Flesh Color[3]	Seed Trace Size[4]	Hard Seed Population[5]	LD[6]	Rind[7]	Hollow Heart Ratings[8] HH0	HH1	HH2	HH3	HH4
3130	11.9	3.6	1.4	2.9	1.2	15.3	85	10	5	0	0
33318	12.4	3.5	1.5	2.7	1.2	15.4	65	10	10	15	0
33354	12.2	3.8	1.9	2.9	1.1	16.4	75	0	15	5	5
ACR 4674	11.9	3.3	0.9	2.0	1.2	15.5	75	10	10	5	0
ACR 5534	11.7	3.7	1.3	2.5	1.2	17.9	85	10	0	0	0
Candy	11.5	4.0	1.8	3.0	1.1	16.1	55	10	5	5	25
Constitution	12.6	3.3	1.8	2.9	1.1	13.0	65	5	10	15	5
Crimson Jewel	12.5	3.2	2.0	3.4	1.0	13.5	80	10	5	5	0
CSC 4203	12.4	3.4	1.6	2.9	1.2	15.0	60	15	0	5	20
CSC 4806	12.1	3.6	2.1	3.0	1.1	16.5	45	5	10	30	10
Freedom	12.7	4.1	1.9	2.0	1.5	17.8	35	40	20	0	5
HMX 4915	12.2	3.9	2.0	2.9	1.2	14.3	30	30	30	5	0
HMX 5910	11.7	3.4	1.6	3.3	1.1	14.8	80	10	5	5	0
Imagination	11.7	4.6	2.3	2.8	1.0	13.6	95	0	5	0	0
Independence	12.1	3.3	2.1	3.5	1.1	13.4	70	15	10	5	0
Intruder (SW-1)	12.0	3.4	1.9	2.8	1.1	15.2	85	0	5	10	0
Liberty	12.7	3.3	1.8	2.8	1.2	14.7	50	15	20	10	5
Matrix	11.2	4.3	2.0	2.9	1.4	16.7	85	5	10	0	0
PX 8033 (5335)	12.3	4.1	1.5	1.8	1.2	14.2	75	15	10	0	0
Revolution	12.8	3.9	1.6	2.7	1.6	17.3	60	20	15	5	0
RWT 8173	12.9	4.4	1.5	2.0	1.2	14.4	80	10	5	5	0
RWT 8174	12.3	4.4	1.6	2.0	1.2	16.8	65	25	10	0	0
RWT 8202	11.8	4.1	1.3	2.4	1.2	17.3	75	15	10	0	0
Slice -n- Serve	12.2	3.6	1.8	2.4	1.1	15.6	60	5	15	20	0
SR3010	12.3	3.6	1.9	2.8	1.0	12.8	70	10	5	5	5
SSX 7401	11.8	3.6	1.8	2.9	1.1	14.9	65	5	15	15	0
SSX 7608	11.8	3.4	1.8	2.9	1.2	15.7	45	20	10	25	0
SSX 7619	11.3	3.4	1.4	2.6	1.0	15.9	80	0	15	5	0
Summer Sweet 5244	12.5	3.5	1.6	2.5	1.1	17.2	60	5	5	20	10
SuperSeedless 7167	12.4	3.4	1.0	1.9	1.1	16.0	60	15	15	10	0
SuperSeedless 7177	12.5	3.3	1.3	2.0	1.2	16.1	65	20	0	10	5
SuperSeedless 9651	12.6	3.9	1.1	2.1	1.1	16.7	85	0	10	0	5
Sweet Delight	12.0	3.9	1.3	2.5	1.2	16.1	75	15	0	5	5
Sweet Slice	11.9	3.4	1.6	2.4	1.1	14.8	90	5	0	5	0
Sweet Slice Plus	11.8	4.0	1.5	3.0	1.1	18.3	55	10	5	15	20
Tomcat (SW-2)	12.6	3.6	1.3	2.4	1.2	15.4	80	10	10	0	0
Tri-X-212	12.3	3.4	1.9	2.8	1.1	17.2	80	5	10	5	0
Tri-X-313	12.8	3.6	1.6	2.9	1.2	15.9	75	10	5	5	5
Tri-X-Palomar	12.1	3.5	1.9	2.9	1.0	17.4	55	10	5	15	10
Tri-X-Triple Threat	12.0	4.1	1.4	2.1	1.0	14.6	75	15	5	5	0
Vagabond	11.5	3.7	1.3	2.8	1.2	14.8	60	20	15	0	5
Average	12.1	3.7	1.6	2.6	1.2	15.6	69	11	9	7	4
LSD (0.05)	**0.7**	**0.4**	**0.7**	**1.0**	**0.1**	**2.3**	**29**	**19**	**17**	**17**	**10**

[1] Most measurements were obtained from fruits in harvest 1.

[2] SS = Indicates sweetness, average of 5 melons per replication (20 total).

[3] Rating: 1 = white, 2 = pink, 3 = red, 4 = medium-dark red, 5 = blood red.

[4] Rating: 1=small (i.e. tomato), 3=medium, 5=large (i.e.Crimson Sweet)

[5] Rating: 1 = few, 3 = some, 5 = many.

[6] LD = Length and diameter ratio, average of 5 melons per replication (20 total).

[7] Rind = Rind thickness (mm), measured from rind to where white and colored flesh meet, average of 5 melons per replication.

[8] **HH Percentage Rating Scale**

HH0: No crack in flesh

HH1: Slight crack in flesh

HH2: Small crack in flesh

HH3: Med. seperation in flesh

HH4: Complete seperation in flesh to rind

HH3 & HH4 = Non-marketable

Miniature Seedless Watermelon Cultural Practices for 2006 Cultivar Trials, Cunningham Research Station, Kinston, NC

Introduction

Growers are searching for alternative crops that can diversify their farm operation, reduce the risks associated with growing one or a few crops, but most importantly, to return profits to their business operation. Miniature seedless watermelons (also called palm melons or personal size watermelons) are a relatively new development in the watermelon industry. Expanded sales and availability continued in the United States in 2006. Sales from miniature seedless watermelon have helped to increase watermelon sales and have not reduced the sales of regular size watermelons. In the tables that follow, the adaptability of the miniature seedless is evaluated, both for yields and quality. This should help the watermelon industry make informed decisions regarding newly released cultivars or those that are being considered for release.

Materials and Methods

As with regular size diploid and triploid watermelons, before the growing season, seed companies were contacted to obtain seed for the watermelon cultivar trials. The first year we conducted miniature seedless watermelon evaluations was in 2003. A miniature watermelon regional test was conducted in 2004 when we collaborated with several other researchers throughout the Southeastern United States. Locations outside of North Carolina included Bradenton, FL., Charleston, SC., Quincy, FL., and Blacksville, SC. We conducted a cultivar variety tests in the 2005 and 2006 growing seasons. We report the specifics for the 2006 study in the tables that follow.

Once all seed were obtained, they were planted into LE 1803 transplant trays (Landmark Plastics Corp.; Akron, OH) on 13 April, 2006. The planting medium used was Fafard 4P, a commercial soil less mix (Conrad Fafard, Inc.; Agawam, ME). Approximately 3 to 4 weeks after seeding, the plants were placed in a cold frame and hardened before being established in the field on 16 May, 2006. Fertilizer, 50 lb/acre N and 100 lb/acre of P_2O_5 and K_20, was incorporated into the bed on 28 March prior to the laying of black polyethylene plastic (0.70 mil thick, 60 inches wide; B.B. Hobbs, Clinton, NC) on 6 April. Fumigant (Telone C-17) was injected on 6 April when the plastic was laid. Sonolan herbicide at 4 pints/acre was applied between the plastic beds for weed control on 10 April. Spacing between row middles was 10 feet. In-row spacing was 12 inches for the miniature seedless watermelon test. Plot size was one row with 10 plants per plot. Pollinizer plants of SP-1 were interplanted in the plots after plants 1, 4, and 7. Four replications were used in the miniature seedless watermelon test. At time of transplant, a starter solution was applied using 20-20-20 (0.5 lb/50 gallons water) and Diazinon (1.0 oz/35 gallons water) for insect control. Plots with missing plants were replanted approximately 7 days after planting to achieve 100% stand in most cases. Trickle irrigation was utilized (Streamline, 8 mil, 12 inch spacing, 0.23 gph; B.B. Hobbs, Clinton, NC) over the growing season. Fertigation was initiated two weeks after planting and applied weekly. Fertilizer was applied through the drip tube during the planting season. The first application was 17 May, the last was 26 July. A total of 40 lb/acre N and 50 lb/acre K_2O was drip applied through the season. Cumulative amount of fertilizer

applied for the entire growing season was 90, 100, and 150 lb/acre of N, P_2O_5, and K_2O, respectively. Insecticides were applied every one to two weeks as a preventative measure beginning 25 May and on the following dates: 7, 9, 15, 23 and 29 June; 7, 13, 20, 24, and 27 July; and 4 August. The following products were alternated during consecutive spray applications to avoid insect and mite resistance; Asana XL, Diazinon, Permethrin, and Agri-mek. Similarly, the following fungicide products were used; Bravo, Tenn-Cop, Pristine, Previcur Flex, Maneb, Nova, and Flint; and applied on the following dates; 9, 15, 23, and 29 June; 7, 13, 20, and 27 July; and 4 August. The weeds between the plastic were controlled using a shielded sprayer with Curbit at 4 pints/acre on 12 April and Gramoxone at 1.5 pints/acre on 30 May.

There were three harvests for the miniature triploid watermelon test. Harvest one was 14 July, the second harvest was 20 July, and the third harvest was 27 July. Each fruit was harvested when ripe and weighed. Evaluations of each watermelon entry included yield, fruit size, production earliness, soluble solids using a hand held refractometer, fruit shape and size, exterior and interior descriptions (rind pattern, length/width ratio, seed trace size, occurrence of hard seeds, hollow heart incidence and severity, and flesh color). Most of the quality measurements were taken at first harvest.

Financial Support
In addition to the seed companies, this program has been supported by the College of Life & Agricultural Sciences, the North Carolina Agricultural Research Service, and the North Carolina Cooperative Extension Service.

Table 29. Triploid mini-watermelon cultivar seed sources and descriptions; 2006.

Entry No.	Cultigen	Company	Description
1	Bibo	Syngenta	Distinct; very narrow, dark green stripes on light green background; primarily oval shape; uniform shape and size; fruit tended to be small
2	Cheyenne	Southwestern Seed	Distinct; narrow; dark green stripes on med - dark green background; oval to slightly oval; uniform fruit shape; variable size
3	Lil' Deuce Coupe	Syngenta	Indistinct, med-wide, dk green stripes on dark green background; primarily oval fruit shape; uniform shape and size
4	Mini Yellow	D.L. Palmer	Indistinct, very narrow, dark green stripes on dark green background; oval - round shape; uniform shape; variable size
5	Petite Perfection	Syngenta	Distinct, very narrow, dark green stripes on light green background; slightly oval fruit; uniform fruit shape and size
6	Poquito	D.L. Palmer	Distinct, narrow, dark green stripes on light to medium green background; mainly oval fruit shape with some round fruit shape; size is very variable; some fruit maybe too large for mini watermelon size
7	Precious Petite	Syngenta	Distinct, narrow, dark green stripe on light green background; round to oval fruit shape; uniform fruit size and shape; excellent mini melon size
8	RWT 8189	Syngenta	Distinct, very narrow, very dark stripes on light green background; primarily oval fruit shape; uniform fruit shape and size
9	SW 157	Southwestern Seed	Indistict, narrow, med. Green stripes on light green background; round to oval fruit shape; very uniform shape and size
10	SW 158	Southwestern Seed	Indistinct, narrow, med -dark green stripes on light green background; round to slightly oval shape fruit; uniform shape; somewhat variable size; If using SP-1 as pollenizer, use care when harvesting as fruit have similar rind pattern
11	SW 160	Southwestern Seed	Indistinct, narrow, med -dark green stripes on light green background; primarily round shape fruit; uniform shape; very variable size
12	SW 333	Southwestern Seed	Distinct, narrow, dark green stripes on light green background; round to oval fruit shape; uniform shape; very variable fruit size
13	Vanessa	Nunhems	Solid, dark green rind; round fruit shape; bright yellow ground spot when ripe; fruit size and shape are fairly uniform on first set; secondary set has more variable sized fruit with a few too large

Figure 3: 2006 Mini Triploid Trial

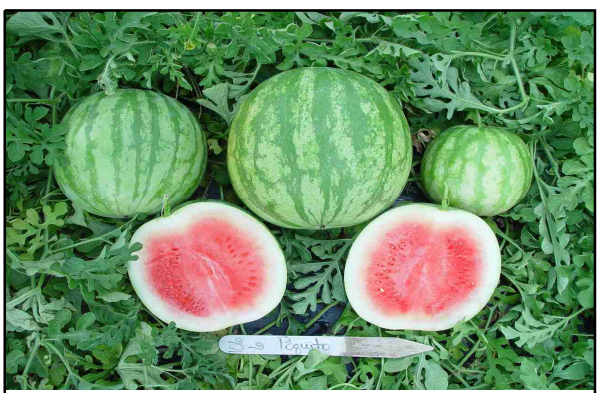
Bibo

Cheyenne

Lil' Deuce Coupe

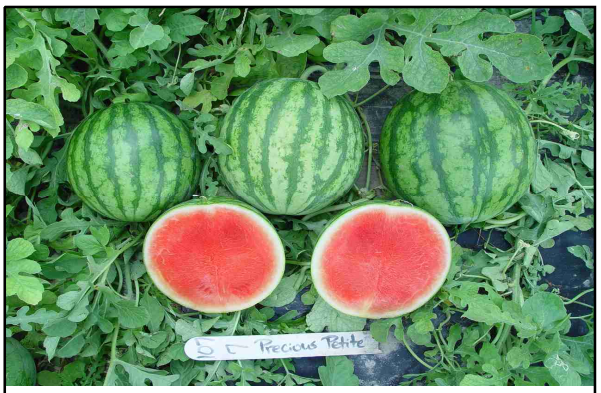
Mini Yellow

Petite Perfection



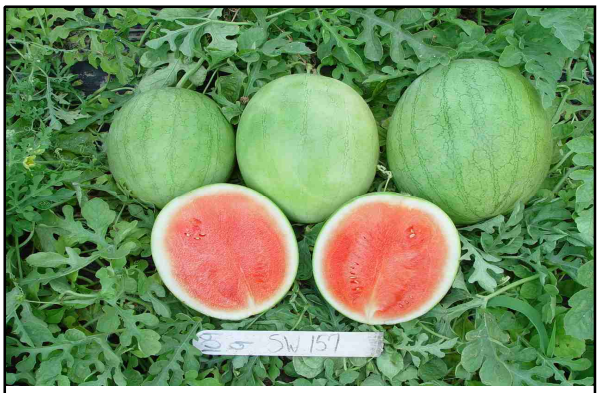
Poquito

Figure 3: 2006 Mini Triploid Trial



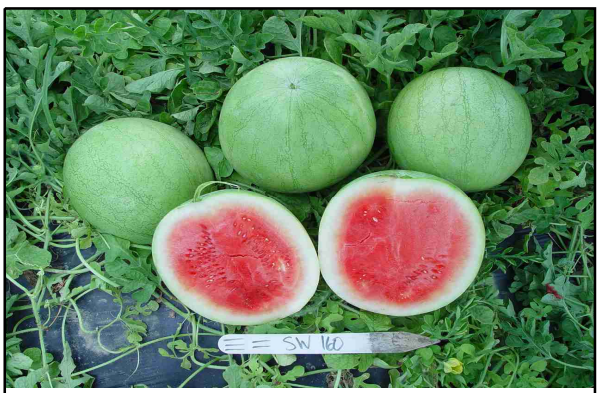
Precious Petite

RWT 8189

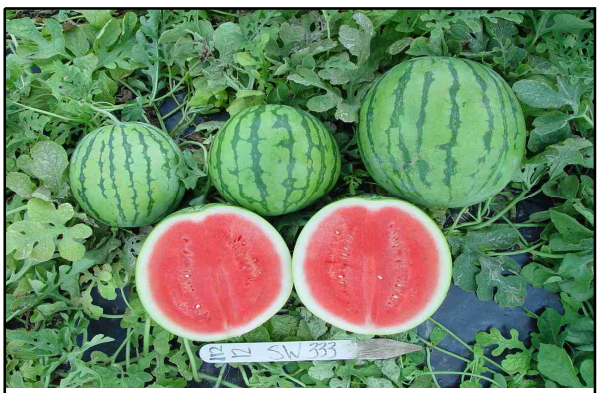


SW 157

SW 158



SW 160



SW 333

Figure 3: 2006 Mini Triploid Trial

Vanessa

Table 30. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **first** harvest by various weight classes (per acre) plus average fruit size[1]. **Kinston, N.C., 2006.**

		Fruit Size Category									
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]	Avg. Wt. (lb)
Bibo	2	1851	2396	1634	0	0	0	0	5881	4029	3.4
Cheyenne	11	0	109	980	762	545	653	109	3158	1089	7.5
Lil' Deuce Coupe	4	0	871	2723	327	0	0	0	3920	3594	4.9
Mini Yellow	8	109	109	2069	871	327	327	109	3920	2178	6.8
Petite Perfection	6	109	653	2614	0	0	0	0	3376	3267	4.4
Poquito	13	0	0	545	218	871	871	871	3376	545	6.8
Precious Petite	1	545	2287	2396	0	0	0	0	5227	4683	4.0
RWT 8189	5	436	1307	2178	0	0	0	0	3920	3485	4.0
SW 157	7	327	327	2723	0	0	0	0	3376	3049	4.2
SW 158	10	0	327	1416	653	109	0	109	2614	1742	6.4
SW 160	12	0	218	436	109	327	109	762	1960	653	3.9
SW 333	8	436	0	2178	653	436	436	1089	5227	2178	5.3
Vanessa	3	218	327	3376	871	109	109	109	5118	3703	5.9
Average	- -	310	687	1943	343	209	193	243	3929	2630	5.2
LSD(0.05)	**- -**	**612**	**1057**	**1709**	**692**	**377**	**530**	**384**	**1754**	**1856**	**3.2**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 31. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **first** harvest by various weight classes (per acre). **Kinston, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mrkt[3]**
Bibo	31	41	28	0	0	0	0	69
Cheyenne	0	3	31	24	17	21	3	34
Lil' Deuce Coupe	0	22	69	8	0	0	0	92
Mini Yellow	3	3	53	22	8	8	3	56
Petite Perfection	3	19	77	0	0	0	0	97
Poquito	0	0	16	6	26	26	26	16
Precious Petite	10	44	46	0	0	0	0	90
RWT 8189	11	33	56	0	0	0	0	89
SW 157	10	10	81	0	0	0	0	90
SW 158	0	13	54	25	4	0	4	67
SW 160	0	11	22	6	17	6	39	33
SW 333	8	0	42	13	8	8	21	42
Vanessa	4	6	66	17	2	2	2	72
Average	6	16	49	9	6	5	8	65
LSD	**14**	**22**	**31**	**17**	**15**	**15**	**13**	**29**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit percent for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 32. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **second** harvest by various weight classes (per acre) plus average fruit size[1]. **Kinston, N.C., 2006.**

		Fruit Size Category									
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]	Avg. Wt. (lb)
Bibo	7	980	762	218	0	0	0	0	1960	980	2.9
Cheyenne	11	0	0	545	109	218	218	109	1198	545	7.5
Lil' Deuce Coupe	5	0	218	871	0	0	0	0	1089	1089	5.1
Mini Yellow	10	0	218	436	436	0	218	109	1525	653	7.3
Petite Perfection	2	218	436	1089	0	0	0	0	1742	1525	4.8
Poquito	12	109	109	109	0	327	0	1198	1851	218	9.9
Precious Petite	1	109	1089	1742	0	0	0	0	2940	2831	4.2
RWT 8189	3	327	436	871	0	0	0	0	1634	1307	3.8
SW 157	5	109	109	980	109	0	0	0	1307	1089	5.0
SW 158	7	0	109	871	218	327	0	0	1525	980	6.4
SW 160	9	0	109	653	109	0	109	327	1307	762	7.9
SW 333	12	218	0	218	0	436	218	436	1525	218	9.0
Vanessa	4	218	218	980	109	109	0	0	1634	1198	5.3
Average	- -	176	293	737	84	109	59	168	1634	1030	6.1
LSD(0.05)	**- -**	**355**	**621**	**790**	**250**	**301**	**238**	**452**	**1193**	**909**	**1.7**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 33. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **second** harvest by various weight classes (per acre). **Kinston, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mrkt[3]**
Bibo	50	39	11	0	0	0	0	50
Cheyenne	0	0	45	9	18	18	9	45
Lil' Deuce Coupe	0	20	80	0	0	0	0	100
Mini Yellow	0	14	29	29	0	14	7	43
Petite Perfection	13	25	63	0	0	0	0	88
Poquito	6	6	6	0	18	0	65	12
Precious Petite	4	37	59	0	0	0	0	96
RWT 8189	20	27	53	0	0	0	0	80
SW 157	8	8	75	8	0	0	0	83
SW 158	0	7	57	14	21	0	0	64
SW 160	0	8	50	8	0	8	25	58
SW 333	14	0	14	0	29	14	29	14
Vanessa	13	13	60	7	7	0	0	73
Average	10	16	46	6	7	4	10	62
LSD	**16**	**26**	**39**	**19**	**33**	**13**	**30**	**28**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit percentages for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 34. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **third** harvest by various weight classes (per acre) plus average fruit size[1]. **Kinston, N.C., 2006.**

		Fruit Size Category									
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]	Avg. Wt. (lb)
Bibo	5	1198	980	871	0	0	0	0	3049	1851	3.3
Cheyenne	11	0	0	762	109	545	0	545	1960	762	6.0
Lil' Deuce Coupe	2	0	762	3267	545	0	0	0	4574	4029	5.5
Mini Yellow	7	0	218	1416	327	109	218	109	2396	1634	6.3
Petite Perfection	4	980	762	1960	218	109	0	218	4247	2723	4.7
Poquito	13	218	218	327	327	218	0	980	2287	545	4.6
Precious Petite	1	1307	2178	1960	0	0	0	109	5554	4138	4.2
RWT 8189	3	1198	1307	2287	0	0	0	0	4792	3594	4.0
SW 157	7	0	327	1307	327	0	0	0	1960	1634	5.6
SW 158	10	109	0	1307	653	218	109	218	2614	1307	7.3
SW 160	12	0	0	653	436	327	109	762	2287	653	6.9
SW 333	9	436	0	1416	327	1198	218	1198	4792	1416	7.9
Vanessa	5	0	109	1742	436	327	218	218	3049	1851	6.6
Average	- -	419	528	1483	285	235	67	335	3351	2010	5.6
LSD(0.05)	**- -**	**686**	**863**	**1210**	**561**	**534**	**225**	**596**	**2008**	**1730**	**3.5**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 35. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **third** harvest by various weight classes (per acre). **Kinston, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mrkt[3]**
Bibo	39	32	29	0	0	0	0	61
Cheyenne	0	0	39	6	28	0	28	39
Lil' Deuce Coupe	0	17	71	12	0	0	0	88
Mini Yellow	0	9	59	14	5	9	5	68
Petite Perfection	23	18	46	5	3	0	5	64
Poquito	10	10	14	14	10	0	43	24
Precious Petite	24	39	35	0	0	0	2	75
RWT 8189	25	27	48	0	0	0	0	75
SW 157	0	17	67	17	0	0	0	83
SW 158	4	0	50	25	8	4	8	50
SW 160	0	0	29	19	14	5	33	29
SW 333	9	0	30	7	25	5	25	30
Vanessa	0	4	57	14	11	7	7	61
Average	10	13	44	10	8	2	12	57
LSD	**15**	**19**	**28**	**20**	**14**	**8**	**18**	**30**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit percentages for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 36. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **fourth** harvest by various weight classes (per acre) plus average fruit size[1]. **Kinston, N.C., 2006.**

		Fruit Size Category									
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]	Avg. Wt. (lb)
Bibo	12	2069	1198	653	0	0	0	0	3920	1851	3.0
Cheyenne	13	545	436	871	218	436	327	218	3049	1307	6.0
Lil' Deuce Coupe	7	1416	1198	1416	218	0	0	0	4247	2614	3.7
Mini Yellow	6	436	871	1960	327	327	0	109	4029	2831	5.2
Petite Perfection	8	1307	1089	1307	0	0	0	0	3703	2396	3.4
Poquito	5	218	871	2069	109	653	218	436	4574	2940	6.4
Precious Petite	3	1634	1416	1960	0	0	0	0	5009	3376	3.7
RWT 8189	11	1416	1089	980	0	0	0	0	3485	2069	3.2
SW 157	4	545	1525	1634	0	0	0	0	3703	3158	4.0
SW 158	1	980	109	3920	109	545	545	109	6316	4029	5.8
SW 160	9	218	436	1742	327	109	218	762	3812	2178	6.1
SW 333	9	436	436	1742	218	0	218	653	3703	2178	6.7
Vanessa	2	980	653	2831	545	109	218	0	5336	3485	5.0
Average	- -	938	871	1776	159	168	134	176	4222	2647	4.8
LSD(0.05)	**- -**	**952**	**855**	**1225**	**446**	**351**	**316**	**455**	**1993**	**1398**	**1.3**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 37. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **fourth** harvest by various weight classes (per acre). **Kinston, N.C., 2006.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mrkt[3]**
Bibo	53	31	17	0	0	0	0	47
Cheyenne	18	14	29	7	14	11	7	43
Lil' Deuce Coupe	33	28	33	5	0	0	0	62
Mini Yellow	11	22	49	8	8	0	3	70
Petite Perfection	35	29	35	0	0	0	0	65
Poquito	5	19	45	2	14	5	10	64
Precious Petite	33	28	39	0	0	0	0	67
RWT 8189	41	31	28	0	0	0	0	59
SW 157	15	41	44	0	0	0	0	85
SW 158	16	2	62	2	9	9	2	64
SW 160	6	11	46	9	3	6	20	57
SW 333	12	12	47	6	0	6	18	59
Vanessa	18	12	53	10	2	4	0	65
Average	23	22	41	4	4	3	5	62
LSD	**21**	**19**	**32**	**12**	**8**	**9**	**10**	**25**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit percentages for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 38. **Triploid mini watermelon** hybrid cultivar trial. Cumulative **number** of fruit harvested over 4 harvests by various weight classes (per acre) plus average fruit size[1]. **Kinston, N.C., 2006.**

		Fruit Size Category								
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]
Bibo	7	6098	5336	3376	0	0	0	0	14810	8712
Cheyenne	13	545	545	3158	1198	1742	1198	980	9365	3703
Lil' Deuce Coupe	2	1416	3049	8276	1089	0	0	0	13830	11326
Mini Yellow	9	545	1416	5881	1960	871	762	436	11870	7296
Petite Perfection	5	2614	2940	6970	218	109	0	218	13068	9910
Poquito	11	545	1198	3049	653	0	1089	3485	12088	4247
Precious Petite	1	3594	6970	8059	0	0	0	109	18731	15028
RWT 8189	3	3376	4138	6316	0	0	0	0	13830	10454
SW 157	6	980	2287	6643	436	0	0	0	10346	8930
SW 158	8	1089	545	7514	1634	1198	653	436	13068	8059
SW 160	12	218	762	3485	980	762	545	2614	9365	4247
SW 333	10	1525	436	5554	1198	2069	1089	3376	15246	5990
Vanessa	4	1416	1307	8930	1960	653	545	327	15137	10237
Average	- -	1843	2379	5939	871	570	452	921	13135	8318
LSD(0.05)	**- -**	**1382**	**1801**	**2288**	**841**	**680**	**728**	**739**	**3392**	**2830**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-1 was the pollinizer interplanted after triploid plants 1, 4, and 7 (3 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 39. Triploid mini watermelon hybrid cultivar trial. Cumulative **Percentage** harvested by number within each fruit size category. **Kinston, NC, 2006.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mkt[2]**
Bibo	41	36	23	0	0	0	0	59
Cheyenne	6	6	34	13	19	13	10	40
Lil' Deuce Coupe	10	22	60	8	0	0	0	82
Mini Yellow	5	12	50	17	7	6	4	61
Petite Perfection	20	23	53	2	1	0	2	76
Poquito	5	10	25	5	0	9	29	35
Precious Petite	19	37	43	0	0	0	1	80
RWT 8189	24	30	46	0	0	0	0	76
SW 157	9	22	64	4	0	0	0	86
SW 158	8	4	57	13	9	5	3	62
SW 160	2	8	37	10	8	6	28	45
SW 333	10	3	36	8	14	7	22	39
Vanessa	9	9	59	13	4	4	2	68
Average	15	20	45	6	4	3	5	66
LSD	**10**	**12**	**14**	**7**	**6**	**6**	**8**	**12**

[1] Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

[2]Includes fruit 3 to 7 lbs.

Table 40. **Mini Triploid** watermelon hybrid cultivar trial. Cumulative **weight** (x 100) of fruit harvested over 4 harvests by various weight classes (per acre). **Kinston, N.C., 2006.**

		Fruit Size Category (lb)									
Cultivar	Rank[1]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[2]	Avg. Wt
Bibo	9	141	181	159	0	0	0	0	481	341	3.2
Cheyenne	13	12	21	174	90	149	115	113	674	195	7.2
Lil' Deuce Coupe	2	32	106	428	80	0	0	0	646	534	4.7
Mini Yellow	8	13	50	327	148	74	74	48	733	377	6.2
Petite Perfection	4	58	100	357	16	9	0	28	569	458	4.3
Poquito	12	13	41	168	49	177	104	440	992	209	8.4
Precious Petite	1	87	240	391	0	0	0	37	755	631	4.0
RWT 8189	5	78	140	299	0	0	0	0	518	440	3.8
SW 157	7	22	79	337	32	0	0	0	470	416	4.7
SW 158	6	26	19	418	123	101	60	87	835	437	6.4
SW 160	11	5	28	184	75	66	52	322	732	212	8.0
SW 333	10	37	15	289	90	179	103	397	1110	304	7.5
Vanessa	3	32	42	490	148	55	51	35	853	533	5.6
Average	- -	43	82	310	65	62	43	116	721	391	5.7
LSD(0.05)	**- -**	**33**	**63**	**116**	**63**	**58**	**69**	**102**	**165**	**129**	**0.9**

[1] Ranked according to total marketable number.

[2] Includes fruit 3 to 7 lbs.

Table 41. Mini Triploid watermelon hybrid cultivar trial. Interior fruit quality. **Kinston, NC, 2006**.[1]

Cultivar	Rind Thickness (mm) [2]	Soluble Solids[3]	Flesh Color[4]	Average Fruit Pressure [5]	Fruit LD	Hollow Heart Ratings [6]				
						HH0	HH1	HH2	HH3	HH4
Bibo	7.7	12.2	4.3	3.4	1.1	100	0	0	0	0
Cheyenne	16.1	11.3	3.1	2.3	1.0	75	15	10	0	0
Lil' Deuce Coupe	8.8	11.5	4.4	2.6	1.1	100	0	0	0	0
Mini Yellow	13.3	10.8	0.0	2.3	1.0	70	0	20	10	0
Petite Perfection	7.5	11.0	4.2	3.1	1.1	100	0	0	0	0
Poquito	17.1	11.1	3.0	2.4	1.0	75	5	10	10	0
Precious Petite	6.8	11.0	4.0	2.7	1.1	100	0	0	0	0
RWT 8189	8.3	10.5	4.0	3.1	1.1	95	5	0	0	0
SW 157	12.3	10.7	3.3	2.2	1.1	70	5	10	15	0
SW 158	14.6	11.5	4.0	3.5	1.0	100	0	0	0	0
SW 160	16.1	11.0	2.8	2.6	1.1	90	5	0	5	0
SW 333	15.4	10.5	3.3	2.3	1.1	80	0	5	15	0
Vanessa	14.0	10.8	3.7	2.3	1.0	85	0	10	5	0
Average	12.1	11.1	3.4	2.7	1.1	88	3	5	5	0
LSD (0.05)	**2.7**	**0.9**	**0.5**	**0.6**	**0.1**	**23**	**9**	**14**	**15**	**0**

[1] Most measurements were obtained from fruits in harvest 1.

[2] Rind Thickness=Rinds were measured in 4 regions of the fruit (stem end and thereafter every 90 degrees) and an average was taken for 5 fruits per replication (15 total).

[3] SS = Soluble solids indicates sweetness, average of 5 melons per replication (15 total).

[4] Rating: 0 = yellow, 6=light red/dark pink, 8=red, 9=bright red, 10=blood red.

[5] Penetrometer = Fruit Pressure Tester - FT011 from QA Supplies LLC, Norfolk Va, Five melons per replicate, per cultivar, were probed 1/2 the distance between the rind and the center of the melon.

[6] **Hollow Heart Ratings** (Percentage occurrence in each category).

HH0 = Fruit with no hollow heart, (Marketable fruit).

HH1 = Fruit with minimal / hairline crack in flesh; (Marketable fruit).

HH2 = Fruit with small crack in flesh; (Marketable fruit).

HH3 = Fruit with medium to large flesh seperations; (Non marketable fruit).

HH4 = Fruit with flesh seperation to rind; (Non marketable fruit).

Yellow Summer and Zucchini Squash Cultural Practices for 2006 Cultivar Trials, Mountain Horticultural Crops Research Station, Fletcher, NC

Introduction

Commercial squash production occurs across the state of North Carolina. Squash production in the state totaled 3,400 acres valued at $9.9 million in 2005. Most squash cultigen tests we have conducted have usually been placed in the eastern part of North Carolina. To provide more regional information, a yellow summer and zucchini squash cultivar test was planted and evaluated in Fletcher, North Carolina which is located in the western part of the state.

Materials and Methods

Seeds were sown 27 July 2006. Hills were replanted one week after initial planting to maximize plant stands in plots. Fertilizer, 500 lb/acre 10-20-20 was applied pre-plant on 9 May. Spacing between row middles was 60 inches and in-row spacing was 2 feet. Plot size was one row, 10 plants per plot, 20 feet long with 10 feet alleys between plots. A total of 78 lb/acre N, 100 lb/acre P, and 151 lb/acre K_2O were applied for the squash production season. The insecticide, Asana, was applied every week as a preventative measure beginning 11 August and on the following dates: 18 and 25 August; 1 and 8, September. The following fungicide products were used: Gavel, Flint, Nova, Kocide DF, Previcur Flex, Bravo Weatherstick, and Maneb; and applied on the following dates: 28 July; 4, 11, 18, and 25 August; and 1 and 8 September.

There were a total of 10 total harvests. The first harvest was 30 August. Harvests were made two to three times per week with the last harvest (#10) being 29 September. Most fruit were harvested when the blossom was detached from the fruit and categorized as marketable or not marketable. Fruit that were small and did not size, or were misshapen, were categorized as culls. Fruit that was off color due to virus were categorized as virus symptomatic and non-marketable fruit. Thus cull fruit were separated from virus symptomatic fruit when statistically analyzed. Graded fruit were weighed for each category for each plot. There were four replications. Other quality measurements that were taken were fruit color, plant vigor, percent plant stand, and powdery mildew ratings. These measurements were taken using a rating system that is explained in the appropriate tables.

Acknowledgements:

We would like to thank D. Palmer Seed Company, Harris Moran Seed Company, Seminis Vegetable Seeds, and Syngenta for their financial support.

Table 42. Yellow and Zucchini squash cultigan seed source and descriptions; 2006.

Entry	Yellow	Company	Description
1	Dixie	Seminis	semi-crook to crook neck; green stem; fairly smooth; small calyx scar; med length handle and bulb length
2	Gentry	Syngenta	semi-crook to crook neck; green stem; smooth; small - med calyx scar; med length handle with med bulbous end
3	Multipik	Harris Moran Seed	straightneck; precocious yellow; fairly smooth; med - large protruding stem scar; med stem length with average bulb size
4	Lioness	Harris Moran Seed	straightneck; green stem; smooth with slight striations; med calyx scar; med length handle with slender bulb
5	Prelude II	Seminis	semi-crook to crookneck; green stem; very smooth skin; very small calyx scar; med length handle and bulb width
6	Daisy Mae	D. Palmer	crookneck; green stem; small calyx scar; short to med handle; average bulb size
7	SVT 13045861	Seminis	straight neck; precocious yellow stem; smooth; med to large calyx scar; med to long fruit length; slender bulb
8	Goldstar	Syngenta	crook to semi - crookneck; green stem; very smooth; small calyx scar; medium length handle and bulb width; average size fruit

Entry	Zucchini	Company	Description
1	Elite	Harris Moran	med green; some curvature at stem end; ridging down fruit;
2	Senator	Seminis	med green; notched fruit at neck with significant tapering at bulbous end; slight ridging at stem end
3	Spineless Beauty	Syngenta	med green; generally straight fruit; ridging is obvious down entire fruit
4	Tigress	Harris Moran	light to med green; fairly straight; slight taper at bulbous end; minimal ridging
5	Cashflow	Syngenta	med green; straight fruit w/ flaring at bulbous end; slight ridging down entire fruit
6	Payroll	Syngenta	med green; very straight, uniform shape fruit; slight taper towards blossom end; very minor ridging at stem end
7	Leopard	Harris Moran	med to dk green; fruit are uniform in shape; fairly straight fruit with slight taper at bulbous end; slight ridging at stem end;
8	Judgement III	Seminis	med green; some constriction at stem end; prolific speckling; very straight fruit; slight ridging down entire fruit
9	Envy	Syngenta	med to dark green; straight fruit with pronounced taper towards blossom end; some ridging at stem end; no speckling; fruit length normal
10	PX 13035780	Seminis	med green; fairly straight; pronouced ridging; prolific speckling; fruit tend to be shorter than normally marketed

Table 43. Yellow Squash cultigen trial yields[1], number of 20 lb boxes per acre, per indicated harvests. **Fletcher, NC, 2006.**

Cultivar	Number of 20 pound boxes per acre											
	Marketable			Culls[2]			Virus [3]			Total		
	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10
Dixie	181	76	10	12	8	1	32	88	139	224	172	150
Gentry	178	124	18	1	21	8	20	83	88	199	228	115
Multipik	209	154	45	0	4	8	12	47	109	221	206	163
Lioness	174	234	222	0	42	13	1	4	1	175	279	237
Prelude II	220	89	20	0	25	2	22	106	112	242	220	134
Daisy Mae	224	101	19	1	41	9	19	97	146	245	238	174
SVT 5861	136	174	117	0	7	11	0	0	0	136	180	128
Gold Star	130	201	70	0	15	15	12	29	84	143	245	169
Average	182	144	65	2	20	9	15	57	85	198	221	159
LSD (0.05)	**66**	**60**	**36**	**12**	**32**	**12**	**18**	**28**	**62**	**65**	**67**	**55**

[1] Total of 10 harvests. Planting was July 27, 2006. Harvests 1-3 occurred on 30 August and 1and 5 September. Harvests 4-7 occurred on 7, 12, 15, and 18 September. Harvests 8-10 occurred on 22, 25, and 29 September.

[2] Culls consisted primarily of misshaped fruit.

[3] Fruit were discolored due to virus. Assayed plants by Seminis Seed Company indicated the prescence of papaya ringspot virus.

Table 44. Yellow Squash cultigen trial. Percentage marketable, cull, and virus fruit per indicated harvests. **Fletcher, NC, 2006.**

Cultivar	Percent by grade[1]								
	Marketable			Culls [2]			Virus [3]		
	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10
Dixie	85	49	4	3	3	1	12	48	96
Gentry	86	53	16	2	6	7	12	41	77
Multipik	94	72	24	0	1	13	6	27	63
Lioness	100	91	89	0	8	9	0	1	2
Prelude II	94	43	16	0	7	2	6	51	82
Daisy Mae	91	51	8	4	10	5	6	39	87
SVT 5861	100	96	89	0	4	11	0	0	0
Gold Star	96	87	37	0	3	9	4	10	54
Average	93	68	35	1	5	7	6	27	58
LSD (0.05)	**8**	**17**	**18**	**5**	**7**	**9**	**6**	**18**	**22**

[1] Total of 10 harvests. Planting was July 27, 2006. Harvests 1-3 occurred on 30 August and 1and 5 September. Harvests 4-7 occurred on 7, 12, 15, and 18 September. Harvests 8-10 occurred on 22, 25, and 29 September. October. Harvests 9-12 occurred on 28 and 31 October and 3 and 7 November.

[2] Culls consisted primarily of misshaped fruit.

[3] Fruit were discolored due to virus. Assayed plants by Seminis Seed Company indicated the prescence of papaya ringspot virus.

Table 45. Yellow Squash cultigen trial yields, cumulative boxes, (20 lb), per acre, over all harvests.[1] **Fletcher, NC, 2006.**

Cultivar	Marketable	Culls[2]	Virus [3]	Total	Percent Marketable	Percent Cull	Percent Virus
Dixie	266	21	259	547	46	2	52
Gentry	320	30	191	542	52	5	43
Multipik	408	13	169	589	63	5	32
Lioness	630	55	6	691	93	6	1
Prelude II	330	26	240	596	51	3	46
Daisy Mae	344	51	262	657	50	6	44
SVT 5861	426	18	0	444	95	5	0
Gold Star	401	30	125	557	73	4	23
Average	391	31	156	578	65	4	30
LSD (0.05)	**102**	**39**	**73**	**124**	**9**	**5**	**11**

[1] Total of 10 harvests.

[2] Culls consisted of primarily misshapen fruit.

[3] Fruit were discolored due to virus. Assayed plants by Seminis Seed Company indicated the prescence of papaya ringspot virus.

Table 46. Yellow Squash cultigen trial. Percent stand count, vigor, and powdery mildew ratings over the growing season. **Fletcher, NC, 2006.** [1]

Cultivar	% Stand [2]	Plant Vigor [3]	Powdery Mildew Rating [4]
Dixie	90.0	7.4	0.7
Gentry	80.0	7.1	1.5
Multipik	87.5	7.5	0.4
Lioness	100.0	9.5	0.0
Prelude II	87.5	7.6	0.0
Daisy Mae	100.0	8.0	0.9
SVT 5861	100.0	8.4	0.1
Gold Star	100.0	7.6	0.4
Average	93.1	7.9	0.5
LSD (0.05)	**12.1**	**1.5**	**0.8**

[1] All ratings were statistically analyzed by SAS using least significant differences to separate cultivar responses over 4 replications.

[2] Percent stand was determined by number of plants in given plot on 29 Sept., 10th harvest.

[3] Plant vigor, 1 = weak, 10 = very vigorous.

[4] Powdery Mildew Rating taken on 29 Sept. 2006.
Scale: 0=none, 1=low, 2=moderate, 3=high

Table 47. Zucchini Squash cultigen trial yields[1], number of 20 lb boxes per acre, per indicated harvests. **Fletcher, NC, 2006.**

Cultivar	Number of 20 pound boxes per acre											
	Marketable			Culls[2]			Virus [3]			Total		
	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10
Elite	205	163	94	17	32	21	5	59	93	228	253	208
Senator	125	124	66	0	83	10	0	21	85	125	228	161
Spineless Beauty	209	151	57	0	66	4	0	36	91	209	252	152
Tigress	207	194	131	12	52	11	0	0	8	219	246	150
Cashflow	347	225	188	9	56	13	0	7	0	356	288	201
Payroll	133	163	201	10	88	7	0	1	0	143	252	207
Leopard	194	236	256	16	76	16	0	0	0	210	312	272
Judgement III	161	162	204	17	83	15	0	16	75	178	261	293
Envy	194	161	181	6	31	37	0	28	4	200	220	218
PX 13035780	281	206	150	0	77	13	0	0	3	281	283	166
Average	206	178	153	9	64	15	0	17	36	215	260	203
LSD (0.05)	**70**	**88**	**93**	**21**	**73**	**19**	**4**	**38**	**56**	**73**	**104**	**88**

[1] Total of 10 harvests. Planting was 27 July, 2006. Harvests 1-3 occurred on 30 August and 1and 5 September. Harvests 4-7 occurred on 7, 12, 15, and 18 September. Harvests 8-10 occurred on 22, 25, and 29 September.

[2] Culls consisted of primarily mishaped fruit.

[3] Fruit were discolored due to virus. Assayed plants by Seminis Seed Company indicated the prescence of papaya ringspot virus.

Table 48. Zucchini Squash cultigen trial. Percentage marketable, cull, and virus fruit per indicated harvests. **Fletcher, NC, 2006.**

Cultivar	Percent per grade[1]								
	Marketable			Culls [2]			Virus [3]		
	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10	1 to 3	4 to 7	8 to 10
Elite	93	75	47	5	5	16	2	20	37
Senator	100	68	49	0	18	9	0	14	42
Spineless Beauty	100	63	30	0	13	4	0	24	66
Tigress	97	91	79	3	9	18	0	0	3
Cashflow	98	86	93	2	10	7	0	4	0
Payroll	98	85	95	2	14	5	0	1	0
Leopard	97	83	94	3	17	6	0	0	0
Judgement III	95	74	73	5	15	7	0	11	20
Envy	98	88	83	2	7	15	0	5	2
PX 13035780	100	90	89	0	10	9	0	0	1
Average	98	80	73	2	12	10	0	8	17
LSD (0.05)	**5**	**19**	**27**	**5**	**10**	**13**	**1**	**16**	**21**

[1] Total of 10 harvests. Planting was 27 July, 2006. Harvests 1-3 occurred on 30 August and 1and 5 September. Harvests 4-7 occurred on 7, 12, 15, and 18 September. Harvests 8-10 occurred on 22, 25, and 29 September.

[2] Culls consisted of primarily mishaped fruit.

[3] Fruit were discolored due to virus. Assayed plants by Seminis Seed Company indicated the prescence of papaya ringspot virus.

Table 49. Zucchini Squash cultigen trial yields, cumulative boxes, (20 lbs.), per acre, over all harvests[1]. **Fletcher, NC, 2006.**

Cultivar	Marketable	Culls[2]	Virus [3]	Total	Percent Marketable	Percent Cull	Percent Virus
Elite	461	71	157	689	72	8	20
Senator	315	93	106	515	72	9	19
Spineless Beauty	417	69	127	613	64	6	30
Tigress	532	75	8	616	89	10	1
Cashflow	760	78	7	844	92	7	1
Payroll	498	104	1	602	93	7	0
Leopard	686	107	0	793	91	9	0
Judgement III	527	115	91	732	81	9	10
Envy	536	73	32	641	90	8	2
PX 13035780	637	90	3	730	93	7	0
Average	537	88	53	678	84	8	8
LSD (0.05)	**172**	**80**	**73**	**174**	**14**	**5**	**11**

[1] Total of 10 harvests.

[2] Culls consisted of primarily misshaped fruit.

[3] Fruit were discolored due to virus. Assayed plants by Seminis Seed Company indicated the prescence of papaya ringspot virus.

Table 50. Zucchini Squash cultigen trial. Percent stand count, plant vigor, powdery mildew, and color rating. **Fletcher, NC, 2006.**

Cultivar	% Stand [1]	Plant Vigor [2]	Powdery Mildew Rating [3]	Color Rating [4]
Elite	80.0	7.4	0.1	3.2
Senator	72.5	7.3	0.1	2.9
Spineless Beauty	65.0	7.0	0.7	3.3
Tigress	60.0	7.9	0.0	2.5
Cashflow	60.0	7.5	1.4	3.1
Payroll	70.0	8.0	0.0	3.4
Leopard	90.0	8.8	0.4	3.6
Judgement III	85.0	9.1	0.0	3.6
Envy	77.5	8.0	0.0	4.3
PX 13035780	75.0	7.8	0.1	3.6
Average	73.5	7.9	0.3	3.3
LSD (0.05)	**26.6**	**1.1**	**0.7**	**0.3**

[1] Percent stand was taken on 29 September 2006; 10th harvest.

[2] Plant Vigor: 1 = weak, 10 = very vigorous

[3] Powdery mildew rating taken on 29 September 2006.
Scale: 0=none, 1=low, 2=moderate, 3=high

[4] Color Scale:
5=ebony; 4=dark green; 3=average green; 2=light green; 1=Charleston Gray green; 0=Yellow