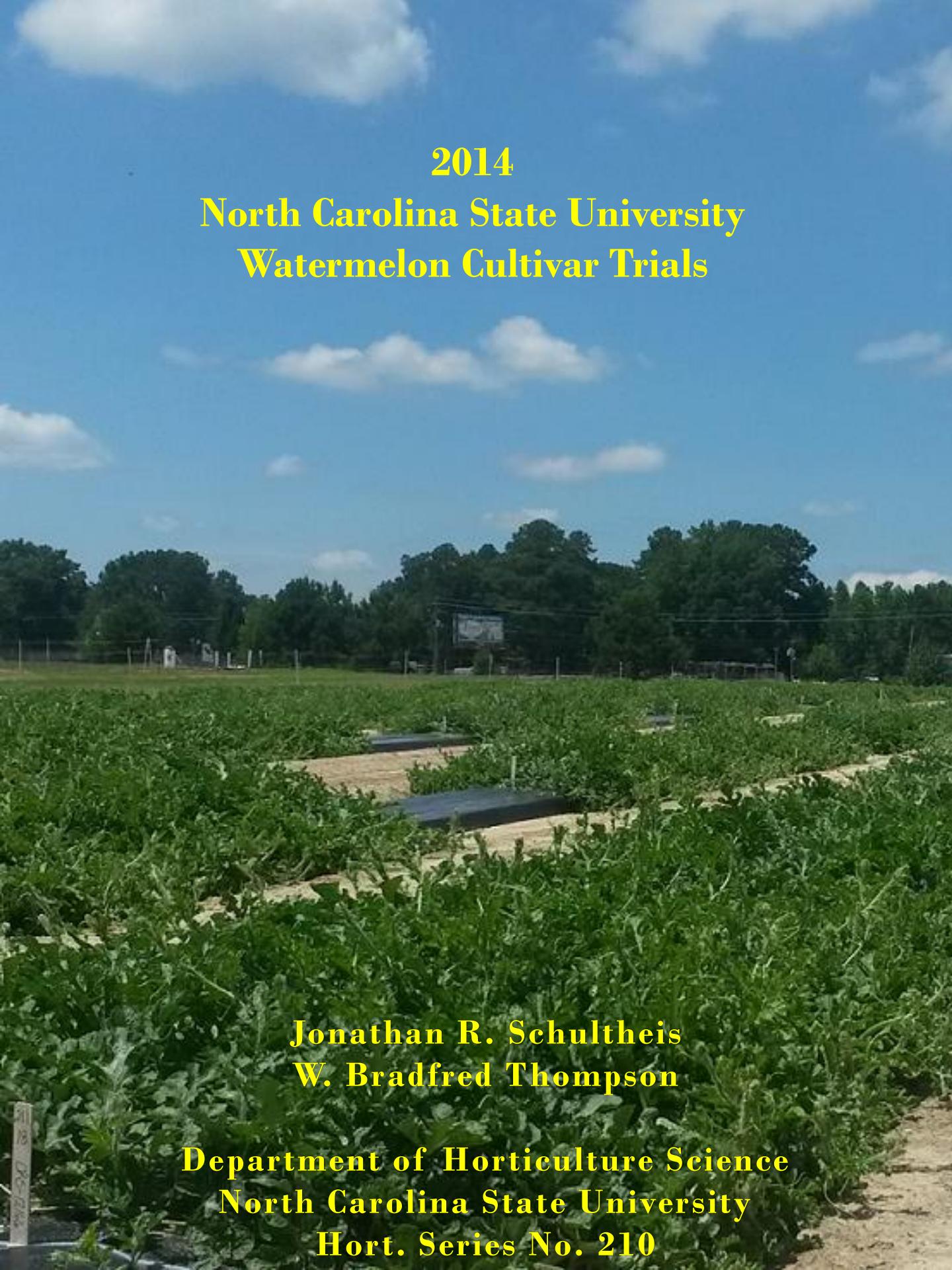


**2014**  
**North Carolina State University**  
**Watermelon Cultivar Trials**



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**Department of Horticulture Science  
North Carolina State University  
Hort. Series No. 210**

**2014**  
**North Carolina**  
**Watermelon**  
**Cultivar Trials**

**Hort. Series # 210**

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**General Cultural Practices**

The watermelon trials were grown on black plastic mulch and fertigated with drip tube. Pesticides used on all plots were chemicals labeled for that crop, (2014 North Carolina Agricultural Chemicals Manual, (<http://ipm.ncsu.edu/Agchem/agchem.html>)).

**Acknowledgments**

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**Disclaimer**

This publication presents data from the cultivar evaluation trials conducted during 2014. 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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## **Standard and Mini Triploid Watermelon Cultural Practices for 2014 Cultivar Trials, Central Crops Research Station, Clayton, NC**

### **Introduction**

Watermelon continues to be an important crop grown in North Carolina as the state was ranked seventh in production among U.S. states nationally in 2012 representing 6.4% of the nation's watermelon production. Approximately 8,300 acres valued at nearly \$34.9 million were produced and harvested in North Carolina in 2012. 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 and citrulline 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 standard size watermelon types annually since 1989. We initiated the evaluation of mini triploid watermelon types in 2003. 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 Poly growing transplant trays (Hummert Int.; Earth City, MO). Seeds of standard size and mini triploid cultigens were sown on 15 April, 2014. The planting medium used was Fine Germinating Mix, a commercial soilless mix (Carolina Greenhouse and Soil Company; Kinston, NC). Approximately 3 weeks after seeding, the plants were placed in a "hardening" greenhouse and hardened before being established in the field. Standard size triploids and mini triploids were established in the field on 19 May 2014. Fertilizer, 30 lb/acre N and 80 lb/acre K<sub>2</sub>O, was incorporated into the beds on 29 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). Fumigant (Telone C-17) was broadcast and incorporated into the soil on 7 November 2013 at 9.0 gallons/acre prior to the start of the growing season. Herbicides, Curbit at 4 pints/acre, Gramaxone at 3 pints/acre, and Prefar at 5 quarts/acre, were applied between the plastic beds for weed control on 29 May. Spacing between row middles was 10 feet for all watermelon types and in-row spacing was 2.5 feet for standard size triploid watermelons and 1 foot for mini triploid watermelons. Plot size for standard triploid size watermelons was one row, 10 plants per plot, 25 feet long with 10 feet alleys between plots. Plot size for the mini triploid watermelons was one row, 10 plants per plot, 10 feet long with 10 feet alleys between plots. At time of transplant, a starter solution was applied using 20-20-20 (0.5 lb/50 gallons water) and 5 oz. Coragen 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. For the 2014 growing season, 'SP-6' was the sole pollinizer source. Pollinizers were interplanted between plants 1 and 2; 5 and 6; and 9 and 10. 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. A total of 61.2 lb/acre N and 122.3 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 91.2, 0, and 202.3 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 4 June and on the following dates (11, 18, and 25 June; 2, 9, 16, and 28 July; and 6 and 14 August). The following products were alternated during consecutive spray applications to avoid insect resistance: Asana, Fan Fare, Perm Up, and Sevin. Fungicides were similarly applied throughout

the growing season at weekly intervals. The fungicide program that was implemented consisted of the following fungicide products which were alternated during consecutive spray applications to avoid disease resistance: Bravo, Kocide, Pristine, Previcur Flex, Penncozeb, and Ranman; and applied on the following dates; 11, 18, and 25 June; 2, 9, 16, and 28 July; and 6 and 14 August.

There were four harvests for the standard size triploid watermelon study and 5 harvests for the mini triploid watermelon study. The first harvest for the standard size triploid test was 24 July. Subsequent harvests were 30 July; 13 and 20 August. The first harvest for the mini triploid trial was 15 July, and subsequent harvests were 22 and 29 July; and 5 and 13 August. Each fruit was harvested when ripe, weighed and categorized statistically by size category. For the triploid watermelon test, fruits were placed in the following categories; < 8.9 lb, 9.0-13.5 lb, 13.6-17.5 lb, 17.6-21.4 lb, and 21.5 + lb. Fruits were considered marketable if they weighed at least 9 pounds. Fruits are often commercially marketed by number or count per bin with 9-13.5 lb. fruit termed 60-count, 13.6-17.5 lb. fruit termed 45-count, 17.6-21.4 lb. fruit termed 36-count, and fruit 21.5 lb. or larger termed 30-count. We use these weight designations to categorize the fruits harvested in this study. The most popular standard triploid fruit size has typically ranged from 12-16 lb. For the mini triploid trial, fruits were placed into the following categories; < 3lb, 3.0-3.9 lb, 4-7 lb, 7.1 – 8.0 lb, 8.1 – 9.0 lb, 9.1 – 10 lb, and > 10 lb. Fruits were considered marketable if they were within the 3 – 7 lb 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. Hard seed in triploid fruit was determined according to USDA standards. Fruits were cut longitudinally in half, then these halves were cut laterally. The number of hard seeds exposed on the cut surface were counted and recorded. This is the second year we have rated for hard seeds according to USDA standards. 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 and are an average value taken for five fruit per plot or 20 fruit per cultigen. Most of the quality measurements were taken at the first or second harvests.

**2014 Trial Note:** The 2014 growing season was optimal for watermelon production. Vine growth and fruit set were excellent as was fruit quality among a majority of the cultivars evaluated. Unlike 2013, there was no crow damage observed within the trial which we attribute to vigorous vine growth that allowed the fruit to size and mature under the cover of the foliage. Overall, we would rate the 2014 trial as one of the best watermelon trials resulting in high yields and fruit quality.

### **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. Triploid Red-Flesh Watermelon Seed Sources and Descriptions; 2014.**

<u>Entry No.</u>	<u>Cultigen</u>	<u>Company</u>	<u>Description</u>
1	13-13077	K&B Development	Indistinct, medium width, medium to dark green stripes on light green background; long round to blocky shape, sizes are mainly medium to large
2	7197 HQ	Nunhems	Indistinct, medium width, medium to dark green stripes on light green background; smaller fruit are mainly short and round, larger fruit are short blocky to blocky, fruit size ranges from small to large
3	ACX 6177	Nunhems	Indistinct, medium wide, dark green stripes on light green background, mainly long round shape, fruit size is mainly medium.
4	Affirmed	Sakata	Indistinct, medium wide, dark green stripes on light green background; shape is mainly short blocky to blocky large fruit; medium to large fruit size
5	Bold Ruler	Sakata	Indistinct, medium wide, medium to dark green stripes on light green background; fruit are mainly short blocky oval, medium to large size
6	Captivation	Syngenta	Indistinct, medium to wide, dark green stripes on light green background, mainly short blocky and blocky fruit, fruit size mainly medium to large, excellent rind/flesh deliniation, one fruit in seven with internal hard core in one rep.
7	Charismatic	Sakata	Indistinct, medium wide dark green stripes on medium green background, uniform, round fruit; uniformly small to medium size fruit; indistinct rind flesh delineation, fairly thick rind
8	Crunchy Red	Harris Moran	Indistinct, medium wide, medium green stripes on a light green background; large fruit are elongated, small fruit round; mainly large size fruit; indistinct rind flesh delineation with many very thick areas of rind around fruit.
9	Cut Above	Clifton Seed	Indistinct, medium wide, medium green stripes on a light green background; uniform blocky fruit, mainly medium to large sized fruit with good rind flesh delineation.
10	Declaration	Nunhems	Indistinct, medium width, medium to dark green stripes on light green background, very uniform oval blocky fruit; very uniform medium to large sized fruit; cookie cutter shape fruit; indistinct rind flesh delineation.

**Table 1. Cont.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
11	Exclamation	Syngenta	Indistinct, medium width, dark green stripes on light green background, mainly oval fruit; size varies from small to large; good rind flesh delineation; minimal rind thickness.
12	Fascination	Syngenta	Indistinct, medium width, dark green stripes on light green background; oval and blocky shapes; size mainly medium to large; very dark red flesh; distinct rind flesh interface,
13	Harvest Moon	K&B Development	Solid dark green with round yellow spots ("stars") and an occasionally larger yellow area (generally circular in shape, "moon"); very dark protruding narrow ribbing on fruit when ripe; uniform fruit shape which are round to long round; mainly medium size; variations in rind thickness around fruit; very thick rind; indistinct rind flesh interface.
14	Kingman	Sakata	Indistinct, medium wide, medium to dark green stripes on light green background; fairly consistent shape, short blocky to blocky; medium to large fruit size; lots of hollow heart, some severe; indistinct rind flesh interface.
15	Liberty	Nunhems	Indistinct, medium wide, medium to dark green stripes on light green background; mainly oval to short blocky fruit; some smaller fruit that are more round; mainly medium to large fruit size; thick indistinct rind flesh interface.
16	Maxima	Origene Seeds	Indistinct, medium wide, very dark green stripes on light to medium green background (background is darker green, giving rind a darker green color); mainly long round fruit; mainly medium size to medium large size fruit; excellent red color
17	Melody	Syngenta	Indistinct, medium wide, very dark green stripes on medium green background, (melon rind is darker than most and very attractive); fruit are mainly round or slightly longer than round and shape is extremely uniform; size was uniform and was small to medium; excellent rind flesh delineation; relatively thin rind.
18	ORS-12166	Origene Seeds	Indistinct; wide, very dark stripes, medium green background (one of the darker-rinded entries in 2014 trial); oval shaped; mainly medium sized fruits; late maturity; excellent red flesh color.
19	Premont	Clifton Seed	Indistinct, medium width, medium to dark green stripes on light green background; large fruit are mostly oval/ or blocky while small fruit are mainly round; large dichotomy in size, small to large size

**Table 1. Cont.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
20	Secretariat	Sakata	Indistinct, medium width, medium to dark green stripes on light green background; blocky fruit with uniform shape; uniformly medium to large size fruit; indistinct rind flesh delineation; good red flesh color.
21	SV0051WA	Seminis	Indistinct, medium to wide, dark green stripes on light green background; large fruit are mainly blocky, fruit size variable from medium to very large; a few small round fruit; thick rind, indistinct rind flesh delineation.
22	SV2757WA	Seminis	Indistinct, medium width, medium to dark green stripes on light green background; mainly short blocky/oval shape, a few small round fruit; fruit primarily medium size; excellent rind flesh delineation; excellent deep red flesh color; relatively thin rinds.
23	SV7018WA	Seminis	Indistinct, narrow to medium wide, dark green stripes on light to medium green background; mainly short blocky/oval shape; fairly uniform size, fruit sizes were medium to large.
24	SV8298WA	Seminis	Indistinct, medium to wide, medium to dark green stripes on light green background; uniformly blocky fruit; uniformly large-sized fruit; indistinct rind flesh delineation.
25	SVR8039-0241	Seminis	Indistinct, medium to wide, dark green stripes on light to medium green background; short blocky or oval fruit; variable size; small to medium fruit; fairly distinct rind flesh interface.
26	Sweet Polly	Siegers	Fairly distinct; medium to wide, very dark green stripes on light green background; mainly blocky fruit with uniformity in shape; a few oval, medium to large size fruit; distinct rind flesh interface.
27	Traveler	Harris Moran	Indistinct, medium width, very dark green stripes on medium to dark green background; fairly uniform oval fruit; mainly small size with some medium size fruit; distinct rind flesh delineation; good red flesh color.
28	Tri-X-313	Syngenta	Indistinct, medium wide, medium to dark green stripes on light green background; mainly oval or short blocky fruit; mainly medium to larger fruit size; indistinct rind flesh delineation; thick rind.
29	Troubadour	Harris Moran	Indistinct, medium width, very dark green stripes on medium to dark green background; uniform oval fruit; uniform small to medium size; indistinct rind flesh delineation.
30	UG 711	United Genetics	Indistinct, medium width, very dark green stripes on medium to dark green background; uniform round fruit; small to medium size.

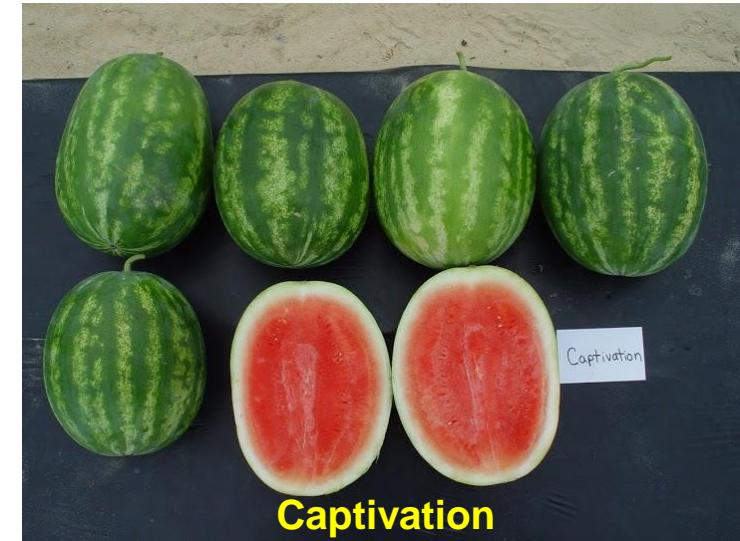
# 2014 Standard Triploid Watermelon



# 2014 Standard Triploid Watermelon



**Bold Ruler**



**Captivation**

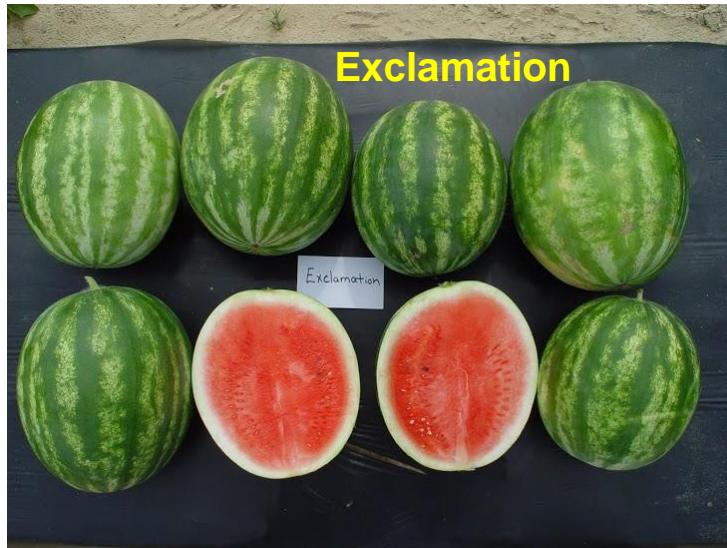


**Charismatic**



**Crunchy Red**

# 2014 Standard Triploid Watermelon



# 2014 Standard Triploid Watermelon



# 2014 Standard Triploid Watermelon



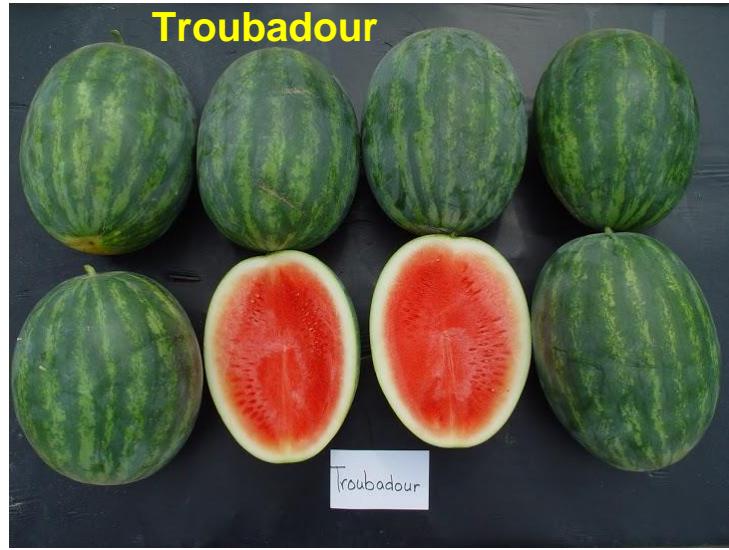
# 2014 Standard Triploid Watermelon



# 2014 Standard Triploid Watermelon



2014 Standard Triploid Watermelon



**Table 2.** Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit weight, (cwt.), per acre by various weight classes including average fruit size<sup>1</sup> for harvest 1. Clayton, N.C. 2014.**

<b>Cultivar</b>	<b>Company</b>	<b>Cwt. (x100) by size</b>					<b>Total / Acre</b>	<b>Mkt / Acre<sup>2</sup></b>
		<b>&lt;9.0</b>	<b>9.0 - 13.5</b>	<b>13.6 - 17.5</b>	<b>17.6 - 21.4</b>	<b>&gt; 21.5</b>		
13-13077	K&B Dev.	7	39	6	8	10	71	64
7197HQ	Nunhems	4	29	33	9	0	74	70
ACX6177	Nunhems	0	29	21	0	0	51	51
Affirmed	Sakata	11	55	58	33	0	157	146
Bold Ruler	Sakata	3	70	55	0	0	128	125
Captivation	Syngenta	3	47	38	8	19	115	112
Charismatic	Sakata	4	84	58	25	9	180	176
Crunchy Red	Harris Moran	0	0	7	0	10	16	16
Cut Above	Clifton	3	14	6	0	0	23	20
Declaration	Nunhems	13	26	34	8	0	81	68
Exclamation	Syngenta	4	19	19	16	0	58	54
Fascination	Syngenta	0	15	21	0	0	36	36
Harvest Moon	K&B Dev.	7	37	60	0	0	104	97
Kingman	Sakata	6	37	35	16	0	94	87
Liberty	Nunhems	9	9	27	0	0	46	36
Maxima	Origene	0	10	8	0	0	18	18
Melody	Syngenta	6	65	67	8	0	146	140
ORS-12166	Origene	0	6	7	0	0	13	13
Premont	Clifton	0	29	15	0	0	44	44
Secretariat	Sakata	6	69	98	16	0	190	184
SV0051WA	Seminis	0	27	34	8	0	69	69
SV2757WA	Seminis	7	40	25	0	0	73	65
SV7018WA	Seminis	4	21	40	16	0	81	77
SV8298WA	Seminis	0	11	20	34	0	65	65
SV0241WA	Seminis	0	60	25	0	0	86	86
Sweet Polly	Siegers	6	10	8	25	0	48	42
Traveler	Harris Moran	11	65	7	0	0	83	72
Tri-X-313	Syngenta	0	0	0	0	0	0	0
Troubadour	Harris Moran	6	46	13	0	0	65	59
UG 711	United Genetics	13	83	50	8	0	153	140
<b>Average</b>		4	35	30	8	2	79	74
<b>LSD (0.05)</b>		<b>15</b>	<b>37</b>	<b>41</b>	<b>37</b>	<b>43</b>	<b>67</b>	<b>65</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Includes fruit  $\geq$  9 pounds.

**Table 3.** Triploid Red-Flesh watermelon hybrid cultivar trial. Bin boxes per acre by various various weight classes including average fruit size<sup>1</sup> for harvest 1. Clayton, N.C. 2014.

<b>Cultivar</b>	<b>Bin boxes / acre by size grade<sup>2</sup></b>					<b>Mkt / Acre<sup>3</sup></b>	<b>% Total Yield by Count</b>				<b>Avg lb./fruit</b>
	<b>&lt;9.0</b>	<b>13.5</b>	<b>17.5</b>	<b>21.4</b>	<b>&gt; 21.5</b>		<b>60</b>	<b>45</b>	<b>36</b>	<b>30</b>	
13-13077	0.9	5.6	0.9	1.2	1.4	9.1	14	12	9	56	12.3
7197HQ	0.6	4.1	4.7	1.2	0.0	10.0	0	12	45	39	13.9
ACX6177	0.0	4.2	3.0	0.0	0.0	7.3	0	0	42	58	13.4
Affirmed	1.5	7.8	8.3	4.7	0.0	20.9	0	21	37	35	13.5
Bold Ruler	0.5	10.0	7.8	0.0	0.0	17.8	0	0	43	55	12.9
Captivation	0.5	6.7	5.4	1.1	2.7	15.9	16	7	33	41	14.0
Charismatic	0.6	11.9	8.3	3.5	1.3	25.1	5	14	32	47	13.7
Crunchy Red	0.0	0.0	1.0	0.0	1.4	2.3	58	0	42	0	18.2
Cut Above	0.4	2.0	0.9	0.0	0.0	2.9	0	0	27	60	11.9
Declaration	1.9	3.7	4.8	1.2	0.0	9.7	0	10	42	32	13.2
Exclamation	0.5	2.7	2.7	2.3	0.0	7.7	0	28	33	33	13.1
Fascination	0.0	2.2	3.0	0.0	0.0	5.2	0	0	58	42	14.3
Harvest Moon	1.1	5.2	8.6	0.0	0.0	13.8	0	0	58	35	13.3
Kingman	0.9	5.3	4.9	2.3	0.0	12.5	0	17	37	39	13.4
Bold Ruler	1.4	1.3	3.9	0.0	0.0	5.2	0	0	60	19	11.7
Maxima	0.0	1.5	1.1	0.0	0.0	2.6	0	0	42	57	12.9
Melody	0.8	9.3	9.6	1.2	0.0	20.0	0	6	46	44	12.8
ORS-12166	0.0	0.8	1.1	0.0	0.0	1.9	0	0	56	44	15.5
Premont	0.0	4.2	2.1	0.0	0.0	6.3	0	0	33	67	13.2
Secretariat	0.9	9.9	14.0	2.3	0.0	26.2	0	9	52	37	13.5
SV0051WA	0.0	3.9	4.8	1.1	0.0	9.9	0	11	49	40	14.6
SV2757WA	1.1	5.7	3.6	0.0	0.0	9.3	0	0	35	55	11.9
SV7018WA	0.5	3.0	5.7	2.3	0.0	11.0	0	20	49	26	15.2
SV8298WA	0.0	1.6	2.9	4.8	0.0	9.3	0	52	31	17	16.6
SV0241WA	0.0	8.6	3.6	0.0	0.0	12.2	0	0	30	70	12.2
Sweet Polly	0.8	1.4	1.1	3.5	0.0	6.0	0	52	16	21	14.2
Traveler	1.6	9.4	0.9	0.0	0.0	10.3	0	0	8	78	11.0
Tri-X-313	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0.0
Troubadour	0.8	6.5	1.9	0.0	0.0	8.4	0	0	21	70	11.7
UG 711	1.9	11.8	7.1	1.1	0.0	20.0	0	5	32	54	11.7
<b>Average</b>	0.6	5.0	4.3	1.1	0.2	10.6	3	9	37	42	13.0
<b>LSD (0.05)</b>	<b>2.1</b>	<b>5.3</b>	<b>5.8</b>	<b>5.3</b>	<b>6.2</b>	<b>9.3</b>	--	--	--	--	--

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Values were determined based upon 700 lb bin box weight.

<sup>3</sup> Includes fruit ≥ 9 pounds.

**Table 4. Triploid Red-Flesh** watermelon hybrid cultivar trial. **Fruit number** for harvest 1 by various weight classes (per acre) including fruit number per plant. **Clayton, N.C., 2014.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category</b>					<b>Total</b>	<b>Total</b>	<b>Fruit No./</b>
		<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>	<b>Number</b>			
13-13077	15	87	349	44	44	44	566	479	0.3
7197HQ	12	44	261	218	44	0	566	523	0.3
ACX6177	19	0	261	131	0	0	392	392	0.2
Affirmed	4	131	479	392	174	0	1176	1045	0.7
Bold Ruler	6	44	610	349	0	0	1002	958	0.6
Captivation	7	44	436	261	44	44	828	784	0.5
Charismatic	2	44	697	392	131	44	1307	1263	0.8
Crunchy Red	29	0	0	44	0	44	87	87	0.1
Cut Above	26	44	131	44	0	0	218	174	0.1
Declaration	15	174	218	218	44	0	653	479	0.4
Exclamation	19	44	174	131	87	0	436	392	0.3
Fascination	23	0	131	131	0	0	261	261	0.2
Harvest Moon	8	87	305	292	0	0	784	697	0.5
Kingman	10	87	305	218	87	0	697	610	0.4
Liberty	23	131	87	174	0	0	392	261	0.2
Maxima	27	0	87	44	0	0	131	131	0.1
Melody	4	87	566	436	44	0	1133	1045	0.7
ORS-12166	28	0	44	44	0	0	87	87	0.1
Premont	22	0	261	87	0	0	349	349	0.2
Secretariat	1	87	610	653	87	0	1438	1350	0.8
SV0051WA	15	0	218	218	44	0	479	479	0.3
SV2757WA	12	87	349	174	0	0	610	523	0.4
SV7018WA	12	44	174	261	87	0	566	523	0.3
SV8298WA	19	0	87	131	174	0	392	392	0.2
SV0241WA	8	0	523	174	0	0	697	697	0.4
Sweet Polly	23	87	87	44	131	0	349	261	0.2
Traveler	10	174	566	44	0	0	784	610	0.5
Tri-X-313	30	0	0	0	0	0	0	0	0.0
Troubadour	15	87	392	87	0	0	566	479	0.3
UG 711	3	174	741	349	44	0	1307	1133	0.8
Average	--	60	305	193	42	6	608	549	0.3
LSD(0.05)	--	197	333	261	195	147	508	467	0.3

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

<sup>2</sup> Includes fruit ≥ 9 pounds.

**Table 5.** Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit weight, (cwt.), per acre by various weight classes including average fruit size<sup>1</sup> for harvest 2. Clayton, N.C. 2014.**

<b>Cultivar</b>	<b>Company</b>	<b>Cwt. (x100) by size</b>					<b>Total / Acre</b>	<b>Mkt / Acre<sup>2</sup></b>
		<b>&lt;9.0</b>	<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>		
13-13077	K&B Dev.	4	53	79	33	0	169	165
7197HQ	Nunhems	2	57	74	27	0	160	158
ACX6177	Nunhems	0	40	48	58	0	147	147
Affirmed	Sakata	7	37	53	48	9	154	147
Bold Ruler	Sakata	7	31	42	41	0	121	114
Captivation	Syngenta	6	84	82	25	30	227	221
Charismatic	Sakata	2	28	81	24	11	146	144
Crunchy Red	Harris Moran	4	35	83	41	0	163	159
Cut Above	Clifton	7	43	78	32	0	161	153
Declaration	Nunhems	0	37	54	41	0	132	132
Exclamation	Syngenta	3	63	102	60	40	267	264
Fascination	Syngenta	0	16	53	84	0	153	153
Harvest Moon	K&B Dev.	0	61	59	41	0	162	162
Kingman	Sakata	0	43	81	40	10	175	175
Liberty	Nunhems	12	57	75	57	9	210	198
Maxima	Origene	0	8	15	34	10	67	67
Melody	Syngenta	0	59	91	8	10	168	168
ORS-12166	Origene	0	17	20	51	10	98	98
Premont	Clifton	13	64	76	26	19	197	185
Secretariat	Sakata	10	32	80	42	9	174	163
SV0051WA	Seminis	11	37	60	69	43	221	210
SV2757WA	Seminis	20	65	48	16	0	149	129
SV7018WA	Seminis	4	48	75	67	10	204	201
SV8298WA	Seminis	4	25	43	75	52	198	195
SV0241WA	Seminis	18	106	80	8	0	212	194
Sweet Polly	Siegers	6	77	79	66	0	228	222
Traveler	Harris Moran	5	90	96	8	0	199	194
Tri-X-313	Syngenta	7	54	85	67	31	245	237
Troubadour	Harris Moran	0	71	52	17	0	140	140
UG 711	United Genetics	4	62	90	0	0	156	152
<b>Average</b>		<b>5</b>	<b>50</b>	<b>68</b>	<b>40</b>	<b>10</b>	<b>173</b>	<b>168</b>
<b>LSD (0.05)</b>		<b>18</b>	<b>61</b>	<b>66</b>	<b>49</b>	<b>47</b>	<b>92</b>	<b>92</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Includes fruit  $\geq$  9 pounds.

**Table 6.** Triploid Red-Flesh watermelon hybrid cultivar trial. Bin boxes per acre by various various weight classes including average fruit size<sup>1</sup> for harvest 2. Clayton, N.C. 2014.

<b>Cultivar</b>	<b>Bin boxes / acre by size grade<sup>2</sup></b>					<b>Mkt / Acre<sup>3</sup></b>	<b>% Total Yield by Count</b>				<b>Avg lb./fruit</b>
	<b>&lt;9.0</b>	<b>13.5</b>	<b>17.5</b>	<b>21.4</b>	<b>&gt; 21.5</b>		<b>60</b>	<b>45</b>	<b>36</b>	<b>30</b>	
13-13077	0.5	7.6	11.3	4.7	0.0	23.6	0	19	47	32	13.8
7197HQ	0.3	8.2	10.5	3.8	0.0	22.5	0	17	46	36	14.6
ACX6177	0.0	5.8	6.9	8.3	0.0	21.0	0	40	33	28	15.3
Affirmed	1.0	5.2	7.5	6.8	1.4	21.0	6	31	34	24	14.7
Bold Ruler	1.0	4.5	5.9	5.8	0.0	16.2	0	34	34	26	14.2
Captivation	0.9	12.1	11.7	3.6	4.3	31.5	13	11	36	37	14.1
Charismatic	0.3	4.0	11.6	3.4	1.5	20.5	7	16	56	19	15.0
Crunchy Red	0.6	5.0	11.8	5.9	0.0	22.7	0	25	51	22	14.5
Cut Above	1.1	6.2	11.1	4.6	0.0	21.9	0	20	48	27	13.9
Declaration	0.0	5.3	7.7	5.9	0.0	18.8	0	31	41	28	15.8
Exclamation	0.4	8.9	14.5	8.5	5.8	37.7	15	22	38	23	15.4
Fascination	0.0	2.3	7.5	12.0	0.0	21.9	0	55	34	10	16.5
Harvest Moon	0.0	8.8	8.5	5.9	0.0	23.1	0	25	37	38	14.4
Kingman	0.0	6.2	11.6	5.8	1.4	25.0	6	23	47	25	15.5
Liberty	1.8	8.1	10.7	8.1	1.3	28.3	4	27	36	27	14.8
Maxima	0.0	1.1	2.1	4.9	1.5	9.6	16	51	22	12	17.0
Melody	0.0	8.4	13.1	1.1	1.4	24.1	6	5	54	35	13.6
ORS-12166	0.0	2.4	2.9	7.3	1.4	14.0	10	52	21	17	16.7
Premont	1.8	9.1	10.9	3.7	2.7	26.4	10	13	39	32	14.3
Secretariat	1.5	4.6	11.5	5.9	1.4	23.3	5	24	46	18	14.5
SV0051WA	1.6	5.3	8.6	9.8	6.2	30.0	20	31	27	17	16.6
SV2757WA	2.9	9.3	6.8	2.3	0.0	18.4	0	11	32	44	12.1
SV7018WA	0.5	6.9	10.7	9.6	1.5	28.7	5	33	37	24	15.6
SV8298WA	0.5	3.6	6.2	10.7	7.4	27.8	26	38	22	13	17.7
SV0241WA	2.6	15.1	11.4	1.2	0.0	27.7	0	4	38	50	12.6
Sweet Polly	0.9	11.0	11.3	9.4	0.0	31.7	0	29	35	34	14.0
Traveler	0.7	12.8	13.8	1.1	0.0	27.7	0	4	48	45	13.1
Tri-X-313	1.1	7.7	12.2	9.6	4.4	33.9	13	27	35	22	15.5
Troubadour	0.0	10.2	7.4	2.4	0.0	20.0	0	12	37	51	13.6
UG 711	0.5	8.9	12.9	0.0	0.0	21.7	0	0	58	40	13.0
<b>Average</b>	0.7	7.2	9.7	5.7	1.4	24.0	5	24	39	28	14.7
<b>LSD (0.05)</b>	<b>2.5</b>	<b>8.8</b>	<b>9.4</b>	<b>7.0</b>	<b>6.7</b>	<b>13.2</b>	--	--	--	--	--

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Values were determined based upon 700 lb bin box weight.

<sup>3</sup> Includes fruit ≥ 9 pounds.

**Table 7. Triploid Red-Flesh** watermelon hybrid cultivar trial. **Fruit number** for harvest 2 by various weight classes (per acre) including fruit number per plant. **Clayton, N.C., 2014.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category</b>					<b>Total</b>	<b>Total</b>	<b>Fruit No./</b>
		<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>	<b>Number</b>			
13-13077	12	44	479	523	174	0	1220	1176	0.7
7197HQ	16	44	479	479	131	0	1133	1089	0.7
ACX6177	22	0	349	305	305	0	958	958	0.6
Affirmed	22	87	305	349	261	44	1045	958	0.6
Bold Ruler	28	87	261	261	218	0	828	741	0.5
Captivation	2	87	741	523	131	131	1612	1525	0.9
Charismatic	25	44	218	523	131	44	958	915	0.6
Crunchy Red	18	44	305	523	218	0	1089	1045	0.6
Cut Above	18	87	349	523	174	0	1133	1045	0.7
Declaration	27	0	305	349	218	0	871	981	0.5
Exclamation	1	44	523	653	305	174	1699	1655	1.0
Fascination	25	0	131	349	436	0	915	915	0.5
Harvest Moon	13	0	523	392	218	0	1133	1133	0.7
Kingman	13	0	349	523	218	44	1133	1133	0.7
Liberty	7	174	479	479	305	44	1481	1307	0.9
Maxima	30	0	87	87	174	44	392	392	0.2
Melody	10	0	523	610	44	44	1220	1220	0.7
ORS-12166	29	0	131	131	261	44	566	566	0.3
Premont	8	174	566	479	131	87	1438	1263	0.8
Secretariat	18	131	261	523	218	44	1176	1045	0.7
SV0051WA	10	131	305	392	349	174	1350	1220	0.8
SV2757WA	22	261	566	305	87	0	1220	958	0.7
SV7018WA	8	44	392	479	349	44	1307	1263	0.8
SV8298WA	16	44	218	261	392	218	1133	1089	0.7
SV0241WA	5	218	915	523	44	0	1699	1481	1.0
Sweet Polly	2	87	653	523	349	0	1612	1525	0.9
Traveler	6	87	784	610	44	0	1525	1438	0.9
Tri-X-313	2	87	479	566	349	131	1612	1525	0.9
Troubadour	18	0	610	349	87	0	1045	1045	0.6
UG 711	13	44	566	566	0	0	1176	1133	0.7
Average	--	68	428	439	211	44	1189	1125	0.7
LSD(0.05)	--	224	523	420	255	201	673	659	0.4

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

<sup>2</sup> Includes fruit ≥ 9 pounds.

**Table 8.** Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit weight, (cwt.), per acre by various weight classes including average fruit size<sup>1</sup> for harvest 3. Clayton, N.C. 2014.**

<b>Cultivar</b>	<b>Company</b>	<b>Cwt. (x100) by size</b>					<b>Total / Acre</b>	<b>Mkt / Acre<sup>2</sup></b>
		<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>			
<b>&lt;9.0</b>	<b>13.5</b>	<b>17.5</b>	<b>21.4</b>	<b>21.5</b>				
13-13077	K&B Dev.	14	108	118	0	50	348	334
7197HQ	Nunhems	5	97	141	100	56	398	393
ACX6177	Nunhems	29	71	132	91	63	387	357
Affirmed	Sakata	15	78	115	68	0	276	261
Bold Ruler	Sakata	27	71	117	58	0	273	246
Captivation	Syngenta	20	142	86	33	0	282	262
Charismatic	Sakata	15	102	88	82	20	306	291
Crunchy Red	Harris Moran	26	62	171	143	40	441	415
Cut Above	Clifton	42	103	158	15	20	338	296
Declaration	Nunhems	27	108	91	75	20	320	293
Exclamation	Syngenta	15	114	99	49	39	316	301
Fascination	Syngenta	34	111	121	65	51	382	348
Harvest Moon	K&B Dev.	25	82	108	58	10	281	257
Kingman	Sakata	24	81	118	17	20	260	236
Liberty	Nunhems	20	103	117	82	20	342	322
Maxima	Origene	13	88	169	156	111	538	525
Melody	Syngenta	21	120	99	58	9	308	287
ORS-12166	Origene	26	170	135	107	53	491	465
Premont	Clifton	29	143	143	107	11	434	404
Secretariat	Sakata	10	41	68	50	9	178	168
SV0051WA	Seminis	4	58	101	49	42	254	250
SV2757WA	Seminis	41	145	139	57	0	382	340
SV7018WA	Seminis	22	124	102	57	9	315	293
SV8298WA	Seminis	26	42	87	69	125	350	324
SV0241WA	Seminis	43	146	94	25	0	307	265
Sweet Polly	Siegers	13	123	101	50	30	316	303
Traveler	Harris Moran	22	70	86	52	0	230	208
Tri-X-313	Syngenta	23	82	135	90	20	351	327
Troubadour	Harris Moran	23	130	104	49	0	307	283
UG 711	United Genetics	31	82	85	33	0	230	199
<b>Average</b>		23	100	114	65	28	331	308
<b>LSD (0.05)</b>		<b>24</b>	<b>80</b>	<b>93</b>	<b>78</b>	<b>71</b>	<b>188</b>	<b>185</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Includes fruit  $\geq$  9 pounds.

**Table 9.** Triploid Red-Flesh watermelon hybrid cultivar trial. Bin boxes per acre by various various weight classes including average fruit size<sup>1</sup> for harvest 3. Clayton, N.C. 2014.

<b>Cultivar</b>	<b>Bin boxes / acre by size grade<sup>2</sup></b>					<b>Mkt / Acre<sup>3</sup></b>	<b>% Total Yield by Count</b>				<b>Avg lb./fruit</b>
	<b>&lt;9.0</b>	<b>13.5</b>	<b>17.5</b>	<b>21.4</b>	<b>&gt; 21.5</b>		<b>60</b>	<b>45</b>	<b>36</b>	<b>30</b>	
13-13077	2.0	15.4	16.9	0.0	7.2	47.7	14	0	34	31	14.0
7197HQ	0.7	13.9	20.1	14.3	7.9	56.2	14	25	35	24	15.2
ACX6177	4.2	10.1	18.9	12.9	9.1	51.0	16	23	34	18	14.6
Affirmed	2.1	11.2	16.5	9.6	0.0	37.3	0	24	42	28	13.5
Bold Ruler	3.8	10.2	16.7	8.2	0.0	35.2	0	21	43	26	13.1
Captivation	2.9	20.3	12.3	4.8	0.0	37.4	0	12	31	50	12.7
Charismatic	2.2	14.6	12.5	11.7	2.8	41.6	6	27	29	33	13.5
Crunchy Red	3.7	8.8	24.5	20.4	5.7	59.3	9	32	39	14	15.2
Cut Above	6.0	14.7	22.5	2.2	2.8	42.2	6	5	47	31	12.8
Declaration	3.9	15.4	13.0	10.7	2.8	41.9	6	23	28	34	13.6
Exclamation	2.2	16.3	14.1	7.1	5.6	43.0	12	16	31	36	14.4
Fascination	4.9	15.9	17.3	9.3	7.3	49.7	13	17	32	29	13.9
Harvest Moon	3.5	11.7	15.4	8.2	1.4	36.7	3	20	38	29	13.3
Kingman	3.4	11.6	16.9	2.5	2.8	33.7	8	7	45	31	13.5
Liberty	2.9	14.7	16.8	11.7	2.9	46.0	6	24	34	30	13.4
Maxima	1.9	12.6	24.1	22.4	15.9	75.0	21	29	31	16	16.1
Melody	3.0	17.2	14.2	8.3	1.4	41.0	3	19	32	39	12.8
ORS-12166	3.8	24.3	19.3	15.3	7.6	66.4	11	22	27	35	14.5
Premont	4.2	20.5	20.4	15.3	1.5	57.8	2	25	33	33	13.8
Secretariat	1.5	5.9	9.7	7.1	1.4	24.0	5	28	38	23	13.9
SV0051WA	0.6	8.3	14.5	7.0	6.0	35.7	16	19	40	23	15.6
SV2757WA	5.9	20.6	19.8	8.1	0.0	48.6	0	15	36	38	12.6
SV7018WA	3.2	17.7	14.6	8.2	1.4	41.8	3	18	32	39	13.3
SV8298WA	3.7	6.0	12.5	9.9	17.9	46.3	36	20	25	12	16.2
SV0241WA	6.1	20.8	13.4	3.6	0.0	37.8	0	8	31	47	11.0
Sweet Polly	1.8	17.6	14.4	7.2	4.2	43.4	9	16	32	39	13.9
Traveler	3.2	10.0	12.3	7.4	0.0	29.7	0	23	38	30	12.9
Tri-X-313	3.3	11.8	19.2	12.8	2.9	46.7	6	26	38	24	14.3
Troubadour	3.3	18.6	14.8	7.0	0.0	40.5	0	16	34	43	12.8
UG 711	4.5	11.6	12.1	4.7	0.0	28.5	0	14	37	35	11.5
<b>Average</b>	3.3	14.3	16.3	9.3	3.9	44.1	8	19	35	31	13.7
<b>LSD (0.05)</b>	<b>3.4</b>	<b>11.5</b>	<b>13.3</b>	<b>11.2</b>	<b>10.2</b>	<b>26.5</b>	--	--	--	--	--

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Values were determined based upon 700 lb bin box weight.

<sup>3</sup> Includes fruit ≥ 9 pounds.

**Table 10. Triploid Red-Flesh** watermelon hybrid cultivar trial. **Fruit number** for harvest 3 by various weight classes (per acre) including fruit number per plant. **Clayton, N.C., 2014.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category</b>					<b>Total</b>	<b>Total</b>	<b>Fruit No./</b>
		<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>	<b>Number</b>			
13-13077	8	218	915	784	305	218	2439	2222	1.4
7197HQ	5	87	871	915	523	218	2614	2527	1.5
ACX6177	8	392	610	871	479	261	2614	2222	1.5
Affirmed	22	218	697	741	349	0	2004	1786	1.2
Bold Ruler	25	392	653	741	305	0	2091	1699	1.2
Captivation	20	261	1220	566	174	0	2222	1960	1.3
Charismatic	17	218	958	566	436	87	2265	2047	1.3
Crunchy Red	4	349	566	1089	741	174	2919	2570	1.7
Cut Above	12	566	915	1002	87	87	2657	2091	1.5
Declaration	20	349	915	566	392	87	2309	1960	1.3
Exclamation	12	218	1002	653	261	174	2309	2091	1.3
Fascination	7	479	915	784	349	218	2744	2265	1.6
Harvest Moon	22	349	741	697	305	44	2134	1786	1.2
Kingman	26	305	697	784	87	87	1960	1655	1.1
Liberty	8	305	915	784	436	87	2527	2222	1.5
Maxima	1	174	784	1089	828	436	3311	3136	1.9
Melody	17	305	1045	653	305	44	2352	2047	1.4
ORS-12166	2	392	1438	871	566	218	3485	3093	2.0
Premont	3	392	1263	915	566	44	3180	2788	1.8
Secretariat	30	174	349	436	261	44	1263	1089	0.7
SV0051WA	27	44	479	653	261	174	1612	1568	0.9
SV2757WA	6	566	1263	915	305	0	3049	2483	1.8
SV7018WA	12	305	1089	653	305	44	2396	2091	1.4
SV8298WA	22	349	349	566	349	523	2134	1786	1.2
SV0241WA	17	697	1307	610	131	0	2744	2047	1.6
Sweet Polly	12	174	1045	653	261	131	2265	2091	1.3
Traveler	29	305	610	566	261	0	1742	1438	1.0
Tri-X-313	11	305	697	871	479	87	2439	2134	1.4
Troubadour	12	305	1133	697	261	0	2396	2091	1.4
UG 711	28	436	741	566	174	0	1917	1481	1.1
Average	--	321	873	742	351	116	2403	2082	1.4
LSD(0.05)	--	333	703	603	411	297	1276	1205	0.7

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

<sup>2</sup> Includes fruit ≥ 9 pounds.

**Table 11.** Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit weight, (cwt.), per acre by various weight classes including average fruit size<sup>1</sup> for harvest 4. Clayton, N.C. 2014.**

<b>Cultivar</b>	<b>Company</b>	<b>Cwt. (x100) by size</b>					<b>Total / Acre</b>	<b>Mkt / Acre<sup>2</sup></b>
		<b>&lt;9.0</b>	<b>9.0 - 13.5</b>	<b>13.6 - 17.5</b>	<b>17.6 - 21.4</b>	<b>&gt; 21.5</b>		
13-13077	K&B Dev.	34	20	20	8	0	81	48
7197HQ	Nunhems	14	32	12	9	10	77	63
ACX6177	Nunhems	19	34	0	17	11	80	62
Affirmed	Sakata	25	48	0	8	0	81	56
Bold Ruler	Sakata	23	29	7	9	0	68	45
Captivation	Syngenta	28	19	19	0	0	65	37
Charismatic	Sakata	9	25	46	0	0	80	71
Crunchy Red	Harris Moran	11	31	28	16	0	86	76
Cut Above	Clifton	30	30	13	0	0	73	43
Declaration	Nunhems	15	37	14	0	0	67	52
Exclamation	Syngenta	12	25	20	0	0	57	45
Fascination	Syngenta	27	23	21	8	0	79	52
Harvest Moon	K&B Dev.	30	19	26	16	0	91	61
Kingman	Sakata	20	30	0	8	0	59	39
Liberty	Nunhems	17	45	20	0	0	82	65
Maxima	Origene	20	42	39	9	0	111	91
Melody	Syngenta	17	59	33	8	0	117	100
ORS-12166	Origene	20	39	58	16	11	145	125
Premont	Clifton	25	27	8	32	9	101	76
Secretariat	Sakata	18	17	14	0	0	48	31
SV0051WA	Seminis	23	21	28	0	10	81	58
SV2757WA	Seminis	18	18	0	0	0	36	18
SV7018WA	Seminis	22	65	19	17	0	124	101
SV8298WA	Seminis	2	19	35	24	0	81	78
SV0241WA	Seminis	26	20	0	0	0	46	20
Sweet Polly	Siegers	6	28	0	0	0	35	28
Traveler	Harris Moran	30	22	0	0	10	62	32
Tri-X-313	Syngenta	9	10	14	0	10	43	34
Troubadour	Harris Moran	30	23	12	0	0	65	35
UG 711	United Genetics	12	31	13	0	39	95	83
<b>Average</b>		20	30	17	7	4	77	57
<b>LSD (0.05)</b>		<b>25</b>	<b>38</b>	<b>41</b>	<b>34</b>	<b>48</b>	<b>75</b>	<b>69</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

<sup>2</sup> Includes fruit  $\geq$  9 pounds.

**Table 12.** Triploid Red-Flesh watermelon hybrid cultivar trial. Bin boxes per acre by various various weight classes including average fruit size<sup>1</sup> for harvest 4. Clayton, N.C. 2014.

<b>Cultivar</b>	<b>Bin boxes / acre by size grade<sup>2</sup></b>					<b>Mkt / Acre<sup>3</sup></b>	<b>% Total Yield by Count</b>				<b>Avg lb./fruit</b>
	<b>&lt;9.0</b>	<b>13.5</b>	<b>17.5</b>	<b>21.4</b>	<b>&gt; 21.5</b>		<b>60</b>	<b>45</b>	<b>36</b>	<b>30</b>	
13-13077	4.8	2.8	2.8	1.2	0.0	6.8	0	10	24	24	9.9
7197HQ	2.1	4.6	1.8	1.3	1.4	9.0	13	11	16	41	9.8
ACX6177	2.7	4.8	0.0	2.4	1.6	8.8	14	21	0	42	11.2
Affirmed	3.6	6.9	0.0	1.1	0.0	8.0	0	10	0	59	10.3
Bold Ruler	3.3	4.2	1.0	1.2	0.0	6.4	0	13	10	43	10.3
Captivation	4.0	2.7	2.6	0.0	0.0	5.3	0	0	29	29	8.5
Charismatic	1.3	3.6	6.6	0.0	0.0	10.2	0	0	57	31	11.6
Crunchy Red	1.5	4.5	4.0	2.3	0.0	10.8	0	19	32	36	11.5
Cut Above	4.3	4.2	1.9	0.0	0.0	6.1	0	0	18	41	8.8
Declaration	2.2	5.3	2.0	0.0	0.0	7.4	0	0	21	56	10.2
Exclamation	1.7	3.6	2.8	0.0	0.0	6.4	0	0	34	44	10.1
Fascination	3.8	3.2	3.1	1.1	0.0	7.4	0	10	27	29	10.9
Harvest Moon	4.2	2.8	3.8	2.2	0.0	8.8	0	17	29	21	10.6
Kingman	2.9	4.3	0.0	1.2	0.0	5.5	0	14	0	52	9.0
Liberty	2.4	6.4	2.9	0.0	0.0	9.3	0	0	25	55	10.5
Maxima	2.8	6.0	5.6	1.3	0.0	13.0	0	8	36	38	11.4
Melody	2.4	8.4	4.7	1.1	0.0	14.3	0	7	28	50	10.8
ORS-12166	2.8	5.6	8.3	2.3	1.6	17.8	8	11	40	27	12.9
Premont	3.6	3.8	1.1	4.6	1.3	10.8	9	32	8	26	13.4
Secretariat	2.5	2.5	1.9	0.0	0.0	4.4	0	0	28	35	8.6
SV0051WA	3.3	2.9	4.0	0.0	1.4	8.3	12	0	34	25	10.8
SV2757WA	2.6	2.5	0.0	0.0	0.0	2.5	0	0	0	50	8.5
SV7018WA	3.2	9.3	2.7	2.4	0.0	14.5	0	14	15	53	10.0
SV8298WA	0.4	2.7	5.1	3.4	0.0	11.2	0	29	44	24	14.1
SV0241WA	3.6	2.9	0.0	0.0	0.0	2.9	0	0	0	45	9.9
Sweet Polly	0.9	4.1	0.0	0.0	0.0	4.1	0	0	0	82	10.0
Traveler	4.3	3.2	0.0	0.0	1.4	4.6	16	0	0	36	9.2
Tri-X-313	1.3	1.5	1.9	0.0	1.4	4.8	22	0	32	24	11.1
Troubadour	4.2	3.3	1.8	0.0	0.0	5.0	0	0	19	35	9.0
UG 711	1.7	4.4	1.9	0.0	5.6	11.9	41	0	14	32	13.3
<b>Average</b>	2.8	4.2	2.5	1.0	0.5	8.2	5	8	21	40	10.5
<b>LSD (0.05)</b>	<b>3.6</b>	<b>5.4</b>	<b>5.9</b>	<b>4.8</b>	<b>6.9</b>	<b>9.8</b>	--	--	--	--	--

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

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

<sup>3</sup> Includes fruit ≥ 9 pounds.

**Table 13. Triploid Red-Flesh** watermelon hybrid cultivar trial. **Fruit number** for harvest 4 by various weight classes (per acre) including fruit number per plant. **Clayton, N.C., 2014.**

<b>Cultivar</b>	<b>Rank<sup>1</sup></b>	<b>Fruit size category</b>						<b>Total</b>	<b>Total</b>	<b>Fruit No./</b>
		<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>	<b>Number</b>	<b>Mkt. No.<sup>2</sup></b>			
13-13077	18	436	174	131	44	0	784	349	0.5	
7197HQ	9	218	305	87	44	44	697	479	0.4	
ACX6177	12	261	305	0	87	44	697	436	0.4	
Affirmed	9	349	436	0	44	0	828	479	0.5	
Bold Ruler	18	305	261	44	44	0	653	349	0.4	
Captivation	23	392	174	131	0	0	697	305	0.4	
Charismatic	7	131	218	305	0	0	653	523	0.4	
Crunchy Red	5	131	305	174	87	0	697	566	0.4	
Cut Above	18	436	261	87	0	0	784	349	0.5	
Declaration	12	218	349	87	0	0	653	436	0.4	
Exclamation	18	174	218	131	0	0	523	349	0.3	
Fascination	16	349	218	131	44	0	741	392	0.4	
Harvest Moon	12	392	174	174	87	0	828	436	0.5	
Kingman	18	305	305	0	44	0	653	349	0.4	
Liberty	5	218	436	131	0	0	784	566	0.5	
Maxima	4	261	392	261	44	0	958	697	0.6	
Melody	3	261	523	218	44	0	1045	784	0.6	
ORS-12166	1	261	349	392	87	44	1133	871	0.7	
Premont	9	349	218	44	174	44	828	479	0.5	
Secretariat	25	261	174	87	0	0	523	261	0.3	
SV0051WA	16	305	174	174	0	44	697	392	0.4	
SV2757WA	29	261	174	0	0	0	436	174	0.3	
SV7018WA	2	305	610	131	87	0	1133	828	0.7	
SV8298WA	7	44	174	218	131	0	566	523	0.3	
SV0241WA	29	349	174	0	0	0	523	174	0.3	
Sweet Polly	25	87	261	0	0	0	349	261	0.2	
Traveler	25	392	218	0	0	44	653	261	0.4	
Tri-X-313	28	131	87	87	0	44	349	218	0.2	
Troubadour	23	392	218	87	0	0	697	305	0.4	
UG 711	12	174	305	87	0	44	610	436	0.4	
Average	--	272	273	113	36	12	706	434	0.4	
<b>LSD(0.05)</b>	--	<b>349</b>	<b>344</b>	<b>271</b>	<b>179</b>	<b>115</b>	<b>635</b>	<b>495</b>	<b>0.4</b>	

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

<sup>2</sup> Includes fruit ≥ 9 pounds.

**Table 14.** Triploid Red-Flesh watermelon hybrid cultivar trial. **Cumulative weight, (cwt.),** per acre of fruit harvested by various weight classes including average fruit size<sup>1</sup>. Clayton, N.C. 2014.

<b>Cultivar</b>	<b>Company</b>	<b>Rank<sup>2</sup></b>	<b>Cwt. (x100) by size</b>					<b>Total / Acre</b>	<b>Mkt / Acre<sup>3</sup></b>
			<b>9.0 -</b>	<b>13.6 -</b>	<b>17.6 -</b>	<b>&gt; 21.5</b>			
13-13077	K&B Dev.	14	58	221	223	107	60	669	611
7197HQ	Nunhems	5	25	215	259	144	65	709	684
ACX6177	Nunhems	13	48	174	202	166	75	665	616
Affirmed	Sakata	15	58	218	226	156	10	668	610
Bold Ruler	Sakata	27	60	202	221	107	0	590	530
Captivation	Syngenta	11	58	292	224	66	49	689	632
Charismatic	Sakata	6	30	239	273	130	40	712	682
Crunchy Red	Harris Moran	8	41	128	289	200	49	707	666
Cut Above	Clifton	29	83	190	255	48	20	594	512
Declaration	Nunhems	25	55	208	193	124	20	600	545
Exclamation	Syngenta	9	34	221	239	125	79	698	664
Fascination	Syngenta	18	61	165	216	157	51	650	590
Harvest Moon	K&B Dev.	20	62	199	253	115	10	638	576
Kingman	Sakata	26	50	191	234	82	30	587	537
Liberty	Nunhems	12	59	213	240	138	30	680	621
Maxima	Origene	2	33	149	231	200	121	734	701
Melody	Syngenta	4	44	303	291	83	19	739	696
ORS-12166	Origene	3	46	232	221	174	74	747	701
Premont	Clifton	1	67	263	242	165	39	776	709
Secretariat	Sakata	24	44	160	259	108	19	590	546
SV0051WA	Seminis	19	38	143	223	126	95	625	587
SV2757WA	Seminis	23	87	267	212	73	0	639	552
SV7018WA	Seminis	7	52	259	236	158	20	724	672
SV8298WA	Seminis	10	32	98	186	201	177	694	662
SV0241WA	Seminis	22	86	332	199	33	0	651	565
Sweet Polly	Siegers	17	31	239	188	141	30	627	596
Traveler	Harris Moran	30	68	247	189	60	10	575	506
Tri-X-313	Syngenta	16	40	147	233	157	61	638	598
Troubadour	Harris Moran	28	59	270	181	66	0	576	517
UG 711	United Genetics	21	60	257	238	41	39	634	574
<b>Average</b>		--	52	215	229	122	43	661	609
<b>LSD (0.05)</b>		--	37	97	103	104	84	167	172

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

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

<sup>3</sup> Includes fruit  $\geq$  9 pounds.

**Table 15.** Triploid Red-Flesh watermelon hybrid cultivar trial. **Bin boxes** per acre by various weight classes including average fruit size<sup>1</sup>. Clayton, N.C. 2014.

<b>Cultivar</b>	<b>Company</b>	<b>Bin boxes/acre</b>						<b>Mkt / Acre<sup>3</sup></b>	<b>% Total Yield by Count</b>				<b>Avg lb./fruit</b>
		<b>9.0-</b>	<b>13.6-</b>	<b>17.6-</b>	<b>&gt; 21.5</b>				<b>60</b>	<b>45</b>	<b>36</b>	<b>30</b>	
13-13077	K&B Dev.	8.3	31.5	31.9	15.2	8.6	87.3		34	34	15	9	13.3
7197HQ	Nunhems	3.6	30.8	37.1	20.6	9.3	97.7		32	37	19	9	14.2
ACX6177	Nunhems	6.9	24.9	28.8	23.7	10.7	88.1		27	32	24	8	14.0
Affirmed	Sakata	8.3	31.1	32.3	22.3	1.4	87.1		33	34	23	2	13.3
Bold Ruler	Sakata	8.6	28.9	31.5	15.3	0.0	75.7		36	37	17	0	12.9
Captivation	Syngenta	8.3	41.8	32.0	9.5	6.9	90.2		42	32	10	7	12.9
Charismatic	Sakata	4.3	34.2	39.0	18.6	5.7	97.4		34	38	18	6	13.7
Crunchy Red	Harris Moran	5.8	18.3	41.2	28.6	7.0	95.1		18	41	28	7	14.8
Cut Above	Clifton	11.8	27.1	36.4	6.8	2.8	73.1		33	42	8	3	12.4
Declaration	Nunhems	7.9	29.7	27.6	17.7	2.8	77.8		35	32	20	4	13.3
Exclamation	Syngenta	4.8	31.5	34.1	17.8	11.4	94.9		32	34	17	11	14.2
Fascination	Syngenta	8.7	23.5	30.9	22.5	7.3	84.2		25	34	24	7	14.0
Harvest Moon	K&B Dev.	8.8	28.5	36.1	16.4	1.4	82.3		31	40	18	2	13.1
Kingman	Sakata	7.1	27.3	33.5	11.7	4.3	76.7		32	41	13	5	13.1
Liberty	Nunhems	8.5	30.5	34.3	19.8	4.2	88.8		32	35	19	4	13.1
Maxima	Origene	4.7	21.3	33.0	28.5	17.4	100.1		22	30	27	16	15.1
Melody	Syngenta	6.2	43.3	41.6	11.8	2.8	99.4		41	40	11	3	12.9
ORS-12166	Origene	6.6	33.1	31.6	24.9	10.6	100.1		30	29	23	11	14.4
Premont	Clifton	9.6	37.6	34.5	23.6	5.6	101.2		34	30	22	5	13.5
Secretariat	Sakata	6.3	22.8	37.0	15.4	2.7	78.0		27	44	18	3	13.4
SV0051WA	Seminis	5.5	20.5	31.9	17.9	13.5	83.9		24	37	20	13	15.1
SV2757WA	Seminis	12.4	38.1	30.3	10.4	0.0	78.9		42	33	11	0	12.0
SV7018WA	Seminis	7.4	36.9	33.7	22.5	2.8	96.0		37	32	21	3	13.4
SV8298WA	Seminis	4.6	14.0	26.6	28.7	25.2	94.6		16	26	28	26	16.3
SV0241WA	Seminis	12.3	47.4	28.4	4.8	0.0	80.7		51	31	5	0	11.5
Sweet Polly	Siegers	4.4	34.1	26.8	20.1	4.2	85.2		39	30	20	4	13.6
Traveler	Harris Moran	9.8	35.3	27.0	8.6	1.4	72.3		45	31	10	2	12.2
Tri-X-313	Syngenta	5.7	21.0	33.3	22.4	8.7	85.4		24	36	24	9	14.6
Troubadour	Harris Moran	8.4	38.6	25.9	9.4	0.0	73.9		46	32	11	0	12.2
UG 711	United Genetics	8.6	36.7	34.0	5.8	5.6	82.1		41	38	6	5	12.6
<b>Average</b>	--	7.5	30.7	32.7	17.4	6.1	86.9		33	35	18	6	13.5
<b>LSD (0.05)</b>	--	<b>5.3</b>	<b>13.9</b>	<b>14.7</b>	<b>15.3</b>	<b>12.0</b>	<b>24.5</b>		<b>15</b>	<b>14</b>	<b>13</b>	<b>11</b>	<b>1.5</b>

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. SP-6 pollinizers were interplanted after triploid plants 1, 5, and 9, (3 plants/plot). Fruit weights for each category are rounded to the nearest whole number.

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

<sup>3</sup> Includes fruit ≥ 9 pounds.

**Table 16. Triploid Red-Flesh** watermelon hybrid cultivar trial. **Fruit number** for cumulative harvests, (4), by various weight classes (per acre) including fruit number per plant.  
**Clayton, N.C., 2014.**

Cultivar	Rank <sup>1</sup>	Fruit size category					Total	Total	Fruit No./Plant
		9.0 -	13.6 -	17.6 -	> 21.5	Number			
13-13077	14	784	1917	1481	566	261	5009	4225	2.9
7197HQ	5	392	1917	1699	741	261	5009	4617	2.9
ACX6177	19	653	1525	1307	871	305	4661	4008	2.7
Affirmed	12	784	1917	1481	828	44	5053	4269	2.9
Bold Ruler	24	828	1786	1394	566	0	4574	3746	2.6
Captivation	7	784	2570	1481	349	174	5358	4574	3.1
Charismatic	3	436	2091	1786	697	174	5184	4748	3.0
Crunchy Red	12	523	1176	1830	1045	218	4792	4269	2.8
Cut Above	29	1133	1655	1655	261	87	4792	3659	2.8
Declaration	24	741	1786	1220	653	87	4487	3746	2.6
Exclamation	8	479	1917	1568	653	349	4966	4487	2.9
Fascination	22	828	1394	1394	828	218	4661	3833	2.7
Harvest Moon	18	828	1742	1655	610	44	4879	4051	2.8
Kingman	24	697	1655	1525	436	131	4443	3746	2.6
Liberty	10	828	1917	1568	741	131	5184	4356	3.0
Maxima	10	436	1350	1481	1045	479	4792	4356	2.8
Melody	1	653	2657	1917	436	87	5750	5097	3.3
ORS-12166	5	653	1960	1438	915	305	5271	4617	3.0
Premont	2	915	2309	1525	871	174	5794	4879	3.3
Secretariat	24	653	1394	1699	566	87	4400	3746	2.5
SV0051WA	29	479	1176	1438	653	392	4138	3659	2.4
SV2757WA	16	1176	2352	1394	392	0	5314	4138	3.1
SV7018WA	4	697	2265	1525	828	87	5401	4705	3.1
SV8298WA	23	436	2919	1307	1045	741	4225	3790	2.4
SV0241WA	9	1263	828	1176	174	0	5663	4400	3.3
Sweet Polly	16	436	2047	1220	741	131	4574	4138	2.6
Traveler	24	958	2178	1220	305	44	4705	3746	2.7
Tri-X-313	21	523	1263	1525	828	261	4400	3877	2.5
Troubadour	20	784	2352	1220	349	0	4705	3920	2.7
UG 711	15	828	2352	1568	218	44	5009	4182	2.9
Average	--	720	1879	1490	640	177	4906	4186	2.8
LSD(0.05)	--	507	836	672	551	345	1078	1052	0.6

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

<sup>2</sup> Includes fruit ≥ 10 pounds.

**Table 17. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. Clayton, N.C., 2014.<sup>1</sup>**

<b>Cultivar</b>	<b>Flesh</b>	<b>Sd.</b>	<b>Trace</b>	<b>Hard Seed</b>	<b>Internal</b>	<b>Flesh</b>	<b>Hollow Heart Ratings<sup>10</sup></b>						
	<b>SS<sup>2</sup></b>	<b>Color<sup>3</sup></b>	<b>Size<sup>4</sup></b>	<b>Population<sup>5</sup></b>	<b>LD<sup>6</sup></b>	<b>Hardcore<sup>7</sup></b>	<b>Rind<sup>8</sup></b>	<b>Firmness<sup>9</sup></b>	<b>HH0</b>	<b>HH1</b>	<b>HH2</b>	<b>HH3</b>	<b>HH4</b>
13-13077	12.9	3.8	2.8	1.9	1.2	0.0	16.6	3.7	75	0	15	5	5
7197HQ	12.9	4.0	1.7	4.5	1.3	0.0	18.2	3.3	95	5	0	0	0
ACX6177	12.7	4.1	1.6	6.2	1.1	0.0	18.2	3.5	75	20	5	0	0
Affirmed	13.1	4.2	2.2	0.3	1.2	25.0	15.0	2.9	75	20	0	5	0
Bold Ruler	13.0	4.2	2.3	0.3	1.2	5.0	17.2	2.4	50	30	10	10	0
Captivation	12.7	4.0	1.8	1.4	1.1	10.0	15.5	3.7	100	0	0	0	0
Charismatic	12.9	4.3	1.4	3.3	1.0	5.0	16.9	3.0	70	0	25	5	0
Crunchy Red	12.5	3.7	2.0	2.5	1.3	0.0	20.2	3.6	90	0	10	0	0
Cut Above	13.2	4.1	1.5	0.8	1.2	5.0	14.8	3.0	80	5	10	5	0
Declaration	13.2	3.9	1.9	0.3	1.2	5.0	15.9	3.0	80	10	5	0	5
Exclamation	12.5	3.9	1.8	3.2	1.1	5.0	16.6	3.5	95	5	0	0	0
Fascination	13.0	4.5	1.3	4.5	1.2	0.0	17.8	3.2	75	10	10	5	0
Harvest Moon	12.6	4.2	3.0	0.4	1.0	0.0	17.9	2.1	90	0	0	5	5
Kingman	12.9	4.2	1.5	10.4	1.2	5.0	17.7	3.0	65	10	15	10	0
Liberty	13.1	4.0	2.2	0.4	1.2	5.0	19.8	2.8	50	25	15	5	5
Maxima	12.9	4.4	2.0	0.6	1.1	0.0	20.3	3.4	95	0	5	0	0
Melody	12.8	4.3	2.1	0.3	1.1	5.0	16.1	2.8	85	15	0	0	0
ORS-12166	12.7	4.3	2.2	0.5	1.2	10.0	18.7	2.9	100	0	0	0	0
Premont	11.9	3.9	1.6	4.5	1.2	0.0	16.8	3.8	100	0	0	0	0
Secretariat	13.0	4.2	1.5	3.9	1.2	0.0	16.7	3.4	90	0	5	5	0
SV0051WA	11.9	4.1	1.7	3.4	1.3	5.0	19.8	5.3	65	0	25	10	0
SV2757WA	12.7	4.4	1.4	1.0	1.1	40.0	15.9	3.4	95	5	0	0	0
SV7018WA	13.5	4.4	1.4	0.8	1.3	5.0	16.6	3.3	95	5	0	0	0
SV8298WA	13.4	4.4	1.4	1.4	1.3	25.0	15.7	3.3	95	5	0	0	0
SV0241WA	12.3	3.9	1.7	0.2	1.2	5.0	17.1	3.4	100	0	0	0	0
Sweet Polly	12.7	4.1	1.5	1.4	1.2	30.0	15.2	3.2	90	10	0	0	0
Traveler	12.3	4.4	2.5	3.0	1.1	0.0	13.7	2.8	95	5	0	0	0
Tri-X-313	12.8	4.0	2.1	0.2	1.2	0.0	18.8	2.7	85	0	5	5	5
Troubadour	12.8	4.2	3.0	1.7	1.2	0.0	14.9	3.3	100	0	0	0	0
UG 711	13.2	4.0	1.7	2.6	1.0	0.0	15.1	2.8	65	0	25	10	0
Average	12.8	4.1	1.9	2.2	1.2	6.5	17.0	3.2	84	6	6	3	1
<b>LSD(0.05)</b>	<b>0.7</b>	<b>0.3</b>	<b>0.5</b>	<b>4.8</b>	<b>0.075</b>	<b>20.8</b>	<b>2.78</b>	<b>0.5</b>	<b>31</b>	<b>22</b>	<b>15</b>	<b>10</b>	<b>6</b>

<sup>1</sup> Most measurements were obtained from fruits in harvest 1 and 2.

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

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

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

<sup>5</sup> Average number of hard seeds counted within 5 melons per replication (20 total).

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

<sup>7</sup> Internal Hardcore = Percentage of melons with internal hardcore symptoms in flesh among all replications (20 fruit total).

<sup>8</sup> Rind = Rind thickness (mm), measured from rind to where white and colored flesh meet.

<sup>9</sup> Fruit pressure was taken by a penetrometer, Fruit Pressure Tester - FT011 from QA Supplies LLC, Norfolk Va.

<sup>10</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 separation in flesh to rind

\*\*HH3 & HH4 = Non-marketable

**Table 18. Triploid mini-watermelon cultivar seed sources and descriptions; 2014.**

<b><u>Entry No.</u></b>	<b><u>Cultigen</u></b>	<b><u>Company</u></b>	<b><u>Description</u></b>
1	Babba	Seminis	Distinct, narrow, dark green stripes on a light green background; uniform, oval fruit; sizes are mainly medium to large for mini triploid market, more ice box size than mini; good, red flesh color with distinct flesh to rind delineation.
2	Petite Perfection	Syngenta	Distinct, narrow, dark green stripes on a light green background; uniform oval shape; uniform and ideal mini triploid size; deep, red flesh color with excellent flesh to rind delineation.
3	Pixie	Nunhems	Distinct, narrow, very dark green stripes bordered by a dark green shadow on a medium green background; uniform round shape; mini melon size to small ice box size; very wide rind thickness; good red flesh color with distinct flesh to rind delineation
4	Sweet Bite	Zeraim Gedera	Indistinct, medium width, dark green stripes on a light to medium green background; uniform round to oval shape with some variations in size; small to very large mini watermelon size; deep red flesh color with a distinct flesh to rind delineation

## 2014 Mini Triploid Watermelon



Petite Perfection



Sweet Bite



**Table 19. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in first harvest** by various weight classes (per acre) and average fruit size<sup>1</sup>. Clayton, N.C., 2014.

<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>		
Babba	4	0	109	218	109	0	109	0	545	327	4.6
Petite Perfection	2	327	218	653	0	0	0	0	1198	871	3.1
Pixie	3	218	218	545	0	0	0	0	980	762	4.6
Sweet Bite	1	0	327	653	109	0	0	0	1089	980	5.3
Average	--	136	218	517	54	0	27	0	953	735	4.4
LSD(0.05)	--	523	465	436	260	0	174	0	699	659	2.7

**Table 20. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in second harvest** by various weight classes (per acre) and average fruit size<sup>1</sup>. Clayton, N.C., 2014.

<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>		
Babba	4	0	109	109	109	218	0	653	1198	218	9.5
Petite Perfection	3	436	218	436	0	0	0	0	1089	653	4.3
Pixie	1	545	545	1960	218	109	0	0	3376	2505	5.0
Sweet Bite	2	218	109	1416	218	0	0	0	1960	1525	5.0
Average	--	299	245	980	136	82	0	163	1906	1225	5.9
LSD(0.05)	--	755	773	1240	438	290	0	201	2326	1619	1.4

**Table 21. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in third harvest** by various weight classes (per acre) and average fruit size<sup>1</sup>. Clayton, N.C., 2014.

<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>		
Babba	4	109	0	218	218	218	327	1089	2178	218	10.6
Petite Perfection	3	653	218	1307	436	653	0	0	3267	1525	5.1
Pixie	2	436	436	1416	218	436	109	0	3049	1851	5.4
Sweet Bite	1	218	545	1742	436	436	218	218	3812	2287	6.1
Average	--	354	299	1171	327	436	163	327	3076	1470	6.8
LSD(0.05)	--	617	790	1404	493	716	348	367	1830	1630	1.9

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. Ace pollinizers were interplanted after triploid plants 1, 5, and 9, (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 22. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in first harvest by various weight classes (per acre). Clayton, N.C., 2014.**

<u>Cultivar</u>	Percentages <sup>1</sup> (%) by Fruit Size Category							<u>Mrkt<sup>2</sup></u>
	<u>&lt;3</u>	<u>3-3.9</u>	<u>4.0-7.0</u>	<u>7.1-8.0</u>	<u>8.1-9.0</u>	<u>9.1-10</u>	<u>&gt;10</u>	
Babba	0	20	40	20	0	20	0	60
Petite Perfection	27	18	55	0	0	0	0	73
Pixie	22	22	56	0	0	0	0	78
Sweet Bite	0	30	60	10	0	0	0	90
Average	12	23	53	8	0	5	0	75

**Table 23. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in second harvest by various weight classes (per acre). Clayton, N.C., 2014.**

<u>Cultivar</u>	Percentages <sup>1</sup> (%) by Fruit Size Category							<u>Mrkt<sup>2</sup></u>
	<u>&lt;3</u>	<u>3-3.9</u>	<u>4.0-7.0</u>	<u>7.1-8.0</u>	<u>8.1-9.0</u>	<u>9.1-10</u>	<u>&gt;10</u>	
Babba	0	9	9	9	18	0	55	18
Petite Perfection	40	20	40	0	0	0	0	60
Pixie	16	16	58	6	3	0	0	74
Sweet Bite	11	6	72	11	0	0	0	78
Average	17	13	45	7	5	0	14	58

**Table 24. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in third harvest by various weight classes (per acre). Clayton, N.C., 2014.**

<u>Cultivar</u>	Percentages <sup>1</sup> (%) by Fruit Size Category							<u>Mrkt<sup>2</sup></u>
	<u>&lt;3</u>	<u>3-3.9</u>	<u>4.0-7.0</u>	<u>7.1-8.0</u>	<u>8.1-9.0</u>	<u>9.1-10</u>	<u>&gt;10</u>	
Babba	5	0	10	10	10	15	50	10
Petite Perfection	20	7	40	13	20	0	0	47
Pixie	14	14	46	7	14	4	0	61
Sweet Bite	6	14	46	11	11	6	6	60
Average	11	9	36	10	14	6	14	44

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100. Percentages may not equal 100% due to rounding to nearest whole number.

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

**Table 25. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in fourth harvest by various weight classes (per acre) and average fruit size<sup>1</sup>. Clayton, N.C., 2014.**

<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>		
Babba	4	0	109	218	0	109	218	653	1307	327	9.6
Petite Perfection	1	109	762	1634	545	109	0	0	3158	2396	5.4
Pixie	2	436	327	762	218	109	0	0	1851	1089	4.7
Sweet Bite	3	0	0	545	545	109	218	218	1634	545	7.8
Average	--	136	299	790	327	109	109	218	1987	1089	6.9
LSD(0.05)	--	290	1066	1091	402	284	367	435	2186	1887	3.7

**Table 26. Triploid mini watermelon hybrid cultivar trial. Number of fruit harvested in fifth harvest by various weight classes (per acre) and average fruit size<sup>1</sup>. Clayton, N.C., 2014.**

<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>		
Babba	4	218	327	871	218	218	0	980	2831	1198	7.4
Petite Perfection	3	762	762	980	109	0	0	0	2614	1742	3.8
Pixie	2	545	653	1307	327	109	109	0	3049	1960	4.7
Sweet Bite	1	545	871	1198	0	436	109	109	3267	2069	5.0
Average	--	517	653	1089	163	191	54	272	2940	1742	5.2
LSD(0.05)	--	773	697	1314	450	372	260	706	1651	1441	2.5

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. Ace pollinizers were interplanted after triploid plants 1, 5, and 9, (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 27. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in fourth harvest by various weight classes (per acre). Clayton, N.C., 2014.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							<b>Mrkt<sup>2</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>	
Babba	0	8	17	0	8	17	50	25
Petite Perfection	3	24	52	17	3	0	0	76
Pixie	24	18	41	12	6	0	0	59
Sweet Bite	0	0	33	33	7	13	13	33
Average	7	13	36	16	6	8	16	48

**Table 28. Triploid mini watermelon hybrid cultivar trial. Percentage of fruit number harvested in fifth harvest by various weight classes (per acre). Clayton, N.C., 2014.**

<b>Cultivar</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>							<b>Mrkt<sup>2</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>	
Babba	8	12	31	8	8	0	35	42
Petite Perfection	29	29	38	4	0	0	0	67
Pixie	18	21	43	11	4	4	0	64
Sweet Bite	17	27	37	0	13	3	3	63
Average	18	22	37	6	6	2	9	59

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100. Percentages may not equal 100% due to rounding to nearest whole number.

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

**Table 29. Triploid mini watermelon hybrid cultivar trial. Cumulative number of fruit harvested over 5 harvests by various weight classes (per acre)<sup>1</sup>. Clayton, N.C., 2014.**

<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>	<b>Total</b>		
Babba	4	327	653	1634	653	762	653	3376	8059	2287	
Petite Perfection	3	2396	2178	5009	1089	762	0	0	11435	7187	
Pixie	1	2178	2178	5990	980	762	218	0	12306	8168	
Sweet Bite	2	980	1851	5554	1307	980	545	545	11761	7405	
Average	--	1470	1715	4547	1007	817	354	980	10890	6262	
<b>LSD(0.05)</b>	--	<b>1339</b>	<b>2288</b>	<b>1873</b>	<b>699</b>	<b>1201</b>	<b>807</b>	<b>1314</b>	<b>1523</b>	<b>2641</b>	

<sup>1</sup> Yields are calculated using 100 percent seedless watermelon population. Ace pollinizers were interplanted after triploid plants 1, 5, and 9, (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 30. Triploid mini watermelon hybrid cultivar trial. Cumulative Percentage harvested by number within each fruit size category. Clayton, NC, 2014.**

<b>Cultivar</b>	<b>Source<sup>2</sup></b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</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>		
Babba	1	5	9	20	8	9	9	41	29	
Petite Perfection	2	21	19	44	10	6	0	0	63	
Pixie	3	18	17	49	8	6	2	0	67	
Sweet Bite	4	9	16	47	11	8	5	5	63	
Average		13	15	40	9	7	4	11	55	
<b>LSD(0.05)</b>		<b>10</b>	<b>17</b>	<b>16</b>	<b>7</b>	<b>11</b>	<b>8</b>	<b>13</b>	<b>17</b>	

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100. Percentages may not equal 100% due to rounding to nearest whole number.

<sup>2</sup> Sources: 1=Seminis; 2=Syngenta; 3=Nunhems; 4=Zeraim Gedera

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

**Table 31. Triploid mini watermelon hybrid cultivar trial. Percent harvested by number by harvest within total and total marketable categories. Clayton, NC, 2014.**

Percentages <sup>1</sup> (%) by harvest for Total and Total Marketable Fruit										
<u>Cultivar</u>	Harvest 1		Harvest 2		Harvest 3		Harvest 4		Harvest 5	
	Total	Mrkt.								
Babba	7	14	15	10	27	10	16	14	35	52
Petite Perfection	10	12	10	9	29	21	28	33	23	24
Pixie	8	9	27	31	25	23	15	13	25	24
Sweet Bite	9	13	17	21	32	31	14	7	28	28
Average	9	12	17	17	28	21	18	17	28	32

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

**Table 32. Mini Triploid watermelon hybrid cultivar trial. Cumulative weight (x 100) of fruit harvested over 5 harvests by various weight classes (per acre) including average fruit weight. Clayton, N.C., 2014.**

<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>		
Babba	4	8	22	92	50	65	61	437	737	114	8.9
Petite Perfection	3	56	75	254	83	64	0	0	532	329	4.6
Pixie	1	50	77	319	74	65	21	0	605	395	4.9
Sweet Bite	2	23	65	296	99	85	52	65	686	361	5.8
Average	--	34	60	240	77	70	34	126	640	300	6.0
LSD(0.05)	--	31	80	103	53	103	77	196	149	115	1.8

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

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

**Table 33. Triploid mini watermelon hybrid cultivar trial. Cumulative Percentage harvested by weight within each fruit size category. Clayton, NC, 2014.**

<b>Cultivar</b>	<b>Company</b>	<b>Percentages<sup>1</sup> (%) by Fruit Size Category</b>								<b>Mkt<sup>2</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>	<b>Total</b>	
Babba	Seminis	2	4	13	8	8	9	56	17	
Petite Perfection	Syngenta	12	16	47	14	11	0	0	63	
Pixie	Nunhems	8	13	54	11	10	3	0	68	
Sweet Bite	Zeraim Gedera	4	11	45	15	11	6	8	57	
Average		7	11	40	12	10	5	16	51	
LSD		8	15	15	10	15	11	15	22	

<sup>1</sup> Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100. Percentages may not equal 100% due to rounding to nearest whole number.

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

**Table 34. Mini Triploid watermelon hybrid cultivar trial. Interior fruit quality. Clayton, NC, 2014.<sup>1</sup>**

<b>Cultivar</b>	<b>Rind Thickness (mm)<sup>2</sup></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>Average Seed Counts</b>	<b>Hollow Heart Ratings<sup>6</sup></b>				
	<b>HH0</b>	<b>HH1</b>	<b>HH2</b>	<b>HH3</b>	<b>HH4</b>						
11005a	14.2	13.6	3.9	3.2	1.03	1.8	85	15	0	0	0
Petite Perfection	7.0	13.6	4.4	3.7	1.06	3.9	100	0	0	0	0
Pixie	17.0	13.5	4.3	3.0	1.00	0.9	100	0	0	0	0
Sweet Bite	14.5	12.5	3.9	3.1	0.99	0.3	40	30	15	10	5
Average	13.2	13.3	4.1	3.3	1.02	1.7	81	11	4	3	1
LSD (0.05)	<b>2.8</b>	<b>0.9</b>	<b>0.5</b>	<b>0.3</b>	<b>0.03</b>	<b>3.3</b>	<b>29</b>	<b>19</b>	<b>15</b>	<b>9</b>	<b>8</b>

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

<sup>2</sup> Rind Thickness=Rinds were measured in 2 regions of the fruit (on one side and directly opposite on the other side) and an average was taken for 5 fruits per replication (20 total).

<sup>3</sup> SS = Soluble solids indicates sweetness, average of 5 melons per replication (20 total).

<sup>4</sup> Flesh Color Rating: 3=red, 3.5=bright red, 4=dark 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 on the top and bottom sides of each fruit.

<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).**