

# **2007**

## **Watermelon**

### **Cultivar Trials**

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#### **General Cultural Practices**

The watermelon trials were grown on black plastic mulch and fertigated with drip irrigation. Pesticides used on all plots were chemicals labeled for that crop, (2007 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 2007. Information in this report is believed to be reliable but should **not** be relied upon as a sole source of information. Limited accompanying detail is included but excludes some pertinent information, which may aid interpretation.

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## **Diploid and Triploid Watermelon Cultural Practices for 2007 Cultivar Trials, Central Crops Research Station, Clayton, NC**

### **Introduction**

Watermelon is an important crop grown in North Carolina as the state was ranked eighth in production among U.S. states nationally in 2006. Approximately 7,400 acres valued at nearly \$12.96 million were produced in 2006. Growers in NC need to remain competitive in the market place and must grow and sell the best cultivars. More recently, in addition to yields, seed companies and markets have focused on specific traits such as lycopene content, hollow heart incidence, seed trace size and flesh firmness. We have committed more of our resources to the evaluation of many of these traits. 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). Seeds of triploid and diploid cultigens were sown on 5 April, 2007. The planting medium used was Fafard Super-Fine Germinating Mix, 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 15 May, 2007. Fertilizer, 30 lb/acre N and 80 lb/acre K<sub>2</sub>O, was incorporated into the bed on 10 April prior to the laying of black polyethylene plastic (0.70 mil thick high density plastic film, 48 inches wide; B.B. Hobbs, Clinton, NC) on 13 April. Fumigant (Telone C-17) was injected on 13 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 9 May. Gramaxone at 1.6 pints/acre was applied on 1 June and Poast at 2 oz/gal was applied between the plastic beds for weed control on 2 July. 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. Pollinizer plants or SP-4 were interplanted in triploid plots after plants 1, 4, and 7. Trickle irrigation was utilized (NETAFIM, 12 inch spacing, 0.24 gph; NETAFIM, Tel Aviv, Israel) over the growing season. Fertigation was initiated two weeks after planting and applied weekly during the planting season. The first fertilizer drip application was 25 May, the last was 25 August. A total of 90 lb/acre N and 180 lb/acre K<sub>2</sub>O was drip applied through the season using a 4-0-8 liquid fertilizer. Cumulative amount of fertilizer applied for the season was 120, 0 and 260 lb/acre of N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O, respectively. Insecticides were applied every week as a preventative measure beginning 6 June and on the following dates (13, 21, 28 June; 3, 9,

13, 27 July; and 16 August). The following products were alternated during consecutive spray applications to avoid insect resistance: Asana XL, Kelthane, and Perm Up, Ambush, Sevin XLR, and Acromite. Similarly, the following fungicide products were used: Kocide 2000, Previcur Flex, Maneb 75DF, Cabrio, Nova, Procure, Pristine, and Bravo Weather Stik, and Quintec; and applied on the following dates: 6, 13, 14, 20, 21, 27, and 29 June; 3, 5, 10, 13, 17, 25, and 27 July.

There were four diploid harvests and four triploid harvests. The first harvest for the diploid test was 12 July, and subsequent harvests were 23 July; 6 and 15 August. The first harvest date for the triploid test was 19 July; subsequent harvests were 30 July; and 10 and 20 August. 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 digital 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), and interior flesh firmness. Flesh firmness was taken by using a Penetrometer FT 011 with a 7/16" plunger tip, (QA Supplies LLC, Norfolk, Va.), and recorded in pounds. Samples were obtained by cutting the center of the fruit from the stem to blossom end. Pressure was then taken in five areas of the fruit; stem end, top side, ground spot side, blossom end, and center. Pressure was not taken on fruit with hollow heart. The reported measures on flesh firmness are an average of the five sample areas. Most of the quality measurements were taken at first harvest.

### **Financial Support**

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.

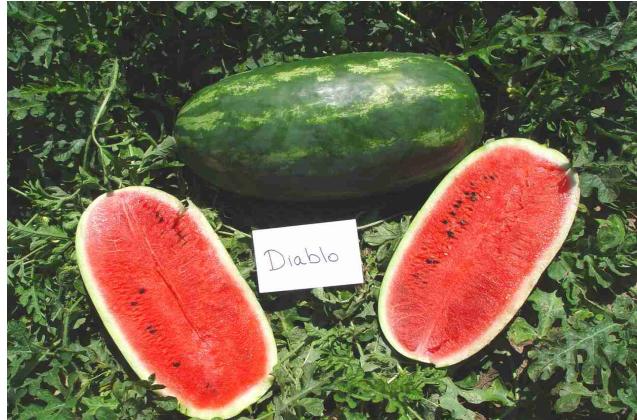
**Table 1. Diploid Red-Flesh Watermelon Cultivar Descriptions and Seed Sources; Clayton, 2007.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
1	Crimson Sweet	Willhite	Distinct, med width, medium to dark green stripes on light green background; round to slightly oval; uniform fruit size and shape
2	Diablo	Willhite	Indistinct, very wide, dark green stripes on light green background; elongated; fairly uniform fruit shape and size with some fruit very elongated
3	Duration	Zeraim Gedera	Indistinct, very wide, medium to dark green stripes on light green background; elongated fruit; uniform shape and size
4	Escarlett	Syngenta	Indistinct, very wide, medium to dark green stripes on a light green background; blocky; 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; blocky to short elongated fruit; uniform shape and size
6	Ole	Willhite	Indistinct, wide, medium to dark green stripes on light green background; blocky to elongated; fairly uniform shape and size
7	Sentinel	Seminis	Indistinct, medium to wide, dark green stripes on light green background; short blocky fruit; uniform shape; variable size
8	Summer Flavor 800	Abbott & Cobb	Indistinct, very wide, medium-dark green stripes on light green background; blocky to elongated; uniform shape and size

Figure 1: 2007 Diploid Trial



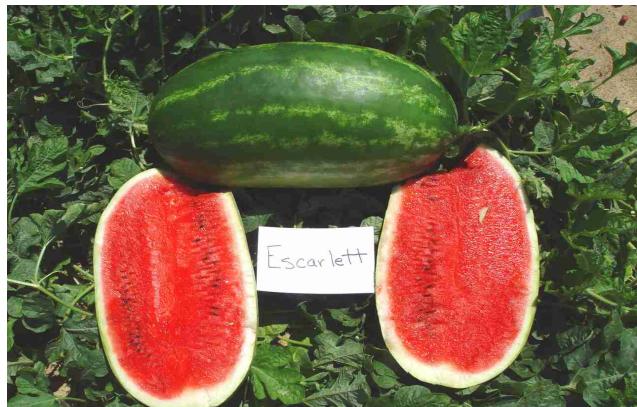
**Crimson Sweet**



**Diablo**



**Duration**



**Escarlett**

Figure 1: 2007 Diploid Trial



**Estrella**



**Ole'**



**Sentinel**



**Summer Flavor 800**

**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., 2007.

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category (lb)</b>				<b>Total</b>	<b>Avg. Wt.</b> <b>(lb)</b>
		<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24 +</b>		
Crimson Sweet	2	0	44	436	87	566	479 20.3
Diablo	3	0	44	436	349	828	479 22.7
Duration	4	0	44	392	218	653	436 21.6
Escarlett	6	0	0	261	305	566	261 23.8
Estrella	7	0	0	174	87	261	174 23.0
Ole	5	0	0	261	261	523	261 24.9
Sentinal	1	0	131	566	174	871	697 22.6
Summer Flavor 800	8	0	44	87	305	436	131 23.8
Average	--	0	38	327	223	588	365 22.9
<b>LSD(0.05)</b>	--	<b>0</b>	<b>167</b>	<b>358</b>	<b>214</b>	<b>537</b>	<b>480</b> 3.3

<sup>1</sup> Ranked according to total marketable weight.

<sup>2</sup> Includes fruit  $\geq$  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., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>			
	<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24+</b>
Crimson Sweet	0	4	88	8
Diablo	0	8	53	39
Duration	0	8	59	33
Escarlett	0	0	50	50
Estrella	0	0	67	33
Ole	0	0	50	50
Sentinal	0	6	67	27
Summer Flavor 800	0	13	15	73
Average	0	5	56	39
<b>LSD (0.05)</b>	<b>0</b>	<b>18</b>	<b>42</b>	<b>38</b>

<sup>1</sup> 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., 2007.

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category (lb)</b>					<b>Total</b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24 +</b>	<b>Total</b>		
Crimson Sweet	1	0	174	828	261	1263	1002	20.0
Diablo	6	0	0	305	566	871	305	26.2
Duration	4	0	44	610	566	1220	653	23.2
Escarlett	6	0	0	305	784	1089	305	27.3
Estrella	3	0	174	697	610	1481	871	24.2
Ole	5	0	87	349	958	1394	436	27.1
Sentinal	8	0	0	87	523	610	87	26.4
Summer Flavor 800	1	44	131	871	828	1873	1002	23.3
Average	--	5	76	506	637	1225	583	24.7
<b>LSD(0.05)</b>	--	<b>45</b>	<b>197</b>	<b>347</b>	<b>493</b>	<b>569</b>	<b>435</b>	<b>4.3</b>

<sup>1</sup> Ranked according to total marketable weight.

<sup>2</sup> Includes fruit  $\geq$  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., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>			
	<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24+</b>
Crimson Sweet	0	13	66	21
Diablo	0	0	38	62
Duration	0	4	51	45
Escarlett	0	0	27	73
Estrella	0	11	45	44
Ole	0	6	22	72
Sentinal	0	0	30	70
Summer Flavor 800	2	5	48	46
Average	0	5	41	54
<b>LSD (0.05)</b>	<b>2</b>	<b>13</b>	<b>36</b>	<b>38</b>

<sup>1</sup> 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., 2007.

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category (lb)</b>				<b>Total</b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24 +</b>		
Crimson Sweet	2	0	174	566	392	1133	741 21.5
Diablo	7	0	44	392	436	871	436 24.1
Duration	6	0	131	392	218	741	523 22.0
Escarlett	8	0	44	261	261	566	305 23.0
Estrella	1	0	174	610	261	1045	784 23.5
Ole	5	0	87	479	349	915	566 23.5
Sentinal	3	44	174	479	436	1133	653 21.8
Summer Flavor 800	3	0	174	479	523	1176	653 23.2
Average	--	5	125	457	359	947	583 22.8
<b>LSD(0.05)</b>	--	<b>45</b>	<b>263</b>	<b>531</b>	<b>484</b>	<b>852</b>	<b>610</b> 7.1

<sup>1</sup> Ranked according to total marketable weight.

<sup>2</sup> Includes fruit  $\geq$  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., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>			
	<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24+</b>
Crimson Sweet	0	16	52	31
Diablo	0	6	46	48
Duration	0	11	65	23
Escarlett	0	6	70	24
Estrella	0	19	44	38
Ole	0	10	53	37
Sentinal	3	21	44	32
Summer Flavor 800	0	14	45	41
Average	0	13	52	34
<b>LSD (0.05)</b>	<b>3</b>	<b>28</b>	<b>40</b>	<b>45</b>

<sup>1</sup> 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., 2007.

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category (lb)</b>				<b>Total</b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24 +</b>		
Crimson Sweet	4	131	784	261	44	1220	1045 13.5
Diablo	6	0	523	261	44	828	784 14.8
Duration	5	44	653	305	0	1002	958 14.1
Escarlett	2	44	610	479	44	1176	1089 17.4
Estrella	8	0	87	392	44	523	479 14.5
Ole	2	44	566	523	44	1176	1089 15.4
Sentinal	1	44	915	392	44	1394	1307 14.7
Summer Flavor 800	7	0	479	261	87	828	741 17.3
Average	--	38	577	359	44	1018	937 15.2
<b>LSD(0.05)</b>	--	<b>114</b>	<b>607</b>	<b>252</b>	<b>128</b>	<b>752</b>	<b>696 5.7</b>

<sup>1</sup> Ranked according to total marketable weight.

<sup>2</sup> 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., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>			
	<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24+</b>
Crimson Sweet	11	64	21	4
Diablo	0	63	32	5
Duration	4	65	30	0
Escarlett	4	52	41	4
Estrella	0	17	75	8
Ole	4	48	44	4
Sentinal	3	66	28	3
Summer Flavor 800	0	58	32	11
Average	3	54	38	5

<sup>1</sup> 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., 2007.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category (lb)</b>				<b>Total</b>	<b>Total Mkt<sup>2</sup></b>
		<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24+</b>		
Crimson Sweet	1	131	1176	2091	784	4182	3267
Diablo	7	0	610	1394	1394	3398	2004
Duration	3	44	871	1699	1002	3616	2570
Escarlett	8	44	653	1307	1394	3398	1960
Estrella	5	0	436	1873	1002	3311	2309
Ole	6	44	741	1612	1612	4008	2352
Sentinal	2	87	1220	1525	1176	4008	2744
Summer Flavor 800	4	44	828	1699	1742	4312	2527
Average	--	49	817	1650	1263	3779	2467
<b>LSD (0.05)</b>	--	<b>133</b>	<b>744</b>	<b>579</b>	<b>578</b>	<b>653</b>	<b>1096</b>

<sup>1</sup> Ranked according to total marketable number.

<sup>2</sup> Includes fruit 8 - 23.9lb.

**Table 11. Diploid Red-Flesh** watermelon hybrid cultivar trial. Percentage harvested by **number** over four harvests within each fruit size category.  
**Clayton, NC., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>			
	<b><u>≤8</u></b>	<b><u>8-15.9</u></b>	<b><u>16-23.9</u></b>	<b><u>24+</u></b>
Crimson Sweet	3	28	51	19
Diablo	0	17	40	42
Duration	1	24	47	28
Escarlett	1	18	38	42
Estrella	0	13	56	31
Ole	1	19	40	40
Sentinal	3	29	37	32
Summer Flavor 800	1	19	39	41
Average	1	21	44	34
<b>LSD (0.05)</b>	<b>3</b>	<b>16</b>	<b>13</b>	<b>18</b>

<sup>1</sup> 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. Percentage harvested by harvest in total and total marketable categories. **Clayton, NC, 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Harvest for Total and Total Marketable fruit</b>							
	<b>Harvest 1</b>		<b>Harvest 2</b>		<b>Harvest 3</b>		<b>Harvest 4</b>	
	<b>Total</b>	<b>Mkt.</b>	<b>Total</b>	<b>Mkt.</b>	<b>Total</b>	<b>Mkt.</b>	<b>Total</b>	<b>Mkt.</b>
Crimson Sweet	14	15	30	31	27	23	29	32
Diablo	24	24	26	15	26	22	24	39
Duration	18	17	34	25	20	20	28	37
Escarlett	17	13	32	16	17	16	35	56
Estrella	8	8	45	38	32	34	16	21
Ole	13	11	35	19	23	24	29	46
Sentinal	22	25	15	3	28	24	35	48
Summer Flavor 800	10	5	43	40	27	26	19	29
Average	16	15	32	23	25	24	27	38

<sup>1</sup> Fruit weight (per cultivar total and total marketable weight classes) divided by the cumulative total and total marketable number (per cultivar) times 100. Percentages are rounded to the nearest whole number.

**Table 13. 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., 2007.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category (lb)</b>				<b>Total</b>	<b>Total Mkt<sup>2</sup></b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24 +</b>			
Crimson Sweet	1	9	149	413	206	777	562	18.6
Diablo	7	0	77	281	399	757	358	22.5
Duration	3	3	108	343	272	727	451	20.1
Escarlett	8	3	87	269	417	776	355	23.1
Estrella	5	0	58	380	301	740	438	22.5
Ole	6	2	94	317	482	895	411	22.4
Sentinal	2	6	160	305	337	809	466	20.5
Summer Flavor 800	4	3	111	336	493	943	447	21.9
Average	--	3	106	330	363	803	436	21
<b>LSD(0.05)</b>	--	<b>9</b>	<b>10</b>	<b>117</b>	<b>176</b>	<b>909</b>	<b>171</b>	<b>3.1</b>

<sup>1</sup> Ranked according to total marketable weight.

<sup>2</sup> Includes fruit 8 - 23.9 lb.

**Table 14. Diploid Red-Flesh** watermelon hybrid cultivar trial. Percentage harvested by **weight** over **four harvests** within each fruit size category.  
**Clayton, NC., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>			
	<b>&lt;8</b>	<b>8-15.9</b>	<b>16-23.9</b>	<b>24+</b>
Crimson Sweet	1	19	54	26
Diablo	0	10	37	53
Duration	0	15	47	37
Escarlett	0	11	35	54
Estrella	0	8	51	41
Ole	0	11	35	54
Sentinal	1	20	37	42
Summer Flavor 800	0	12	36	52
Average	0	13	42	45
<b>LSD (0.05)</b>	<b>1</b>	<b>12</b>	<b>15</b>	<b>21</b>

<sup>1</sup> Fruit weight (per cultivar weight class) divided by the total weight (per cultivar) times 100.

Percentages are rounded to the nearest whole number.

**Table 15. Diploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. Clayton, NC, 2007.<sup>1</sup>**

<b>Cultivar</b>	<b>SS<sup>2</sup></b>	<b>Color<sup>3</sup></b>	<b>Seed Size<sup>4</sup></b>	<b>Flesh</b>		<b>Rind<sup>7</sup></b>	<b>Hollow Heart Ratings<sup>8</sup></b>				
				<b>Pressure<sup>5</sup></b>	<b>LD<sup>6</sup></b>		<b>HH0</b>	<b>HH1</b>	<b>HH2</b>	<b>HH3</b>	<b>HH4</b>
Crimson Sweet	12.3	2.9	3.0	2.3	1.5	16.5	90	5	5	0	0
Diablo	11.8	3.9	3.7	2.2	1.9	14.9	80	10	5	5	0
Duration	12.1	4.1	3.4	2.8	1.9	14.1	95	5	0	0	0
Escarlett	11.8	4.1	2.6	2.6	1.8	15.5	95	5	0	0	0
Estrella	12.3	4.1	2.5	2.5	2.0	16.3	95	0	0	5	0
Ole	12.2	3.8	3.9	2.5	1.7	14.8	90	0	5	0	5
Sentinal	12.5	3.9	3.6	2.3	1.6	15.8	100	0	0	0	0
Summer Flavor 800	12.0	4.0	3.4	2.6	1.7	17.5	100	0	0	0	0
Average	12.1	3.9	3.3	2.5	1.8	15.7	93	3	2	1	1
<b>LSD(0.05)</b>	<b>0.8</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>2.7</b>	<b>20</b>	<b>10</b>	<b>9</b>	<b>8</b>	<b>5</b>

<sup>1</sup> Most measurements were obtained from fruits in harvest 1.

<sup>2</sup> SS = Soluble solids indicates sweetness, average of 5 melons per replication (20 total).

<sup>3</sup> Rating: 1 = white, 2 = pink, 3 = red, 4 = medium-dark red, 5 = blood red.

<sup>4</sup> Rating: 1 = small, 3 = medium (i.e. Crimson Sweet), 5 = large (i.e. Jubilee).

<sup>5</sup> Pressure was taken from 2 sides of fruit flesh on 5 fruit per replication.

<sup>6</sup> LD = Length and diameter ratio, average of 5 melons per replication (20 total).

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

<sup>8</sup> 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 separations; (Non marketable fruit).

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

**Table 16. Triploid Red-Flesh Watermelon Seed Sources and Descriptions; 2006.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
1	5003	Hazera	Fairly distinct, medium to wide, dark green stripes on light to medium green background; oval; uniform shape and size; standard to large size fruit
2	PX 8032-8133	Seminis	Indistinct, very wide, dark green stripes on light green background; blocky; uniform shape and size; mainly large standard to large size fruit
3	ACX 7125	Abbott & Cobb	Indistinct, medium to wide width, medium to dark green stripes on light green background; short to long oval; uniform shape and size; mainly large standard to large fruit size
4	Amarillo	Syngenta	Distinct, narrow dark green stripes on a light green background; round; uniform shape and fairly uniform size; generally small fruit, ~ 10lbs.
5	Constitution	Nunhems	Indistinct, medium width, dark green stripes on medium green background; oval/round; uniform shape and size; good standard size for market
6	Crunchy Red	Harris Moran	Indistinct, medium to wide, dark green stripes on light green background; blocky; uniform shape and generally uniform size; large standard to mostly large fruit
7	CS 4804	Clifton Seed	Some distinct/Some indistinct, medium wide, medium to dark green stripes on light green background; round/oval; variable shape and size; mainly standard size
8	WX 1008	Willhite	Solid dark green with waxy bloom; short blocky; uniform shape and size; large standard or large size market
9	WX 1010	Willhite	Solid dark green with waxy bloom; oval/short blocky; shape is somewhat variable; size is very variable; small to large standard size
10	Intruder	Southwestern	Indistinct, medium width, medium to dark green stripes on light green background; mainly round to short oval; uniform shape; variable size
11	Liberty	Nunhems	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape; variable size; small to large standard
12	Matrix	Syngenta	Indistinct, very wide, dark green stripe on a light to medium green background; blocky to elongated; somewhat uniform shape; very variable in size; larger standard size
13	NUN 6032	Nunhems	Indistinct, medium to wide, medium to dark green stripes on light green background; long oval to short blocky; uniform shape; size fairly uniform; large standard size
14	NUN 6033	Nunhems	Very indistinct, medium to dark green stripes on light green background; short oval; uniform shape; variable size; large standard size
15	NUN 7561	Nunhems	Generally distinct, medium dark green stripes on medium green background; round to short oval; uniform shape; some variable size; small to large standard size
16	Revolution	Nunhems	Indistinct, wide, dark green stripes on light green background; blocky to elongated; fairly uniform shape and size; generally larger standard fruit with some extra large
17	RWT 8173	Syngenta	Distinct, narrow, very dark green stripes on dark green background; long oval to blocky; uniform shape; variable size; small to large standard market size

**Table 16. Cont.**

<b>Entry No.</b>	<b>Cultigen</b>	<b>Company</b>	<b>Description</b>
18	RWT 8174	Syngenta	Indistinct, medium width, very dark green stripes on dark green background; the stripe fades and is not distinguishable as fruit ripens; long oval to short blocky; fairly uniform shape and size; standard medium to large size fruit
19	RWT 8203	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; long oval to short blocky; uniform shape and size; mainly large standard size
20	RWT 8207	Syngenta	Indistinct, medium width, dark green stripes on light to medium green background; round; shape and size is fairly uniform; small to large standard size
21	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; some too small for market
22	Super Crisp 32	Zeraim Gedera	Indistinct, medium to wide, very dark green stripes on light to medium green background; long oval to short blocky; uniform shape and size; mainly medium to large standard size
23	Super Crisp F1	Zeraim Gedera	Indistinct, medium wide, very dark green stripes on light to medium green background; short to long oval; fairly uniform shape; variable size; small to large standard size
24	Super Seedless 7167	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; mainly long oval to blocky; shape and size somewhat variable; small to large standard size
25	Super Seedless 7187	Abbott & Cobb	Indistinct, medium to wide, dark green stripes on light green background; oval to long oval; uniform shape and size; nearly all fruit in standard size range
26	Super Seedless 9651	Abbott & Cobb	No stripes. Hazy medium to dark solid green; primarily oval; uniform shape and size; most medium to large standard size
27	SW 139	Southwestern	Distinct, narrow dark green stripes on medium green background; round to short oval; very uniform shape and size; mainly small traditional size, ~ 12lbs
28	SW 3130	Southwestern	Indistinct, narrow to wide, medium to dark green stripes on light green background; primarily oval; generally uniform shape and size; small to medium fruit size in traditional size market
29	SW 3714	Southwestern	Indistinct, medium width, medium to dark green stripes on light green background; primarily oval with small fruit being round; generally uniform shape and size; small to medium fruit size in traditional market
30	SW 3988	Southwestern	Distinct, narrow dark green stripes on a medium green background; round; very uniform shape and size; mainly too small size for traditional market
31	SW 806	Southwestern	Indistinct, medium wide, medium to dark green stripes on light green background; short oval; uniform shape and size; small to large size traditional size
32	Sweet Delight	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape; variable size; small to large size fruit for traditional market
33	Sweet Slice Plus	Willhite	Indistinct, medium wide, medium to dark green stripes on light green background; oval; uniform shape and size; small to medium traditional size

**Table 16. Cont.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
34	Tomcat	Southwestern	Indistinct, medium wide, medium to dark green stripes on light green background; mainly oval to some blocky; uniform shape and size; mainly medium to large traditional size
35	Tri-X-212	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape; somewhat variable size; small to large traditional size
36	Tri-X-313	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape; variable size; medium to large traditional size
37	Tri-X-Palomar	Syngenta	Distinct, narrow width, dark green stripes on medium to dark green background; round; uniform shape; somewhat variable size; mainly medium traditional size
38	USS 7042	US Seedless	Indistinct, medium width, medium to dark green stripes on light green background; short to long oval; variable shape; uniform size; most fruit traditional size, ~ 12 lbs
39	Vagabond	Harris Moran	Indistinct, medium to wide, dark green stripes on medium green background; oval to long oval/blocky; uniform shape and size; mainly medium to large traditional size
40	Tri-X-212 + Emphasis	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; oval; uniform shape; somewhat variable size; small to medium traditional size
41	Tri-X-313 + Emphasis	Syngenta	Indistinct, medium width, medium to dark green stripes on light green background; long oval; uniform shape; variable size; most fruit large traditional size
42	Tri-X-Triple Threat + Emphasis	Syngenta	Distinct, narrow, dark green stripes on medium green background; round to slightly oval; uniform shape; variable somewhat variable; small to large traditional size

Figure 2: Triploid Photographs, 2007



**5003**



**8032**



**ACX 7125**



**Amarillo**



**Constitution**



**Crunchy Red**

Figure 2: Triploid Photographs, 2007



**WX 1008**



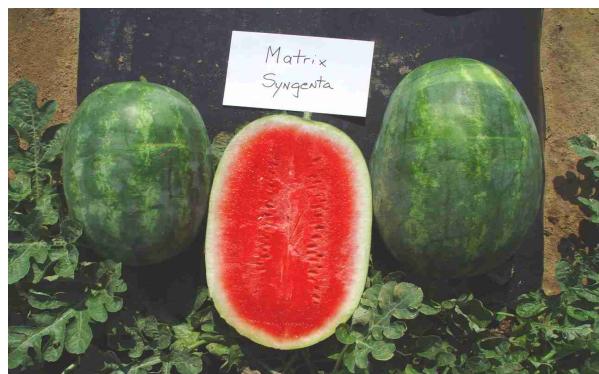
**WX 1010**



**Intruder**



**Liberty**



**Matrix**

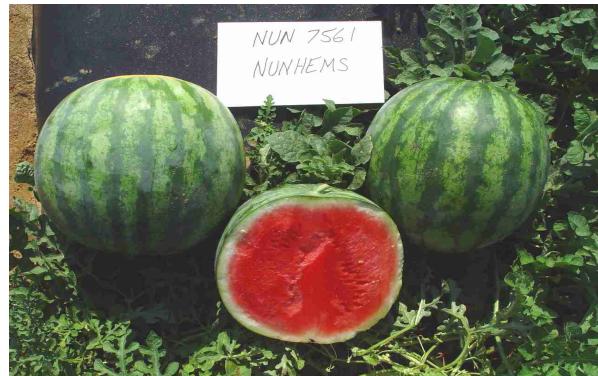


**NUN 6032**

Figure 2: Triploid Photographs, 2007



**NUN 6033**



**NUN 7561**



**Revolution**



**RWT 8173**

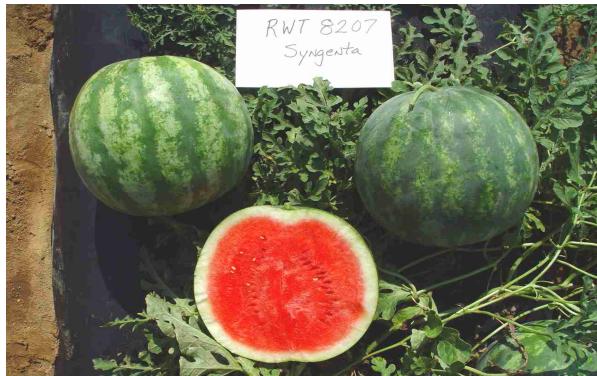


**RWT 8174**



**RWT 8203**

Figure 2: Triploid Photographs, 2007



RWT 8207



Summer Sweet 5244



Super Crisp 32



Super Crisp



Super Seedless 7167



Super Seedless 7187

Figure 2: Triploid Photographs, 2007



**Super Seedless 9651**



**SW 139**



**SW 3130**



**SW 3714**



**SW 3988**



**SW 806**

Figure 2: Triploid Photographs, 2007



**Sweet Delight**



**Sweet Slice Plus**



**Tomcat**



**Tri-x 212**

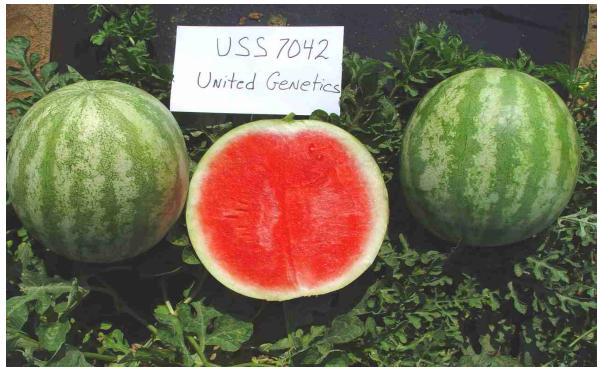


**Tri-x-313**



**Tri-X-Palomar**

Figure 2: Triploid Photographs, 2007



**USS 7042**



**Vagabond**



**Tri-X-212 + Emphasis**



**Tri-X-313 + Emphasis**



**Triple Threat + Emphasis**

**Table 17. Triploid Red-Flesh watermelon hybrid cultivar trial. Fruit number for first harvest by various weight classes, (per acre), including average fruit size<sup>1</sup>. Clayton, N.C. 2007.**

<b>Cultivar</b>	<b>Seed Company</b>	<b>Rank<sup>2</sup></b>	<b>Fruit size category (lb)</b>						<b>Total No./ Acre</b>	<b>Mkt No./ Acre<sup>3</sup></b>	<b>Avg wt.</b>
			<b>≤8</b>	<b>8-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1-30</b>	<b>30+</b>			
5003	Hazera	22	0	305	523	261	44	0	1133	1089	16.0
8032-8133	Seminis	34	0	305	479	44	0	0	828	828	14.2
ACX 7125	Abbott & Cobb	27	0	131	479	392	131	0	1133	1002	17.6
Amarillo	Syngenta	4	44	1002	436	44	0	0	1525	1481	12.1
Constitution	Nunhems	25	0	392	523	131	0	0	1045	1045	14.6
Crunchy Red	Harris Moran	29	0	0	523	392	0	0	915	915	18.1
CS 4804	Clifton Seed	42	0	44	131	0	0	0	174	174	11.5
WX 1008	Willhite	3	87	741	566	218	0	0	1612	1525	14.2
WX 1010	Willhite	20	0	349	653	131	87	0	1220	1133	16.0
Intruder	Southwestern	35	0	261	305	218	44	0	828	784	16.1
Liberty	Nunhems	16	0	218	871	131	0	0	1220	1220	15.0
Matrix	Syngenta	5	0	305	697	436	87	0	1525	1438	17.0
NUN 6032	Nunhems	22	0	131	653	305	0	0	1089	1089	15.8
NUN 6033	Nunhems	13	0	305	653	305	131	0	1394	1263	17.3
NUN 7561	Nunhems	17	0	1002	174	0	0	0	1176	1176	12.1
Revolution	Nunhems	29	0	87	436	392	87	0	1002	915	18.4
RWT 8173	Syngenta	29	0	218	305	392	218	0	1133	915	18.3
RWT 8174	Syngenta	37	0	174	349	174	0	0	697	697	16.9
RWT 8203	Syngenta	17	0	349	479	349	0	0	1176	1176	16.3
RWT 8207	Syngenta	22	44	741	349	0	0	0	1133	1089	13.1
Summer Sweet 5244	Abbott & Cobb	20	0	305	697	131	0	0	1133	1133	15.3
Super Crisp 32	Zeraim Gedera	27	0	261	436	305	0	0	1002	1002	16.2
Super Crisp F1	Zeraim Gedera	10	44	871	261	174	44	0	1394	1307	13.9
Super Seedless 7167	Abbott & Cobb	25	0	392	436	218	44	0	1089	1045	17.1
Super Seedless 7187	Abbott & Cobb	10	0	261	653	392	44	0	1350	1307	17.2
Super Seedless 9651	Abbott & Cobb	35	0	131	261	392	87	0	871	784	18.3
SW 139	Southwestern	13	174	1220	44	0	0	0	1438	1263	11.2
SW 3130	Southwestern	6	0	697	610	87	44	0	1438	1394	15.6
SW 3714	Southwestern	2	0	610	653	305	0	0	1568	1568	14.7
SW 3988	Southwestern	6	392	1220	174	0	0	44	1830	1394	12.6
SW 806	Southwestern	13	0	436	741	87	0	0	1263	1263	14.9
Sweet Delight	Syngenta	32	0	131	523	218	174	0	1045	871	17.8
Sweet Slice Plus	Willhite	1	0	741	1002	349	0	0	2091	2091	15.5
Tomcat	Southwestern	10	0	566	523	218	0	0	1307	1307	15.4
Tri-X-212	Syngenta	8	0	653	566	131	0	0	1350	1350	15.1
Tri-X-313	Syngenta	17	0	392	566	218	44	0	1220	1176	15.7
Tri-X-Palomar	Syngenta	38	44	305	131	44	0	0	523	479	13.0
USS 7042	US Seedless	8	0	871	436	44	0	0	1350	1350	9.9
Vagabond	Harris Moran	32	0	436	436	0	0	0	871	871	13.5
Tri-X-212 + Emphasis	Syngenta	39	0	218	131	87	0	0	436	436	15.5
Tri-X-313 + Emphasis	Syngenta	40	0	174	131	44	0	0	349	349	10.7
Triple Threat + Emphasis	Syngenta	41	0	305	0	0	0	0	305	305	6.3
Average		--	20	435	452	185	31	1	1123	1071	14.9
LSD (0.05)		--	143	452	382	269	105	19	569	531	4.0

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

<sup>2</sup> Ranked according to total marketable weight.

<sup>3</sup> Includes fruit 8 - 22 pounds.

**Table 18. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by number within each fruit size category for first harvest. Clayton, NC, 2007.**

Cultivar	Percentages <sup>1</sup> (%) by Fruit Size Category					
	<8	8.1-14	14.1-18	18.1-22	22.1 - 30	30 +
5003	0	27	46	23	4	0
8032-8133	0	37	58	5	0	0
ACX 7125	0	12	42	35	12	0
Amarillo	3	66	29	3	0	0
Constitution	0	37	50	13	0	0
Crunchy Red	0	0	57	43	0	0
CS 4804	0	25	75	0	0	0
WX 1008	5	46	35	14	0	0
WX 1010	0	29	54	11	7	0
Intruder	0	32	37	26	5	0
Liberty	0	18	71	11	0	0
Matrix	0	20	46	29	6	0
NUN 6032	0	12	60	28	0	0
NUN 6033	0	22	47	22	9	0
NUN 7561	0	85	15	0	0	0
Revolution	0	9	43	39	9	0
RWT 8173	0	19	27	35	19	0
RWT 8174	0	25	50	25	0	0
RWT 8203	0	30	41	30	0	0
RWT 8207	4	65	31	0	0	0
Summer Sweet 5244	0	27	62	12	0	0
Super Crisp 32	0	26	43	30	0	0
Super Crisp F1	3	63	19	12	3	0
Super Seedless 7167	0	36	40	20	4	0
Super Seedless 7187	0	19	48	29	3	0
Super Seedless 9651	0	15	30	45	10	0
SW 139	12	85	3	0	0	0
SW 3130	0	48	42	6	3	0
SW 3714	0	39	42	19	0	0
SW 3988	21	67	10	0	0	2
SW 806	0	34	59	7	0	0
Sweet Delight	0	13	50	21	17	0
Sweet Slice Plus	0	35	48	17	0	0
Tomcat	0	43	40	17	0	0
Tri-X-212	0	48	42	10	0	0
Tri-X-313	0	32	46	18	4	0
Tri-X-Palomar	8	58	25	8	0	0
USS 7042	0	65	32	3	0	0
Vagabond	0	50	50	0	0	0
Tri-X-212 + Emphasis	0	50	30	20	0	0
Tri-X-313 + Emphasis	0	50	38	13	0	0
Triple Threat + Emphasis	0	100	0	0	0	0
<b>Average</b>	<b>1</b>	<b>37</b>	<b>42</b>	<b>17</b>	<b>3</b>	<b>0</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

**Table 19. Triploid Red-Flesh watermelon hybrid cultivar trial. Fruit number for second harvest by various weight classes, (per acre), including average fruit size<sup>1</sup>. Clayton, N.C. 2007.**

<b>Cultivar</b>	<b>Seed Company</b>	<b>Rank<sup>2</sup></b>	<b>Fruit size category (lb)</b>						<b>Total No./ Acre</b>	<b>Mkt No./ Acre<sup>3</sup></b>	<b>Avg wt.</b>
			<b>&lt;8</b>	<b>8-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1-30</b>	<b>30+</b>			
5003	Hazera	18	44	436	610	436	131	0	1655	1481	16.7
8032-8133	Seminis	11	0	610	871	131	0	0	1612	1612	14.5
ACX 7125	Abbott & Cobb	11	0	261	653	697	131	0	1742	1612	17.8
Amarillo	Syngenta	3	523	1786	261	87	0	0	2657	2134	10.7
Constitution	Nunhems	15	0	653	871	0	0	0	1525	1525	13.9
Crunchy Red	Harris Moran	23	44	131	741	566	305	0	1786	1438	18.7
CS 4804	Clifton Seed	1	131	1873	566	218	0	0	2788	2657	12.7
WX 1008	Willhite	27	0	436	523	392	0	0	1350	1350	16.0
WX 1010	Willhite	11	44	653	741	218	87	0	1742	1612	15.1
Intruder	Southwestern	8	131	1002	610	174	0	0	1917	1786	13.5
Liberty	Nunhems	15	0	436	653	436	87	0	1612	1525	16.1
Matrix	Syngenta	37	0	261	566	261	174	0	1263	1089	17.2
NUN 6032	Nunhems	10	44	349	784	523	131	0	1830	1655	16.7
NUN 6033	Nunhems	35	0	131	523	479	131	0	1263	1133	17.6
NUN 7561	Nunhems	29	87	697	436	131	0	0	1350	1263	13.6
Revolution	Nunhems	37	0	174	610	305	131	0	1220	1089	17.5
RWT 8173	Syngenta	26	87	392	566	436	131	0	1612	1394	15.8
RWT 8174	Syngenta	2	0	653	1045	566	87	0	2352	2265	16.2
RWT 8203	Syngenta	37	0	566	479	44	44	0	1133	1089	10.9
RWT 8207	Syngenta	9	87	958	479	261	44	0	1830	1699	13.7
Summer Sweet 5244	Abbott & Cobb	32	0	479	479	261	44	0	1263	1220	15.2
Super Crisp 32	Zeraim Gedera	6	0	653	958	218	44	0	1873	1830	15.4
Super Crisp F1	Zeraim Gedera	28	218	653	566	87	0	0	1525	1307	13.3
Super Seedless 7167	Abbott & Cobb	15	0	653	610	261	174	0	1699	1525	16.1
Super Seedless 7187	Abbott & Cobb	23	0	436	566	436	87	0	1525	1438	16.5
Super Seedless 9651	Abbott & Cobb	18	0	131	784	566	218	0	1699	1481	17.8
SW 139	Southwestern	18	44	1263	174	44	0	0	1525	1481	11.6
SW 3130	Southwestern	34	0	741	349	87	44	0	1220	1176	13.6
SW 3714	Southwestern	37	131	784	218	87	44	0	1263	1089	12.8
SW 3988	Southwestern	18	218	1394	44	44	0	0	1699	1481	11.3
SW 806	Southwestern	6	44	958	523	349	44	0	1917	1830	14.8
Sweet Delight	Syngenta	32	87	566	218	436	261	44	1612	1220	16.3
Sweet Slice Plus	Willhite	29	0	566	610	87	0	0	1263	1263	14.2
Tomcat	Southwestern	42	44	479	174	218	44	0	958	871	10.9
Tri-X-212	Syngenta	37	87	523	349	218	0	0	1176	1089	14.6
Tri-X-313	Syngenta	18	0	392	697	392	87	0	1568	1481	16.0
Tri-X-Palomar	Syngenta	5	87	784	915	174	0	0	1960	1873	14.0
USS 7042	US Seedless	23	0	697	566	174	87	44	1568	1438	17.5
Vagabond	Harris Moran	14	0	305	871	392	0	0	1568	1568	15.8
Tri-X-212 + Emphasis	Syngenta	4	87	1133	653	131	0	0	2004	1917	13.3
Tri-X-313 + Emphasis	Syngenta	35	44	392	653	87	131	0	1307	1133	15.5
Triple Threat + Emphasis	Syngenta	29	0	1002	218	44	0	0	1263	1263	12.6
Average		--	55	653	566	266	69	2	1612	1485	14.9
LSD (0.05)		--	197	549	442	311	147	27	766	702	3.2

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

<sup>2</sup> Ranked according to total marketable weight.

<sup>3</sup> Includes fruit 8 - 22 pounds.

**Table 20. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by number within each fruit size category for second harvest. Clayton, NC, 2007.**

Cultivar	Percentages <sup>1</sup> (%) by Fruit Size Category					
	<8	8.1-14	14.1-18	18.1-22	22.1 - 30	30 +
5003	3	26	37	26	8	0
8032-8133	0	38	54	8	0	0
ACX 7125	0	15	38	40	8	0
Amarillo	20	67	10	3	0	0
Constitution	0	43	57	0	0	0
Crunchy Red	2	7	41	32	17	0
CS 4804	5	67	20	8	0	0
WX 1008	0	32	39	29	0	0
WX 1010	3	38	42	13	5	0
Intruder	7	52	32	9	0	0
Liberty	0	27	41	27	5	0
Matrix	0	21	45	21	14	0
NUN 6032	2	19	43	29	7	0
NUN 6033	0	10	41	38	10	0
NUN 7561	6	52	32	10	0	0
Revolution	0	14	50	25	11	0
RWT 8173	5	24	35	27	8	0
RWT 8174	0	28	44	24	4	0
RWT 8203	0	50	42	4	4	0
RWT 8207	5	52	26	14	2	0
Summer Sweet 5244	0	38	38	21	3	0
Super Crisp 32	0	35	51	12	2	0
Super Crisp F1	14	43	37	6	0	0
Super Seedless 7167	0	38	36	15	10	0
Super Seedless 7187	0	29	37	29	6	0
Super Seedless 9651	0	8	46	33	13	0
SW 139	3	83	11	3	0	0
SW 3130	0	61	29	7	4	0
SW 3714	10	62	17	7	3	0
SW 3988	13	82	3	3	0	0
SW 806	2	50	27	18	2	0
Sweet Delight	5	35	14	27	16	3
Sweet Slice Plus	0	45	48	7	0	0
Tomcat	5	50	18	23	5	0
Tri-X-212	7	44	30	19	0	0
Tri-X-313	0	25	44	25	6	0
Tri-X-Palomar	4	40	47	9	0	0
USS 7042	0	44	36	11	6	3
Vagabond	0	19	56	25	0	0
Tri-X-212 + Emphasis	4	57	33	7	0	0
Tri-X-313 + Emphasis	3	30	50	7	10	0
Triple Threat + Emphasis	0	79	17	3	0	0
<b>Average</b>	<b>3</b>	<b>40</b>	<b>36</b>	<b>17</b>	<b>4</b>	<b>0</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

**Table 21. Triploid Red-Flesh watermelon hybrid cultivar trial. Fruit number for third harvest by various weight classes, (per acre), including average fruit size<sup>1</sup>. Clayton, N.C. 2007.**

<b>Cultivar</b>	<b>Seed Company</b>	<b>Rank<sup>2</sup></b>	<b>Fruit size category (lb)</b>						<b>Total No./ Acre</b>	<b>Mkt No./ Acre<sup>3</sup></b>	<b>Avg wt.</b>
			<b>&lt;8</b>	<b>8-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1-30</b>	<b>30+</b>			
5003	Hazera	23	131	566	174	218	0	0	1089	958	13.4
8032-8133	Seminis	24	87	305	305	305	0	0	1002	915	13.3
ACX 7125	Abbott & Cobb	37	0	218	174	218	174	0	784	610	17.6
Amarillo	Syngenta	27	44	479	349	0	0	0	1394	828	12.1
Constitution	Nunhems	3	0	828	436	131	0	0	1394	1394	13.6
Crunchy Red	Harris Moran	39	0	261	131	174	131	0	697	566	11.3
CS 4804	Clifton Seed	24	305	697	131	87	0	0	1220	915	11.3
WX 1008	Willhite	16	174	697	305	87	0	44	1307	1089	16.1
WX 1010	Willhite	19	261	566	261	174	0	0	1263	1002	12.5
Intruder	Southwestern	12	174	828	349	0	0	0	1350	1176	11.5
Liberty	Nunhems	27	218	349	261	218	0	0	1045	828	13.1
Matrix	Syngenta	35	87	174	174	305	87	44	871	653	16.7
NUN 6032	Nunhems	15	131	697	305	131	0	0	1263	1133	13.0
NUN 6033	Nunhems	4	174	697	392	261	44	0	1568	1350	13.9
NUN 7561	Nunhems	1	44	958	741	261	44	0	2047	1960	13.6
Revolution	Nunhems	19	44	566	305	131	44	0	1089	1002	14.0
RWT 8173	Syngenta	4	305	653	566	131	44	0	1699	1350	12.8
RWT 8174	Syngenta	16	87	392	436	261	131	0	1307	1089	15.1
RWT 8203	Syngenta	11	174	697	392	131	0	0	1394	1220	13.0
RWT 8207	Syngenta	27	131	392	305	131	44	0	1002	828	14.7
Summer Sweet 5244	Abbott & Cobb	8	131	915	218	131	0	0	1394	1263	12.7
Super Crisp 32	Zeraim Gedera	19	87	653	261	87	0	0	1089	1002	11.7
Super Crisp F1	Zeraim Gedera	40	87	349	131	44	0	0	610	523	11.3
Super Seedless 7167	Abbott & Cobb	19	87	479	392	131	0	44	1133	1002	14.2
Super Seedless 7187	Abbott & Cobb	27	44	349	261	218	44	0	915	828	15.1
Super Seedless 9651	Abbott & Cobb	24	174	349	218	349	174	0	1263	915	14.9
SW 139	Southwestern	8	131	784	436	44	0	0	1394	1263	11.1
SW 3130	Southwestern	40	87	349	87	87	0	0	610	523	10.7
SW 3714	Southwestern	27	131	349	479	0	0	0	958	828	12.7
SW 3988	Southwestern	34	261	566	174	0	0	0	1002	741	9.8
SW 806	Southwestern	2	87	1176	218	131	44	0	1655	1525	12.2
Sweet Delight	Syngenta	8	174	653	261	349	44	0	1481	1263	13.3
Sweet Slice Plus	Willhite	40	44	218	305	0	0	0	566	523	11.5
Tomcat	Southwestern	18	87	610	436	0	44	0	1176	1045	12.9
Tri-X-212	Syngenta	4	174	610	523	218	0	0	1525	1350	13.1
Tri-X-313	Syngenta	37	87	436	174	0	0	0	697	619	11.5
Tri-X-Palomar	Syngenta	35	131	305	218	131	87	0	871	653	13.5
USS 7042	US Seedless	27	0	479	218	131	0	0	828	828	12.7
Vagabond	Harris Moran	12	131	610	436	131	0	0	1307	1176	13.3
Tri-X-212 + Emphasis	Syngenta	7	87	958	305	44	87	0	1481	1307	13.2
Tri-X-313 + Emphasis	Syngenta	27	44	436	174	218	44	0	697	828	14.8
Triple Threat + Emphasis	Syngenta	12	87	958	218	0	44	0	1307	1176	11.4
<b>Average</b>		--	117	562	301	138	32	3	1161	1001	13.1
<b>LSD (0.05)</b>		--	211	528	348	270	111	33	730	656	3.3

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

<sup>2</sup> Ranked according to total marketable weight.

<sup>3</sup> Includes fruit 8 - 22 pounds.

**Table 22. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by number within each fruit size category for third harvest. Clayton, NC, 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>					
	<b>&lt;8</b>	<b>8.1-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1 - 30</b>	<b>30 +</b>
5003	12	52	16	20	0	0
8032-8133	9	30	30	30	0	0
ACX 7125	0	28	22	28	22	0
Amarillo	3	34	25	0	0	0
Constitution	0	59	31	9	0	0
Crunchy Red	0	38	19	25	19	0
CS 4804	25	57	11	7	0	0
WX 1008	13	53	23	7	0	3
WX 1010	21	45	21	14	0	0
Intruder	13	61	26	0	0	0
Liberty	21	33	25	21	0	0
Matrix	10	20	20	35	10	5
NUN 6032	10	55	24	10	0	0
NUN 6033	11	44	25	17	3	0
NUN 7561	2	47	36	13	2	0
Revolution	4	52	28	12	4	0
RWT 8173	18	38	33	8	3	0
RWT 8174	7	30	33	20	10	0
RWT 8203	12	50	28	9	0	0
RWT 8207	13	39	30	13	4	0
Summer Sweet 5244	9	66	16	9	0	0
Super Crisp 32	8	60	24	8	0	0
Super Crisp F1	14	57	21	7	0	0
Super Seedless 7167	8	42	35	12	0	4
Super Seedless 7187	5	38	29	24	5	0
Super Seedless 9651	14	28	17	28	14	0
SW 139	9	56	31	3	0	0
SW 3130	14	57	14	14	0	0
SW 3714	14	36	50	0	0	0
SW 3988	26	57	17	0	0	0
SW 806	5	71	13	8	3	0
Sweet Delight	12	44	18	24	3	0
Sweet Slice Plus	8	38	54	0	0	0
Tomcat	7	52	37	0	4	0
Tri-X-212	11	40	34	14	0	0
Tri-X-313	12	62	25	0	0	0
Tri-X-Palomar	15	35	25	15	10	0
USS 7042	0	58	26	16	0	0
Vagabond	10	47	33	10	0	0
Tri-X-212 + Emphasis	6	65	21	3	6	0
Tri-X-313 + Emphasis	6	62	25	31	6	0
Triple Threat + Emphasis	7	73	17	0	3	0
<b>Average</b>	<b>10</b>	<b>48</b>	<b>26</b>	<b>12</b>	<b>3</b>	<b>0</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

**Table 23. Triploid Red-Flesh** watermelon hybrid cultivar trial. **Fruit number** for **fourth** harvest by various weight classes, (per acre), including average fruit size<sup>1</sup>. **Clayton, N.C. 2007.**

<b>Cultivar</b>	<b>Seed Company</b>	<b>Rank<sup>2</sup></b>	<b>Fruit size category (lb)</b>						<b>Total No./ Acre</b>	<b>Mkt No./ Acre<sup>3</sup></b>	<b>Avg wt.</b>
			<b>≤8</b>	<b>8-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1-30</b>	<b>30+</b>			
5003	Hazera	11	0	349	87	44	0	0	479	479	13.2
8032-8133	Seminis	23	131	305	44	0	0	0	479	349	9.6
ACX 7125	Abbott & Cobb	3	87	479	174	44	0	0	784	697	12.6
Amarillo	Syngenta	30	349	305	0	0	0	0	653	305	7.4
Constitution	Nunhems	36	44	261	0	0	0	0	305	261	7.1
Crunchy Red	Harris Moran	9	174	349	87	87	0	0	697	523	12.2
CS 4804	Clifton Seed	30	305	261	44	0	0	0	610	305	8.5
WX 1008	Willwhite	8	131	523	44	0	0	0	697	566	9.2
WX 1010	Willwhite	11	131	392	87	0	0	0	610	479	9.8
Intruder	Southwestern	17	174	436	0	0	0	0	610	436	9.3
Liberty	Nunhems	19	305	305	44	44	0	0	697	392	8.0
Matrix	Syngenta	1	131	436	305	0	0	0	871	741	12.0
NUN 6032	Nunhems	4	87	523	87	44	44	0	784	653	11.9
NUN 6033	Nunhems	6	87	610	0	0	0	0	697	610	10.9
NUN 7561	Nunhems	40	174	218	0	0	0	0	392	218	9.1
Revolution	Nunhems	19	131	305	87	0	0	0	523	392	8.8
RWT 8173	Syngenta	30	0	87	174	44	44	0	349	305	17.2
RWT 8174	Syngenta	23	131	305	44	0	0	0	479	349	9.4
RWT 8203	Syngenta	17	87	436	0	0	0	0	523	436	10.4
RWT 8207	Syngenta	36	0	261	0	0	0	0	261	261	7.1
Summer Sweet 5244	Abbott & Cobb	11	44	392	44	44	0	0	523	479	11.1
Super Crisp 32	Zeraim Gedera	30	174	261	0	44	0	0	479	305	9.7
Super Crisp F1	Zeraim Gedera	36	392	218	44	0	0	0	653	261	6.5
Super Seedless 7167	Abbott & Cobb	9	174	436	44	44	0	0	697	523	9.7
Super Seedless 7187	Abbott & Cobb	11	44	392	44	44	0	0	523	479	11.6
Super Seedless 9651	Abbott & Cobb	1	0	653	87	0	0	0	741	741	11.6
SW 139	Southwestern	36	261	218	44	0	0	0	523	261	9.1
SW 3130	Southwestern	40	87	218	0	0	0	0	305	218	9.8
SW 3714	Southwestern	11	131	436	0	44	0	0	610	479	9.1
SW 3988	Southwestern	42	349	131	0	0	0	0	479	131	7.4
SW 806	Southwestern	19	349	349	44	0	0	0	741	392	7.9
Sweet Delight	Syngenta	6	87	523	87	0	0	0	697	610	11.0
Sweet Slice Plus	Willwhite	30	174	261	44	0	0	0	479	305	9.9
Tomcat	Southwestern	19	44	349	44	0	0	0	436	392	7.5
Tri-X-212	Syngenta	23	218	218	0	131	0	0	566	349	10.3
Tri-X-313	Syngenta	4	87	523	131	0	0	0	741	653	11.1
Tri-X-Palomar	Syngenta	11	131	436	44	0	0	0	610	479	9.5
USS 7042	US Seedless	23	87	305	44	0	0	0	436	349	9.9
Vagabond	Harris Moran	23	0	305	44	0	0	0	349	349	10.7
Tri-X-212 + Emphasis	Syngenta	30	174	218	87	0	0	0	479	305	8.8
Tri-X-313 + Emphasis	Syngenta	23	44	349	0	0	0	0	392	349	9.3
Triple Threat + Emphasis	Syngenta	23	87	349	0	0	0	0	436	349	9.2
<b>Average</b>		--	<b>138</b>	<b>350</b>	<b>52</b>	<b>16</b>	<b>2</b>	<b>0</b>	<b>557</b>	<b>417</b>	<b>9.9</b>
<b>LSD (0.05)</b>		--	<b>236</b>	<b>386</b>	<b>129</b>	<b>79</b>	<b>27</b>	<b>0</b>	<b>484</b>	<b>415</b>	<b>3.7</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted among the triploid plants, 3, 6, and 9.

<sup>2</sup> Ranked according to total marketable weight.

<sup>3</sup> Includes fruit 8 - 22 pounds.

**Table 24. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by number within each fruit size category for fourth harvest. Clayton, NC, 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>					
	<b>&lt;8</b>	<b>8.1-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1 - 30</b>	<b>30 +</b>
5003	0	73	18	9	0	0
8032-8133	27	64	9	0	0	0
ACX 7125	11	61	22	6	0	0
Amarillo	53	47	0	0	0	0
Constitution	14	86	0	0	0	0
Crunchy Red	25	50	12	12	0	0
CS 4804	50	43	7	0	0	0
WX 1008	19	75	6	0	0	0
WX 1010	21	64	14	0	0	0
Intruder	29	71	0	0	0	0
Liberty	44	44	6	6	0	0
Matrix	15	50	35	0	0	0
NUN 6032	11	67	11	6	6	0
NUN 6033	12	87	0	0	0	0
NUN 7561	44	56	0	0	0	0
Revolution	25	58	17	0	0	0
RWT 8173	0	25	50	13	13	0
RWT 8174	27	64	9	0	0	0
RWT 8203	17	83	0	0	0	0
RWT 8207	0	100	0	0	0	0
Summer Sweet 5244	8	75	8	8	0	0
Super Crisp 32	36	54	0	9	0	0
Super Crisp F1	60	33	7	0	0	0
Super Seedless 7167	25	63	6	6	0	0
Super Seedless 7187	8	75	8	8	0	0
Super Seedless 9651	0	88	12	0	0	0
SW 139	50	42	8	0	0	0
SW 3130	29	71	0	0	0	0
SW 3714	21	71	0	7	0	0
SW 3988	73	27	0	0	0	0
SW 806	47	47	6	0	0	0
Sweet Delight	12	75	12	0	0	0
Sweet Slice Plus	36	54	9	0	0	0
Tomcat	10	80	10	0	0	0
Tri-X-212	39	39	0	23	0	0
Tri-X-313	12	71	18	0	0	0
Tri-X-Palomar	21	71	7	0	0	0
USS 7042	20	70	10	0	0	0
Vagabond	0	87	13	0	0	0
Tri-X-212 + Emphasis	36	46	18	0	0	0
Tri-X-313 + Emphasis	11	89	0	0	0	0
Triple Threat + Emphasis	20	80	0	0	0	0
<b>Average</b>	<b>24</b>	<b>64</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>0</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

**Table 25. Triploid Red-Flesh watermelon hybrid cultivar trial. Fruit number for cumulative harvests, (4), by various weight classes (per acre)<sup>1</sup>. Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit size category (lb)</b>						<b>Total Number</b>	<b>Total Mkt. No.<sup>3</sup></b>
		<b>&lt;8</b>	<b>8.1-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1 - 30</b>	<b>30 +</b>		
5003	19	174	1655	1394	958	174	0	4356	4008
8032-8133	34	218	1525	1699	479	0	0	3920	3703
ACX 7125	31	87	1089	1481	1350	436	0	4443	3920
Amarillo	2	958	3572	1045	131	0	0	5706	4748
Constitution	9	44	2134	1830	261	0	0	4269	4225
Crunchy Red	37	218	741	1481	1220	436	0	4095	3441
CS 4804	17	784	2875	871	305	0	0	4835	4051
WX 1008	4	392	2396	1438	697	0	44	4966	4530
WX 1010	10	436	1960	1742	523	174	0	4835	4225
Intruder	12	479	2527	1263	392	44	0	4705	4182
Liberty	21	523	1307	1830	828	87	0	4574	3964
Matrix	27	218	1176	1742	1002	349	44	4530	3920
NUN 6032	5	261	1699	1830	1002	174	0	4966	4530
NUN 6033	7	261	1742	1568	1045	305	0	4922	4356
NUN 7561	3	305	2875	1350	392	44	0	4966	4617
Revolution	39	174	1133	1438	828	261	0	3833	3398
RWT 8173	20	392	1350	1612	1002	436	0	4792	3964
RWT 8174	6	218	1525	1873	1002	218	0	4835	4400
RWT 8203	30	261	2047	1350	523	44	0	4225	3920
RWT 8207	32	305	2352	1133	392	87	0	4269	3877
Summer Sweet 5244	16	174	2091	1438	566	44	0	4312	4095
Super Crisp 32	13	261	1830	1655	653	44	0	4443	4138
Super Crisp F1	38	784	2091	1002	305	44	0	4225	3398
Super Seedless 7167	15	261	1960	1481	653	218	44	4617	4095
Super Seedless 7187	18	87	1438	1525	1089	174	0	4312	4051
Super Seedless 9651	28	174	1263	1350	1307	479	0	4574	3920
SW 139	8	610	3485	697	87	0	0	4879	4269
SW 3130	40	174	2004	1045	261	87	0	3572	3311
SW 3714	25	392	2178	1350	436	44	0	4400	3964
SW 3988	33	1220	3311	392	44	0	44	5009	3746
SW 806	1	479	2919	1525	566	87	0	5576	5009
Sweet Delight	24	349	1873	1089	1002	479	44	4835	3964
Sweet Slice Plus	11	218	1786	1960	436	0	0	4400	4182
Tomcat	35	218	2004	1176	436	87	0	3920	3616
Tri-X-212	14	479	2004	1438	697	0	0	4617	4138
Tri-X-313	29	174	1742	1568	610	131	0	4225	3920
Tri-X-Palomar	36	392	1830	1307	349	87	0	3964	3485
USS 7042	26	87	2352	1263	349	87	44	4182	3964
Vagabond	22	131	1655	1786	523	0	0	4095	3964
Tri-X-212 + Emphasis	23	349	2527	1176	261	87	0	4400	3964
Tri-X-313 + Emphasis	42	131	1350	958	349	174	0	2962	2657
Triple Threat + Emphasis	41	174	2614	436	44	44	0	3311	3093
Average	--	334	2000	1371	604	135	6	4449	3974
<b>LSD(0.05)</b>	--	<b>418</b>	<b>962</b>	<b>714</b>	<b>507</b>	<b>221</b>	<b>45</b>	<b>1121</b>	<b>1067</b>

<sup>1</sup>Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

<sup>2</sup> Ranked according to total marketable weight.

<sup>3</sup> Includes fruit 8 - 22 pounds.

**Table 26. Triploid Red-Flesh** watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category. **Clayton, NC., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category (lb)</b>					
	<b>&lt;8</b>	<b>8.1-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1 - 30</b>	<b>30 +</b>
5003	4	38	32	22	4	0
8032-8133	6	39	43	12	0	0
ACX 7125	2	25	33	30	10	0
Amarillo	17	63	18	2	0	0
Constitution	1	50	43	6	0	0
Crunchy Red	5	18	36	30	11	0
CS 4804	16	59	18	6	0	0
WX 1008	8	48	29	14	0	1
WX 1010	9	41	36	11	4	0
Intruder	10	54	27	8	1	0
Liberty	11	29	40	18	2	0
Matrix	5	26	38	22	8	1
NUN 6032	5	34	37	20	4	0
NUN 6033	5	35	32	21	6	0
NUN 7561	6	58	27	8	1	0
Revolution	5	30	38	22	7	0
RWT 8173	8	28	34	21	9	0
RWT 8174	5	32	39	21	5	0
RWT 8203	6	48	32	12	1	0
RWT 8207	7	55	27	9	2	0
Summer Sweet 5244	4	48	33	13	1	0
Super Crisp 32	6	41	37	15	1	0
Super Crisp F1	19	49	24	7	1	0
Super Seedless 7167	6	42	32	14	5	1
Super Seedless 7187	2	33	35	25	4	0
Super Seedless 9651	4	28	30	29	10	0
SW 139	12	71	14	2	0	0
SW 3130	5	56	29	7	2	0
SW 3714	9	50	31	10	1	0
SW 3988	24	66	8	1	0	1
SW 806	9	52	27	10	2	0
Sweet Delight	7	39	23	21	10	1
Sweet Slice Plus	5	41	45	10	0	0
Tomcat	6	51	30	11	2	0
Tri-X-212	10	43	31	15	0	0
Tri-X-313	4	41	37	14	3	0
Tri-X-Palomar	10	46	33	9	2	0
USS 7042	2	56	30	8	2	1
Vagabond	3	40	44	13	0	0
Tri-X-212 + Emphasis	8	57	27	6	2	0
Tri-X-313 + Emphasis	4	46	32	12	6	0
Triple Threat + Emphasis	5	79	13	1	1	0
<b>Average</b>	<b>7</b>	<b>45</b>	<b>31</b>	<b>14</b>	<b>3</b>	<b>0</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

**Table 27. Triploid Red-Flesh** watermelon hybrid cultivar trial. Percentage harvested by **number** by harvest for total and total marketable categories. **Clayton, NC., 2007.**

<u>Cultivar</u>	Percentages <sup>1</sup> (%) by Harvest for Total and Total Marketable fruit							
	Harvest 1		Harvest 2		Harvest 3		Harvest 4	
	Total	Mrkt.	Total	Mrkt.	Total	Mrkt.	Total	Mrkt.
5003	26	27	38	37	25	24	11	12
8032-8133	21	22	41	44	26	25	12	9
ACX 7125	25	26	39	41	18	16	18	18
Amarillo	27	31	47	45	24	17	11	6
Constitution	24	25	36	36	33	33	7	6
Crunchy Red	22	27	44	42	17	16	17	15
CS 4804	4	4	58	66	25	23	13	8
WX 1008	32	34	27	30	26	24	14	12
WX 1010	25	27	36	38	26	24	13	11
Intruder	18	19	41	43	29	28	13	10
Liberty	27	31	35	38	23	21	15	10
Matrix	34	37	28	28	19	17	19	19
NUN 6032	22	24	37	37	25	25	16	14
NUN 6033	28	29	26	26	32	31	14	14
NUN 7561	24	25	27	27	41	42	8	5
Revolution	26	27	32	32	28	29	14	12
RWT 8173	24	23	34	35	35	34	7	8
RWT 8174	14	16	49	51	27	25	10	8
RWT 8203	28	30	27	28	33	31	12	11
RWT 8207	27	28	43	44	23	21	6	7
Summer Sweet 5244	26	28	29	30	32	31	12	12
Super Crisp 32	23	24	42	44	25	24	11	7
Super Crisp F1	33	38	36	38	14	15	15	8
Super Seedless 7167	24	26	37	37	25	24	15	13
Super Seedless 7187	31	32	35	35	21	20	12	12
Super Seedless 9651	19	20	37	38	28	23	16	19
SW 139	29	30	31	35	29	30	11	6
SW 3130	40	42	34	36	17	16	9	7
SW 3714	36	40	29	27	22	21	14	12
SW 3988	37	37	34	40	20	20	10	3
SW 806	23	25	34	37	30	30	13	8
Sweet Delight	22	22	33	31	31	32	14	15
Sweet Slice Plus	48	50	29	30	13	13	11	7
Tomcat	33	36	24	24	30	29	11	11
Tri-X-212	29	33	25	26	33	33	12	8
Tri-X-313	29	30	37	38	16	16	18	17
Tri-X-Palomar	13	14	49	54	22	19	15	14
USS 7042	32	34	38	36	20	21	10	9
Vagabond	21	22	38	40	32	30	9	9
Tri-X-212 + Emphasis	10	11	46	48	34	33	11	8
Tri-X-313 + Emphasis	12	13	44	43	24	31	13	13
Triple Threat + Emphasis	9	10	38	41	39	38	13	11
<b>Average</b>	<b>25</b>	<b>27</b>	<b>36</b>	<b>37</b>	<b>26</b>	<b>25</b>	<b>13</b>	<b>11</b>

<sup>1</sup> Fruit number (per cultivar and harvest) divided by the total number and total marketable number (per cultivar) times 100.



**Table 28. 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<sup>1</sup>. **Clayton, N.C. 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit size category (lb)</b>						<b>Total Wt./Acre</b>	<b>Mkt Wt./Acre<sup>3</sup></b>	<b>Avg lb./fruit</b>
		<b>&lt;8</b>	<b>8-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1-30</b>	<b>30+</b>			
5003	11	13	201	224	186	40	0	663	611	15.4
8032-8133	29	14	184	267	92	0	0	557	543	14.1
ACX 7125	5	6	132	239	265	101	0	743	636	16.7
Amarillo	26	59	373	163	25	0	0	620	561	10.9
Constitution	19	3	241	293	51	0	0	588	585	13.8
Crunchy Red	25	15	82	240	240	107	0	683	561	16.9
CS 4804	35	50	315	135	61	0	0	561	512	11.6
WX 1008	7	27	271	229	135	0	55	716	634	14.5
WX 1010	13	30	225	277	103	41	0	677	605	14.1
Intruder	24	33	290	199	76	10	0	607	565	12.8
Liberty	17	35	148	286	162	21	0	651	595	14.5
Matrix	8	15	138	283	198	85	14	732	618	16.1
NUN 6032	3	17	193	290	193	40	0	734	676	14.8
NUN 6033	4	16	204	252	209	75	0	755	664	15.3
NUN 7561	12	23	324	210	76	10	0	644	611	12.9
Revolution	31	13	130	236	164	63	0	605	529	15.9
RWT 8173	10	28	161	257	197	101	0	744	614	15.6
RWT 8174	2	15	178	303	197	83	0	746	678	15.5
RWT 8203	27	17	234	215	103	12	0	582	553	14.0
RWT 8207	32	17	273	179	76	22	0	567	528	13.2
Summer Sweet 5244	22	13	237	226	110	10	0	595	572	13.9
Super Crisp 32	15	19	203	270	126	12	0	629	598	14.1
Super Crisp F1	38	53	242	160	61	10	0	526	463	12.5
Super Seedless 7167	18	17	225	239	129	52	14	676	594	14.5
Super Seedless 7187	6	6	171	248	216	43	0	685	636	15.9
Super Seedless 9651	9	11	138	221	258	113	0	742	617	16.3
SW 139	36	42	377	106	16	0	0	541	499	11.1
SW 3130	39	12	226	162	52	22	0	474	440	13.4
SW 3714	30	25	239	215	86	10	0	575	539	12.9
SW 3988	40	79	367	62	8	0	39	555	436	10.9
SW 806	1	31	329	244	111	19	0	735	685	13.3
Sweet Delight	20	23	206	173	195	117	14	727	574	15.0
Sweet Slice Plus	16	15	203	309	85	0	0	611	597	13.9
Tomcat	34	12	231	194	87	20	0	545	512	13.8
Tri-X-212	14	35	239	227	138	0	0	639	604	13.8
Tri-X-313	23	13	200	249	117	30	0	609	566	14.5
Tri-X-Palomar	37	25	202	214	69	22	0	530	484	13.3
USS 7042	28	6	277	199	68	22	66	638	544	15.2
Vagabond	21	9	193	281	100	0	0	583	573	14.3
Tri-X-212 + Emphasis	33	23	292	185	50	20	0	569	526	12.8
Tri-X-313 + Emphasis	41	9	151	150	71	41	0	422	372	14.2
Triple Threat + Emphasis	42	12	293	69	8	11	0	393	370	11.6
Average	--	22	227	219	118	33	5	623	564	14
LSD (0.05)	--	27	110	113	100	54	42	172	152	1.7

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 3, 6, and 9 within the plot.

<sup>2</sup> Ranked according to total marketable weight.

<sup>3</sup> Includes fruit 8 - 22 pounds.

**Table 29. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested over four harvests by weight within each fruit size category. Clayton, NC, 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>					
	<b>&lt;8</b>	<b>8.1-14</b>	<b>14.1-18</b>	<b>18.1-22</b>	<b>22.1 - 30</b>	<b>30 +</b>
5003	2	30	34	28	6	0
8032-8133	3	33	48	17	0	0
ACX 7125	1	18	32	36	14	0
Amarillo	9	60	26	4	0	0
Constitution	0	41	50	9	0	0
Crunchy Red	2	12	35	35	16	0
CS 4804	9	56	24	11	0	0
WX 1008	4	38	32	19	0	8
WX 1010	5	33	41	15	6	0
Intruder	5	48	33	13	2	0
Liberty	5	23	44	25	3	0
Matrix	2	19	39	27	12	2
NUN 6032	2	26	40	26	5	0
NUN 6033	2	27	33	28	10	0
NUN 7561	4	50	33	12	2	0
Revolution	2	21	39	27	10	0
RWT 8173	4	22	34	26	14	0
RWT 8174	2	24	41	26	11	0
RWT 8203	3	40	37	18	2	0
RWT 8207	3	48	32	13	4	0
Summer Sweet 5244	2	40	38	18	2	0
Super Crisp 32	3	32	43	20	2	0
Super Crisp F1	10	46	30	12	2	0
Super Seedless 7167	2	33	35	19	8	2
Super Seedless 7187	1	25	36	32	6	0
Super Seedless 9651	2	19	30	35	15	0
SW 139	8	70	20	3	0	0
SW 3130	3	48	34	11	5	0
SW 3714	4	42	37	15	2	0
SW 3988	14	66	11	1	0	7
SW 806	4	45	33	15	3	0
Sweet Delight	3	28	24	27	16	2
Sweet Slice Plus	2	33	51	14	0	0
Tomcat	2	42	36	16	4	0
Tri-X-212	5	37	36	22	0	0
Tri-X-313	2	33	41	19	5	0
Tri-X-Palomar	5	38	40	13	4	0
USS 7042	1	43	31	11	3	10
Vagabond	2	33	48	17	0	0
Tri-X-212 + Emphasis	4	51	32	9	4	0
Tri-X-313 + Emphasis	2	36	36	17	10	0
Triple Threat + Emphasis	3	74	18	2	3	0
<b>Average</b>	<b>4</b>	<b>38</b>	<b>35</b>	<b>18</b>	<b>5</b>	<b>1</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted among the triploid plants, 3, 6, and 9.

**Table 30. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. Clayton, N.C., 2007.<sup>1</sup>**

<b>Cultivar</b>	<b>Flesh</b>	<b>Sd. Trace</b>	<b>Hard Seed Population<sup>5</sup></b>	<b>Flesh</b>			<b>Hollow Heart Ratings<sup>9</sup></b>					
	<b>SS<sup>2</sup></b>	<b>Color<sup>3</sup></b>	<b>Size<sup>4</sup></b>	<b>LD<sup>6</sup></b>	<b>Rind<sup>7</sup></b>	<b>Firmness<sup>8</sup></b>	<b>HH0</b>	<b>HH1</b>	<b>HH2</b>	<b>HH3</b>	<b>HH4</b>	
5003	11.6	3.9	2.4	1.3	1.2	14.1	3.0	50	20	10	15	0
8032-8133	12.0	4.2	2.0	1.3	1.3	15.6	3.1	90	10	0	0	0
ACX 7125	11.2	3.7	1.8	1.4	1.2	16.5	3.6	90	10	0	0	0
Amarillo	11.4	2.0	2.2	1.1	1.0	14.4	3.4	65	25	10	0	0
Constitution	11.5	3.9	2.3	1.1	1.1	13.9	3.0	80	10	5	5	0
Crunchy Red	11.4	3.6	1.4	1.2	1.3	16.4	4.2	90	10	0	0	0
CS 4804	11.7	3.7	2.1	1.5	1.1	18.8	4.0	40	50	10	0	0
WX 1008	11.4	4.0	2.1	1.8	1.2	16.1	3.0	60	20	20	0	0
WX 1010	11.4	4.1	2.4	1.1	1.2	16.9	3.1	50	25	15	10	0
Intruder	11.6	3.8	2.1	1.2	1.1	14.7	3.1	40	45	15	0	0
Liberty	11.8	3.8	2.4	1.1	1.2	15.0	3.0	75	20	5	0	0
Matrix	11.1	4.1	2.4	1.3	1.6	15.3	3.0	70	20	10	0	0
NUN 6032	11.5	3.6	2.1	1.1	1.2	15.7	3.3	75	10	5	0	0
NUN 6033	11.0	3.8	2.0	1.3	1.1	16.4	3.2	60	30	10	0	0
NUN 7561	11.9	3.9	2.3	1.4	1.1	13.6	3.2	100	0	0	0	0
Revolution	11.8	4.1	2.3	1.6	1.6	16.8	2.9	95	0	0	5	0
RWT 8173	12.2	4.4	2.2	1.3	1.3	13.7	3.2	70	20	5	0	0
RWT 8174	12.1	4.4	2.3	1.5	1.2	14.6	3.5	100	0	0	0	0
RWT 8203	11.6	3.4	1.5	1.3	1.3	16.9	3.0	80	5	15	0	0
RWT 8207	11.4	4.3	1.9	1.5	1.1	14.2	3.0	95	5	0	0	0
Summer Sweet 5244	12.0	3.4	2.1	1.3	1.2	15.1	3.0	50	35	15	0	0
Super Crisp 32	11.9	3.8	1.6	1.1	1.2	18.4	2.9	80	10	10	0	0
Super Crisp F1	11.9	3.6	1.9	1.4	1.3	15.2	2.9	60	30	5	5	0
Super Seedless 7167	12.0	3.6	1.7	1.4	1.2	16.3	3.2	70	20	5	5	0
Super Seedless 7187	11.4	3.4	1.8	1.3	1.2	15.1	3.3	80	10	10	0	0
Super Seedless 9651	11.7	3.6	1.7	1.2	1.2	17.3	3.6	90	10	0	0	0
SW 139	11.1	4.0	2.1	1.1	1.1	13.4	2.9	75	10	5	5	0
SW 3130	11.7	3.7	1.4	1.1	1.2	15.7	3.3	75	10	15	0	0
SW 3714	12.0	3.5	2.6	1.0	1.1	17.2	2.9	65	25	10	0	0
SW 3988	11.6	4.1	2.4	1.9	1.0	12.0	3.3	40	10	25	5	20
SW 806	11.4	3.8	1.8	1.1	1.2	16.9	3.0	80	15	5	0	0
Sweet Delight	11.9	3.6	1.5	1.1	1.3	18.0	3.2	80	5	5	0	10
Sweet Slice Plus	11.4	3.9	2.1	1.0	1.1	18.5	2.6	50	10	15	20	5
Tomcat	11.5	3.7	1.8	1.0	1.2	17.5	3.1	70	15	15	0	0
Tri-X-212	11.6	3.6	2.2	1.1	1.1	16.2	3.1	65	20	10	5	0

**Table 30 (cont.). Triploid Red-Flesh** watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, N.C., 2007.**<sup>1</sup>

Cultivar	SS <sup>2</sup>	Flesh Color <sup>3</sup>	Sd. Trace Size <sup>4</sup>	Hard Seed Population <sup>5</sup>	LD <sup>6</sup>	Rind <sup>7</sup>	Firmness <sup>8</sup>	Hollow Heart Ratings <sup>9</sup>				
								HH0	HH1	HH2	HH3	HH4
Tri-X-313	11.9	3.4	2.7	1.1	1.2	16.6	3.0	80	10	10	0	0
Tri-X-Palomar	11.5	3.4	2.4	1.1	1.0	16.0	2.9	80	15	0	5	0
USS 7042	11.4	4.3	2.3	1.1	1.2	13.5	3.2	75	10	15	0	0
Vagabond	11.2	3.9	2.0	1.5	1.2	14.8	4.0	85	10	5	0	0
Tri-X-212 + Emphasis	11.7	3.6	2.4	1.1	1.1	16.9	3.1	45	30	20	0	5
Tri-X-313 + Emphasis	12.2	3.8	1.9	0.9	1.2	15.5	3.0	50	10	30	5	5
Triple Threat + Emphasis	12.5	4.2	1.8	1.2	1.0	14.5	3.3	60	35	5	0	0
Average	11.8	3.8	2.2	1.1	1.1	15.4	3.2	68	17	12	1	1
LSD (0.05)	0.7	0.5	0.5	0.6	0.1	2.5	0.5	34	25	18	9	7

<sup>1</sup> Most measurements were obtained from fruits in harvest 1.

<sup>2</sup> SS = Indicates sweetness, average of 5 melons per replication (20 total).

<sup>3</sup> Rating: 1 = white, 2 = pink, 3 = red, 4 = medium-dark red, 5 = blood red.

<sup>4</sup> Rating: 1=small (i.e. tomato), 3=medium, 5=large (i.e.Crimson Sweet).

<sup>5</sup> Rating: 1 = few, 3 = some, 5 = many.

<sup>6</sup> LD = Length and diameter ratio, average of 5 melons per replication (20 total).

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

<sup>8</sup> Fruit pressure was taken by a 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.

<sup>9</sup> HH Percentage Rating Scale:

HH0: No crack in flesh

HH1: Slight crack in flesh

HH2: Small crack in flesh

HH3: Med. separation in flesh

HH4: Complete seperation in flesh to rind

HH3 & HH4 = Non-marketable

## **Miniature Seedless Watermelon Cultural Practices for 2007 Cultivar Trials, Central Crops Research Station; Clayton, 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. Since then, a miniature seedless watermelon cultivar variety test has been conducted. We report the specifics for the 2007 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 Super-Fine Germinating Mix, 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 15 May, 2007. Fertilizer, 30 lb/acre N and 80 lb/acre K<sub>2</sub>O, was incorporated into the bed on 10 April prior to the laying of black polyethylene plastic (0.70 mil thick high density plastic film, 48 inches wide; B.B. Hobbs, Clinton, NC) on 13 April. Fumigant (Telone C-17) was injected on 13 April when the plastic was laid. Herbicides, Alanap at 6 qt/acre, Curbit at 4 pt./acre, and Glyfus Xtra at 3 pt./acre was applied between the plastic beds for weed control on 9 May. 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 and 15 feet between plots. Pollinizer plants of SP-4 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 (0.5 lb./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 (NETAFIM, 12 inch spacing, 0.24 gph; NETAFIM, Tel Aviv, Israel) 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 25 May, the last was 27 July. A total of 90 lb/acre N and 180 lb/acre K<sub>2</sub>O was drip applied through the season. Cumulative amount of fertilizer applied for the entire growing season was 120, 0, and 280 lb/acre of N, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O, respectively. Insecticides were applied every week as a

preventative measure beginning 6 June and on the following dates: 13, 21, 28 June; 3, 9, 13, 27 July; and 16 August. The following products were alternated during consecutive spray applications to avoid insect and mite resistance: Asana XL, Kelthane, and Perm Up, Ambush, Sevin XLR, and Acromite. Similarly, the following fungicide products were used; Kocide 2000, Previcur Flex, Maneb 75DF, Cabrio, Nova, Procure, Pristine, and Bravo Weather Stik, and Quintec; and applied on the following dates; 6, 13, 14, 20, 21, 27, and 29 June; 3, 5, 10, 13, 17, 25, and 27 July.

There were five harvests for the miniature triploid watermelon test. The first harvest one was 12 July and the fifth harvest was 27 August. 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 digital 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), and interior flesh firmness. Flesh firmness was taken by using a Penetrometer FT 011 with a 7/16" plunger tip, (QA Supplies LLC, Norfolk, Va.), and recorded in pounds. Samples were obtained by cutting the center of the fruit from the stem to blossom end. Pressure was then taken in two areas of the fruit; top side and ground spot side. Pressure was not taken on fruit with hollow heart. The reported measures on flesh firmness are an average of the two sample areas. 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 31. Triploid mini-watermelon cultivar seed sources and descriptions; 2007.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
1	ACX 3514	Abbott & Cobb	Distinct, arrow, dark green stripes on light green background; round to oval; variable shape and size as some fruit tended to be assymetrical
2	Bibo	Syngenta	Distinct; very narrow, dark green stripes on light green background; oval; uniform shape and size; fruit are fairly small with some tending to be too small
3	Bobbie	Nunhems	Distinct, narrow, dark green stripes on light green background; round to slightly oval; uniform shape; variable size; rind pattern is similar to Tri-X-Palomar
4	Cheyenne	Southwestern	Distinct, narrow, dark green stripes on medium to dark green background; round; uniform shape; variable size; few oversize fruit
5	HMX 6917	Harris Moran	Distinct, very narrow, dark green stripes on dark green background; round; uniform shape and size; some large fruit
6	Leopard	Hazera	Distinct, narrow, dark green stripes on light green background; oval; uniform shape and size; stripes become narrower and background becomes lighter as fruit ripens
7	Little Deuce Coupe	Syngenta	Distinct, narrow pin stripes on dark green background; appears as solid dark rind; primarily round to oval; very uniform shape and size
8	Mielhart	Hazera	Distinct, narrow, dark green stripes on light green background; oval; uniform fruit shape and size
9	NUN 3072	Nunhems	Distinct, narrow to medium dark green stripes with medium green shadowing on each side on light green background; round; uniform shape and size; unique rind pattern
10	Petite Perfection	Syngenta	Distinct, narrow, dark green stripes on light green background; slightly oval; uniform fruit shape and size
11	Petite Treat	Zeraim Gedera	Distinct, narrow, dark green stripes on light to mediumgreen background; mainly oval with some round; variable fruit size with some being too large for mini category
12	Precious Petite	Syngenta	Distinct, narrow, medium to dark green stripe on light green background; round to oval; uniform fruit size and shape
13	Rosasweet	Syngenta	Distinct, narrow, dark green stripes on light green background; mainly oval; uniform shape and size; good mini size
14	RWT 8209	Syngenta	Distinct, narrow, dark green stripes on light green background; slightly oval; uniform shape and size
15	SW 3178	Southwestern	Distinct, narrow, dark green pinstripes on dark green background - appears as solid green rind; round; uniform shape and size

**Table 31. Triploid mini-watermelon cultivar seed sources and descriptions; 2007.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
16	SW 3314	Southwestern	Distinct; narrow, dark green stripes on light green background; round to slightly oval; fairly uniform shape and size; several fruit too large for mini category
17	SW 3416	Southwestern	Distinct, narrow to medium dark green stripes on light green background; round; uniform shape and size, but too large for mini for mini category
18	SW 3418	Southwestern	Solid dark green rind; round; very uniform shape and size; fruit tended to be borderline large mini and ice box size
19	Vanessa	Nunhems	Solid, dark green rind; round; 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: 2007 Mini Triploid Trial



Figure 3: 2007 Mini Triploid Trial



**HMX 6917**



**Leopard**



**Lil' Deuce Coupe**



**Mielhart**

Figure 3: 2007 Mini Triploid Trial



**NUN 3072**



**Petite Perfection**



**Petite Treat**



**Precious Petite**

Figure 3: 2007 Mini Triploid Trial



**Rosasweet**



**RWT 8209**



**SW 3178**



**SW 3314**

Figure 3: 2007 Mini Triploid Trial



**Table 32. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in first harvest by various weight classes (per acre) plus average fruit size<sup>1</sup>. Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit Size Category</b>								<b>Total Mkt<sup>3</sup></b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Total</b>		
ACX 3514	13	0	109	871	327	653	545	980	3485	980	9.1
Bibo	1	2069	3049	1742	0	0	0	0	6861	4792	3.5
Bobbie	16	0	109	545	436	218	109	327	1742	653	7.4
Cheyenne	15	0	0	762	218	327	436	109	1851	762	8.1
HMX 6917	11	0	218	871	436	0	0	0	1525	1089	5.4
Leopard	12	0	109	980	327	109	0	109	1634	1089	6.9
Little Deuce Coupe	7	0	327	1525	436	0	0	0	2287	1851	5.4
Mielhart	10	0	0	1525	0	109	109	0	1742	1525	5.6
NUN 3072	18	0	0	218	109	109	0	0	436	218	4.8
Petite Perfection	3	109	327	3376	327	0	0	0	4138	3703	5.2
Petite Treat	14	109	0	980	436	436	327	218	2505	980	7.6
Precious Petite	5	762	980	1851	0	0	0	0	3594	2831	4.1
Rosasweet	4	545	871	2723	0	0	0	0	4138	3594	4.2
RWT 8209	2	327	762	3267	0	0	0	0	4356	4029	4.5
SW 3178	9	0	109	1525	436	327	109	218	2723	1634	6.9
SW 3314	6	218	109	2069	653	436	109	218	3812	2178	7.5
SW 3416	17	0	0	436	218	218	0	1634	2505	436	11.8
SW 3418	19	0	0	0	436	327	109	762	1634	0	10.4
Vanessa	8	109	218	1634	653	327	109	109	3158	1851	6.8
Average	--	224	384	1416	287	189	103	246	2849	1800	7
<b>LSD(0.05)</b>	--	<b>470</b>	<b>628</b>	<b>1231</b>	<b>576</b>	<b>370</b>	<b>311</b>	<b>414</b>	<b>1810</b>	<b>1419</b>	<b>1.7</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 33. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in first harvest by various weight classes (per acre). Kinston, N.C., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							
	<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Mrkt<sup>3</sup></b>
ACX 3514	0	3	25	9	19	16	28	28
Bibo	30	44	25	0	0	0	0	70
Bobbie	0	6	31	25	13	6	19	38
Cheyenne	0	0	41	12	18	24	6	41
HMX 6917	0	14	57	29	0	0	0	71
Leopard	0	7	60	20	7	0	7	67
Little Deuce Coupe	0	14	67	19	0	0	0	81
Mielhart	0	0	88	0	6	6	0	88
NUN 3072	0	0	50	25	25	0	0	50
Petite Perfection	3	8	82	8	0	0	0	89
Petite Treat	4	0	39	17	17	13	9	39
Precious Petite	21	27	52	0	0	0	0	79
Rosasweet	13	21	66	0	0	0	0	87
RWT 8209	8	18	75	0	0	0	0	93
SW 3178	0	4	56	16	12	4	8	60
SW 3314	6	3	54	17	11	3	6	57
SW 3416	0	0	17	9	9	0	65	17
SW 3418	0	0	0	27	20	7	47	0
Vanessa	3	7	52	21	10	3	3	59
Average	5	9	49	13	9	4	10	59

<sup>1</sup> 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 34. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in second harvest by various weight classes (per acre) plus average fruit size<sup>1</sup>. Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit Size Category</b>							<b>Total Mkt<sup>3</sup></b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>		
ACX 3514	16	0	0	545	109	109	545	1307	2614	545
Bibo	11	762	762	1089	109	0	0	0	2723	1851
Bobbie	13	0	109	1198	545	327	545	871	3594	1307
Cheyenne	15	0	0	871	218	0	218	871	2178	871
HMX 6917	6	0	0	2505	1089	762	327	327	5009	2505
Leopard	4	218	109	2614	109	436	327	218	4029	2723
Little Deuce Coupe	3	0	436	2723	0	109	0	0	3267	3158
Mielhart	8	0	218	1960	545	545	0	109	3376	2178
NUN 3072	17	0	0	436	653	436	653	1198	3376	436
Petite Perfection	5	545	218	2396	218	218	218	0	3812	2614
Petite Treat	14	218	327	871	218	762	218	545	3158	1198
Precious Petite	1	980	1089	2940	0	0	0	0	5009	4029
Rosasweet	2	327	762	2505	0	0	0	0	3594	3267
RWT 8209	12	109	327	1198	109	0	0	0	1742	1525
SW 3178	7	0	0	2287	545	436	436	871	4574	2287
SW 3314	9	218	327	1851	218	436	436	653	4138	2178
SW 3416	18	0	109	218	109	545	0	1198	2178	327
SW 3418	19	0	0	0	109	327	0	1851	2287	0
Vanessa	10	218	109	1960	545	327	109	327	3594	2069
Average	--	189	258	1588	287	304	212	545	3382	1846
<b>LSD(0.05)</b>	--	<b>385</b>	<b>483</b>	<b>1257</b>	<b>435</b>	<b>609</b>	<b>456</b>	<b>761</b>	<b>1852</b>	<b>1441</b>
										<b>1.8</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 35. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in second harvest by various weight classes (per acre). Kinston, N.C., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							<b>Mrkt<sup>3</sup></b>
	<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	
ACX 3514	0	0	21	4	4	21	50	21
Bibo	28	28	40	4	0	0	0	68
Bobbie	0	3	33	15	9	15	24	36
Cheyenne	0	0	40	10	0	10	40	40
HMX 6917	0	0	50	22	15	7	7	50
Leopard	5	3	65	3	11	8	5	68
Little Deuce Coupe	0	13	83	0	3	0	0	97
Mielhart	0	6	58	16	16	0	3	65
NUN 3072	0	0	13	19	13	19	35	13
Petite Perfection	14	6	63	6	6	6	0	69
Petite Treat	7	10	28	7	24	7	17	38
Precious Petite	20	22	59	0	0	0	0	80
Rosasweet	9	21	70	0	0	0	0	91
RWT 8209	6	19	69	6	0	0	0	88
SW 3178	0	0	50	12	10	10	19	50
SW 3314	5	8	45	5	11	11	16	53
SW 3416	0	5	10	5	25	0	55	15
SW 3418	0	0	0	5	14	0	81	0
Vanessa	6	3	55	15	9	3	9	58
Average	5	8	45	8	9	6	19	52

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 36. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in third harvest by various weight classes (per acre) plus average fruit size<sup>1</sup>. Kinston, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit Size Category</b>							<b>Total Mkt<sup>3</sup></b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>		
ACX 3514	9	109	327	1307	436	0	327	1307	3812	1634
Bibo	2	436	980	2831	327	0	109	0	4683	3812
Bobbie	7	109	545	1198	545	109	545	1742	4792	1742
Cheyenne	17	0	0	545	109	436	0	1416	2505	545
HMX 6917	10	0	327	871	762	762	545	762	4029	1198
Leopard	12	109	218	762	218	653	327	1307	3594	980
Little Deuce Coupe	3	0	436	2287	436	545	109	327	4138	2723
Mielhart	6	109	109	1742	1307	762	327	545	4901	1851
NUN 3072	19	109	0	327	327	109	109	2178	3158	327
Petite Perfection	13	0	0	980	762	436	218	545	2940	980
Petite Treat	11	0	436	762	327	0	436	1525	3485	1198
Precious Petite	4	0	545	1960	436	109	0	0	3049	2505
Rosasweet	5	218	327	2069	109	327	327	980	4356	2396
RWT 8209	1	653	980	2940	762	218	218	109	5881	3920
SW 3178	16	0	0	653	545	218	871	762	3049	653
SW 3314	14	218	109	653	327	436	545	653	2940	762
SW 3416	15	218	109	545	218	0	0	1742	2831	653
SW 3418	18	0	0	545	218	0	109	2396	3267	545
Vanessa	8	109	218	1525	1198	762	436	1416	5663	1742
Average	--	126	298	1290	493	310	292	1037	3846	1588
<b>LSD(0.05)</b>	--	<b>306</b>	<b>624</b>	<b>1161</b>	<b>656</b>	<b>664</b>	<b>522</b>	<b>1340</b>	<b>1905</b>	<b>1389</b>
										<b>3.1</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 37. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in third harvest by various weight classes (per acre). Clayton, N.C., 2007.**

Cultivar	Percentages <sup>1</sup> (%) by Fruit Size Category							<u>Mrkt<sup>3</sup></u>
	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	
ACX 3514	3	9	34	11	0	9	34	43
Bibo	9	21	60	7	0	2	0	81
Bobbie	2	11	25	11	2	11	36	36
Cheyenne	0	0	22	4	17	0	57	22
HMX 6917	0	8	22	19	19	14	19	30
Leopard	3	6	21	6	18	9	36	27
Little Deuce Coupe	0	11	55	11	13	3	8	66
Mielhart	2	2	36	27	16	7	11	38
NUN 3072	3	0	10	10	3	3	69	10
Petite Perfection	0	0	33	26	15	7	19	33
Petite Treat	0	13	22	9	0	13	44	34
Precious Petite	0	18	64	14	4	0	0	82
Rosasweet	5	8	48	3	8	8	23	55
RWT 8209	11	17	50	13	4	4	2	67
SW 3178	0	0	21	18	7	29	25	21
SW 3314	7	4	22	11	15	19	22	26
SW 3416	8	4	19	8	0	0	62	23
SW 3418	0	0	17	7	0	3	73	17
Vanessa	2	4	27	21	13	8	25	31
Average	3	7	32	12	8	8	30	39

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 38. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in fourth harvest by various weight classes (per acre) plus average fruit size<sup>1</sup>. Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit Size Category</b>								<b>Total Mkt<sup>3</sup></b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Total</b>		
ACX 3514	10	0	218	1634	436	762	545	762	4356	1851	7.6
Bibo	11	871	762	980	109	0	0	0	2723	1742	4.0
Bobbie	15	0	109	980	109	436	218	436	2287	1089	7.9
Cheyenne	18	0	0	871	327	327	218	545	2287	871	8.4
HMX 6917	9	545	653	1634	218	327	109	327	3812	2287	5.2
Leopard	8	109	436	2069	327	327	218	871	4356	2505	6.5
Little Deuce Coupe	14	327	109	1525	109	0	109	0	2178	1634	5.2
Mielhart	1	109	871	2831	762	109	0	218	4901	3703	5.9
NUN 3072	5	109	327	2287	327	653	327	109	4138	2614	6.1
Petite Perfection	3	436	1089	2178	436	762	545	109	5554	3267	5.7
Petite Treat	12	218	762	980	436	218	109	327	3049	1742	5.6
Precious Petite	4	545	762	2178	327	0	0	0	3812	2940	4.7
Rosasweet	6	980	545	2069	218	0	0	0	3812	2614	4.3
RWT 8209	2	0	545	2940	109	327	218	0	4138	3485	5.5
SW 3178	17	218	218	762	327	109	218	109	1960	980	6.3
SW 3314	13	436	327	1307	0	109	109	545	2831	1634	6.1
SW 3416	16	327	109	980	436	0	436	653	2940	1089	7.4
SW 3418	19	0	109	436	436	109	0	762	1851	545	8.8
Vanessa	7	0	545	1960	327	545	218	218	3812	2505	6.1
Average	--	275	447	1611	304	269	189	315	3410	2058	6
<b>LSD(0.05)</b>	--	<b>628</b>	<b>644</b>	<b>1205</b>	<b>550</b>	<b>576</b>	<b>438</b>	<b>626</b>	<b>1762</b>	<b>1392</b>	<b>2.0</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 39. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in fourth harvest by various weight classes (per acre). Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							<b>Mrkt<sup>3</sup></b>
	<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	
ACX 3514	0	5	38	10	18	13	18	43
Bibo	32	28	36	4	0	0	0	64
Bobbie	0	5	43	5	19	10	19	48
Cheyenne	0	0	38	14	14	10	24	38
HMX 6917	14	17	43	6	9	3	9	60
Leopard	3	10	48	8	8	5	20	58
Little Deuce Coupe	15	5	70	5	0	5	0	75
Mielhart	2	18	58	16	2	0	4	76
NUN 3072	3	8	55	8	16	8	3	63
Petite Perfection	8	20	39	8	14	10	2	59
Petite Treat	7	25	32	14	7	4	11	57
Precious Petite	14	20	57	9	0	0	0	77
Rosasweet	26	14	54	6	0	0	0	69
RWT 8209	0	13	71	3	8	5	0	84
SW 3178	11	11	39	17	6	11	6	50
SW 3314	15	12	46	0	4	4	19	58
SW 3416	11	4	33	15	0	15	22	37
SW 3418	0	6	24	24	6	0	41	29
Vanessa	0	14	51	9	14	6	6	66
Average	8	12	46	9	8	6	11	58

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 40. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in **fifth** harvest by various weight classes (per acre) plus average fruit size<sup>1</sup>. Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit Size Category</b>								<b>Total Mkt<sup>3</sup></b>	<b>Avg. Wt. (lb)</b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Total</b>		
ACX 3514	7	0	762	3158	218	545	653	436	5772	3920	6.3
Bibo	19	545	545	762	0	0	0	0	1851	1307	4.1
Bobbie	6	218	1198	2831	218	218	218	218	5118	4029	5.2
Cheyenne	16	0	545	2069	545	109	327	109	3703	2614	6.2
HMX 6917	4	327	1198	3485	545	0	436	0	5990	4683	5.2
Leopard	9	545	762	2940	218	0	0	0	4465	3703	4.9
Little Deuce Coupe	8	762	1742	2178	0	109	109	0	4901	3920	4.3
Mielhart	2	218	1525	3594	109	218	0	109	5772	5118	4.7
NUN 3072	18	109	218	1634	109	327	0	109	2505	1851	6.1
Petite Perfection	5	436	1634	2940	109	218	0	0	5336	4574	4.5
Petite Treat	15	871	653	2178	109	109	218	109	4247	2831	5.0
Precious Petite	3	653	1198	3485	218	0	0	0	5554	4683	4.2
Rosasweet	14	1634	2396	545	0	0	0	0	4574	2940	3.3
RWT 8209	10	653	1416	1960	109	0	0	0	4138	3376	4.1
SW 3178	1	871	1851	4029	109	0	327	0	7187	5881	4.7
SW 3314	12	218	980	2178	109	327	327	762	4901	3158	5.8
SW 3416	13	327	762	2396	436	109	109	218	4356	3158	5.5
SW 3418	11	109	436	2831	871	109	0	653	5009	3267	6.3
Vanessa	17	653	545	2069	871	218	0	0	4356	2614	5.2
Average	--	481	1072	2487	258	138	143	143	4723	3559	5
<b>LSD(0.05)</b>	--	<b>863</b>	<b>949</b>	<b>2181</b>	<b>598</b>	<b>294</b>	<b>445</b>	<b>600</b>	<b>3052</b>	<b>2514</b>	<b>1.3</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 41. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in fifth harvest by various weight classes (per acre). Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							
	<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Mrkt<sup>3</sup></b>
ACX 3514	0	13	55	4	9	11	8	68
Bibo	29	29	41	0	0	0	0	71
Bobbie	4	23	55	4	4	4	4	79
Cheyenne	0	15	56	15	3	9	3	71
HMX 6917	5	20	58	9	0	7	0	78
Leopard	12	17	66	5	0	0	0	83
Little Deuce Coupe	16	36	44	0	2	2	0	80
Mielhart	4	26	62	2	4	0	2	89
NUN 3072	4	9	65	4	13	0	4	74
Petite Perfection	8	31	55	2	4	0	0	86
Petite Treat	21	15	51	3	3	5	3	67
Precious Petite	12	22	63	4	0	0	0	84
Rosasweet	36	52	12	0	0	0	0	64
RWT 8209	16	34	47	3	0	0	0	82
SW 3178	12	26	56	2	0	5	0	82
SW 3314	4	20	44	2	7	7	16	64
SW 3416	8	18	55	10	3	3	5	72
SW 3418	2	9	57	17	2	0	13	65
Vanessa	15	13	47	20	5	0	0	60
Average	11	22	52	6	3	3	3	75

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 42. Triploid mini watermelon** hybrid cultivar trial. Cumulative **number**, ( x 100), of fruit harvested over 5 harvests by various weight classes (per acre) plus average fruit size<sup>1</sup>.

**Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>2</sup></b>	<b>Fruit Size Category</b>							<b>Total</b>	<b>Mkt<sup>3</sup></b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>		
ACX 3514	13	1	14	75	15	21	26	48	200	89
Bibo	6	47	61	74	5	0	1	0	188	135
Bobbie	14	3	21	68	19	13	16	36	175	88
Cheyenne	16	0	5	51	14	12	12	30	125	57
HMX 6917	8	9	24	94	30	19	14	14	204	118
Leopard	10	10	16	94	12	15	9	25	181	110
Little Deuce Coupe	7	11	30	102	10	8	3	3	168	133
Mielhart	5	4	27	117	27	17	4	10	207	144
NUN 3072	18	3	5	49	15	16	11	36	136	54
Petite Perfection	3	16	33	119	19	16	10	7	219	151
Petite Treat	15	14	22	58	15	15	13	27	164	80
Precious Petite	1	29	46	124	10	1	0	0	210	170
Rosasweet	4	37	49	99	3	3	3	10	205	148
RWT 8209	2	17	40	82	11	5	4	1	203	163
SW 3178	9	11	22	93	20	11	20	20	195	114
SW 3314	12	13	19	81	13	17	15	28	186	99
SW 3416	17	9	11	46	14	9	5	54	148	57
SW 3418	19	1	5	38	21	9	2	64	140	44
Vanessa	11	11	16	91	36	22	871	21	206	108
Average	- -									
<b>LSD(0.05)</b>	- -	<b>14</b>	<b>16</b>	<b>27</b>	<b>13</b>	<b>11</b>	<b>10</b>	<b>23</b>	<b>36</b>	<b>34</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-4 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.

<sup>2</sup> Ranked according to total marketable number.

<sup>3</sup> Includes fruit 3 to 7 lbs.

**Table 43. Triploid mini watermelon hybrid cultivar trial. Cumulative Percentage harvested by number within each fruit size category. Clayton, NC, 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							
	<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Mkt<sup>2</sup></b>
ACX 3514	1	7	38	7	10	13	24	45
Bibo	24	32	41	3	0	0	0	73
Bobbie	2	11	39	11	8	9	21	50
Cheyenne	0	4	43	11	10	10	23	47
HMX 6917	4	12	46	15	9	7	7	58
Leopard	6	10	53	6	8	5	13	62
Little Deuce Coupe	7	18	61	6	5	2	2	79
Mielhart	2	13	56	13	8	2	5	70
NUN 3072	2	4	37	12	12	9	25	41
Petite Perfection	8	15	54	8	7	4	3	69
Petite Treat	9	13	35	9	9	8	17	48
Precious Petite	14	22	59	4	1	0	0	81
Rosasweet	18	24	48	2	2	2	6	72
RWT 8209	9	20	61	6	3	2	0	81
SW 3178	5	11	47	11	6	10	10	58
SW 3314	7	10	44	7	9	8	14	54
SW 3416	6	7	31	10	6	3	36	39
SW 3418	1	4	27	15	6	2	45	31
Vanessa	5	8	44	17	11	5	10	51
Average	7	13	45	9	7	5	14	58
<b>LSD</b>	<b>7</b>	<b>8</b>	<b>13</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>12</b>	<b>15</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

<sup>2</sup>Includes fruit 3 to 7 lbs.

**Table 44. Triploid mini watermelon hybrid cultivar trial. Percent harvested by number by harvest within total and total marketable categories. Clayton, NC, 2007.**

Cultivar	Percentages <sup>1</sup> (%) by harvest for Total and Total Marketable Fruit									
	Harvest 1		Harvest 2		Harvest 3		Harvest 4		Harvest 5	
	Total	Mrkt.	Total	Mrkt.	Total	Mrkt.	Total	Mrkt.	Total	Mrkt.
ACX 3514	17	11	13	6	19	18	22	21	29	44
Bibo	36	35	14	14	25	28	14	13	10	10
Bobbie	10	7	20	15	27	20	13	12	29	46
Cheyenne	15	13	17	15	20	10	18	15	30	46
HMX 6917	7	9	25	21	20	10	19	19	29	40
Leopard	9	10	22	25	20	9	24	23	25	34
Little Deuce Coupe	14	14	19	24	25	20	13	12	29	30
Mielhart	8	11	16	15	24	13	24	26	28	36
NUN 3072	3	4	25	8	23	6	30	48	18	34
Petite Perfection	19	24	17	17	13	6	25	22	24	30
Petite Treat	15	12	19	15	21	15	19	22	26	36
Precious Petite	17	17	24	24	15	15	18	17	26	28
Rosasweet	20	24	18	22	21	16	19	18	22	20
RWT 8209	22	25	9	9	29	24	20	21	20	21
SW 3178	14	14	23	20	16	6	10	9	37	51
SW 3314	20	22	22	22	16	8	15	16	26	32
SW 3416	17	8	15	6	19	12	20	19	29	56
SW 3418	12	0	16	0	23	13	13	13	36	75
Vanessa	15	17	17	19	28	16	19	23	21	24
Average	15	15	19	16	21	14	19	19	26	36

<sup>1</sup> Fruit number (per cultivar and harvest) divided by the total number and total marketable number (per cultivar) times 100.

**Table 45. Mini Triploid** watermelon hybrid cultivar trial. Cumulative **weight** (x 100) of fruit harvested over 5 harvests by various weight classes (per acre). **Clayton, N.C., 2007.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit Size Category (lb)</b>								<b>Total Mkt<sup>2</sup></b>	<b>Avg. Wt</b>
		<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Total</b>		
ACX 3514	13	2	50	417	115	177	250	638	165	467	8.2
Bibo	9	13	211	372	40	0	10	0	746	583	4.0
Bobbie	14	8	70	365	141	110	155	455	130	436	7.5
Cheyenne	16	0	19	286	109	102	115	409	104	306	8.2
HMX 6917	7	17	83	505	230	159	134	166	129	588	6.3
Leopard	10	25	55	525	91	129	82	300	121	580	6.5
Little Deuce Coupe	6	29	106	558	74	64	32	34	896	663	5.3
Mielhart	4	12	96	615	205	147	41	112	123	711	5.9
NUN 3072	17	8	20	272	116	141	103	433	109	291	8.0
Petite Perfection	3	39	113	628	138	140	93	70	122	740	5.6
Petite Treat	15	37	76	312	114	129	124	357	115	388	7.0
Precious Petite	1	73	158	640	72	9	0	0	951	798	4.5
Rosasweet	5	94	167	500	24	27	31	129	972	666	4.8
RWT 8209	2	5	140	635	81	45	41	12	1000	775	4.9
SW 3178	11	27	76	497	147	93	185	231	126	573	6.5
SW 3314	12	32	66	453	98	148	146	345	129	518	6.8
SW 3416	18	23	40	245	106	73	54	761	130	284	8.7
SW 3418	19	3	18	208	156	73	21	885	136	226	9.7
Vanessa	8	25	56	528	270	187	83	245	139	584	6.8
Average	--	25	85	450	122	103	89	294	334	536	6.6
<b>LSD(0.05)</b>	--	<b>35</b>	<b>56</b>	<b>142</b>	<b>96</b>	<b>94</b>	<b>95</b>	<b>303</b>	<b>310</b>	<b>161</b>	<b>1.2</b>

<sup>1</sup> Ranked according to total marketable number.

<sup>2</sup> Includes fruit 3 to 7 lbs.

**Table 46. Triploid mini watermelon hybrid cultivar trial. Cumulative Percentage harvested by weight within each fruit size category. Clayton, NC, 2007.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							
	<b>&lt;3</b>	<b>3-3.9</b>	<b>4.0-7.0</b>	<b>7.1-8.0</b>	<b>8.1-9.0</b>	<b>9.1-10</b>	<b>&gt;10</b>	<b>Mkt<sup>2</sup></b>
ACX 3514	0	3	26	7	11	15	38	29
Bibo	15	28	51	5	0	1	0	79
Bobbie	1	5	29	11	8	12	35	34
Cheyenne	0	2	30	10	11	12	36	32
HMX 6917	1	7	40	18	12	10	12	47
Leopard	3	5	47	7	11	7	21	52
Little Deuce Coupe	3	12	62	8	7	4	4	74
Mielhart	1	8	51	16	12	3	9	59
NUN 3072	1	2	26	11	12	10	38	28
Petite Perfection	3	10	52	12	11	7	6	61
Petite Treat	3	7	28	10	12	11	30	35
Precious Petite	8	17	67	7	1	0	0	84
Rosasweet	10	17	52	2	3	3	12	69
RWT 8209	5	14	64	8	4	4	1	78
SW 3178	2	6	40	12	8	14	18	46
SW 3314	3	6	39	8	12	10	20	45
SW 3416	2	3	20	8	6	4	57	23
SW 3418	0	1	16	12	5	2	64	17
Vanessa	2	4	38	19	13	6	17	42
Average	3	8	41	10	8	7	22	49
<b>LSD</b>	<b>4</b>	<b>6</b>	<b>14</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>17</b>	<b>16</b>

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.

<sup>2</sup>Includes fruit 3 to 7 lbs.

**Table 47. Mini Triploid watermelon hybrid cultivar trial. Interior fruit quality. Clayton, NC, 2007.<sup>1</sup>**

<b>Cultivar</b>	<b>Rind Thickness</b>	<b>Soluble Solids<sup>3</sup></b>	<b>Flesh Color<sup>4</sup></b>	<b>Average Fruit Pressure<sup>5</sup></b>	<b>Fruit LD</b>	<b>Hollow Heart Ratings<sup>6</sup></b>				
	(mm) <sup>2</sup>	Solids <sup>3</sup>	Color <sup>4</sup>	Average Fruit Pressure <sup>5</sup>	Fruit LD	<b>HH0</b>	<b>HH1</b>	<b>HH2</b>	<b>HH3</b>	<b>HH4</b>
ACX 3514	15.3	11.4	3.2	2.4	1.0	65	0	15	20	0
Bibo	8.5	11.7	4.1	2.8	1.2	95	5	0	0	0
Bobbie	14.7	12.4	3.6	2.5	1.0	95	5	0	0	0
Cheyenne	14.4	11.5	3.4	2.3	1.0	95	5	0	0	0
HMX 6917	17.0	11.8	4.3	3.0	1.0	100	0	0	0	0
Leopard	14.6	11.4	3.8	2.7	1.2	100	0	0	0	0
Little Deuce Coupe	9.3	11.4	3.9	2.5	1.1	100	0	0	0	0
Mielhart	13.4	11.1	4.1	3.1	1.1	95	5	0	0	0
NUN 3072	16.5	12.3	4.0	2.5	1.0	95	5	0	0	0
Petite Perfection	7.9	11.5	4.0	2.7	1.1	100	0	0	0	0
Petite Treat	14.0	11.2	3.6	2.5	1.1	85	0	15	0	0
Precious Petite	7.9	11.1	3.8	2.5	1.1	100	0	0	0	0
Rosasweet	7.9	11.5	3.9	3.0	1.1	100	0	0	0	0
RWT 8209	8.1	11.4	3.8	3.0	1.1	100	0	0	0	0
SW 3178	12.9	11.1	3.6	2.2	1.0	70	5	15	5	5
SW 3314	14.2	11.3	3.2	1.9	1.1	55	10	5	15	15
SW 3416	13.8	11.6	1.0	2.2	1.0	90	5	0	5	0
SW 3418	16.1	11.8	3.5	2.4	1.0	95	5	0	0	0
Vanessa	13.9	11.1	3.7	2.3	1.0	95	5	0	0	0
Average	12.6	11.5	3.6	2.6	1.1	91	3	3	2	1
<b>LSD (0.05)</b>	<b>2.2</b>	<b>0.7</b>	<b>0.5</b>	<b>0.4</b>	<b>0.1</b>	<b>20</b>	<b>11</b>	<b>12</b>	<b>10</b>	<b>5</b>

<sup>1</sup> Most measurements were obtained from fruits in harvest 1.

<sup>2</sup> 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).

<sup>3</sup> SS = Soluble solids indicates sweetness, average of 5 melons per replication (15 total).

<sup>4</sup> Rating: 1 = yellow, 2=light red/dark pink, 3=red, 4=bright red, 5=blood red.

<sup>5</sup> Fruit pressure was taken by a 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.

<sup>6</sup> **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 separations; (Non marketable fruit).

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