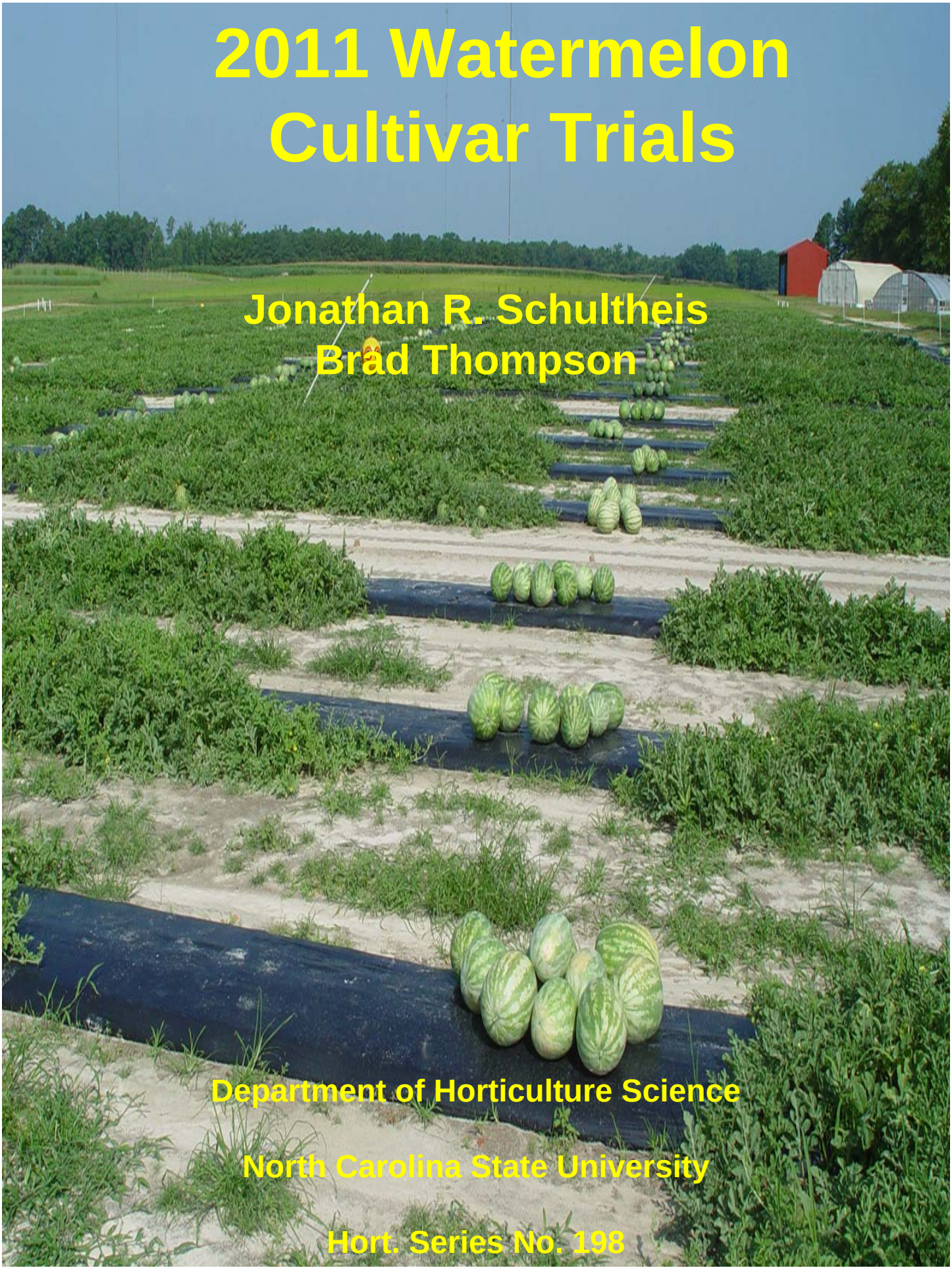
2011 Watermelon Cultivar Trials



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2011
North Carolina
Watermelon
Cultivar Trials

Hort. Series # 198

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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, (2011 North Carolina Agricultural Chemicals Manual, (http://ipm.ncsu.edu/Agchem/agchem.html).

Acknowledgments

We gratefully acknowledge the assistance of Reid Evans (Superintendent), Cathy Herring (Asst. Superintendent), and Kirby Jones (Horticulture Supervisor), Central Crops Research Station, Clayton, NC, as well as, the personnel at the research station for their help in establishing, maintaining, and harvesting the cultivar evaluation trials. We want to acknowledge the following for their assistance with the trials: Dennis Adams, Jonathan Monks, Sam Harris, Gwyndolyn Jones , and Nate Roth.
The cooperation and support of Abbott & Cobb, Inc.; Nunhems; Origene Seeds; Sakata Seed Company; Seigers; Syngenta Seeds, Inc.; Willhite Seed, Inc.; and Zeraim Gedera Seed were also appreciated.

Disclaimer
This publication presents data from the cultivar evaluation trials conducted during 2011. 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.

TABLE OF CONTENTS

CONTENT

Diploid, Triploid, and Mini Triploid Watermelon Cultural Practices for 2011 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 eighth in production among U.S. states nationally in 2010 representing 4.8% of the nation's watermelon production. Approximately 7,200 acres valued at nearly $24.1 million were produced in North Carolina in 2010. 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 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 triploid, diploid, and triploid mini cultigens were sown on 13 April, 2011. The planting medium used was Fafard Super-Fine Germinating Mix, a commercial soil less mix (Conrad Fafard, Inc.; Agawam, ME). Approximately 3 weeks after seeding, the plants were placed in a cold frame and hardened before being established in the field. Triploids and diploids were established in the field on 11 May 2011. The mini triploid watermelon trial was established in the field on 26 May. Fertilizer, 30 lb/acre N and 80 lb/acre K_20, was incorporated into the beds on 20 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 field on 9 November 2010 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 5 May. Gramaxone at 3 pt./acre was applied to row middles on 1 and 14 June for weed control within the row middles. Spacing between row middles was 10 feet for all watermelon types and in-row spacing was 2.5 feet for standard size triploid and diploid watermelons and 1 foot for mini triploid watermelons. Plot size for diploid and standard triploid size watermelons was one row, 10 plants per plot, 25 feet long with 15 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 8 oz. 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. For the 2011 growing season, 2 pollinizer cultivars were used to enhance pollination. The pollinizer 'SP-4' was interplanted within triploid plots after plants 1 and 10. The pollinizer 'Ace' was interplanted within the triploid plots after plants 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. A total of 72.4 lb/acre N and 144.8 lb/acre K_2O was drip applied through the season using a 4-0-8 liquid fertilizer. Cumulative amount of fertilizer applied for the season was 102.4, 0, and 224.8 lb/acre of N, P_2O_5, and K_2O, respectively. Insecticides were applied every week as a preventative

measure beginning 19 May and on the following dates (25 May; 2, 9, 15, 22, and 29 June; 6, 13, 22, and 27 July). The following products were alternated during consecutive spray applications to avoid insect resistance: Agri-Mek, Asana, Perm Up, Sniper, and Thionex. 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: Kocide, Maneb 750F, Pristine, Previcur Flex, Ranman, and Bravo Weather Stik; and applied on the following dates: 25 May; 2, 9, 15, 22, and 29 June; 6, 13, and 27 July.

There were five harvests for the triploid/diploid trial and three mini triploid harvests. The first harvest for the triploid/diploid test was 19 July. Subsequent harvests were 26 July; 9 and 23 August; and 7 September. The first harvest for the mini triploid trial was 21 July, and subsequent harvests were 26 July and 2 August. Each fruit was harvested when ripe, weighed and categorized statistically by size category. For the diploid and triploid watermelon test, fruits were placed in the following categories; < 7.9 lb, 8-9.9 lb, 10-11.9 lb, 12-15.9 lb, 16-17.9 lb, and 18 + lb. Fruits were considered marketable if they weighed at least 10 pounds. Smaller sized triploid fruit are increasing in demand with the most popular standard triploid fruit size being 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. 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 the first or second harvests.

2011 Trial Notice: Our standard size triploid and diploid 2011 trial yields were noticeably higher than past year's trials due to harvesting the trial five times. The reasons for so many harvests are we had significant damage to the foliage predominately caused by ozone and some mite pressure that caused certain varieties (i.e.: Crimson Sweet) to become necrotic and lose their foliage which causing certain plots to nearly die. After harvesting the fruit off of the vines during the first and second harvests, the vines produced new foliage and could again support fruit production. The fruit that were collected off of the affected plots was of good quality and therefore is represented within this report. It also must be noted that yields could have been higher except we had to deter crows and coyotes from coming into the plots and pecking and eating the fruit. Several fruit in a couple of the plots rotted before it could be weighed and was therefore not included in the data set. In a few cases, coyotes transported the fruit out of the field and could not be traced back to an individual plot. Fortunately, coyote damage was sporadic and minimal. Although there were issues with a few of the plots within the trial, the overall trial was very good which is shown in the data found within this booklet.

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/Diploid Red-Flesh Watermelon Seed Sources and Descriptions; 2011.

Entry No.	Cultigen	Company	Description
1	407	Zeraim Gedera	Indistinct, medium width, medium to dark green stripes on light green background; slightly longer than round shape; uniform shape; somewhat variable size from small to medium; excellent rind flesh delineation; good interior red flesh color; rind is fairly thin
2	53312	Seigers	Distinct, narrow dark green stripes on a light green background; round; uniform shape; size is somewhat variable from small to medium, but tends to be a smaller fruit; bright canary yellow flesh; few hard seeds in fruit, but seed traces do have brown color; excellent rind flesh delineation
3	ACX 4674	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; mainly short blocky with some oval and smaller size fruit that are round; shape is a little variable; mostly medium to large sized fruit which are somewhat variable in size; thick rind and indistinct rind flesh delineation
4	Affirmed	Sakata	Indistinct, medium width, medium to dark green stripes on light green background; oval or short blocky; uniform shape; fruit size is variable from small to large; most medium to large size; average rind thickness; average rind flesh delineation, good red flesh color
5	Bold Ruler	Sakata	Indistinct, medium width, medium to dark green stripes on light green background; mainly oval, medium size fruits; thick rind; poor rind flesh delineation; yellow ring around red flesh is noticable in several fruit; good red flesh color
6	Crimson Sweet (seeded)	Willhite	Distinct, medium width, dark green stripes on light green background; uniform shape; mainly round; medium to large size; Excellent flavor
7	Crispy Red	Abott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval fruit that have a uniform shape; medium to large size; consistent fruit size; thick rind; indistinct rind flesh delineation
8	Cut Master ESL	Willhite	Distinct, very narrow, dark green stripes that protrude or are raised on fruit when ripe on a medium to dark green background (appears as a solid green); oval, short block shape; fairly uniform in shape; small to large fruit size which is variable; excellent red flesh color; signficant hollow heart; variation in rind thickness; susceptable to sunburn
9	Declaration	Nunhems	Indistinct, medium width, medium to dark green stripes on light green background; oval fruit; very uniform shape; size is very uniform with medium large size fruit; good red flesh color; good rind flesh delineation
10	Distinction	Syngenta	Distinct, medium width, very dark green stripes on light green background; round fruit; very uniform shape; medium and large sized fruit; fairly uniform size; excellent red flesh color; excellent rind flesh delineation; thin rind
11	Fascination	Syngenta	Indistinct, medium to wide, very dark green stripes on light green background; slightly oval to oval shape; shape is fairly uniform; sizes vary from small to medium large; excellent rind flesh delineation; deep red flesh; thin rind
12	Imagination	Syngenta	Solid dark green fruit with raised narrow lines on fruit when ripe; fruit are round or short round and have uniform shapes; size is fairly uniform and small; bright deep red flesh; excellent rind flesh delineation
13	Liberator	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; primarily oval with some smaller fruits that are short round; size is variable from medium to large; thick rind; indistinct rind flesh delineation

Table 1. Cont.

Entry No.	Cultigen	Company	Description
14	Maxima	Origene Seeds	Mainly distinct, medium width, very dark green stripes on light green background; very uniform shape as fruit are round or short round; size is medium to large and fairly uniform; excellent red flesh color; medium rind thickness; good rind flesh delineation
15	Melody	Syngenta	Indistinct, medium width, dark green stripes on light green background; round or short round; uniform shape; size is somewhat variable as fruits vary from small to medium size; excellent rind flesh delineation; deep red flesh color
16	NUN 1000	Nunhems	Indistinct, medium width, medium dark green stripes on light green background; elongated oval or blocky; uniform shape; size is variable; small to large size fruit; substantial hollow heart; regular rind thickness; indistinct rind flesh delineation; average red flesh color
17	Ole (seeded)	Willhite	Indistinct, very wide, dark green stripes on light green background; blocky to short elongated fruit; slight bottlenecking in some fruit at stem end; variable shape; size variable from small to large; dark brown to black seeds; large seeds; deep red flesh; thick rind
18	Palomar	Syngenta	Distinct, narrow, dark green stripes on a medium to dark green background; round fruit that are uniform in shape; fruit size is variable from small to medium size; indistinct rind flesh delineation; thick rind; regular red flesh color
19	RWT 8231	Syngenta	Distinct, very narrow, very dark green stripes on dark green background; dark green stripes are raised when fruit are ripe (rind appears as solid dark green); short round or round fruit; uniform shape; size is somewhat variable from small to medium large; mainly a medium size fruit; intense red flesh color; good rind flesh delineation
20	Summer Flavor 800 (seeded)	Abbott & Cobb	Indistinct, very wide, dark green stripes on a light green background; uniformly blocky fruit; size was medium to large; dark black seeds; dark red flesh; good flesh-rind delineation
21	Summer King	Syngenta	Indistinct, medium wide, medium to dark green stripes on light green background; oval fruit that have a uniform shape; size is mainly medium; indistinct rind flesh delineation
22	Super Seedless 7167	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval fruit that are uniform in shape; size is fairly uniform with medium to large sized fruit; indistinct rind flesh delineation; good red flesh color
23	Super Seedless 7177	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval which was slightly more narrow than 7167; uniform shape; size was variable from small to large size; thick rind; indistinct rind flesh elineation
24	Super Seedless 7187	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval, very uniform shape; size also very uniform being primarily medium to medium large; indistinct rind flesh delineation; average to good red flesh color; thick rind
25	Super Seedless 7197	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval, uniform shapes; size fairly uniform and fruit ranged from medium to large size; average rind flesh delineation; excellent deep red flesh
26	Super Seedless 7267	Abbott & Cobb	Indistinct, medium width, medium to dark green stripes on light green background; oval/short block shapes; fairly uniform shapes; average sized fruit are medium large but these range from medium to large sized; dark, deep red flesh color; average rind thickness; average rind flesh delineation

Table 1. Cont.

Entry No.	Cultigen	Company	Description
27	Sweet Polly	Seigers	Indistinct, medium width, dark green stripes on a light green background; oval; very uniform shape; very uniform size as most fruit are medium to large size; good rind flesh delineation
28	Tri-X-313	Syngenta	Indistinct, medium width, medium to dark green stripes on a light green background; larger fruit are all oval with few smaller fruit being more round; fairly uniform shape; size ranges from medium to large; average red flesh color; indistinct rind flesh delineation
29	WDL 9405	Syngenta	Indistinct, medium to wide stripes that are dark green on a light green background; all oval fruit, uniform shape; uniformly sized fruit that are mainly medium to large size; excellent red flesh color; excellent rind flesh delineation; rind is thin
30	WDL 9408	Syngenta	Indistinct, medium to wide, dark green stripes on a light green background; oval/blocky fruit; fairly uniform shape, but some variation; medium to large size with consistent size; excellent rind flesh delineation; excellent red flesh color
31	WDL 9409	Syngenta	Indistinct, medium wide, dark green stripes on a light green background; oval/short block fruit; shape is somewhat variable with some round small fruit and a few elongated fruit; size is generally very uniform with medium to large size fruit; good rind flesh delineation; excellent red flesh color
32	WX 4838	Willhite	Indistinct, medium wide, medium to dark green stripes on a light green background; round fruit; uniform shape; small to medium size fruit as shape is somewhat variable; average rind thickness and average rind flesh delineation
33	WX 4868	Willhite	Indistinct, medium wide, medium to dark green stripes on a light green background; oval fruit; uniform shape overall with a blocky large fruit; size is primarily medium; some variable size with a few small and large fruit; good red flesh color; thick rind; indistinct rind flesh delineation

Figure 1. Triploid Cultivar Pictures

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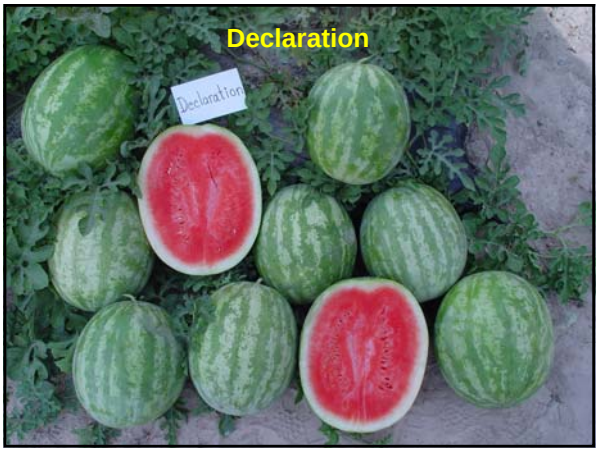

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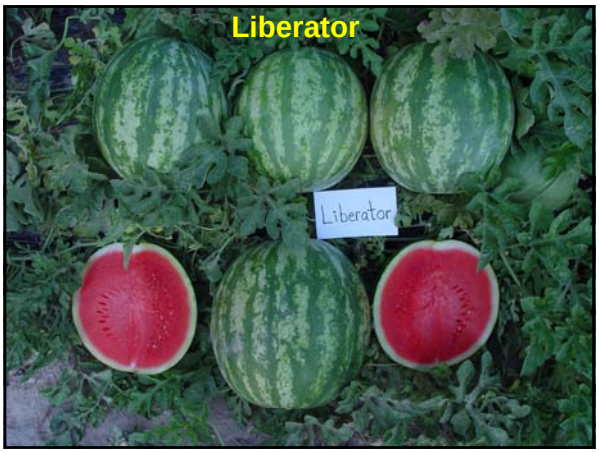

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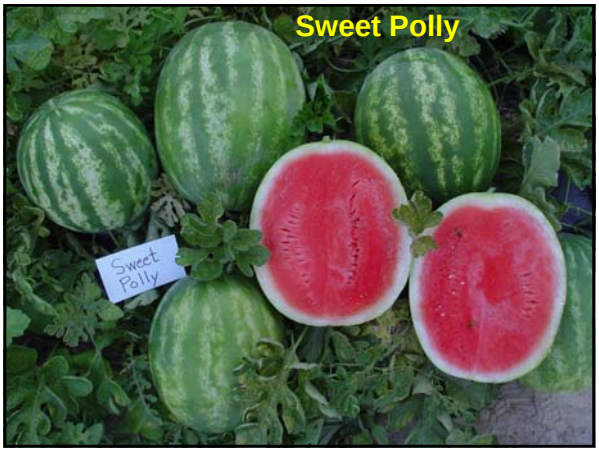

Figure 1. Triploid Cultivar Pictures

Table 2. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **harvest 1** by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2011.**

	Seed		Fruit size category						Total No./	Mkt No./	Avg
Cultivar	Company	Rank[2]	<7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Acre	Acre[3]	wt.
407	Zeraim Gedera	12	349	697	697	1263	218	174	3398	2352	12.0
53312	Seigers	32	697	828	1176	349	0	44	3093	1568	10.0
ACX 4674	Abbott & Cobb	18	131	1045	1045	871	131	0	3223	2047	11.2
Affirmed	Sakata	17	218	479	610	1045	305	131	2788	2091	12.6
Bold Ruler	Sakata	14	523	610	958	1133	87	0	3311	2178	11.0
Crimson Sweet	Willhite	31	174	218	305	784	174	349	2004	1612	14.1
Crispy Red	Abbott & Cobb	20	87	131	305	1220	392	87	2222	2004	13.7
Cut Master ESL	Willhite	6	218	479	871	1133	261	218	3180	2483	12.3
Declaration	Nunhems	24	218	653	871	871	44	44	2701	1830	11.0
Distinction	Syngenta	2	44	392	566	1612	523	174	3311	2875	13.6
Fascination	Syngenta	13	131	349	653	1089	349	131	2701	2222	12.7
Imagination	Syngenta	33	1089	784	653	610	0	0	3136	1263	9.5
Liberator	Abbott & Cobb	29	174	349	741	784	174	0	2222	1699	12.0
Maxima	Origene Seed	5	131	261	436	1220	479	392	2919	2527	14.4
Melody	Syngenta	29	349	784	915	697	44	44	2831	1699	10.8
NUN 1000	Nunhems	21	261	523	1002	828	44	87	2744	1960	11.4
Ole	Willhite	14	44	0	218	523	261	1176	2222	2178	19.0
Palomar	Syngenta	24	349	828	523	1133	131	44	3006	1830	11.2
RWT 8231	Syngenta	27	392	436	392	915	305	131	2570	1742	12.4
Summer Flavor 800	Abbott & Cobb	1	87	87	174	741	436	1612	3136	2962	17.7
Summer King	Syngenta	6	174	871	958	1394	131	0	3528	2483	11.5
Super Seedless 7167	Abbott & Cobb	9	174	392	697	1307	305	87	2962	2396	12.5
Super Seedless 7177	Abbott & Cobb	8	87	392	697	1394	218	131	2919	2439	12.7
Super Seedless 7187	Abbott & Cobb	23	261	523	436	1220	218	44	2701	1917	12.4
Super Seedless 7197	Abbott & Cobb	18	87	305	523	1133	131	261	2439	2047	13.1
Super Seedless 7267	Abbott & Cobb	14	44	349	436	1220	305	218	2570	2178	13.4
Sweet Polly	Seigers	4	131	261	566	1481	479	131	3049	2657	13.5
Tri-X-313	Syngenta	3	87	305	1002	1350	261	87	3093	2701	12.6
WDL 9405	Syngenta	26	44	349	653	697	305	131	2178	1786	12.8
WDL 9408	Syngenta	21	131	392	566	1045	218	131	2483	1960	12.7
WDL 9409	Syngenta	9	131	349	610	1350	218	218	2875	2396	12.7
WX 4838	Willhite	27	479	741	828	784	87	44	2962	1742	10.9
WX 4868	Willhite	9	174	218	392	1220	523	261	2788	2396	13.7
Average		- -	232	466	651	1043	235	199	2826	2128	12.6
LSD (0.05)		**- -**	**359**	**433**	**442**	**668**	**328**	**248**	**882**	**887**	**1.7**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit ≥ 10 pounds.

Table 3. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **early season harvest, (Harvest 1)**. **Clayton, NC, 2010.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	10	21	21	37	6	5
53312	23	27	38	11	0	1
ACX 4674	4	32	32	27	4	0
Affirmed	8	17	22	37	11	5
Bold Ruler	16	18	29	34	3	0
Crimson Sweet	9	11	15	39	9	17
Crispy Red	4	6	14	55	18	4
Cut Master ESL	7	15	27	36	8	7
Declaration	8	24	32	32	2	2
Distinction	1	12	17	49	16	5
Fascination	5	13	24	40	13	5
Imagination	35	25	21	19	0	0
Liberator	8	16	33	35	8	0
Maxima	4	9	15	42	16	13
Melody	12	28	32	25	2	2
NUN 1000	10	19	37	30	2	3
Ole	2	0	10	24	12	53
Palomar	12	28	17	38	4	1
RWT 8231	15	17	15	36	12	5
Summer Flavor 800	3	3	6	24	14	51
Summer King	5	25	27	40	4	0
Super Seedless 7167	6	13	24	44	10	3
Super Seedless 7177	3	13	24	48	7	4
Super Seedless 7187	10	19	16	45	8	2
Super Seedless 7197	4	12	21	46	5	11
Super Seedless 7267	2	14	17	47	12	8
Sweet Polly	4	9	19	49	16	4
Tri-X-313	3	10	32	44	8	3
WDL 9405	2	16	30	32	14	6
WDL 9408	5	16	23	42	9	5
WDL 9409	5	12	21	47	8	8
WX 4838	16	25	28	26	3	1
WX 4868	6	8	14	44	19	9
Average	8	16	23	37	8	7

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

Table 4. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **harvest 2** by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2011.**

Cultivar	Seed Company	Rank [2]	Fruit size category (lb) <7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Total No./ Acre	Mkt No./ Acre[3]	Avg wt.
407	Zeraim Gedera	15	44	44	131	218	0	0	436	349	8.4
53312	Seigers	29	218	87	44	87	0	0	436	131	6.9
ACX 4674	Abbott & Cobb	5	218	131	261	305	0	0	915	566	10.8
Affirmed	Sakata	15	131	131	0	305	44	0	610	349	11.5
Bold Ruler	Sakata	21	174	218	131	131	0	0	653	261	9.4
Crimson Sweet	Willhite	33	131	0	0	0	0	0	131	0	2.9
Crispy Red	Abbott & Cobb	8	87	174	44	436	44	0	784	523	12.2
Cut Master ESL	Willhite	15	305	436	174	174	0	0	1089	349	10.0
Declaration	Nunhems	9	305	349	131	174	87	44	1089	436	10.0
Distinction	Syngenta	24	131	131	44	87	44	44	479	218	6.9
Fascination	Syngenta	18	261	174	261	44	0	0	741	305	8.2
Imagination	Syngenta	32	523	174	44	0	0	0	741	44	6.9
Liberator	Abbott & Cobb	3	218	261	349	249	0	0	1176	697	10.2
Maxima	Origene Seed	1	131	44	218	349	131	87	958	784	12.3
Melody	Syngenta	18	87	87	174	131	0	0	479	305	10.4
NUN 1000	Nunhems	29	131	174	44	44	44	0	436	131	10.1
Ole	Willhite	28	44	0	87	87	0	0	218	174	8.8
Palomar	Syngenta	21	174	174	218	44	0	0	610	261	9.1
RWT 8231	Syngenta	5	87	174	174	349	44	0	828	566	10.8
Summer Flavor 800	Abbott & Cobb	24	0	0	131	44	44	0	218	218	9.1
Summer King	Syngenta	29	131	131	87	44	0	0	392	131	10.1
Super Seedless 7167	Abbott & Cobb	11	0	44	174	131	87	0	436	392	13.0
Super Seedless 7177	Abbott & Cobb	24	87	131	131	87	0	0	436	218	6.7
Super Seedless 7187	Abbott & Cobb	3	131	174	218	436	44	0	1002	697	11.1
Super Seedless 7197	Abbott & Cobb	1	87	261	261	261	218	44	1133	784	12.1
Super Seedless 7267	Abbott & Cobb	11	131	87	174	174	0	44	610	392	11.0
Sweet Polly	Seigers	24	218	131	44	174	0	0	566	218	6.5
Tri-X-313	Syngenta	18	44	44	174	131	0	0	392	305	10.9
WDL 9405	Syngenta	21	174	261	131	87	0	44	697	261	9.9
WDL 9408	Syngenta	11	87	87	131	174	44	44	566	392	11.4
WDL 9409	Syngenta	5	44	87	174	349	44	0	697	566	12.5
WX 4838	Willhite	9	305	218	87	349	0	0	958	436	10.1
WX 4868	Willhite	11	87	87	87	131	131	44	566	392	15.1
Average		- -	149	143	137	175	32	12	651	359	9.9
LSD (0.05)		- -	**252**	**285**	**241**	**255**	**101**	**71**	**593**	**405**	**4.4**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit ≥ 10 pounds.

Table 5. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **harvest 2**. **Clayton, NC, 2011.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	10	10	30	50	0	0
53312	50	20	10	20	0	0
ACX 4674	24	14	29	33	0	0
Affirmed	21	21	0	50	7	0
Bold Ruler	27	33	20	20	0	0
Crimson Sweet	100	0	0	0	0	0
Crispy Red	11	22	6	56	6	0
Cut Master ESL	28	40	16	16	0	0
Declaration	28	32	12	16	8	4
Distinction	27	27	9	18	9	9
Fascination	35	24	35	6	0	0
Imagination	71	24	6	0	0	0
Liberator	19	22	30	21	0	0
Maxima	14	5	23	36	14	9
Melody	18	18	36	27	0	0
NUN 1000	30	40	10	10	10	0
Ole	20	0	40	40	0	0
Palomar	29	29	36	7	0	0
RWT 8231	11	21	21	42	5	0
Summer Flavor 800	0	0	60	20	20	0
Summer King	33	33	22	11	0	0
Super Seedless 7167	0	10	40	30	20	0
Super Seedless 7177	20	30	30	20	0	0
Super Seedless 7187	13	17	22	43	4	0
Super Seedless 7197	8	23	23	23	19	4
Super Seedless 7267	21	14	29	29	0	7
Sweet Polly	38	23	8	31	0	0
Tri-X-313	11	11	44	33	0	0
WDL 9405	25	38	19	12	0	6
WDL 9408	15	15	23	31	8	8
WDL 9409	6	12	25	50	6	0
WX 4838	32	23	9	36	0	0
WX 4868	15	15	15	23	23	8
Average	25	20	23	26	4	1

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

Table 6. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **harvest 3** by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2011.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb) <7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Total No./ Acre	Mkt No./ Acre[3]	Avg wt.
407	Zeraim Gedera	18	0	0	131	218	44	44	436	436	13.6
53312	Seigers	30	87	131	87	87	0	0	392	174	8.2
ACX 4674	Abbott & Cobb	3	131	44	131	479	87	44	915	741	12.2
Affirmed	Sakata	2	131	0	218	436	131	87	1002	871	12.9
Bold Ruler	Sakata	3	87	174	305	392	44	0	1002	741	11.1
Crimson Sweet	Willhite	33	0	0	0	0	0	0	0	0	0.0
Crispy Red	Abbott & Cobb	6	0	0	87	349	131	87	653	653	14.7
Cut Master ESL	Willhite	6	44	131	349	174	87	44	828	653	13.3
Declaration	Nunhems	9	0	44	44	436	44	87	653	610	15.0
Distinction	Syngenta	25	0	87	44	131	44	0	305	218	8.8
Fascination	Syngenta	25	87	131	87	131	0	0	436	218	11.3
Imagination	Syngenta	31	0	44	44	44	0	0	131	87	5.9
Liberator	Abbott & Cobb	18	87	0	87	261	44	44	523	436	13.6
Maxima	Origene Seed	9	0	0	44	392	87	87	610	610	15.1
Melody	Syngenta	18	87	87	261	131	44	0	610	436	10.5
NUN 1000	Nunhems	22	44	44	174	218	0	0	479	392	9.0
Ole	Willhite	25	0	0	44	0	44	131	218	218	17.5
Palomar	Syngenta	25	0	44	0	218	0	0	261	218	9.0
RWT 8231	Syngenta	32	305	87	0	44	0	0	436	44	6.1
Summer Flavor 800	Abbott & Cobb	25	0	0	44	44	0	131	218	218	16.4
Summer King	Syngenta	5	44	87	218	392	87	0	828	697	12.6
Super Seedless 7167	Abbott & Cobb	13	87	218	0	392	131	44	871	566	13.0
Super Seedless 7177	Abbott & Cobb	9	0	44	131	305	174	0	653	610	10.4
Super Seedless 7187	Abbott & Cobb	1	44	44	131	658	131	174	1176	1089	14.1
Super Seedless 7197	Abbott & Cobb	9	87	131	87	305	131	87	828	610	13.2
Super Seedless 7267	Abbott & Cobb	16	0	87	174	218	131	0	610	523	13.4
Sweet Polly	Seigers	17	0	44	174	174	131	0	523	479	13.2
Tri-X-313	Syngenta	6	0	44	87	479	87	0	697	653	13.7
WDL 9405	Syngenta	24	44	0	0	261	44	0	349	305	12.4
WDL 9408	Syngenta	13	44	44	131	349	44	44	653	566	11.9
WDL 9409	Syngenta	18	0	44	131	174	0	131	479	436	13.8
WX 4838	Willhite	23	261	218	87	218	44	0	828	349	10.2
WX 4868	Willhite	13	131	44	44	392	44	87	741	566	12.8
Average		- -	55	63	108	258	61	41	586	467	11.8
LSD (0.05)		**- -**	**159**	**132**	**232**	**332**	**159**	**129**	**487**	**443**	**6.0**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit ≥ 10 pounds.

Table 7. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **late season harvest, (Harvest 4)**. **Clayton, NC, 2010.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	0	0	30	50	10	10
53312	22	33	22	22	0	0
ACX 4674	14	5	14	52	10	5
Affirmed	13	0	22	43	13	9
Bold Ruler	9	17	30	39	4	0
Crimson Sweet	0	0	0	0	0	0
Crispy Red	0	0	13	53	20	13
Cut Master ESL	5	16	42	21	11	5
Declaration	0	7	7	67	7	13
Distinction	0	29	14	43	14	0
Fascination	20	30	20	30	0	0
Imagination	0	33	33	33	0	0
Liberator	17	0	17	50	8	8
Maxima	0	0	7	64	14	14
Melody	14	14	43	21	7	0
NUN 1000	9	9	36	45	0	0
Ole	0	0	20	0	20	60
Palomar	0	17	0	83	0	0
RWT 8231	70	20	0	10	0	0
Summer Flavor 800	0	0	20	20	0	60
Summer King	5	11	26	47	11	0
Super Seedless 7167	10	25	0	45	15	5
Super Seedless 7177	0	7	20	47	27	0
Super Seedless 7187	4	4	11	56	11	15
Super Seedless 7197	11	16	11	37	16	11
Super Seedless 7267	0	14	29	36	21	0
Sweet Polly	0	8	33	33	25	0
Tri-X-313	0	6	12	69	12	0
WDL 9405	12	0	0	75	12	0
WDL 9408	7	7	20	53	7	7
WDL 9409	0	9	27	36	0	27
WX 4838	32	26	11	26	5	0
WX 4868	18	6	6	53	6	12
Average	9	11	18	41	9	8

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

Table 8. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **harvest 4** by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2011.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb) <7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Total No./ Acre	Mkt No./ Acre[3]	Avg wt.
407	Zeraim Gedera	8	44	0	218	479	44	44	828	784	13.8
53312	Seigers	29	218	87	174	44	0	0	523	218	6.5
ACX 4674	Abbott & Cobb	12	44	44	131	436	131	0	784	697	14.0
Affirmed	Sakata	12	44	44	174	436	44	44	784	697	13.5
Bold Ruler	Sakata	22	44	87	131	349	0	0	610	479	12.3
Crimson Sweet	Willhite	33	0	0	87	44	0	0	131	131	9.1
Crispy Red	Abbott & Cobb	2	44	44	261	566	174	87	1176	1089	13.5
Cut Master ESL	Willhite	6	0	218	392	349	87	44	1089	871	10.1
Declaration	Nunhems	11	44	87	349	305	44	44	871	741	12.5
Distinction	Syngenta	28	87	44	131	131	44	0	436	305	6.6
Fascination	Syngenta	29	0	0	44	174	0	0	218	218	10.2
Imagination	Syngenta	32	44	349	44	131	0	0	566	174	7.5
Liberator	Abbott & Cobb	17	44	87	87	392	87	87	784	653	13.6
Maxima	Origene Seed	18	87	174	174	174	131	87	828	566	13.1
Melody	Syngenta	18	44	305	174	392	0	0	915	566	11.2
NUN 1000	Nunhems	24	0	0	174	261	0	0	436	436	11.9
Ole	Willhite	21	0	0	0	87	87	348	523	523	15.5
Palomar	Syngenta	27	0	131	0	261	0	44	436	305	9.8
RWT 8231	Syngenta	29	87	44	87	131	0	0	349	218	7.8
Summer Flavor 800	Abbott & Cobb	3	0	44	131	305	218	392	1089	1045	17.5
Summer King	Syngenta	6	0	131	218	479	87	87	1002	871	13.3
Super Seedless 7167	Abbott & Cobb	12	174	218	261	261	131	44	1089	697	11.3
Super Seedless 7177	Abbott & Cobb	4	44	174	131	523	218	131	1220	1002	13.9
Super Seedless 7187	Abbott & Cobb	5	0	44	131	653	131	0	958	915	13.3
Super Seedless 7197	Abbott & Cobb	1	87	44	131	741	218	174	1394	1263	14.1
Super Seedless 7267	Abbott & Cobb	24	87	131	261	87	87	0	653	436	12.1
Sweet Polly	Seigers	18	0	0	131	305	131	0	566	566	13.2
Tri-X-313	Syngenta	8	0	131	87	436	218	44	915	784	13.1
WDL 9405	Syngenta	12	131	0	261	305	87	44	828	697	12.3
WDL 9408	Syngenta	12	0	44	87	349	87	174	741	697	14.3
WDL 9409	Syngenta	22	0	87	174	131	87	87	566	479	13.3
WX 4838	Willhite	26	87	261	174	174	0	0	697	349	10.0
WX 4868	Willhite	8	87	131	305	436	44	0	1002	784	12.6
Average		- -	48	96	161	313	79	61	758	614	12.0
LSD (0.05)		**- -**	**139**	**210**	**275**	**382**	**177**	**147**	**692**	**584**	**5.6**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit ≥ 10 pounds.

Table 9. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **Harvest 4**. **Clayton, NC, 2011.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	5	0	26	58	5	5
53312	42	17	33	8	0	0
ACX 4674	6	6	17	56	17	0
Affirmed	6	6	22	56	6	6
Bold Ruler	7	14	21	57	0	0
Crimson Sweet	0	0	67	33	0	0
Crispy Red	4	4	22	48	15	7
Cut Master ESL	0	20	36	32	8	4
Declaration	5	10	40	35	5	5
Distinction	20	10	30	30	10	0
Fascination	0	0	20	80	0	0
Imagination	8	62	8	23	0	0
Liberator	6	11	11	50	11	11
Maxima	11	21	21	21	16	11
Melody	5	33	19	43	0	0
NUN 1000	0	0	40	60	0	0
Ole	0	0	0	17	17	67
Palomar	0	30	0	60	0	10
RWT 8231	25	13	25	38	0	0
Summer Flavor 800	0	4	12	28	20	36
Summer King	0	13	22	48	9	9
Super Seedless 7167	16	20	24	24	12	4
Super Seedless 7177	4	14	11	43	18	11
Super Seedless 7187	0	5	14	68	14	0
Super Seedless 7197	6	3	9	53	16	12
Super Seedless 7267	13	20	40	13	13	0
Sweet Polly	0	0	23	54	23	0
Tri-X-313	0	14	10	48	24	5
WDL 9405	16	0	32	37	11	5
WDL 9408	0	6	12	47	12	24
WDL 9409	0	15	31	23	15	15
WX 4838	12	38	25	25	0	0
WX 4868	9	13	30	43	4	0
Average	7	13	23	41	9	8

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

Table 10. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **harvest 5** by various weight classes, (per acre), including average fruit size[1]. **Clayton, N.C. 2011.**

Cultivar	Seed Company	Rank[2]	Fruit size category (lb) <7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Total No./ Acre	Mkt No./ Acre[3]	Avg wt.
407	Zeraim Gedera	2	0	523	697	784	44	87	2134	1612	12.0
53312	Seigers	33	0	479	131	44	0	0	653	174	9.8
ACX 4674	Abbott & Cobb	12	44	741	653	261	44	0	1742	958	10.3
Affirmed	Sakata	5	0	349	436	697	87	44	1612	1263	11.6
Bold Ruler	Sakata	7	0	697	741	349	44	0	1830	1133	10.7
Crimson Sweet	Willhite	3	0	131	479	697	87	261	1655	1525	14.0
Crispy Red	Abbott & Cobb	15	0	566	349	479	87	0	1481	915	11.3
Cut Master ESL	Willhite	26	0	566	218	218	0	218	1220	653	10.7
Declaration	Nunhems	12	0	610	566	349	44	0	1568	958	10.8
Distinction	Syngenta	30	0	523	174	174	87	0	958	436	10.6
Fascination	Syngenta	25	0	349	392	261	0	44	1045	697	11.0
Imagination	Syngenta	32	653	523	131	131	0	0	1438	261	8.8
Liberator	Abbott & Cobb	8	44	349	523	392	44	131	1481	1089	12.7
Maxima	Origene Seed	23	0	87	218	261	87	174	828	741	9.7
Melody	Syngenta	20	0	436	566	261	0	0	1263	828	10.7
NUN 1000	Nunhems	28	0	697	392	218	0	0	1307	610	10.7
Ole	Willhite	11	0	0	174	523	44	261	1002	1002	15.5
Palomar	Syngenta	1	0	349	610	828	87	131	2004	1655	12.4
RWT 8231	Syngenta	8	44	436	610	349	0	131	1568	1089	11.4
Summer Flavor 800	Abbott & Cobb	8	0	87	174	566	131	218	1176	1089	14.6
Summer King	Syngenta	6	0	479	566	566	44	44	1699	1220	11.5
Super Seedless 7167	Abbott & Cobb	26	0	479	305	261	87	0	1133	653	10.7
Super Seedless 7177	Abbott & Cobb	15	0	349	479	261	131	44	1263	915	11.5
Super Seedless 7187	Abbott & Cobb	23	0	349	392	349	0	0	1089	741	11.1
Super Seedless 7197	Abbott & Cobb	3	0	392	828	566	44	87	1917	1525	11.8
Super Seedless 7267	Abbott & Cobb	15	44	523	479	392	44	0	1481	915	10.8
Sweet Polly	Seigers	18	0	828	392	392	44	44	1699	871	11.0
Tri-X-313	Syngenta	29	0	436	305	44	131	0	915	479	10.5
WDL 9405	Syngenta	20	0	784	174	392	218	44	1612	828	12.2
WDL 9408	Syngenta	22	0	392	479	261	44	0	1176	784	10.6
WDL 9409	Syngenta	18	0	218	523	218	44	87	1089	871	14.9
WX 4838	Willhite	31	0	741	349	0	0	0	1089	349	9.2
WX 4868	Willhite	12	87	523	392	523	44	0	1568	958	11.1
Average		- -	28	454	421	366	54	62	1385	903	11.4
LSD (0.05)		**- -**	**191**	**472**	**387**	**407**	**154**	**171**	**941**	**746**	**2.7**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit ≥ 10 pounds.

Table 11. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **Harvest 5**. **Clayton, NC, 2011.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	0	24	33	37	2	4
53312	0	73	20	7	0	0
ACX 4674	3	42	38	15	3	0
Affirmed	0	22	27	43	5	3
Bold Ruler	0	38	40	19	2	0
Crimson Sweet	0	8	29	42	5	16
Crispy Red	0	38	24	32	6	0
Cut Master ESL	0	46	18	18	0	18
Declaration	0	39	36	22	3	0
Distinction	0	55	18	18	9	0
Fascination	0	33	37	25	0	4
Imagination	45	36	9	9	0	0
Liberator	3	24	35	26	3	9
Maxima	0	11	26	32	11	21
Melody	0	34	45	21	0	0
NUN 1000	0	53	30	17	0	0
Ole	0	0	17	52	4	26
Palomar	0	17	30	41	4	7
RWT 8231	3	28	39	22	0	8
Summer Flavor 800	0	7	15	48	11	19
Summer King	0	28	33	33	3	3
Super Seedless 7167	0	42	27	23	8	0
Super Seedless 7177	0	28	38	21	10	3
Super Seedless 7187	0	32	36	32	0	0
Super Seedless 7197	0	20	43	30	2	5
Super Seedless 7267	3	35	32	26	3	0
Sweet Polly	0	49	23	23	3	3
Tri-X-313	0	48	33	5	14	0
WDL 9405	0	49	11	24	14	3
WDL 9408	0	33	41	22	4	0
WDL 9409	0	20	48	20	4	8
WX 4838	0	68	32	0	0	0
WX 4868	6	33	25	33	3	0
Average	2	34	30	25	4	5

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

Table 12. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for cumulative harvests, (5), by various weight classes (per acre)[1] including fruit number per plant. **Clayton, N.C., 2011.**

		Fruit size category (lb)						Total	Total	Fruit No./
Cultivar	Rank[2]	<7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Number	Mkt. No.[3]	Plant
407	2	479	1263	1873	2962	349	349	7275	5532	4.2
53312	32	1307	1612	1612	610	0	44	5184	2265	3.0
ACX 4674	10	566	2004	2222	2352	392	44	7579	5009	4.4
Affirmed	5	523	1002	1438	2919	610	305	6795	5271	3.9
Bold Ruler	13	828	1786	2265	2352	174	0	7405	4792	4.3
Crimson Sweet	31	610	349	871	1525	261	610	4225	3267	2.4
Crispy Red	7	218	915	1045	3049	828	261	6316	5184	3.6
Cut Master ESL	10	610	1830	2004	2047	436	523	7449	5009	4.3
Declaration	17	566	1742	1960	2134	261	218	6883	4574	4.0
Distinction	22	436	1176	958	2134	741	218	5663	4051	3.3
Fascination	26	523	1002	1438	1699	349	174	5184	3659	3.0
Imagination	33	2439	1873	915	915	0	0	6142	1830	3.5
Liberator	17	566	1045	1786	2178	349	261	6186	4574	3.6
Maxima	6	392	566	1089	2396	915	828	6186	5227	3.6
Melody	25	566	1699	2091	1612	87	44	6098	3833	3.5
NUN 1000	28	479	1438	1786	1568	87	87	5445	3528	3.1
Ole	30	174	0	523	1220	436	1917	4269	4095	2.5
Palomar	21	610	1525	1350	2483	218	218	6403	4269	3.7
RWT 8231	26	1002	1176	1263	1786	349	261	5837	3659	3.4
Summer Flavor 800	23	131	218	653	1699	828	2352	5881	5532	3.4
Summer King	3	349	1699	2047	2875	349	131	7449	5401	4.3
Super Seedless 7167	16	436	1350	1438	2352	741	174	6490	4705	3.7
Super Seedless 7177	7	305	1089	1568	2570	741	305	6578	5184	3.8
Super Seedless 7187	4	436	1133	1307	3311	523	218	6926	5358	4.0
Super Seedless 7197	1	349	1133	1830	3006	741	653	7710	6229	4.4
Super Seedless 7267	19	305	1176	1525	2091	566	261	5924	4443	3.4
Sweet Polly	13	349	1263	1307	2527	784	174	6403	4792	3.7
Tri-X-313	12	131	958	1655	2439	697	131	6011	4922	3.5
WDL 9405	24	392	1394	1220	1742	653	261	5663	3877	3.3
WDL 9408	20	261	958	1394	2178	436	392	5619	4400	3.2
WDL 9409	15	174	784	1612	2222	392	523	5706	4748	3.3
WX 4838	29	1133	2178	1525	1525	131	44	6534	3223	3.8
WX 4868	9	566	1002	1220	2701	784	392	6665	5097	3.8
Average	- -	552	1222	1478	2157	461	375	6245	4471	3.6
LSD(0.05)	**- -**	**541**	**709**	**696**	**1004**	**473**	**403**	**1411**	**1399**	**0.8**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit ≥ 10 pounds.

Table 13. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **cumulative** harvests. **Clayton, NC., 2011.**

	Percentages[1] (%) by Fruit Size Category (lb)					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	7	17	26	41	5	5
53312	25	31	31	12	0	1
ACX 4674	7	26	29	31	5	1
Affirmed	8	15	21	43	9	4
Bold Ruler	11	24	31	32	2	0
Crimson Sweet	14	8	21	36	6	14
Crispy Red	3	14	17	48	13	4
Cut Master ESL	8	25	27	27	6	7
Declaration	8	25	28	31	4	3
Distinction	8	21	17	38	13	4
Fascination	10	19	28	33	7	3
Imagination	40	30	15	15	0	0
Liberator	9	17	29	35	6	4
Maxima	6	9	18	39	15	13
Melody	9	28	34	26	1	1
NUN 1000	9	26	33	29	2	2
Ole	4	0	12	29	10	45
Palomar	10	24	21	39	3	3
RWT 8231	17	20	22	31	6	4
Summer Flavor 800	2	4	11	29	14	40
Summer King	5	23	27	39	5	2
Super Seedless 7167	7	21	22	36	11	3
Super Seedless 7177	5	17	24	39	11	5
Super Seedless 7187	6	16	19	48	8	3
Super Seedless 7197	5	15	24	39	10	8
Super Seedless 7267	5	20	26	35	10	4
Sweet Polly	5	20	20	39	12	3
Tri-X-313	2	16	28	41	12	2
WDL 9405	7	25	22	31	12	5
WDL 9408	5	17	25	39	8	7
WDL 9409	3	14	28	39	7	9
WX 4838	17	33	23	23	2	1
WX 4868	8	15	18	41	12	6
Average	9	19	24	34	7	7

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

Table 14. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** by harvest for all 5 harvest for total and total marketable categories. **Clayton, NC., 2011.**

		Percentages[1] (%) by Harvest for Total and Total Marketable fruit									
		Harvest 1		Harvest 2		Harvest 3		Harvest 4		Harvest 5	
Cultivar	Seed Company	Total	Total Mrkt.	Total	Total Mrkt.	Total	Total Mrkt.	Total	Total Mrkt.	Total	Total Mrkt.
407	Zeraim Gedera	47	43	6	6	6	8	11	14	29	29
53312	Seigers	60	69	8	6	8	8	10	10	13	8
ACX 4674	Abbott & Cobb	43	41	12	11	12	15	10	14	23	19
Affirmed	Sakata	41	40	9	7	15	17	12	13	24	24
Bold Ruler	Sakata	45	45	9	5	14	15	8	10	25	24
Crimson Sweet	Willhite	47	49	3	0	0	0	3	4	39	47
Crispy Red	Abbott & Cobb	35	39	12	10	10	13	19	21	23	18
Cut Master ESL	Willhite	43	50	15	7	11	13	15	17	16	13
Declaration	Nunhems	39	40	16	10	9	13	13	16	23	21
Distinction	Syngenta	58	71	8	5	5	5	8	8	17	11
Fascination	Syngenta	52	61	14	8	8	6	4	6	20	19
Imagination	Syngenta	51	69	12	2	2	5	9	10	23	14
Liberator	Abbott & Cobb	36	37	19	15	8	10	13	14	24	24
Maxima	Origene Seed	47	48	15	15	10	12	13	11	13	14
Melody	Syngenta	46	44	8	8	10	11	15	15	21	22
NUN 1000	Nunhems	50	56	8	4	9	11	8	12	24	17
Ole	Willhite	52	53	5	4	5	5	12	13	23	24
Palomar	Syngenta	47	43	10	6	4	5	7	7	31	39
RWT 8231	Syngenta	44	48	14	15	7	1	6	6	27	30
Summer Flavor 800	Abbott & Cobb	53	54	4	4	4	4	19	19	20	20
Summer King	Syngenta	47	46	5	2	11	13	13	16	23	23
Super Seedless 7167	Abbott & Cobb	46	51	7	8	13	12	17	15	17	14
Super Seedless 7177	Abbott & Cobb	44	47	7	4	10	12	19	19	19	18
Super Seedless 7187	Abbott & Cobb	39	36	14	13	17	20	14	17	16	14
Super Seedless 7197	Abbott & Cobb	32	33	15	13	11	10	18	20	25	24
Super Seedless 7267	Abbott & Cobb	43	49	10	9	10	12	11	10	25	21
Sweet Polly	Seigers	48	55	9	5	8	10	9	12	27	18
Tri-X-313	Syngenta	51	55	7	6	12	13	15	16	15	10
WDL 9405	Syngenta	38	46	12	7	6	8	15	18	28	21
WDL 9408	Syngenta	44	45	10	9	12	13	13	16	21	18
WDL 9409	Syngenta	50	50	12	12	8	9	10	10	19	18
WX 4838	Willhite	45	54	15	14	13	11	11	11	17	11
WX 4868	Willhite	42	47	8	8	11	11	15	15	24	19
Average		46	49	10	8	9	10	12	13	22	20

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

Table 15. Triploid Red-Flesh watermelon hybrid cultivar trial. **Cumulative** weight, (**cwt.**), per acre of fruit harvested over five harvests by various weight classes plus average fruit size[1]. **Clayton, N.C. 2011.**

		Fruit size category (lb)						Total Cwt./	Mkt Cwt./	Avg lb./
Cultivar	Rank[2]	<7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Acre	Acre[3]	fruit
407	4	28	114	206	406	59	67	881	738	12.1
53312	32	76	148	175	83	0	8	490	266	9.5
ACX 4674	15	37	182	243	322	65	9	857	638	11.3
Affirmed	5	33	90	159	405	104	58	849	725	12.4
Bold Ruler	19	58	159	248	323	29	0	818	600	10.9
Crimson Sweet	31	20	32	86	160	22	67	387	335	11.4
Crispy Red	6	15	85	113	420	141	48	822	723	13.1
Cut Master ESL	11	38	163	222	280	74	102	879	678	11.7
Declaration	21	35	158	212	287	43	41	776	583	11.3
Distinction	22	17	106	104	293	125	41	687	564	12.2
Fascination	27	28	90	156	232	59	33	598	479	11.5
Imagination	33	152	166	100	123	0	0	541	223	8.8
Liberator	17	37	97	196	302	58	53	744	609	12.2
Maxima	2	24	50	121	335	156	166	851	778	13.8
Melody	28	36	156	230	217	15	8	662	469	10.9
NUN 1000	29	30	132	197	215	15	16	604	442	11.1
Ole	25	6	0	48	162	74	212	503	496	15.8
Palomar	23	29	140	146	340	36	41	733	564	11.2
RWT 8231	26	61	108	139	245	60	49	662	493	11.4
Summer Flavor 800	16	0	16	67	216	103	251	653	637	15.9
Summer King	9	21	156	225	388	58	25	872	696	11.7
Super Seedless 7167	14	30	123	160	325	124	35	796	644	12.2
Super Seedless 7177	8	15	100	171	358	124	57	825	710	12.5
Super Seedless 7187	3	26	104	142	451	88	61	872	742	12.5
Super Seedless 7197	1	23	104	202	406	124	126	986	859	12.8
Super Seedless 7267	18	20	105	168	287	95	51	726	601	12.2
Sweet Polly	12	23	117	142	353	131	33	799	659	12.5
Tri-X-313	13	10	88	181	335	115	25	754	656	12.5
WDL 9405	24	26	126	135	243	110	52	692	540	12.3
WDL 9408	20	19	87	152	297	74	75	705	599	12.5
WDL 9409	10	12	70	177	305	64	137	764	682	13.4
WX 4838	30	80	196	168	207	22	8	682	406	10.4
WX 4868	7	38	90	133	372	131	75	838	710	12.6
Average	**- -**	33	111	161	294	76	62	737	592	12.1
LSD (0.05)	**- -**	**35**	**64**	**76**	**140**	**78**	**74**	**192**	**201**	**1.3**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable weight.

[3] Includes fruit ≥ 10 pounds.

Table 16. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested over five harvests by **weight** within each fruit size category. **Clayton, NC, 2011.**

	Percentages[1] (%) by Fruit Size Category					
Cultivar	**< 7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
407	3	13	23	46	7	8
53312	16	30	36	17	0	2
ACX 4674	4	21	28	38	8	1
Affirmed	4	11	19	48	12	7
Bold Ruler	7	20	30	40	4	0
Crimson Sweet	5	8	22	41	6	17
Crispy Red	2	10	14	51	17	6
Cut Master ESL	4	19	25	32	8	12
Declaration	4	20	27	37	6	5
Distinction	3	15	15	43	18	6
Fascination	5	15	26	39	10	5
Imagination	28	31	18	23	0	0
Liberator	5	13	26	41	8	7
Maxima	3	6	14	39	18	19
Melody	6	24	35	33	2	1
NUN 1000	5	22	33	36	2	3
Ole	1	0	9	32	15	42
Palomar	4	19	20	46	5	6
RWT 8231	9	16	21	37	9	7
Summer Flavor 800	0	2	10	33	16	38
Summer King	2	18	26	44	7	3
Super Seedless 7167	4	15	20	41	16	4
Super Seedless 7177	2	12	21	43	15	7
Super Seedless 7187	3	12	16	52	10	7
Super Seedless 7197	2	11	21	41	13	13
Super Seedless 7267	3	14	23	40	13	7
Sweet Polly	3	15	18	44	16	4
Tri-X-313	1	12	24	44	15	3
WDL 9405	4	18	19	35	16	7
WDL 9408	3	12	22	42	10	11
WDL 9409	2	9	23	40	8	18
WX 4838	12	29	25	30	3	1
WX 4868	5	11	16	44	16	9
Average	5	15	22	39	10	9

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7

Table 17. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, N.C., 2011.**[1]

Cultivar	SS[2]	Flesh Color[3]	Sd. Trace Size[4]	Hard Seed Population[5]	LD[6]	Rind[7]	Flesh Firmness[8]	Hollow Heart Ratings[9]				
								HH0	HH1	HH2	HH3	HH4
407	11.3	4.3	0.2	0.9	1.1	15.3	5.1	95	0	5	0	0
53312	11.3	1.0	0.1	0.3	1.0	14.1	2.4	90	5	0	5	0
ACX 4674	11.6	3.9	0.2	0.4	1.3	19.8	2.4	90	5	0	5	0
Affirmed	11.9	4.4	0.2	0.1	1.2	16.9	2.2	50	20	20	10	0
Bold Ruler	11.2	4.2	0.2	0.0	1.2	18.7	2.1	50	20	25	5	0
Crimson Sweet	10.6	2.9	2.6	5.0	1.1	18.2	2.2	90	10	0	0	0
Crispy Red	12.4	4.2	0.1	0.0	1.2	20.2	2.4	70	25	5	0	0
Cut Master ESL	12.5	4.3	0.2	0.0	1.2	17.4	2.5	45	5	15	25	10
Declaration	11.9	4.2	0.5	0.1	1.2	17.6	2.4	55	20	20	5	0
Distinction	12.0	4.5	0.2	0.1	1.1	15.9	2.8	100	0	0	0	0
Fascination	11.5	4.6	0.1	0.6	1.2	14.2	2.9	100	0	0	0	0
Imagination	12.0	4.6	0.2	0.3	1.0	14.1	2.6	100	0	0	0	0
Liberator	11.8	4.1	0.5	0.2	1.2	18.5	2.5	90	5	5	0	0
Maxima	12.4	4.5	0.2	0.0	1.1	18.0	2.6	85	5	10	0	0
Melody	11.2	4.4	0.5	0.1	1.1	14.1	2.2	80	10	10	0	0
NUN 1000	11.5	4.1	0.2	0.1	1.2	16.5	2.2	55	15	15	15	0
Ole	11.3	4.1	3.3	5.0	1.8	17.9	2.8	90	10	0	0	0
Palomar	11.4	3.8	0.2	0.1	1.0	18.7	2.2	80	5	5	0	10
RWT 8231	12.1	4.4	0.8	0.2	1.1	20.1	2.3	100	0	0	0	0
Summer Flavor 800	11.8	4.1	3.1	5.0	1.7	18.8	2.4	100	0	0	0	0
Summer King	12.0	4.0	0.1	0.1	1.2	18.5	2.2	35	25	30	10	0
Super Seedless 7167	12.1	4.1	0.1	0.2	1.2	18.0	2.4	75	15	10	0	0
Super Seedless 7177	12.6	4.1	0.6	0.2	1.2	20.3	2.5	85	15	0	0	0
Super Seedless 7187	12.1	4.2	0.2	0.4	1.2	18.4	2.5	85	10	5	0	0
Super Seedless 7197	12.5	4.4	0.2	0.3	1.2	19.9	3.8	100	0	0	0	0
Super Seedless 7267	12.8	4.4	0.2	0.0	1.2	17.2	2.6	90	10	0	0	0
Sweet Polly	12.2	4.1	0.7	0.1	1.2	16.0	2.6	100	0	0	0	0
Tri-X-313	11.8	4.1	0.2	0.1	1.2	16.9	2.3	60	25	10	5	0
WDL 9405	11.2	4.5	1.0	0.5	1.2	13.8	2.6	100	0	0	0	0
WDL 9408	11.7	4.5	0.1	0.7	1.2	15.3	2.6	90	10	0	0	0
WDL 9409	12.3	4.4	0.2	0.3	1.2	15.3	2.7	100	0	0	0	0
WX 4838	12.3	4.1	0.6	0.1	1.1	19.4	2.3	75	15	0	10	0
WX 4868	12.3	4.4	0.6	0.0	1.3	20.2	2.2	45	25	10	15	5
Average	11.9	4.1	0.6	0.6	1.2	17.4	2.6	80	9	6	3	1
LSD (0.05)	**0.8**	**0.3**	**0.6**	**0.4**	**0.1**	**3.2**	**0.7**	**28**	**18**	**18**	**12**	**6**

Table 17. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, N.C., 2011 (Cont.)**

[1] Most measurements were obtained from fruits in harvest 1.
[2] SS = Indicates sweetness, average of 5 melons per replication (20 total).
[3] Rating: 1 = yellow, 2 = pink, 3 = red, 4 = medium-dark red, 5 = blood red.
[4] Rating: 1=small (i.e. tomato), 3=medium, 5=large.
[5] Rating: 1 = few, 3 = some, 5 = many.
[6] LD = Length and diameter ratio, average of 5 melons per replication (20 total).
[7] Rind = Rind thickness (mm), measured from rind to where white and colored flesh meet, average of 5 melons per replication.
[8] 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.
[9] **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; 2011

Entry No.	Cultigen	Company	Description
1	ACX 10358	Abbott & Cobb	Distinct, narrow, medium to dark green stripes on light to medium green background; mainly round with a few slightly longer than round; fairly uniform shape; fairly uniform size; mostly small to medium size fruit; medium size seed trace size; good red flesh color; fairly thin rind
2	Little Deuce Coupe	Syngenta	Appears as solid medium to dark green rind, distinct, extremely narrow, very dark green stripes on medium to dark green background; round/ oval shape fruit; some shape variability; small to medium seed trace size; good to excellent red flesh color; size varied from fruit that were too small to medium size
3	RWT 8225	Syngenta	Distinct, very narrow dark green stripes on light green background; slightly longer than round to round shape; fairly uniform in shape; mostly medium size fruits, with a few larger sized mini fruits; good red flesh color; small seed trace size; medium thick rind
4	RWT 8212	Syngenta	Appears as a solid dark green melon; distinct extremely narrow very dark stripes on dark green background; slightly longer than round to round shape that is relatively uniform; uniform small to medium size fruits; dark red flesh; small seed trace sizes; thin rind
5	6708	Origene Seed	Indistinct, medium to wide width, dark green stripes on light to medium green background; shapes mainly round to slightly longer than round; sizes mainly medium and fairly uniform; excellent red flesh color; small to medium seed trace size; medium thick rind
6	9730	Origene Seed	Distinct, narrow dark green stripes on light green background; mainly round to slightly longer than round fruit; uniform shape; uniform sizes mainly small to medium size fruit; excellent deep red flesh color; small to medium seed trace size; medium thick rind
7	9155	Zeraim Gedera	Indistinct, medium thick, dark green stripes on light to medium green background; round; shape is very uniform; size is very uniform; thick rind that has an indistinct rind flesh delineation; medium seed trace size; good red flesh color
8	9162	Zeraim Gedera	Distinct, very narrow, dark green stripes on light green background; round fruit that have uniform shape; small to mostly medium size fruit that are uniform in size; good red flesh color; seed traces small but tan in color; thin to medium thick rind

Figure 2. Mini Triploid Cultivar Pictures

Figure 2. Mini Triploid Cultivar Pictures

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[1]. **Clayton, N.C., 2011.**

		Fruit Size Category									
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]	Avg. Wt. (lb)
ACX 10358	6	545	762	1525	0	0	0	0	2831	2287	3.9
Little Deuce Coupe	1	1525	3158	2069	0	0	0	0	6752	5227	3.7
RWT 8225	7	218	436	1742	545	0	0	0	2940	2178	5.2
RWT 8212	2	3376	2178	1851	0	0	0	0	7405	4029	3.1
6708	5	545	762	1851	0	0	0	0	3158	2614	4.4
9730	8	871	436	327	0	0	0	0	1634	762	3.2
9155	3	218	327	2831	0	0	0	0	3376	3158	4.7
9162	3	436	871	2287	0	0	0	0	3594	3158	4.4
Average	- -	966	1116	1810	68	0	0	0	3961	2927	4.1
LSD(0.05)	**- -**	**1133**	**1045**	**1610**	**285**	**0**	**0**	**0**	**2290**	**1981**	**0.9**

Table 20. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **second** and **third** harvests by various weight classes (per acre) and average fruit size[1]. **Clayton, N.C., 2011.**

		Fruit Size Category									
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]	Avg. Wt. (lb)
ACX 10358	5	436	1416	1634	109	218	0	0	3812	3049	4.2
Little Deuce Coupe	7	1089	871	762	0	0	0	0	2723	1634	3.0
RWT 8225	4	436	762	2396	436	109	109	0	4247	2158	5.0
RWT 8212	8	1089	762	327	0	0	0	0	2178	1089	2.5
6708	1	653	1634	2396	218	0	0	0	4901	4029	4.2
9730	3	1198	653	9730	0	0	0	0	4465	3267	4.1
9155	6	762	871	1742	218	0	0	0	3594	2614	4.1
9162	2	109	762	2614	218	218	0	0	3920	3376	5.3
Average	- -	721	966	2700	150	68	14	0	3730	2652	4.1
LSD(0.05)	**- -**	**777**	**1175**	**1547**	**310**	**285**	**113**	**0**	**1883**	**2041**	**0.9**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 21. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **first** harvest by various weight classes (per acre).**Clayton, N.C., 2011.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mrkt[2]**
ACX 10358	19	27	54	0	0	0	0	81
Little Deuce Coupe	23	47	31	0	0	0	0	77
RWT 8225	7	15	59	19	0	0	0	74
RWT 8212	46	29	25	0	0	0	0	54
6708	17	24	59	0	0	0	0	83
9730	53	27	20	0	0	0	0	47
9155	6	10	84	0	0	0	0	94
9162	12	24	64	0	0	0	0	88
Average	23	25	49	2	0	0	0	75

Table 22. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **second and third** harvests by various weight classes (per acre). **Clayton, N.C., 2011.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	**<3**	**3-3.9**	**4.0-7.0**	**7.1-8.0**	**8.1-9.0**	**9.1-10**	**>10**	**Mrkt[2]**
ACX 10358	11	37	43	3	6	0	0	80
Little Deuce Coupe	40	32	28	0	0	0	0	60
RWT 8225	10	18	56	10	3	3	0	51
RWT 8212	50	35	15	0	0	0	0	50
6708	13	33	49	4	0	0	0	82
9730	27	15	218	0	0	0	0	73
9155	21	24	48	6	0	0	0	73
9162	3	19	67	6	6	0	0	86
Average	22	27	66	4	2	0	0	69

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

[2] Includes fruit 3 to 7 lbs.

Table 23. **Triploid mini watermelon** hybrid cultivar trial. Cumulative **number** of fruit harvested over 3 harvests by various weight classes (per acre)[1]. **Clayton, N.C., 2011.**

		Fruit Size Category								
Cultivar	Rank[2]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[3]
ACX 10358	5	980	2178	3158	109	218	0	0	6643	5336
Little Deuce Coupe	1	2614	4029	2831	0	0	0	0	9474	6861
RWT 8225	5	653	1198	4138	980	109	109	0	7187	4336
RWT 8212	7	4465	2940	2178	0	0	0	0	9583	5118
6708	2	1198	2396	4247	218	0	0	0	8059	6643
9730	8	2069	1089	2940	0	0	0	0	6098	4029
9155	4	980	1198	4574	218	0	0	0	6970	5772
9162	3	545	1634	4901	218	218	0	0	7514	6534
Average	- -	1688	2083	3621	218	68	14	0	7691	5579
LSD(0.05)	**- -**	**1328**	**1665**	**2077**	**389**	**285**	**113**	**0**	**2141**	**2423**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 pollinizers were interplanted after triploid plants 1 and 10 (2 plants/plot). Ace pollinizers were interplanted after triploid plants 4 and 7 (2 plants/plot). Fruit numbers for each category are rounded to the nearest whole number.

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 24. Triploid mini watermelon hybrid cultivar trial. **Cumulative** Percentage harvested by **number** within each fruit size category. **Clayton, NC, 2011.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Mkt[2]
ACX 10358	17	32	46	1	3	0	0	78
Little Deuce Coupe	27	45	27	0	0	0	0	73
RWT 8225	9	16	59	14	1	1	0	75
RWT 8212	50	29	21	0	0	0	0	50
6708	16	30	51	3	0	0	0	81
9730	36	19	45	0	0	0	0	64
9155	19	17	61	2	0	0	0	78
9162	7	22	66	3	3	0	0	88
Average	23	26	47	3	1	0	0	73
LSD(0.05)	**20**	**20**	**21**	**5**	**3**	**1**	**0**	**22**

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

[2]Includes fruit 3 to 7 lbs.

Table 25. Triploid mini watermelon hybrid cultivar trial. **Percent** harvested by **number** by harvest within total and total marketable categories. **Clayton, NC, 2011.**

	Percentages[1] (%) by harvest for Total and Total Marketable			
	Harvest 1		Harvests 2-3	
Cultivar	Total	Total Mrkt.	Total	Total Mrkt.
ACX 10358	43	43	57	57
Little Deuce Coupe	71	76	29	24
RWT 8225	41	50	59	50
RWT 8212	77	79	23	21
6708	39	39	61	61
9730	27	19	73	81
9155	48	55	52	45
9162	48	48	52	52
Average	49	51	51	49

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

Table 26. **Mini Triploid** watermelon hybrid cultivar trial. Cumulative **weight** (x 100) of fruit harvested over 3 harvests by various weight classes (per acre) including average fruit weight. **Clayton, N.C., 2011.**

		Fruit Size Category (lb)									
Cultivar	Rank[1]	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Total	Total Mkt[2]	Avg. Wt
ACX 10358	6	23	78	155	8	18	0	0	282	233	4.2
Little Deuce Coupe	4	67	138	138	0	0	0	0	344	277	3.6
RWT 8225	5	16	42	217	74	9	11	0	369	259	5.1
RWT 8212	7	95	99	104	0	0	0	0	298	203	3.0
6708	2	30	85	224	17	0	0	0	356	310	4.4
9730	8	47	38	149	0	0	0	0	234	187	3.8
9155	3	25	41	243	17	0	0	0	326	284	4.5
9162	1	15	59	260	17	18	0	0	369	319	4.9
Average	- -	40	73	186	17	6	1	0	322	259	4.2
LSD(0.05)	**- -**	**29**	**58**	**107**	**30**	**24**	**11**	**0**	**106**	**110**	**0.6**

[1] Ranked according to total marketable number.
[2] Includes fruit 3 to 7 lbs.

Table 27. Triploid mini watermelon hybrid cultivar trial. Cumulative **Percentage** harvested by weight within each fruit size category. **Clayton, NC, 2011.**

	Percentages[1] (%) by Fruit Size Category							
Cultivar	<3	3-3.9	4.0-7.0	7.1-8.0	8.1-9.0	9.1-10	>10	Mkt[2]
ACX 10358	11	30	51	2	5	0	0	78
Little Deuce Coupe	19	45	36	0	0	0	0	73
RWT 8225	5	11	61	20	2	2	0	74
RWT 8212	40	31	29	0	0	0	0	50
6708	10	25	60	5	0	0	0	81
9730	25	18	57	0	0	0	0	64
9155	13	14	70	4	0	0	0	78
9162	4	17	71	5	4	0	0	88
Average	16	24	54	4	1	0	0	73
LSD	**17**	**18**	**23**	**7**	**6**	**2**	**0**	**22**

[1] Fruit number (per cultivar and weight class) divided by the total number (per cultivar) times 100.
[2]Includes fruit 3 to 7 lbs.

Table 28. Mini Triploid watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, NC, 2011**.[1]

Cultivar	Rind Thickness (mm)[2]	Soluble Solids[3]	Flesh Color[4]	Average Fruit Pressure[5]	Fruit LD	Hollow Heart Ratings[6]				
						HH0	HH1	HH2	HH3	HH4
ACX 10358	0.9	10.8	4.1	2.8	1.06	100	0	0	0	0
Little Deuce Coupe	0.7	11.2	4.5	3.1	1.06	100	0	0	0	0
RWT 8225	1.4	10.9	4.1	3.1	1.07	100	0	0	0	0
RWT 8212	0.8	11.1	4.4	2.9	1.07	100	0	0	0	0
6708	1.3	10.1	4.3	3.2	1.05	100	0	0	0	0
9730	1.1	9.6	4.3	3.5	1.09	100	0	0	0	0
9155	1.4	10.5	4.0	2.8	0.99	100	0	0	0	0
9162	1.1	10.7	4.4	3.1	1.03	100	0	0	0	0
Average	1.1	10.6	4.3	3.1	1.05	100	0	0	0	0
LSD (0.05)	**0.2**	**1.2**	**0.2**	**0.4**	**0.04**	**0**	**0**	**0**	**0**	**0**

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

[2] 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).

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

[4] Rating: 3=red, 3.5=bright red, 4=dark red, 5=blood red.

[5] 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.

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

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

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

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

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

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