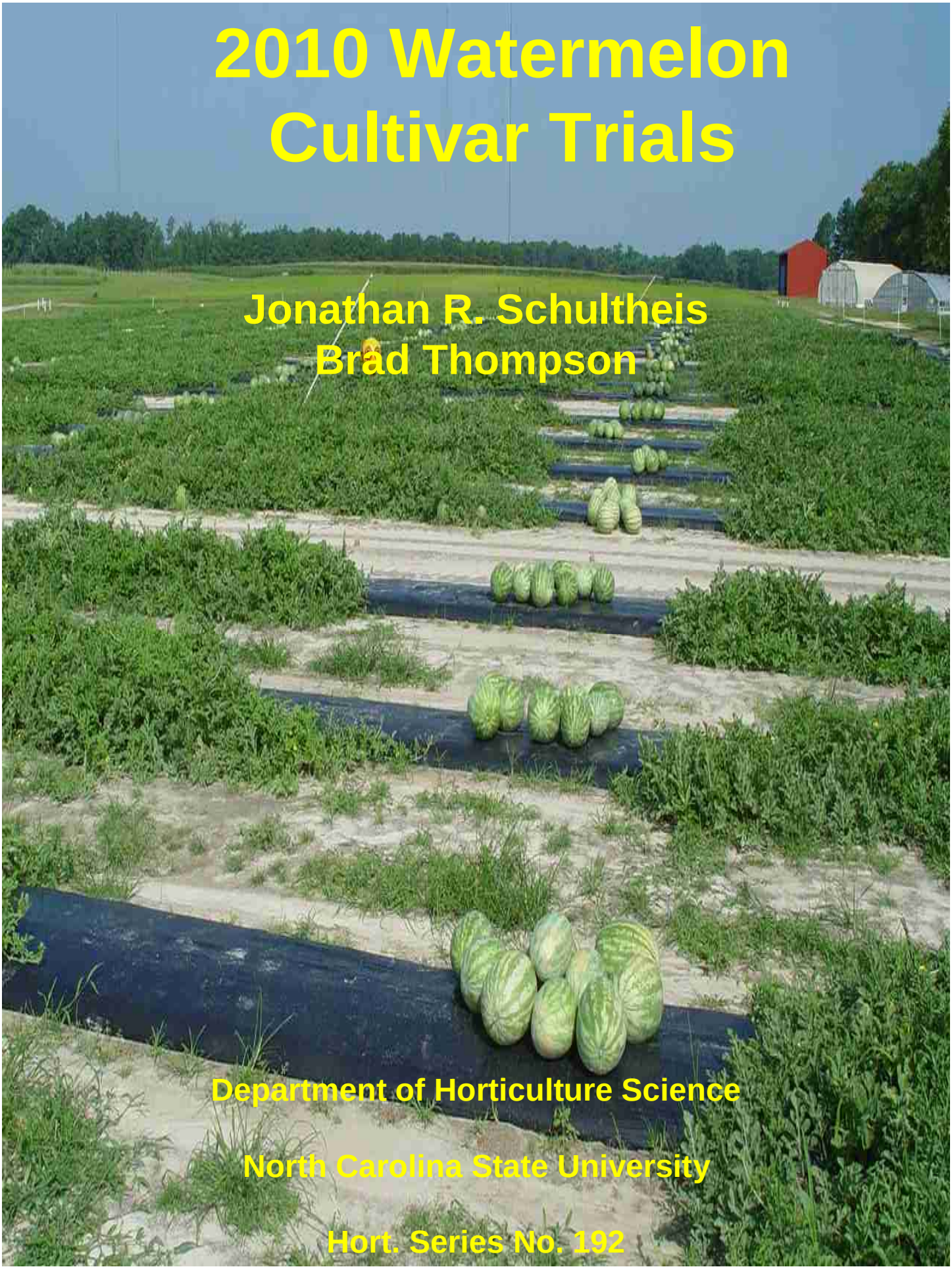
2010 Watermelon Cultivar Trials



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Hort. Series No. 192

2010
North Carolina
Watermelon
Cultivar Trials

Hort. Series # 192

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General Cultural Practices

The watermelon trials were grown on black plastic mulch and fertigated with drip irrigation. Pesticides used on all plots were chemicals labeled for that crop, (2010 North Carolina Agricultural Chemicals Manual, (http://ipm.ncsu.edu/Agchem/agchem.html).

Acknowledgments

We gratefully acknowledge the assistance of Reid Evans (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, John Palumbo, Steven Hill, and Eric Pilecki. Also, we want to thank Joy Smith for her statistical analysis assistance.
The cooperation and support of Abbott & Cobb, Inc.; D.L. Palmer; Harris Moran Seed Company; Nunhems; Sakata Seed Company; Southwest Seed Company; Syngenta Seeds, Inc.; U.S. Seedless; Willhite Seed, Inc.; and Zeraim Gedera Seed were also appreciated.

Disclaimer
This publication presents data from the cultivar evaluation trials conducted during 2010. Information in this report is believed to be reliable but should **not** be relied upon as a sole source of information. Limited accompanying detail is included but excludes some pertinent information, which may aid interpretation.

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Diploid, Triploid, and Mini Triploid Watermelon Cultural Practices for 2010 Cultivar Trials, Central Crops Research Station, Clayton, NC

Introduction

Watermelon is an important crop grown in North Carolina as the state was ranked seventh in production among U.S. states nationally in 2009 representing 3.8% of the nation's watermelon crop. Approximately 8,800 acres valued at nearly $15.4 million were produced in 2009. 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 have evaluated mini triploid watermelon types since 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 LE 1803 transplant trays (Landmark Plastics Corp.; Akron, OH). Seeds of triploid, diploid, and triploid mini cultigens were sown on 6 April, 2010. 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, diploids, and triploid mini watermelons were established in the field on 11 May 2010. Fertilizer, 30 lb/acre N and 80 lb/acre K_20, was incorporated into the bed on 13 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 6 November 2009 at 9.9 gallons/acre prior to the start of the growing season. Herbicides, Curbit at 4 pints/acre, Gramaxone at 3 pints/acre, and Alanap L at 6 quarts/acre, were applied between the plastic beds for weed control on 7 May. Sandia at 0.75 oz/acre was applied to row middles on 6 June for nutsedge control. Paraquat at 3 pints/acre was applied between the plastic beds for weed control on 4 June. 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 0.5 lb Diazinon per 50 gallons water for insect control. Plots with missing plants were replanted approximately 7 days after planting to achieve 100% stand in most cases. SP-4 pollinizer plants were interplanted in triploid plots after plants 1, 4, and 7. Trickle irrigation was utilized (NETAFIM, 12 inch spacing, 0.24 gph; NETAFIM, Tel Aviv, Israel) over the growing season. Fertigation was initiated two weeks after planting and applied weekly during the planting season. A total of 77.6 lb/acre N and 155.2 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 107.6, 0, and 235.2 lb/acre of N, P_2O_5, and K_2O, respectively. Insecticides were applied every week as a preventative measure beginning 20 May and on the following dates (9, 16, 23, 24 June; 1, 8, and 26 July). The following products were alternated during consecutive spray applications to avoid insect resistance: Perm Up, Sniper, Sevin XLP, and Abamectin. 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, Gavel, Ranman, and Bravo Weather Stik; and applied on the following dates: 2, 9, 17, and 23 June; 1, 8, and 26 July.

There were four diploid harvests, four triploid harvests, and four mini triploid harvests. The first harvest for the diploid test was 16 July which consisted of picking off fruit that had been damaged by birds before the fruit had matured. This harvest was not included in the cumulative harvests data found within the booklet. Subsequent harvests were 22 July; 3 and 12 August. The first harvest date for the triploid test was 15 July; subsequent harvests were 22 July; 3 and 12 August. The first harvest for the mini triploid trial was 8 July, and subsequent harvests were 15, and 22 July, and 3 August. Each fruit was harvested when ripe, weighed and categorized statistically by size category. For the diploid watermelon test, fruits were placed in the following categories; < 8 lb, 8-15.9 lb, 16-23.9 lb, and 24 + lb. Fruit less than 8 lb were considered not marketable while fruit greater than 8 lbs were considered marketable. For the triploid trial, fruits were placed in the following weight 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 first or second harvest.

2010 Trial Notice: Our 2010 trial yields were noticeably lower than past year's trials. We believe that excessive high temperatures at our trial location inhibited or reduced fruit set. The temperatures recorded during the summer in Raleigh, NC made 2010 the hottest summer ever since records had been kept. In addition, significant damage to the foliage was caused by ozone which likely inhibited fruit enlargement, thereby reducing fruit size.

Financial Support

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

Table 1. Diploid watermelon cultivar descriptions and seed sources; **Clayton, N.C., 2010.**

Entry No.	Cultigen	Company	Description
1	Diablo	Willhite	Indistinct, wide, dark green stripes on light green background; elongated; shape is somewhat variable; size is variable; large dark black seed; dark red flesh; rind is fairly thick
2	Lemon Krush	D. Palmer	Distinct, narrow, dark green stripes on a light green background; oval; small fruit; uniform shape and size; bright canary yellow; dark, black seeds; thin rind (probably not conducive to shipping)
3	Olé	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
4	Orange Krush	D. Palmer	Distinct, medium wide, dark green stripes on a light green background; oval (short to long); small to medium size fruit; medium orange color; dark black, large seeds; thick rind
5	Plantation Pride	D. Palmer	Indistinct, wide, dark green stripes on a light green background; mainly blocky with some short elongated; shape somewhat variable; size generally medium to large; dark black seeds; dark red flesh; good flesh-rind delineation
6	Summer Flavor 800	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

Figure 1: 2010 Diploid Cultivars

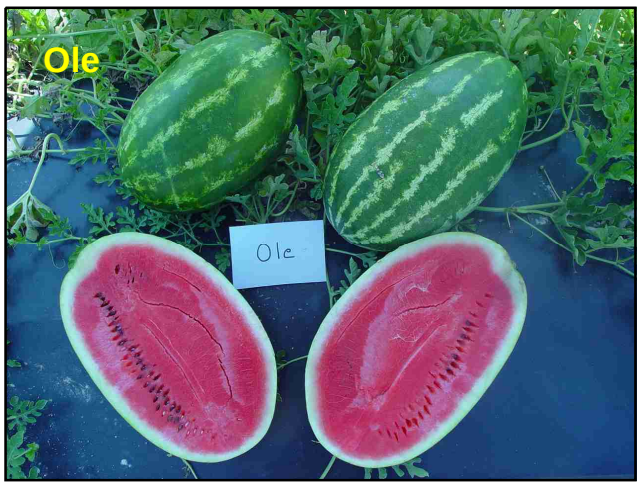


Figure 1: 2010 Diploid Cultivars

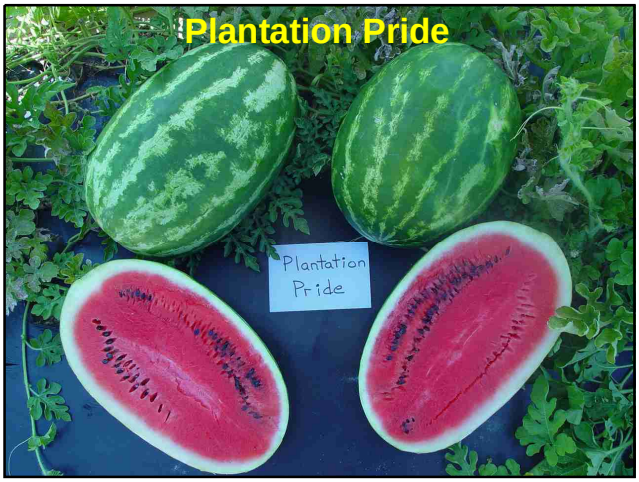


Table 2. Diploid watermelon hybrid cultivar trial**. Number** of fruit harvested during the **first harvest**[1] by various weight classes (per acre) and average fruit size. **Clayton, N.C., 2010.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	Rank[2]	<8	8-15.9	16-23.9	24 +	Total	Mkt[3]	(lb)[4]
Diablo	2	0	116	116	0	232	232	14.5
Lemon Krush	3	116	174	0	0	290	174	8.2
Ole	3	0	87	87	0	174	174	15.2
Orange Krush	1	0	290	58	0	349	349	13.4
Plantation Pride	6	174	0	0	0	174	0	7.2
Summer Flavor 800	3	58	116	58	0	232	174	14.5
Average	- -	58	131	53	0	242	184	12.2
LSD(0.05)	**- -**	**157**	**424**	**196**	**0**	**461**	**470**	**6.3**

Table 3. Diploid watermelon hybrid cultivar trial**. Number** of fruit harvested during the **second harvest**[1] by various weight classes (per acre) including average fruit size. **Clayton, N.C., 2010.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	Rank[2]	<8	8-15.9	16-23.9	24 +	Total	Mkt[3]	(lb)[4]
Diablo	4	0	87	741	261	1089	1089	21.4
Lemon Krush	2	87	958	261	0	1307	1220	12.3
Ole	1	0	566	392	349	1307	1307	18.6
Orange Krush	5	0	697	261	87	1045	1045	14.1
Plantation Pride	3	0	610	479	87	1176	1176	17.7
Summer Flavor 800	6	0	392	305	87	784	784	18.5
Average	- -	15	552	407	145	1118	1104	17.1
LSD(0.05)	**- -**	**62**	**457**	**301**	**225**	**628**	**645**	**4.2**

[1] Harvest 1 yields consisted of fruit that would have been considered marketable fruit, but were damaged by . birds before the fruit were completely mature for harvesting. This harvest will not be included in the overall cumulative yield results. 1st Harvest: 16 July, 66 DAP; 2nd Harvest: 22 July, 72 DAP; 3rd Harvest: 3 August, 84 DAP; 4th Harvest: 12 August, 93 DAP.

[2] Ranked according to total marketable number.

[3] Includes fruit = 8 pounds.

[4] Represents average weights of fruit across all reps for representative harvest.

Table 4. Diploid watermelon hybrid cultivar trial**. Number** of fruit harvested during the **late harvests**[1]**,** Harvests 3 and 4**,** by various weight classes (per acre) including average fruit size. **Clayton, N.C., 2010.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	Rank[2]	<8	8-15.9	16-23.9	24 +	Total	Mkt[3]	(lb)[4]
Diablo	5	87	218	218	44	566	479	14.8
Lemon Krush	3	174	566	44	0	784	610	11.3
Ole	6	0	174	87	0	261	261	15.1
Orange Krush	1	0	479	261	0	741	741	16.4
Plantation Pride	2	44	349	261	44	697	653	15.3
Summer Flavor 800	4	44	305	261	0	610	566	16.9
Average	- -	58	348	189	15	610	552	15.0
LSD(0.05)	**- -**	**138**	**422**	**161**	**78**	**511**	**479**	**4.8**

[1] Harvest 1 yields consisted of fruit that would have been considered marketable fruit, but were damaged by birds before the fruit were completely mature for harvesting. This harvest will not be included in the overall cumulative yield results. 1st Harvest: 16 July, 66 DAP; 2nd Harvest: 22 July, 72 DAP; 3rd Harvest: 3 August, 84 DAP; 4th Harvest: 12 August, 93 DAP.

[2] Ranked according to total marketable number.

[3] Includes fruit = 8 pounds.

[4] Represents average weights of fruit across all reps for representative harvest.

Table 5. Diploid watermelon hybrid cultivar trial. Percentage fruit harvested by **numbe** within each size category for the **first harvest**. **Clayton, N.C., 2010**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Diablo	0	50	50	0
Lemon Krush	40	60	0	0
Ole	0	50	50	0
Orange Krush	0	83	17	0
Plantation Pride	100	0	0	0
Summer Flavor 800	25	50	25	0
Average	28	49	24	0

Table 6. Diploid watermelon hybrid cultivar trial. Percentage fruit harvested by **numbe** within each size category for the **second harvest**. **Clayton, N.C., 2010.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Diablo	0	8	68	24
Lemon Krush	7	73	20	0
Ole	0	43	30	27
Orange Krush	0	67	25	8
Plantation Pride	0	52	41	7
Summer Flavor 800	0	50	39	11
Average	1	49	37	13

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

Table 7. Diploid watermelon hybrid cultivar trial. Percentage fruit harvested by **number** within each size category for **third and fourth harvests; Clayton, N.C., 2010.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Diablo	15	38	38	8
Lemon Krush	22	72	6	0
Ole	0	67	33	0
Orange Krush	0	65	35	0
Plantation Pride	6	50	37	6
Summer Flavor 800	7	50	43	0
Average	8	57	32	2

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

Table 8. Diploid watermelon hybrid cultivar trial. Cumulative **fruit number** from **Harvests 2-4** by various weight classes (per acre) and fruit number per plant. **Clayton, N.C.**, **2010.**

		Fruit size category (lb)						% Mkt.	Fruit /
Cultivar	Rank[1]	<8	8-15.9	16-23.9	24+	Total	Total Mkt[2]	Loss[3]	Plant[4]
Diablo	4	87	305	958	305	1655	1568	15	1.5
Lemon Krush	1	261	1525	305	0	2091	1830	10	1.7
Ole	4	0	741	479	349	1568	1568	11	1.4
Orange Krush	3	0	1176	523	87	1786	1786	20	1.6
Plantation Pride	1	44	958	741	131	1873	1830	0	1.5
Summer Flavor 800	6	44	697	566	87	1394	1350	13	1.3
Average	- -	73	900	595	160	1728	1655	11	1.5
LSD (0.05)	**- -**	**117**	**532**	**385**	**235**	**718**	**714**	**- -**	**0.4**

[1] Ranked according to total marketable number.

[2] Includes fruit = 8 pounds.

[3] Percentage of fruit in the 1st harvest that would have been marketable if they had not been damaged by birds. The percentage was not included as part of the total marketable fruit number.

[4] Fruit number per plant includes fruit that were harvested in Harvest 1 even though this fruit was not included in overall yields.

Table 9. Diploid watermelon hybrid cultivar trial. Percentage harvested by **number** over **Harvests 2-4** within each fruit size category. **Clayton, NC., 2010.**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Diablo	3	44	41	13
Lemon Krush	12	78	10	0
Ole	0	65	22	14
Orange Krush	0	78	18	3
Plantation Pride	3	65	28	5
Summer Flavor 800	3	67	26	3
Average	4	66	24	6
LSD (0.05)	**5**	**16**	**15**	**9**

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

Table 10. Diploid watermelon hybrid cultivar trial. Percentage harvested by harvest in **total** and **total marketable** number categories. **Clayton, NC, 2010.**

	Percentages[1] (%) by Harvest for Total and Total Marketable fruit			
	2nd Harvest		3rd and 4th Harvests	
Cultivar	Total	Total Mkt.	Total	Total Mkt.
Diablo	66	69	34	31
Lemon Krush	62	67	38	33
Ole	83	83	17	17
Orange Krush	59	59	41	41
Plantation Pride	63	64	37	36
Summer Flavor 800	56	58	44	42
Average	65	67	35	33

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

Table 11. Diploid watermelon hybrid cultivar trial**.** Cumulative **weight** (x 100), of fruit harvested over **Harvests 2-4** by various weight classes (per acre) and average fruit size. **Clayton, N.C., 2010.**

		Fruit size category (lb)					Total	Avg. Wt.
Cultivar	**Rank[1]**	**<8**	**8-15.9**	**16-23.9**	**24 +**	**Total**	**Mkt[2]**	**(lb)**
Diablo	1	6	92	186	85	369	363	17.0
Lemon Krush	5	17	227	55	0	300	283	11.5
Ole	3	0	151	94	94	340	340	16.0
Orange Krush	4	0	199	89	23	311	311	13.5
Plantation Pride	2	3	182	149	36	370	367	15.4
Summer Flavor 800	6	3	138	115	23	279	276	14.6
Average	- -	5	115	44	44	328	323	14.7
LSD(0.05)	**- -**	**9**	**69**	**79**	**64**	**128**	**128**	**2.2**

[1] Ranked according to total marketable weight.

[2] Includes fruit = 8 lb.

Table 12. Diploid watermelon hybrid cultivar trial. Percentage **harvested b weight** over **four harvests** within each fruit size category. **Clayton, NC., 20**

	Percentages[1] (%) by Fruit Size Category (lb)			
Cultivar	**<8**	**8-15.9**	**16-23.9**	**24+**
Diablo	1	29	48	21
Lemon Krush	7	77	16	0
Ole	0	52	26	22
Orange Krush	0	68	26	7
Plantation Pride	1	53	37	8
Summer Flavor 800	2	54	38	7
Average	2	56	32	11
LSD (0.05)	**2**	**21**	**19**	**16**

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

Table 13. Diploid watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, NC, 2010.**[1]

Cultivar	SS[2]	Color[3]	Seed Size[4]	Flesh Pressure [5]	LD[6]	Rind[7]	Hollow Heart Ratings [8]				
							HH0	HH1	HH2	HH3	HH4
Diablo	11.8	4.5	4.3	2.3	1.9	16.5	33	27	20	13	7
Lemon Krush	11.0	1.0	3.8	3.0	1.1	9.6	100	0	0	0	0
Ole	11.4	4.6	4.0	2.9	1.6	18.2	87	13	0	0	0
Orange Krush	11.1	2.0	4.2	2.5	1.2	16.1	47	20	13	20	0
Plantation Pride	11.2	4.6	3.9	2.5	1.6	15.6	87	13	0	0	0
Summer Flavor 800	10.3	4.3	4.0	2.2	1.5	17.3	100	0	0	0	0
Average	11.1	3.5	4.0	2.6	1.5	15.5	76	12	6	6	1
LSD(0.05)	**1.3**	**0.3**	**0.2**	**0.3**	**0.2**	**3.8**	**49**	**39**	**17**	**26**	**9**

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

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

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

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

[5] Pressure was taken from 2 sides of fruit flesh on 5 fruit per replication.

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

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

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

Hollow Heart Ratings (Percentage occurrence in each category).

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

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

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

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

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

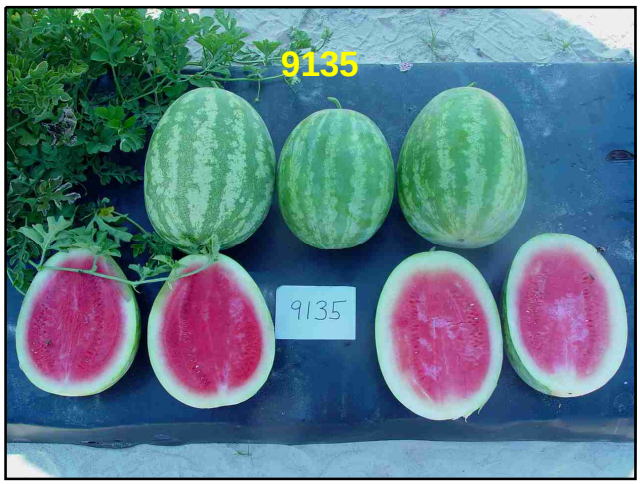
Table 14. Triploid Red-Flesh Watermelon Seed Sources and Descriptions; 2010.

Entry No.	Cultigen	Company	Description
1	9135	Zeraim Gedera	Indistinct, medium width, dark green stripes on light green background; slightly oval to short blocky shape; some variation in shape; fairly uniform size; large fruited type; good interior red flesh color
2	ACR 4106	Abbott & Cobb	Indistinct, medium wide, medium to dark green stripes on light green background; oval; uniform shape; variable size; pronounced water soaking in rind; several hard seed in fruit
3	ACR 6177	Abbott & Cobb	Distinct, narrow to medium wide, dark green stripes on a light green background; round; very uniform shape and size; high amounts of hard seed in several fruit
4	ACR 6277	Abbott & Cobb	Indistinct, medium wide, dark green stripes on a light green background; oval; uniform shape; variable size; in other plots within trial, variety tended to be mixed with elongated and short, oval fruit as well as tetraploid fruit; Excellent red flesh color
5	Cut Master ESL	Willhite	Distinct, very narrow dark green stripes that are raised when fruit are ripe on a medium to dark green background (appears as solid green); short oval; fairly uniform shape, variation in fruit size; very thick rinds; attractive
6	Declaration	Nunhems	Indistinct, medium wide, dark green stripes on light green background; most fruit oval with a few small fruit round in shape; fairly uniform shape and size; watersoaking in rind
7	Fascination	Syngenta	Indistinct, medium to wide, very dark green stripes on light green background; slightly oval or oval; shape is fairly uniform; variable size; very dark red flesh; contains hard seed, but very small; good flesh-rind delineation
8	Fresh Cut ESL	Willhite	Distinct, very narrow, very dark green stripes on dark green background, (appears as solid green rind); oval; shape was fairly uniform; sizes were variable; some fruit contained very thick rinds while other fruit did not
9	Intruder	Southwest	Indistinct, medium wide, dark green stripes on light green background; mainly round fruit; uniform shape; size varied considerably; generally good flesh-rind delineation; some water soaking into white rind
10	Krimson Krunch	D. Palmer	Distinct, narrow, medium green stripes on a very light green background; round; uniform shape; variable size; some very small fruit; excellent flesh-rind delineation; hard seed within majority of fruit sampled
11	Liberty	Nunhems	Indistinct, medium width, dark green stripes on light green background; oval; uniform shape; generally uniform size; some water soaking into white rind
12	Melody	Syngenta	Indistinct, medium width, dark green stripes on a medium green background; round; uniform shape and size; small fruit; nice flesh-rind delineation; excellent red flesh color
13	Orange Crisp	US Seedless	Distinct, narrow, dark green stripes on a light green background; slightly oval or round; uniform shape and size; some large fruit; no hollow heart observed in all plots
14	QV 776	Sakata	Indistinct, medium wide, dark green stripes on a light green background; larger fruit were oval while smaller fruit were round; variation in shape related to fruit size; variable size; excellent red flesh color
15	RWT 8228	Syngenta	Indistinct, medium wide, very dark green stripes on a light green background; round to short oval; fairly uniform shape and size; some watersoaking into rind even with good flesh-rind delineation

Table 14. Cont.

Entry No.	Cultigen	Company	Description
16	RWT 8229	Syngenta	Mainly distinct, medium wide, dark green stripes on light green background; round; very uniform shape; fairly uniform size with fairly large fruit; excellent flesh-rind delineation; good red flesh color
17	SSX 7436	Sakata	Indistinct, medium size, dark green stripes on a light green background; large fruit have oval shape, small fruit are round; variable fruit size; water soaking into white rind; fairly thick white rind
18	Summer King	Syngenta	Indistinct, medium wide, dark green stripes on a light green background; oval fruit; uniform fruit shape and size; fair amount of hard seed
19	Summer Sweet 4674	Abbott & Cobb	Indistinct, medium wide, dark green stripes on a light green background; mainly oval fruit with small round fruit and some elongated fruit; shape not uniform; size is variable; many hard seed in fruit
20	Super Seedless 7167	Abbott & Cobb	Indistinct, medium width, dark green stripes on a light green background; oval fruit; uniform fruit shape; some variation in size; some large fruit
21	Super Seedless 7177	Abbott & Cobb	Indistinct, medium wide, dark green stripes on a light green background; oval; variable sizes with some large fruit; water soaking in rind
22	Super Seedless 7187	Abbott & Cobb	Indistinct, medium wide, dark green stripes on a light green background; oval; uniform shape; variable size with some large fruit; water soaking in rind
23	Sweet Treasure	Sakata	Indistinct, medium wide, dark green stripes on a light green background; short oval, uniform shape; size variable; water soaking in rind
24	SWT 7609	Sakata	Indistinct, medium wide, medium to dark green stripes on a light green background; oval; small fruit are round, larger fruit are oval; sizes were variable
25	Tomcat	Southwest	Indistinct, medium wide, dark green stripes on a light green background; round to slightly oblong; uniform shape and fairly uniform size; water soaking in rind
26	Triple Threat	Syngenta	Distinct, narrow, dark green stripes on a medium to dark green background; generally round; uniform shape and size; excellent flesh-rind delineation; excellent red flesh color
27	Tri-X-313	Syngenta	Indistinct, medium wide, dark green stripes on light green background; oval; uniform fruit shape; size varied considerably; some fairly large fruit
28	Troubadour	Harris Moran	Indistinct, medium to wide, very dark green stripes on a light to medium green background; long to regular oval, uniform shape; variable size; water soaking in rind
29	UG 408	United Genetics	Distinct, narrrow, dark green stripes on a light green background; slightly oval to near round; very uniform in shape and size; excellent flesh-rind delineation; early; no hollow heart observed
30	UG 508	United Genetics	Mainly distinct, narrow, very dark green stripes on medium green background; round; very uniform shape and size; generally a smaller sized fruit; ripens early; excellent red flesh color; excellent flesh-rind delineation
31	WTC-9139	Zeraim Gedera	Indistinct, medium wide, dark green stripes on a light green background; oval; very uniform shape and size; fairly large sized fruit; variable rind thickness with some rinds being regular and others being thick
32	WX 4838	Willhite	Indistinct, medium wide, dark green stripes on light green background; round to slightly oblong; uniform shape and fairly uniform size; water soaking in rind

Figure 2. Triploid Cultivar Pictures



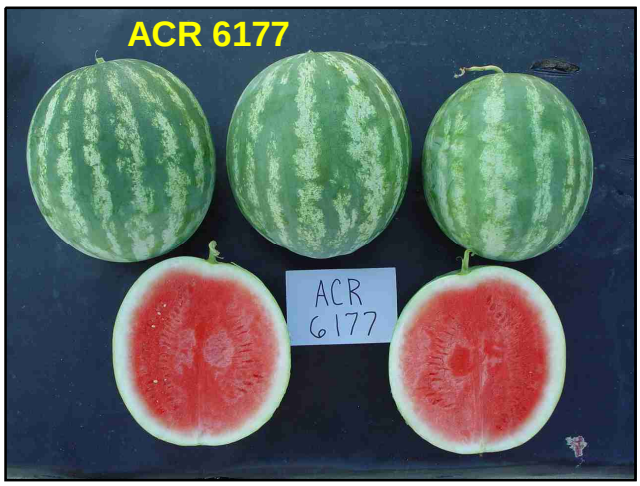
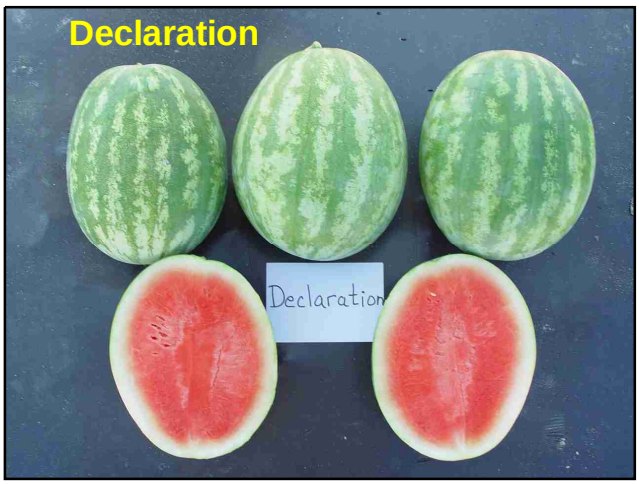


Figure 2. Triploid Cultivar Pictures



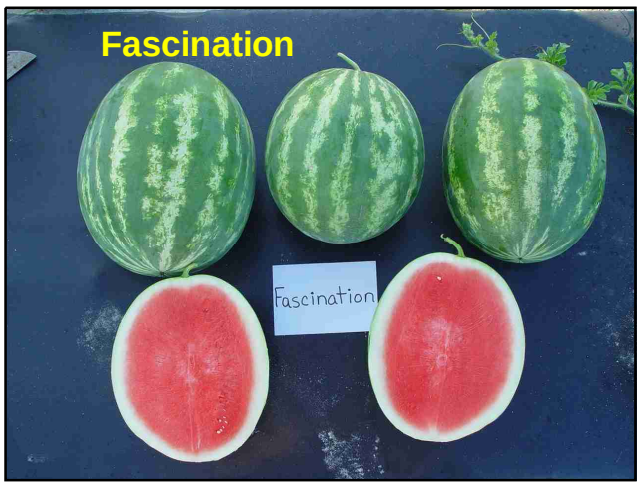
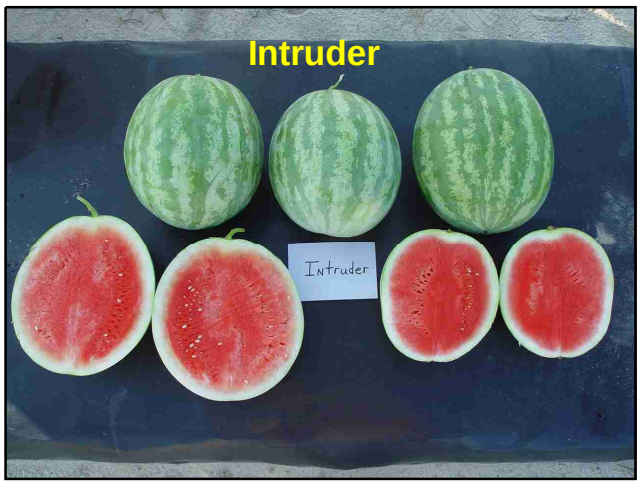
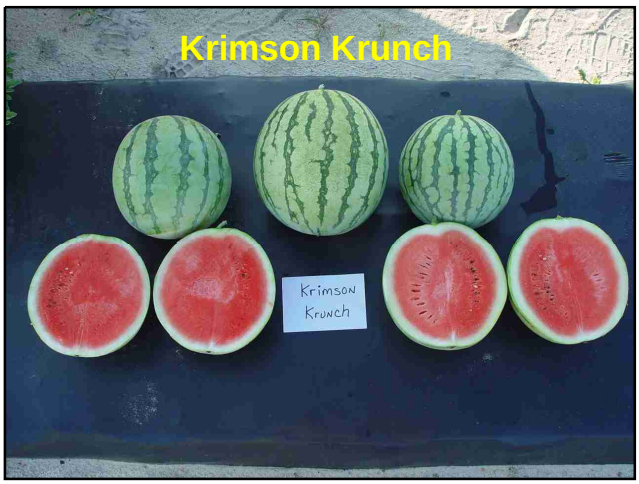
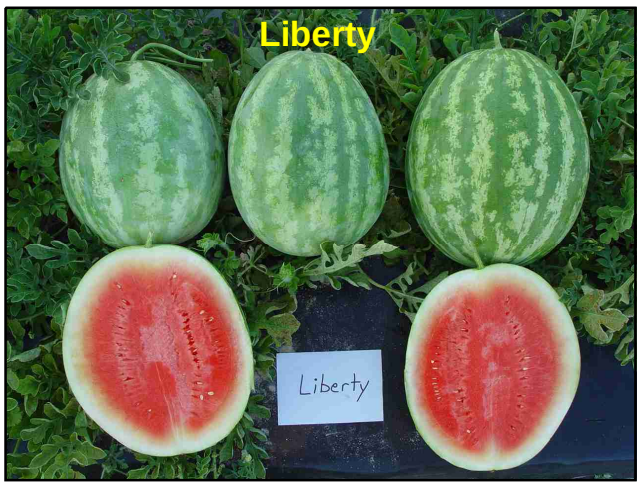


Figure 2. Triploid Cultivar Pictures







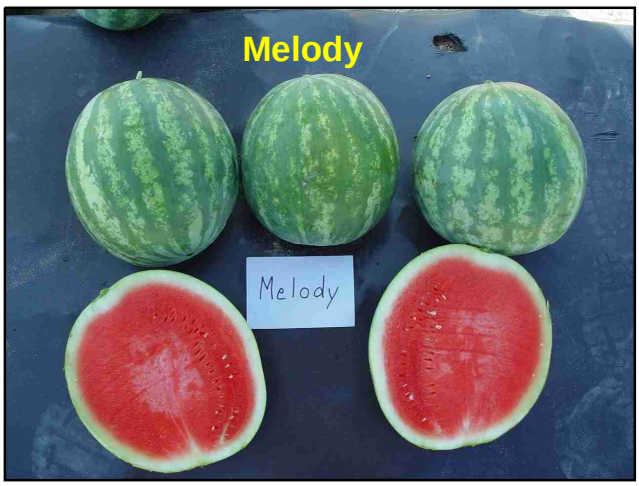


Figure 2. Triploid Cultivar Pictures

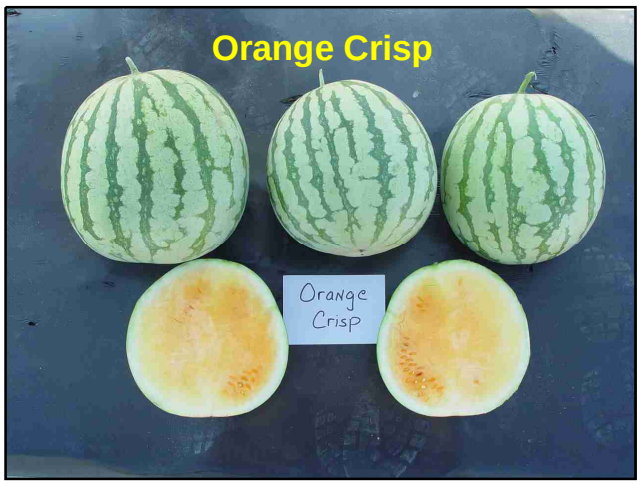


Figure 2. Triploid Cultivar Pictures

Figure 2. Triploid Cultivar Pictures

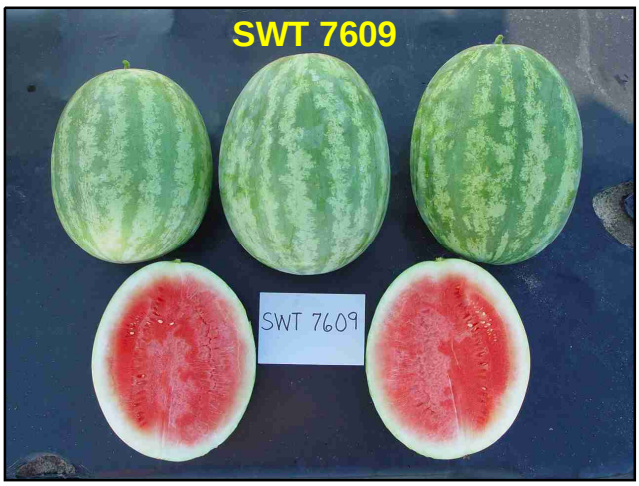
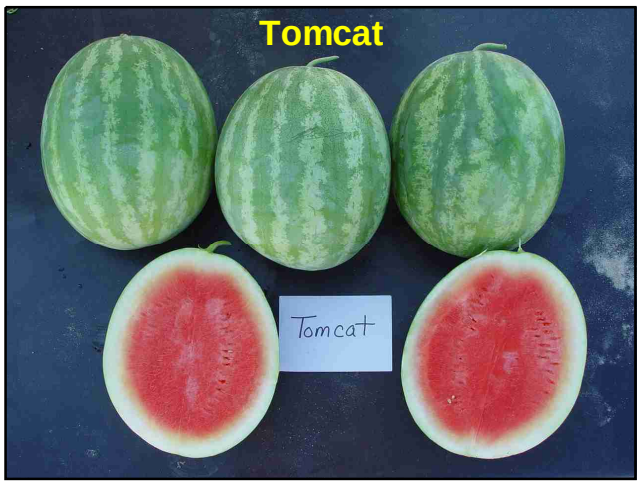


Figure 2. Triploid Cultivar Pictures



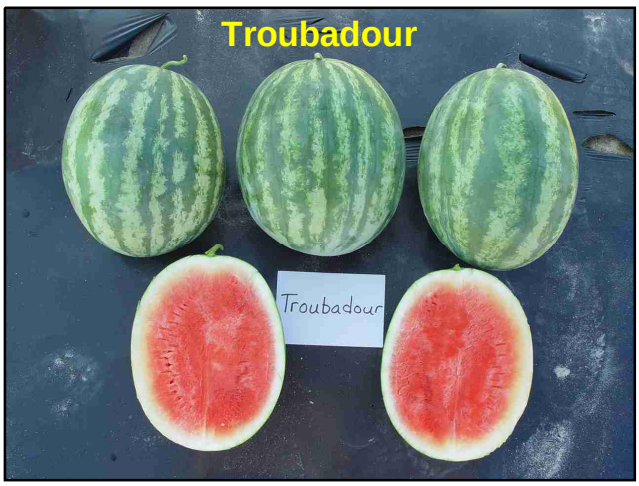


Figure 2. Triploid Cultivar Pictures

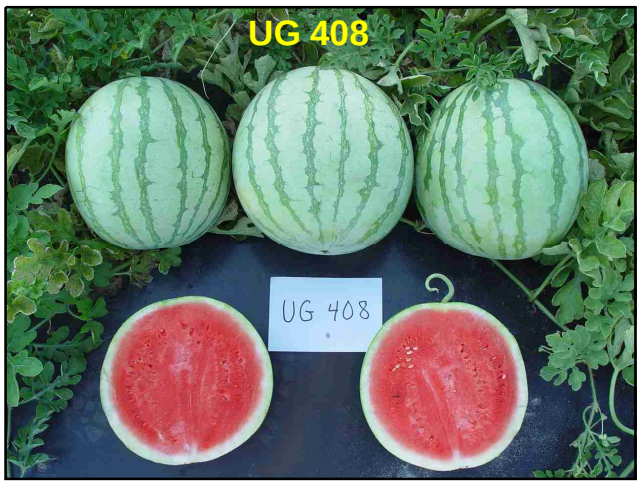


Table 15. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **early season**[1] harvests by various weight classes, (per acre), including average fruit size[2]. **Clayton, N.C. 2010.**

Cultivar	Seed Company	Rank[3]	Fruit size category <7.9	8-9.9	10-11.9	12-15.9	16-17.9	18 +	Total No./ Acre	Mkt No./ Acre[4]	Avg wt.
9135	Zeraim Gedera	10	87	44	44	436	261	0	871	741	14.0
ACR 4106	Abbott & Cobb	5	261	349	261	566	0	0	1438	828	10.7
ACR 6177	Abbott & Cobb	10	44	218	261	349	44	87	1002	741	12.3
ACR 6277	Abbott & Cobb	16	44	44	131	218	87	261	784	697	15.5
Cut Master	Willhite	28	87	87	87	305	0	0	566	392	11.4
Declaration	Nunhems	8	87	523	218	479	44	44	1394	784	11.2
Fascination	Syngenta	28	44	131	261	87	0	44	566	392	11.0
Fresh Cut	Willhite	10	131	87	174	523	44	0	958	741	12.5
Intruder	Southwest	16	131	305	87	566	44	0	1133	697	11.3
Krimson Krunch	D. Palmer	31	741	305	261	44	0	0	1350	305	7.6
Liberty	Nunhems	20	174	349	349	261	0	44	1176	653	11.0
Melody	Syngenta	31	523	218	174	174	0	0	1089	349	9.0
Orange Crisp	US Seedless	5	87	479	174	523	131	0	1394	828	12.0
QV 776	Sakata	5	261	218	305	392	44	87	1307	828	11.0
RWT 8228	Syngenta	25	0	0	174	174	44	44	436	436	13.7
RWT 8229	Syngenta	24	0	44	44	218	87	131	523	479	15.7
SSX 7436	Sakata	10	523	174	174	523	44	0	1438	741	10.2
Summer King	Syngenta	20	174	87	131	349	131	44	915	653	12.5
Summer Sweet 4674	Abbott & Cobb	20	131	261	436	218	0	0	1045	653	10.2
Super Seedless 7167	Abbott & Cobb	3	305	523	479	349	44	0	1699	871	10.1
Super Seedless 7177	Abbott & Cobb	8	44	349	131	479	131	44	1176	784	12.7
Super Seedless 7187	Abbott & Cobb	2	174	174	218	653	44	0	1263	915	11.5
Sweet Treasure	Sakata	16	218	261	349	261	87	0	1176	697	10.8
SWT 7609	Sakata	3	218	349	349	523	0	0	1438	871	11.3
Tomcat	Southwest	10	174	174	261	436	44	0	1089	741	10.9
Triple Threat	Syngenta	23	174	131	349	218	0	0	871	566	10.8
Tri-X-313	Syngenta	10	305	87	349	349	44	0	1133	741	10.2
Troubadour	Harris Moran	31	392	218	131	131	44	0	915	305	9.2
UG 408	United Genetics	16	218	479	479	218	0	0	1394	697	9.8
UG 508	United Genetics	25	566	479	305	131	0	0	1481	436	8.7
WTC-9139	Zeraim Gedera	1	87	87	87	741	174	44	1220	1045	13.7
WX 4838	Willhite	25	523	610	218	174	0	44	1568	436	9.1
Average		- -	216	245	233	346	50	29	1119	657	11.3
LSD (0.05)		**- -**	**297**	**250**	**287**	**303**	**122**	**94**	**456**	**379**	**1.9**

[1] Early season harvest consists of harvest 1.

[2] Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 1, 4, and 7 within the plot.

[3] Ranked according to total marketable number.

[4] Includes fruit = 10 pounds.

Table 16. 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 +**
9135	10	5	5	50	30	0
ACR 4106	18	24	18	39	0	0
ACR 6177	4	22	26	35	4	9
ACR 6277	6	6	17	28	11	33
Cut Master	15	15	15	54	0	0
Declaration	6	37	16	34	3	3
Fascination	8	23	46	15	0	8
Fresh Cut	14	9	18	55	5	0
Intruder	12	27	8	50	4	0
Krimson Krunch	55	23	19	3	0	0
Liberty	15	30	30	22	0	4
Melody	48	20	16	16	0	0
Orange Crisp	6	34	12	37	9	0
QV 776	20	17	23	30	3	7
RWT 8228	0	0	40	40	10	10
RWT 8229	0	8	8	42	17	25
SSX 7436	36	12	12	36	3	0
Summer King	19	10	14	38	14	5
Summer Sweet 4674	13	25	42	21	0	0
Super Seedless 7167	18	31	28	21	3	0
Super Seedless 7177	4	30	11	41	11	4
Super Seedless 7187	14	14	17	52	3	0
Sweet Treasure	19	22	30	22	7	0
SWT 7609	15	24	24	36	0	0
Tomcat	16	16	24	40	4	0
Triple Threat	20	15	40	25	0	0
Tri-X-313	27	8	31	31	4	0
Troubadour	43	24	14	14	5	0
UG 408	16	34	34	16	0	0
UG 508	38	32	21	9	0	0
WTC-9139	7	7	7	61	14	4
WX 4838	33	39	14	11	0	3
Average	18	20	21	32	5	4

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

Table 17. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **mid season**[1] harvests by various weight classes, (per acre), including average fruit size[2]. **Clayton, N.C. 2010.**

Cultivar	Seed Company	Rank [3]	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[4]	Avg wt.
9135	Zeraim Gedera	3	44	44	218	523	174	392	1394	1307	15.8
ACR 4106	Abbott & Cobb	26	44	44	131	305	87	0	610	523	12.4
ACR 6177	Abbott & Cobb	5	44	218	436	479	218	131	1525	1263	12.9
ACR 6277	Abbott & Cobb	15	87	174	0	479	87	261	1089	828	14.4
Cut Master	Willhite	7	174	218	349	523	131	131	1525	1133	12.9
Declaration	Nunhems	22	131	44	174	392	0	44	784	610	10.9
Fascination	Syngenta	7	44	174	305	479	218	131	1350	1133	13.3
Fresh Cut	Willhite	17	218	87	261	349	87	87	1089	784	12.1
Intruder	Southwest	3	218	131	218	828	218	44	1655	1307	12.7
Krimson Krunch	D. Palmer	25	479	87	392	131	44	0	1133	566	8.9
Liberty	Nunhems	14	87	131	131	436	131	174	1089	871	13.3
Melody	Syngenta	31	523	349	0	305	44	0	1220	349	10.4
Orange Crisp	US Seedless	17	261	131	174	479	44	87	1176	784	12.0
QV 776	Sakata	26	131	174	131	261	131	0	828	523	11.6
RWT 8228	Syngenta	1	0	0	174	653	348	348	1525	1525	16.0
RWT 8229	Syngenta	2	44	131	131	697	305	261	1568	1394	15.0
SSX 7436	Sakata	17	218	392	349	392	44	0	1394	784	10.6
Summer King	Syngenta	6	44	131	261	741	131	44	1350	1176	13.0
Summer Sweet 4674	Abbott & Cobb	9	305	305	349	610	0	0	1568	958	11.1
Super Seedless 7167	Abbott & Cobb	9	174	174	174	523	131	131	1307	958	12.4
Super Seedless 7177	Abbott & Cobb	17	218	87	131	479	87	87	1089	784	12.2
Super Seedless 7187	Abbott & Cobb	11	0	87	131	349	261	174	1002	915	15.2
Sweet Treasure	Sakata	29	131	261	131	305	0	0	828	436	11.3
SWT 7609	Sakata	21	87	0	305	261	87	44	784	697	11.8
Tomcat	Southwest	11	174	174	218	610	87	0	1263	915	11.3
Triple Threat	Syngenta	11	349	261	261	566	87	0	1525	915	10.9
Tri-X-313	Syngenta	22	261	44	131	392	87	0	915	610	10.6
Troubadour	Harris Moran	22	174	174	218	305	87	0	958	610	11.6
UG 408	United Genetics	29	174	436	131	305	0	0	1045	436	10.4
UG 508	United Genetics	32	131	218	218	87	0	0	653	305	10.3
WTC-9139	Zeraim Gedera	15	44	87	131	479	131	87	958	828	13.6
WX 4838	Willhite	26	436	218	218	305	0	0	1176	523	9.7
Average		- -	170	162	206	438	109	83	1168	836	12.2
LSD (0.05)		- -	**264**	**227**	**238**	**379**	**179**	**178**	**556**	**500**	**2.2**

[1] Mid season harvests include harvests 2 and 3.

[2] Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 1, 4, and 7 within the plot.

[3] Ranked according to total marketable number.

[4] Includes fruit = 10 pounds.

Table 18. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **mid season harvests, (Harvests 2 and 3)**. **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 +**
9135	3	3	16	37	12	28
ACR 4106	7	7	21	50	14	0
ACR 6177	3	14	29	31	14	9
ACR 6277	8	16	0	44	8	24
Cut Master	11	14	23	34	9	9
Declaration	17	6	22	50	0	6
Fascination	3	13	23	35	16	10
Fresh Cut	20	8	24	32	8	8
Intruder	13	8	13	50	13	3
Krimson Krunch	42	8	35	12	4	0
Liberty	8	12	12	40	12	16
Melody	43	29	0	25	4	0
Orange Crisp	22	11	15	41	4	7
QV 776	16	21	16	32	16	0
RWT 8228	0	0	11	43	23	23
RWT 8229	3	8	8	44	19	17
SSX 7436	16	28	25	28	3	0
Summer King	3	10	19	55	10	3
Summer Sweet 4674	19	19	22	39	0	0
Super Seedless 7167	13	13	13	40	10	10
Super Seedless 7177	20	8	12	44	8	8
Super Seedless 7187	0	9	13	35	26	17
Sweet Treasure	16	32	16	37	0	0
SWT 7609	11	0	39	33	11	6
Tomcat	14	14	17	48	7	0
Triple Threat	23	17	17	37	6	0
Tri-X-313	29	5	14	43	10	0
Troubadour	18	18	23	32	9	0
UG 408	17	42	13	29	0	0
UG 508	20	33	33	13	0	0
WTC-9139	5	9	14	50	14	9
WX 4838	37	19	19	26	0	0
Average	15	14	18	37	9	7

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

Table 19. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for **late season**[1] harvest by various weight classes, (per acre), including average fruit size[2]. **Clayton, N.C. 2010.**

Cultivar	Seed Company	Rank[3]	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[4]	Avg wt.
9135	Zeraim Gedera	1	87	44	261	566	174	87	1220	1089	13.0
ACR 4106	Abbott & Cobb	17	131	305	261	349	0	0	1045	610	10.6
ACR 6177	Abbott & Cobb	4	131	349	349	566	87	0	1481	1002	11.6
ACR 6277	Abbott & Cobb	3	44	174	479	436	87	44	1263	1045	12.3
Cut Master	Willhite	22	436	174	131	261	44	87	1133	523	10.8
Declaration	Nunhems	8	131	261	305	523	0	0	1220	828	11.3
Fascination	Syngenta	28	44	131	0	305	0	87	566	392	12.5
Fresh Cut	Willhite	20	174	218	261	305	0	0	958	566	11.1
Intruder	Southwest	8	131	174	436	261	44	87	1133	828	11.5
Krimson Krunch	D. Palmer	32	131	218	218	44	0	0	610	261	9.3
Liberty	Nunhems	13	87	218	174	392	44	44	958	653	11.5
Melody	Syngenta	26	174	349	131	261	0	44	958	436	11.2
Orange Crisp	US Seedless	31	174	392	131	131	44	44	915	349	9.9
QV 776	Sakata	13	131	218	392	261	0	0	1002	653	10.9
RWT 8228	Syngenta	1	0	131	479	436	87	87	1220	1089	12.6
RWT 8229	Syngenta	17	0	131	218	305	87	0	741	610	13.1
SSX 7436	Sakata	25	87	87	174	261	44	0	653	479	12.1
Summer King	Syngenta	7	87	174	523	218	44	87	1133	871	11.4
Summer Sweet 4674	Abbott & Cobb	17	44	479	349	174	87	0	1133	610	10.6
Super Seedless 7167	Abbott & Cobb	13	44	174	436	174	44	0	871	653	10.9
Super Seedless 7177	Abbott & Cobb	10	87	305	349	392	0	0	1133	741	10.9
Super Seedless 7187	Abbott & Cobb	4	44	305	349	523	44	87	1350	1002	12.5
Sweet Treasure	Sakata	22	0	218	261	174	87	0	741	523	11.4
SWT 7609	Sakata	11	261	392	523	131	0	44	1350	697	9.9
Tomcat	Southwest	20	87	131	349	174	0	44	784	566	10.4
Triple Threat	Syngenta	28	174	131	218	174	0	0	697	392	9.8
Tri-X-313	Syngenta	26	174	87	261	87	87	0	697	436	9.9
Troubadour	Harris Moran	11	131	436	436	218	44	0	1263	697	10.1
UG 408	United Genetics	28	87	349	305	87	0	0	828	392	10.0
UG 508	United Genetics	22	87	261	261	218	0	44	871	523	10.2
WTC-9139	Zeraim Gedera	4	44	174	131	741	87	44	1220	1002	12.6
WX 4838	Willhite	13	131	174	261	392	0	0	958	653	10.7
Average		- -	112	230	294	298	39	30	1003	662	11.1
LSD (0.05)		**- -**	**238**	**310**	**278**	**276**	**119**	**94**	**466**	**410**	**2.2**

[1] Late season harvest was harvest 4.

[2] Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 1, 4, and 7 within the plot.

[3] Ranked according to total marketable number.

[4] Includes fruit = 10 pounds.

Table 20. 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 +**
9135	7	4	21	46	14	7
ACR 4106	13	29	25	33	0	0
ACR 6177	9	24	24	38	6	0
ACR 6277	3	14	38	34	7	3
Cut Master	38	15	12	23	4	8
Declaration	11	21	25	43	0	0
Fascination	8	23	0	54	0	15
Fresh Cut	18	23	27	32	0	0
Intruder	12	15	38	23	4	8
Krimson Krunch	21	36	36	7	0	0
Liberty	9	23	18	41	5	5
Melody	18	36	14	27	0	5
Orange Crisp	19	43	14	14	5	5
QV 776	13	22	39	26	0	0
RWT 8228	0	11	39	36	7	7
RWT 8229	0	18	29	41	12	0
SSX 7436	13	13	27	40	7	0
Summer King	8	15	46	19	4	8
Summer Sweet 4674	4	42	31	15	8	0
Super Seedless 7167	5	20	50	20	5	0
Super Seedless 7177	8	27	31	35	0	0
Super Seedless 7187	3	23	26	39	3	6
Sweet Treasure	0	29	35	24	12	0
SWT 7609	19	29	39	10	0	3
Tomcat	11	17	44	22	0	6
Triple Threat	25	19	31	25	0	0
Tri-X-313	25	12	38	12	12	0
Troubadour	10	34	34	17	3	0
UG 408	11	42	37	11	0	0
UG 508	10	30	30	25	0	5
WTC-9139	4	14	11	61	7	4
WX 4838	14	18	27	41	0	0
Average	12	23	29	29	4	3

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

Table 21. Triploid Red-Flesh watermelon hybrid cultivar trial. **Fruit number** for cumulative harvests, (4), by various weight classes (per acre)[1] including fruit number per plant. **Clayton, N.C., 2010.**

		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
9135	1	218	131	523	1525	610	479	3485	3136	2.0
ACR 4106	21	436	697	653	1220	87	0	3093	1960	1.8
ACR 6177	3	218	784	1045	1394	349	218	4008	3006	2.3
ACR 6277	8	174	392	610	1133	261	566	3136	2570	1.8
Cut Master	18	697	479	566	1089	174	218	3223	2047	1.9
Declaration	13	349	828	697	1394	44	87	3398	2222	2.0
Fascination	23	131	436	566	871	218	261	2483	1917	1.4
Fresh Cut	17	523	392	697	1176	131	87	3006	2091	1.7
Intruder	5	479	610	741	1655	305	131	3920	2831	2.3
Krimson Krunch	31	1350	610	871	218	44	0	3093	1133	1.8
Liberty	16	349	697	653	1089	174	261	3223	2178	1.9
Melody	31	1220	915	305	741	44	44	3267	1133	1.9
Orange Crisp	21	523	1002	479	1133	218	131	3485	1960	2.0
QV 776	19	523	610	828	915	174	87	3136	2004	1.8
RWT 8228	2	0	131	828	1263	479	479	3180	3049	1.8
RWT 8229	9	44	305	392	1220	479	392	2831	2483	1.6
SSX 7436	19	828	653	697	1176	131	0	3485	2004	2.0
Summer King	7	305	392	915	1307	305	174	3398	2701	2.0
Summer Sweet 4674	13	479	1045	1133	1002	87	0	3746	2222	2.2
Super Seedless 7167	9	523	871	1089	1045	218	131	3877	2483	2.2
Super Seedless 7177	11	349	741	610	1350	218	131	3398	2309	2.0
Super Seedless 7187	5	218	566	697	1525	349	261	3616	2831	2.1
Sweet Treasure	26	349	741	741	741	174	0	2744	1655	1.6
SWT 7609	12	566	741	1176	915	87	87	3572	2265	2.1
Tomcat	13	436	479	828	1220	131	44	3136	2222	1.8
Triple Threat	24	697	523	828	958	87	0	3093	1873	1.8
Tri-X-313	25	741	218	741	828	218	0	2744	1786	1.6
Troubadour	27	697	828	784	653	174	0	3136	1612	1.8
UG 408	29	479	1263	915	610	0	0	3267	1525	1.9
UG 508	30	784	958	784	436	0	44	3006	1263	1.7
WTC-9139	4	174	349	349	1960	392	174	3398	2875	2.0
WX 4838	27	1089	1002	697	871	0	44	3703	1612	2.1
Average	- -	498	637	732	1082	199	142	3290	2155	2
LSD(0.05)	**- -**	**471**	**422**	**444**	**593**	**257**	**226**	**761**	**741**	**0.4**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 1, 4, and 7 within the plot.

[2] Ranked according to total marketable number.

[3] Includes fruit = 10 pounds.

Table 22. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** within each fruit size category for **cumulative** harvests. **Clayton, NC., 2010.**

	Percentages[1] (%) by Fruit Size Category (lb)					
Cultivar	**<7.9**	**8-9.9**	**10-11.9**	**12-15.9**	**16-17.9**	**18 +**
9135	6	4	15	44	17	14
ACR 4106	14	23	21	39	3	0
ACR 6177	5	20	26	35	9	5
ACR 6277	6	12	19	36	8	18
Cut Master	22	15	18	34	5	7
Declaration	10	24	21	41	1	3
Fascination	5	18	23	35	9	11
Fresh Cut	17	13	23	39	4	3
Intruder	12	16	19	42	8	3
Krimson Krunch	44	20	28	7	1	0
Liberty	11	22	20	34	5	8
Melody	37	28	9	23	1	1
Orange Crisp	15	29	14	33	6	4
QV 776	17	19	26	29	6	3
RWT 8228	0	4	26	40	15	15
RWT 8229	2	11	14	43	17	14
SSX 7436	24	19	20	34	4	0
Summer King	9	12	27	38	9	5
Summer Sweet 4674	13	28	30	27	2	0
Super Seedless 7167	13	22	28	27	6	3
Super Seedless 7177	10	22	18	40	6	4
Super Seedless 7187	6	16	19	42	10	7
Sweet Treasure	13	27	27	27	6	0
SWT 7609	16	21	33	26	2	2
Tomcat	14	15	26	39	4	1
Triple Threat	23	17	27	31	3	0
Tri-X-313	27	8	27	30	8	0
Troubadour	22	26	25	21	6	0
UG 408	15	39	28	19	0	0
UG 508	26	32	26	14	0	1
WTC-9139	5	10	10	58	12	5
WX 4838	29	27	19	24	0	1
Average	15	19	22	33	6	4

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

Table 23. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested by **number** by harvest for all 4 harvest for total and total marketable categories. **Clayton, NC., 2010.**

		Percentages[1] (%) by Harvest for Total and Total Marketable fruit					
		Early Harvest - (1)		Mid Harvests - (2 & 3)		Late Harvest - (4)	
Cultivar	Seed Company	Total	Total Mrkt.	Total	Total Mrkt.	Total	Total Mrkt.
9135	Zeraim Gedera	25	24	40	42	35	35
ACR 4106	Abbott & Cobb	46	42	20	27	34	31
ACR 6177	Abbott & Cobb	25	25	38	42	37	33
ACR 6277	Abbott & Cobb	25	27	35	32	40	41
Cut Master	Willhite	18	19	47	55	35	26
Declaration	Nunhems	41	35	23	27	36	37
Fascination	Syngenta	23	20	54	59	23	20
Fresh Cut	Willhite	32	35	36	38	32	27
Intruder	Southwest	29	25	42	46	29	29
Krimson Krunch	D. Palmer	44	27	37	50	20	23
Liberty	Nunhems	36	30	34	40	30	30
Melody	Syngenta	33	31	37	31	29	38
Orange Crisp	US Seedless	40	42	34	40	26	18
QV 776	Sakata	42	41	26	26	32	33
RWT 8228	Syngenta	14	14	48	50	38	36
RWT 8229	Syngenta	18	19	55	56	26	25
SSX 7436	Sakata	41	37	40	39	19	24
Summer King	Syngenta	27	24	40	44	33	32
Summer Sweet 4674	Abbott & Cobb	28	29	42	43	30	27
Super Seedless 7167	Abbott & Cobb	44	35	34	39	22	26
Super Seedless 7177	Abbott & Cobb	35	34	32	34	33	32
Super Seedless 7187	Abbott & Cobb	35	32	28	32	37	35
Sweet Treasure	Sakata	43	42	30	26	27	32
SWT 7609	Sakata	40	38	22	31	38	31
Tomcat	Southwest	35	33	40	41	25	25
Triple Threat	Syngenta	28	30	49	49	23	21
Tri-X-313	Syngenta	41	41	33	34	25	24
Troubadour	Harris Moran	29	19	31	38	40	43
UG 408	United Genetics	43	46	32	29	25	26
UG 508	United Genetics	49	34	22	24	29	41
WTC-9139	Zeraim Gedera	36	36	28	29	36	35
WX 4838	Willhite	42	27	32	32	26	41
Average		34	31	36	38	30	31

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

Table 24. Triploid Red-Flesh watermelon hybrid cultivar trial. **Cumulative** weight per acre of fruit harvested over four harvests by various weight classes plus average fruit size[1]. **Clayton, N.C. 2010.**

		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
9135	1	14	12	57	211	104	104	502	476	14.3
ACR 4106	23	25	61	71	166	15	0	339	252	11.0
ACR 6177	3	15	70	115	194	57	41	492	406	12.3
ACR 6277	7	13	37	66	158	43	117	434	384	13.8
Cut Master	16	47	44	61	151	29	41	373	282	11.8
Declaration	13	23	76	76	189	7	17	388	290	11.4
Fascination	20	9	40	63	116	37	50	315	266	12.7
Fresh Cut	15	36	36	78	163	22	18	353	282	11.7
Intruder	6	30	57	81	227	51	25	471	385	12.0
Krimson Krunch	32	74	55	95	29	8	0	262	132	8.3
Liberty	12	25	64	72	148	30	51	389	301	12.0
Melody	31	81	83	32	103	8	10	316	152	9.7
Orange Crisp	19	33	90	52	157	36	26	394	271	11.3
QV 776	21	35	56	92	126	29	16	354	264	11.2
RWT 8228	2	0	12	93	175	80	98	457	445	14.4
RWT 8229	8	3	28	43	172	82	77	405	374	14.2
SSX 7436	22	52	59	77	160	21	0	370	259	10.6
Summer King	9	19	34	99	179	51	34	416	363	12.2
Summer Sweet 4674	18	32	94	124	135	14	0	399	273	10.7
Super Seedless 7167	10	34	77	117	141	37	25	431	320	11.1
Super Seedless 7177	11	23	68	66	185	36	26	404	313	11.8
Super Seedless 7187	5	13	53	77	210	59	52	464	398	12.8
Sweet Treasure	26	21	67	80	101	29	0	298	210	10.9
SWT 7609	14	37	69	126	128	15	16	391	285	10.9
Tomcat	17	29	43	90	162	22	8	353	282	11.1
Triple Threat	24	46	48	90	131	14	0	330	235	10.7
Tri-X-313	25	47	19	81	108	37	0	292	226	10.6
Troubadour	27	46	74	84	87	30	0	321	201	10.2
UG 408	29	32	114	100	84	0	0	331	184	10.1
UG 508	30	51	85	87	59	0	8	289	154	9.4
WTC-9139	4	13	31	38	266	66	34	448	403	13.4
WX 4838	28	73	90	75	114	0	9	360	198	9.7
Average	**- -**	32	58	80	148	33	28	379	290	11.5
LSD (0.05)	**- -**	**31**	**38**	**48**	**81**	**43**	**44**	**97**	**104**	**1.3**

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted after the triploid plants, 1, 4, and 7 within the plot.

[2] Ranked according to total marketable weight.

[3] Includes fruit = 10 pounds.

Table 25. Triploid Red-Flesh watermelon hybrid cultivar trial. Percentage harvested over four harvests by **weight** within each fruit size category. **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 +**
9135	3	2	11	42	21	21
ACR 4106	7	18	21	49	4	0
ACR 6177	3	14	23	39	11	8
ACR 6277	3	9	15	36	10	27
Cut Master	12	12	16	40	8	11
Declaration	6	20	20	49	2	4
Fascination	3	13	20	37	12	16
Fresh Cut	10	10	22	46	6	5
Intruder	6	12	17	48	11	5
Krimson Krunch	28	21	36	11	3	0
Liberty	6	16	19	38	8	13
Melody	26	26	10	32	2	3
Orange Crisp	8	23	13	40	9	6
QV 776	10	16	26	36	8	5
RWT 8228	0	3	20	38	17	21
RWT 8229	1	7	11	42	20	19
SSX 7436	14	16	21	43	6	0
Summer King	5	8	24	43	12	8
Summer Sweet 4674	8	24	31	34	4	0
Super Seedless 7167	8	18	27	33	9	6
Super Seedless 7177	6	17	16	46	9	6
Super Seedless 7187	3	11	17	45	13	11
Sweet Treasure	7	22	27	34	10	0
SWT 7609	9	18	32	33	4	4
Tomcat	8	12	26	46	6	2
Triple Threat	14	15	27	40	4	0
Tri-X-313	16	7	28	37	13	0
Troubadour	14	23	26	27	9	0
UG 408	10	35	30	25	0	0
UG 508	17	29	30	20	0	3
WTC-9139	3	7	8	59	15	8
WX 4838	20	25	21	32	0	2
Average	9	16	22	38	8	7

[1] Yields are calculated using 100 percent seedless watermelon population. SP-4 plants were interplanted among the triploid plants, 1, 4, and 7.

Table 26. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, N.C., 2010.**[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
9135	11.0	4.1	1.8	0.1	1.2	19.5	2.3	95	5	0	0	0
ACR 4106	11.0	3.7	1.8	1.4	1.2	18.2	2.4	100	0	0	0	0
ACR 6177	10.9	4.4	1.4	2.1	1.0	18.1	2.7	100	0	0	0	0
ACR 6277	11.2	3.9	1.6	1.8	1.3	19.3	2.6	100	0	0	0	0
Cut Master	11.2	4.2	2.3	0.4	1.2	13.3	2.5	85	5	10	0	0
Declaration	10.9	4.0	2.5	0.4	1.2	16.4	2.3	80	10	5	5	0
Fascination	10.7	4.6	1.1	0.7	1.0	14.4	2.8	100	0	0	0	0
Fresh Cut	11.1	4.3	2.6	0.1	1.2	16.6	2.4	95	5	0	0	0
Intruder	11.1	4.1	2.6	0.0	1.1	16.0	2.3	80	10	5	5	0
Krimson Krunch	10.7	4.1	1.9	0.6	1.0	13.3	2.4	95	5	0	0	0
Liberty	10.8	4.1	2.3	0.2	1.1	16.4	2.2	85	10	5	0	0
Melody	10.6	4.4	2.4	0.6	1.0	15.4	2.2	100	0	0	0	0
Orange Crisp	10.9	8.0	1.6	2.0	1.0	15.7	2.4	95	5	0	0	0
QV 776	11.2	4.2	1.7	0.5	1.2	16.4	2.3	100	0	0	0	0
RWT 8228	11.0	4.1	1.5	0.1	1.2	14.1	2.8	100	0	0	0	0
RWT 8229	11.1	4.3	2.6	0.0	1.1	17.8	2.9	100	0	0	0	0
SSX 7436	10.6	4.1	2.5	0.2	1.1	16.9	2.2	85	5	10	0	0
Summer King	11.1	4.1	1.6	1.7	1.2	17.6	2.4	95	5	0	0	0
Summer Sweet 4674	10.4	3.8	1.3	4.0	1.2	16.7	2.5	100	0	0	0	0
Super Seedless 7167	11.1	3.8	2.0	1.4	1.2	17.2	2.3	100	0	0	0	0
Super Seedless 7177	11.6	4.3	1.3	1.4	1.2	17.4	2.5	100	0	0	0	0
Super Seedless 7187	10.6	3.9	1.3	0.7	1.2	15.1	2.7	100	0	0	0	0
Sweet Treasure	10.4	4.0	2.0	0.0	1.1	15.6	2.1	100	0	0	0	0
SWT 7609	11.0	4.3	2.1	0.3	1.2	16.1	2.1	85	5	10	0	0
Tomcat	11.1	4.0	2.6	0.3	1.2	15.8	2.2	95	0	0	5	0
Triple Threat	11.4	4.4	1.8	0.1	1.0	12.2	2.3	100	0	0	0	0
Tri-X-313	11.0	4.0	2.1	0.2	1.1	16.9	2.4	100	0	0	0	0
Troubadour	10.6	4.5	2.8	0.5	1.2	14.1	2.7	100	0	0	0	0
UG 408	11.0	4.3	2.6	0.1	1.0	13.0	2.3	95	0	0	5	0
UG 508	10.7	4.4	2.4	0.2	1.0	11.8	2.4	100	0	0	0	0
WTC-9139	12.2	4.1	1.9	0.0	1.2	18.8	2.4	75	5	20	0	0
WX 4838	10.8	3.9	3.1	0.2	1.0	16.1	2.4	100	0	0	0	0
Average	11.0	4.3	2.0	0.7	1.1	16.0	2.4	95	2	2	1	0
LSD (0.05)	**0.1**	**0.3**	**0.8**	**0.9**	**0.1**	**2.9**	**0.3**	**16**	**9**	**9**	**5**	**0**

Table 26. Triploid Red-Flesh watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, N.C., 2010.[1] (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 = white, 2 = pink, 3 = red, 4 = medium-dark red, 5 = blood red.

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

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

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

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

[8] 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 27. Triploid mini-watermelon cultivar seed sources and descriptions; 2010.

Entry No.	Cultigen	Company	Description
1	9141	Zeraim Gedera	Distinct, narrow, dark green stripes on light to medium green background; uniformly round or slightly oval shape; uniform size
2	9145	Zeraim Gedera	Distinct, narrow, dark green stripes on a light green background; mainly round fruit to just slightly oval; uniform shape; some variation in size; average size seed traces; firm flesh
3	Little Deuce Coupe	Syngenta	Appears as solid light green rind; distinct, extremely narrow, very dark green stripes on light green background; round to oval; fairly uniform shape and size; seed trace relatively small
4	Petite Perfection	Syngenta	Distinct, very narrow dark green stripes on a light green backgound; uniform round or slightly oval fruit; uniform size; seed traces are relatively small
5	RWT 8212	Syngenta	Appears as solid dark green rind; distinct, extremely narrow, very dark green stripes on a dark green background; round fruit; uniform shape; variable size; small size seed traces; comparable to Little Deuce Coupe
6	RWT 8225	Syngenta	Distinct , narrow, dark green stipes on a light green background; uniformly round shapes and size; small seed traces
7	WDL 8312	Syngenta	Distinct, very narrow, dark green stripes on a light green background; uniformly round shape and size; small seed traces; very good red flesh color
8	10358	Abbott & Cobb	Indistinct, medium to wide dark green stripes bordered by medium green on a light green background; mainly round to oval fruit; variable fruit shape and size; average seed trace size; many hard seed present within fruit

Figure 3. Mini Triploid Cultivar Pictures

Figure 3. Mini Triploid Cultivar Pictures

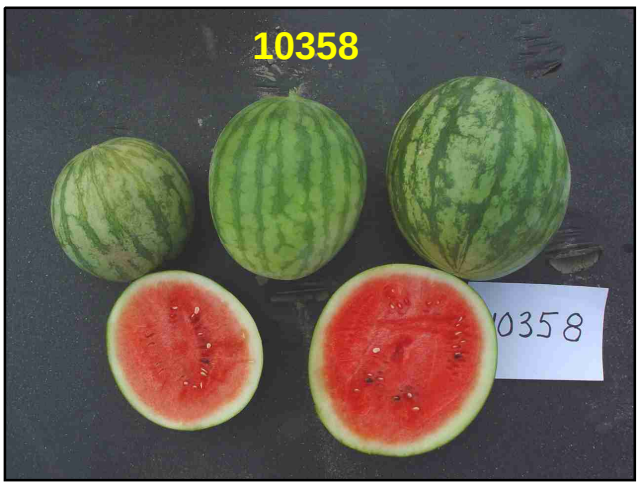


Table 28. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **first** harvest by various weight classes (per acre) and average fruit size[1]. **Clayton, N.C., 2010.**

		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)
9141	3	0	653	1307	0	0	0	0	1960	1960	4.6
9145	8	436	327	109	0	0	0	0	871	436	2.1
Little Deuce Coupe	4	436	871	871	109	0	0	0	2287	1742	3.8
Petite Perfection	1	327	980	1307	0	0	0	0	2614	2287	3.9
RWT 8212	5	545	653	980	0	0	0	0	2178	1634	3.8
RWT 8225	6	218	218	1089	0	0	0	0	1525	1307	4.6
WDL 8312	2	327	1307	762	0	0	0	0	2396	2069	3.8
10358	6	436	545	762	109	109	0	0	1960	1307	4.2
Average	- -	340	694	898	27	14	0	0	1974	1593	3.8
LSD(0.05)	**- -**	**579**	**897**	**770**	**164**	**113**	**0**	**0**	**1421**	**1224**	**1.2**

Table 29. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested in **second** harvest by various weight classes (per acre) and average fruit size[1]. **Clayton, N.C., 2010.**

		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)
9141	1	545	653	1742	109	0	0	0	3049	2396	4.4
9145	1	1634	1307	1089	0	0	0	0	4029	2396	3.3
Little Deuce Coupe	4	871	436	1307	0	0	0	0	2614	1742	4.3
Petite Perfection	4	762	980	762	0	0	0	0	2505	1742	3.6
RWT 8212	6	1525	545	327	0	0	0	0	2396	871	2.7
RWT 8225	3	327	653	1416	109	0	0	0	2505	2069	4.4
WDL 8312	6	653	436	436	0	0	0	0	1525	871	3.0
10358	8	0	0	0	109	0	109	0	218	0	4.1
Average	- -	790	626	885	41	0	14	0	2355	1511	3.7
LSD(0.05)	**- -**	**1016**	**751**	**843**	**205**	**0**	**113**	**0**	**1290**	**983**	**2.7**

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

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 30. **Triploid mini watermelon** hybrid cultivar trial. **Number** of fruit harvested during the late harvests - **harvests 3 and 4,** by various weight classes (per acre) and average fruit size[1]. **Clayton, N.C., 2010.**

		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)
9141	5	218	327	1525	109	0	0	0	2178	1851	5.2
9145	1	1634	1742	2178	0	0	0	0	5554	3920	3.6
Little Deuce Coupe	3	653	980	1198	0	0	0	0	2831	2178	3.8
Petite Perfection	2	762	762	1525	109	0	0	0	3158	2287	4.1
RWT 8212	7	653	545	653	0	0	0	0	1851	1198	3.7
RWT 8225	3	545	762	1416	0	0	0	0	2723	2178	4.4
WDL 8312	5	1416	871	980	0	0	0	0	3267	1851	3.5
10358	7	0	109	1089	218	109	0	0	1525	1198	5.6
Average	- -	735	762	1320	54	14	0	0	2886	2083	4.2
LSD(0.05)	**- -**	**1156**	**723**	**764**	**271**	**113**	**0**	**0**	**1403**	**1048**	**0.8**

Table 31. **Triploid mini watermelon** hybrid cultivar trial. Cumulative **number** of fruit harvested over 4 harvests by various weight classes (per acre)[1]. **Clayton, N.C., 2010.**

		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]
9141	3	762	1634	4574	218	0	0	0	7187	6207
9145	1	3812	3376	3376	0	0	0	0	10563	6752
Little Deuce Coupe	4	1960	2287	3376	109	0	0	0	7732	5663
Petite Perfection	2	1851	2723	3594	109	0	0	0	8276	6316
RWT 8212	7	2723	1742	1960	0	0	0	0	6425	3703
RWT 8225	5	1089	1634	3920	109	0	0	0	6752	5554
WDL 8312	6	2396	2614	2178	0	0	0	0	7187	4792
10358	8	545	653	1851	436	218	109	0	3812	2505
Average	- -	1892	2083	3104	123	27	14	0	7242	5186
LSD(0.05)	**- -**	**1454**	**1250**	**1420**	**393**	**131**	**113**	**0**	**1728**	**1709**

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

[2] Ranked according to total marketable number.

[3] Includes fruit 3 to 7 lbs.

Table 32. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **first** harvest by various weight classes (per acre). **Clayton, N.C., 2010.**

	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]**
9141	0	33	67	0	0	0	0	100
9145	50	38	13	0	0	0	0	50
Little Deuce Coupe	19	38	38	5	0	0	0	76
Petite Perfection	13	38	50	0	0	0	0	88
RWT 8212	25	30	45	0	0	0	0	75
RWT 8225	14	14	71	0	0	0	0	86
WDL 8312	14	55	32	0	0	0	0	86
10358	22	28	39	6	6	0	0	67
Average	20	34	44	1	1	0	0	78

Table 33. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **second** harvest by various weight classes (per acre). **Clayton, N.C., 2010.**

	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]**
9141	18	21	57	4	0	0	0	79
9145	41	32	27	0	0	0	0	59
Little Deuce Coupe	33	17	50	0	0	0	0	67
Petite Perfection	30	39	30	0	0	0	0	70
RWT 8212	64	23	14	0	0	0	0	36
RWT 8225	13	26	57	4	0	0	0	83
WDL 8312	43	29	29	0	0	0	0	57
10358	0	0	0	50	0	50	0	0
Average	30	23	33	7	0	6	0	56

[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 34. **Triploid mini watermelon** hybrid cultivar trial. **Percentage** of fruit number harvested in **third and fourth** harvests by various weight classes (per acre). **Clayton, N.C., 2010.**

	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]**
9141	10	15	70	5	0	0	0	85
9145	29	31	39	0	0	0	0	71
Little Deuce Coupe	23	35	42	0	0	0	0	77
Petite Perfection	24	24	48	3	0	0	0	72
RWT 8212	35	29	35	0	0	0	0	65
RWT 8225	20	28	52	0	0	0	0	80
WDL 8312	43	27	30	0	0	0	0	57
10358	0	7	71	14	7	0	0	79
Average	23	25	49	3	1	0	0	73

Table 35. Triploid mini watermelon hybrid cultivar trial. **Cumulative** Percentage harvested by number within each fruit size category. **Clayton, NC, 2010.**

	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]**
9141	10	22	64	3	0	0	0	87
9145	36	31	32	0	0	0	0	64
Little Deuce Coupe	25	29	45	1	0	0	0	73
Petite Perfection	22	33	44	1	0	0	0	77
RWT 8212	44	27	29	0	0	0	0	56
RWT 8225	15	25	59	2	0	0	0	84
WDL 8312	33	37	30	0	0	0	0	68
10358	13	19	50	11	4	2	0	69
Average	25	28	44	2	1	0	0	72
LSD(0.05)	**20**	**17**	**23**	**8**	**3**	**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 36. Triploid mini watermelon hybrid cultivar trial. **Percent** harvested by number by harvest within total and total marketable categories. **Clayton, NC, 2010.**

	Percentages[1] (%) by harvest for Total and Total Marketable Fruit					
	Harvest 1		Harvest 2		Harvests 3-4	
Cultivar	Total	Total Mrkt.	Total	Total Mrkt.	Total	Total Mrkt.
9141	27	32	42	39	30	30
9145	8	6	38	35	53	58
Little Deuce Coupe	30	31	34	31	37	38
Petite Perfection	32	36	30	28	38	36
RWT 8212	34	44	37	24	29	32
RWT 8225	23	24	37	37	40	39
WDL 8312	33	43	21	18	45	39
10358	51	52	6	0	40	48
Average	30	34	31	26	39	40

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

Table 37. **Mini Triploid** watermelon hybrid cultivar trial. Cumulative **weight** (x 100) of fruit harvested over 4 harvests by various weight classes (per acre) including average fruit weight. **Clayton, N.C., 2010.**

		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
9141	1	15	55	249	17	0	0	0	336	304	4.7
9145	2	85	116	159	0	0	0	0	359	274	3.4
Little Deuce Coupe	5	46	77	164	8	0	0	0	298	241	3.8
Petite Perfection	3	41	95	174	8	0	0	0	318	269	3.9
RWT 8212	7	63	59	97	0	0	0	0	219	156	3.4
RWT 8225	4	28	58	203	8	0	0	0	297	261	4.4
WDL 8312	6	54	92	103	0	0	0	0	249	194	3.5
10358	8	10	22	95	33	18	10	0	188	117	4.9
Average	- -	43	72	155	9	2	1	0	283	227	4.0
LSD(0.05)	**- -**	**33**	**42**	**76**	**30**	**11**	**10**	**0**	**80**	**78**	**0.7**

[1] Ranked according to total marketable number.

[2] Includes fruit 3 to 7 lbs.

Table 38. Triploid mini watermelon hybrid cultivar trial. Cumulative **Percentage** harvested by weight within each fruit size category. **Clayton, NC, 2010.**

	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]
9141	5	17	74	5	0	0	0	90
9145	24	32	44	0	0	0	0	76
Little Deuce Coupe	16	25	57	3	0	0	0	82
Petite Perfection	13	30	55	3	0	0	0	84
RWT 8212	33	29	38	0	0	0	0	67
RWT 8225	9	20	68	2	0	0	0	88
WDL 8312	22	38	40	0	0	0	0	78
10358	5	14	55	16	7	3	0	69
Average	16	25	54	3	1	0	0	79
LSD	**16**	**15**	**26**	**11**	**4**	**4**	**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 39. Mini Triploid watermelon hybrid cultivar trial. Interior fruit quality. **Clayton, NC, 2010**.[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
9141	15.7	10.7	3.8	2.2	0.96	90	0	5	5	0
9145	13.1	10.2	3.9	3.2	0.98	85	15	0	0	0
Little Deuce Coupe	8.3	11.0	4.4	2.7	1.08	100	0	0	0	0
Petite Perfection	7.9	11.0	4.4	2.6	1.04	100	0	0	0	0
RWT 8212	8.8	11.1	4.3	2.5	1.05	100	0	0	0	0
RWT 8225	13.5	10.7	4.1	2.7	1.04	100	0	0	0	0
WDL 8312	8.3	10.9	4.3	2.7	1.04	100	0	0	0	0
10358	10.9	9.9	3.7	2.3	1.05	100	0	0	0	0
Average	10.8	10.7	4.1	2.6	1.03	97	2	1	1	0
LSD (0.05)	**1.2**	**0.6**	**0.3**	**0.2**	**0.02**	**17**	**16**	**5**	**5**	**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) 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: 1 = yellow, 2=orange/salmon, 3=red, 3.5=bright red, 4=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).