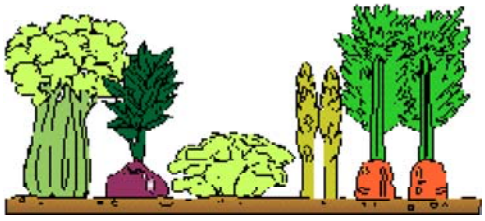

VEGETARIAN NEWSLETTER

A Vegetable Crops Extension Publication
Vegetarian 03-08
August 2003

University of Florida
Institute of Food and Agricultural Sciences
Cooperative Extension Service

Vegetarian Archive Vegetarian Index

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List of Extension Vegetable Crops Specialists

* * * * * * UPCOMING EVENTS CALENDAR * * * * * *

South Florida Drip Irrigation School: Managing Water and Nutrients in Vegetable Production. Miami-Dade County Extension Service Office. August 21, 2003 from 8:15 - 2:00.

AgriTech Strawberry Conference. Plant City. August 26-27, 2003. Florida Strawberry Growers Association: http://www.straw-berry.org/

Florida Tomato Institute. Ritz-Carlton Hotel. Naples. September 4, 2003. Contact Bill Stall at wms@ifas.ufl.edu

49th Conference of the InterAmerican Society for Tropical Horticulture. Fortaleza, Brazil, Aug. 31- Sept. 5, 2003.

ISHS International Symposium on Protected Culture in a Mild-Winter Climate. Renaissance WorldGate Hotel - Kissimmee, Fla. March 23-27, 2004. Contact: Daniel Cantliffe at djc@ifas.ufl.edu

GCREC SPRING 2003 TOMATO VARIETY EVALUATION

A replicated tomato variety trial was conducted in spring 2003 at the Gulf Coast Research and Education Center-Bradenton located in west-central Florida to evaluate 28 fresh market tomato commercial and experimental hybrids. Seeds were sown on 9 January into planter flats (1.5 x 1.5 x 2.5-inch cells) containing a commercial mix. Transplants were fertilized periodically with a liquid 20-20-20 (N-$P_20_5K_20$) to sustain growth during production. Plants were conditioned before transplanting by limiting water and nutrients in the final phase of production.

The Eau Gallie fine sand in the experimental area was prepared in mid-February. Beds were formed and fumigated with methyl bromide:chloropicrin, 67:33 at 350 lb/treated acre. Banded fertilizer was applied in shallow grooves on the bed shoulders after the beds were pressed and before the black polyethylene mulch was applied. The total fertilizer applied was equivalent to 282-70-392 lb N-P_20_5-K_20/A. The final beds were 32-in. wide and 8-in. high, and were spaced on 5-ft centers with six beds between seepage irrigation/drainage ditches, which were on 41-ft centers. Transplants were set in the field on 5 March and spaced 24 in. apart in single rows down the center of each bed.

Fruit were harvested three times at or beyond the mature-green stage on 12 May, 27-28 May and 15 June. Tomatoes were graded as cull or marketable by U.S. standards for grades and marketable fruit were sized by machine (see footnotes Table 1 for specifications). Marketable fruits of each size were counted and weighed, cull fruits were weighed.

Seasonal yields from three harvests ranged from 1912 cartons/acre for 'Florida 47' to 3223 cartons/acre for Fla. 8135 (Table 1). Fourteen other entries had yields similar to those of Fla. 8135. All entries produced yields greater than the state average yield for spring 2000 of 1693 cartons/acre. Yields of extra-large fruit varied from 1634 cartons/acre for 'Florida 47' to 2893 cartons/acre for TY02-1276. Yields of TY02-1276 extra large fruit were similar to those of 12 other entries. Large fruit yields ranged from 141 cartons/acre for HA 3603 to 484 cartons/acre for Fla. 8135. Cull fruit for the entire season varied from 14% by weight for 'Sebring' to 43% for HA-3603. Radial cracks and small fruit were the principal defects during the latter part of the season. Average fruit weight was from 6.2 oz for ACR 242 XLT to 8.2 oz for HA-3072. TYLC- infected plants ranged from 0 for several entries to 31% for 'Florida 47'. Over 85% of the entries had at least one infected plant.

Yields in the spring 2003 season were similar to those in recent spring seasons at this location. Exceptional experimental hybrid performers in spring 2003 were Fla. 8135, Fla. 8093, XTM 0233, ACR 2012, and TY02-1276. Many experimental hybrids produced yields well above those of the standard commercial hybrids.

Table 1. Seed source, total marketable yields, average marketable fruit weight, and cull percentages for fresh market tomato entries in spring 2003 (Harvest Dates: 12 May, 27-28 May, and 12 June 2003).

Entry	Seed Source	Total Harvest				Culls (%)[2]	Avg Fruit Wt (oz)
		Total	X-Large	Large	Medium		
		----------(cartons/A)[1]----------					
Fla. 8135	GCREC-UF	3223 a[3]	2663 ab	484 a	76 b-i	17 g-i	6.8 g-i
TY02-1276	Hazera	3036 ab	2893 a	123 i	20 h-i	21 e-i	8.0 ab
XTM0233	Sakata	3035 ab	2516 a-d	432 a-c	87 b-f	19 f-i	6.8 g-i
Fla. 8093	GCREC-UF	3023 a-c	2627 a-c	325 b-g	71 c-i	20 e-i	7.0 e-i
ACR 2012	Abbott & Cobb	2807 a-d	2210 b-f	448 ab	150 a	28 c-e	6.7 h-j
XTM 0231	Sakata	2803 a-d	2494 a-d	267 d-i	41 e-i	17 f-i	7.4 c-f
STM0227	Sakata	2770 a-e	2510 a-d	230 e-i	29 f-i	17 f-i	7.3 d-g
EX1432427	Seminis	2733 a-e	2498 a-d	221 e-i	15 i	19 f-i	7.7 a-d
Florida 91	Seminis	2720 a-e	2481 a-d	202 f-i	38 e-i	18 f-i	7.5 b-e
Fla. 8134	GCREC-UF	2707 a-e	2289 a-e	350 a-f	69 c-i	23 d-h	6.8 f-i
Fla. 7964	GCREC-UF	2693 a-e	2178 b-f	408 a-d	106 a-c	21 e-i	6.7 g-j
TY02-1273	Hazera	2691 a-e	2423 a-e	225 e-i	43 d-i	25 c-f	7.5 b-e

ACR 242 XLT	Abbott & Cobb	2670 a-e	2089 b-f	478 a	104 a-d	16 g-i	6.2 j
Fla. 8092	GCREC-UF	2660 a-e	2457 a-d	174 g-i	28 f-i	22 e-h	7.5 c-e
XTM 0230	Sakata	2597 a-e	2291 a-e	269 d-i	37 e-i	21 e-i	7 e-i
HA-3072	Hazera	2566 b-e	2406 a-e	144 i	16 i	31 b-d	8.2 a
Sebring	Syngenta	2531 b-f	2243 b-f	245 e-i	42 e-i	14 i	7.3 d-g
XTM0112	Sakata	2482 b-f	2015 c-f	371 a-e	96 a-e	24 d-h	6.8 g-i
Fla. 7973	GCREC-UF	2472 b-f	2081 b-f	311 b-h	80 b-h	23 e-h	7.2 d-h
ACR 42 XLT	Abbott & Cobb	2466 b-f	2102 b-f	280 c-i	83 b-g	25 d-g	7.1 e-i
Fla. 8059	GCREC-UF	2378 c-f	1985 d-f	340 a-f	53 c-i	16 hi	6.8 f-i
RFT 1092	Syngenta	2376 c-f	2015 c-f	306 b-h	55 c-i	32 bc	7.0 e-i
ACR 32 XLT	Abbott & Cobb	2369 d-f	1815 ef	420 a-d	134 ab	22 e-h	6.5 ij
HA-3073	Hazera	2288 d-f	2127 b-f	146 i	15 i	43 a	7.8 a-d
RFT 0871	Syngenta	2232 d-f	2006 c-f	181 g-i	45 c-i	31 b-d	7.3 d-g
RFT 0252	Syngenta	2228 d-f	2039 b-f	166 hi	23 g-i	19 f-i	7.7 a-d
HA-3603	Hazera	2124 ef	1956 d-f	141 i	26 f-i	36 ab	7.9 a-c
Florida 47	Seminis	1912 f	1634 f	224 e-i	54 c-i	24 d-h	7.3 d-g

[1]Carton = 25 lbs. Acre = 8712 lbf. Grading belt hole sizes: X-Large = no belt, greater than 2.75"; Large = 2.75"-2.51"; Medium = 2.5"-2.26"; and Cull < 2.25".
[2]By weight.
[3]Mean separation in columns by Duncan's multiple range test, 5% level.

(Maynard - Vegetarian 03-08)

DIPLOID AND TRIPLOID WATERMELON VARIETY EVALUATION, GCREC-SPRING 2003

Diploid (seeded) watermelons generally weigh from 18 to 35 lb and represent about half of the commercial crop grown in Florida. Triploid (seedless) watermelons usually weigh 15 to 22 lb and are grown in Florida on about the other half of the acreage. The proportion of the Florida crop devoted to triploid production is increasing each year. Icebox watermelons weigh 6 to 12 lb each and are grown on a very small acreage. Personal size or miniwatermelons were introduced in 2003; these fruit weigh 3 to 7 lb. each. Florida produced 8.6 million cwt of watermelons of all types from 24,000 harvested acres in 2000-2001, which provided an average yield of 310 cwt/acre. The average price was $5.70/cwt resulting in a crop value of over $42 million which accounted for 2.5% of the gross value of the state's vegetable crops.

The objective of these trials was to evaluate the performance of triploid and diploid watermelon varieties under west-central Florida conditions.

The EauGallie fine sand was prepared in early February by incorporation of 0-0.8-0 lb N-P_20_5-K_20 per 100 linear bed feet (lbf). Beds were formed and fumigated with methylbromide:chloropicrin, 67:33 at 2.3 lb/100 lbf. Banded fertilizer was applied in shallow grooves on the bed shoulders at 3.1-0-4.3 lb N-P_20_5-K_20/100 lbf after the beds were pressed and before the black polyethylene mulch was applied. The total fertilizer applied was equivalent to 150-40-208 lb N-P_2O_5-K_2O/A. The final beds were 32-in. wide and 8-in. high, and were spaced on 9-ft centers with four beds between seepage irrigation/drainage ditches, which were on 41-ft centers.

Diploid entries were direct seeded on 26 February and triploid entries were transplanted on 4 March at 3-ft in-row spacing. Eight-plant triploid plots were arranged on two beds with ten-plant diploid plots in beds on each side. Diploids were replicated four times and triploids three times.

Watermelons were harvested twice; during the 15-22 May and 3-9 June periods. Marketable (U.S. No. 1 or better) fruit according to U.S. Standards for Grades of Watermelons were separated from culls and counted and weighed individually. Fruit 12 lbs and larger were assumed to be marketable. Six fruit from each entry at the first harvest were used to determine soluble solids (a measure of sweetness) with a digital, hand-held refractometer.

Total diploid yields (Table 1) varied from 424 cwt/acre for 'Delta' and 98212 to 729 cwt/acre for 'Montreal'. Twenty-one other entries had yields similar to those of 'Montreal'. Average fruit weight over the entire season ranged from 18.5 lbs for 'Fiesta' to 25.4 lbs for 'Dulce'. Fruit per plant varied from 1.5 for 'Delta', WX 264, and 98212 to 2.4 for HSR 2965. Cull fruit ranged from 2% by weight for SSC 46104 to 20% for WX 264. Soluble solids ranged from 11.6% for 'Celebration' to 13.6% for HSR 2965. Soluble solids for all entries exceeded the 10% specified of optional use to designate very good internal quality in the U.S. Standards for Grades of Watermelons.

Diploid watermelon variety evaluations have been conducted at this location each spring season since 1991. The highest yields of individual varieties ranged from 439 cwt/acre in 1996 to 1062 cwt/acre in 1993. In spring 2003, the highest yield was 729 cwt/acre which was somewhat less than the 12-year average yield of 773 cwt/acre.

Total triploid yields (Table 2) ranged from 195 cwt/acre for USS 2121 to 959 cwt/acre for WX 28. Twenty-seven other entries produced yields statistically similar to those of WX 28. Average fruit weight for the entire season varied from 13.7 lbs for USS 2121 to 26.5 lbs WX 28. The number of fruit per plant ranged from 0.9 for USS 2121 to 3.4 for 'Superseedless 7171'. Cull fruit ranged from 2% for RWT 8145 to 38% for ZG 8801. Soluble solids concentrations were high ranging from 11.4% for 'Dillion' to 13.9% for USS 2330.

Seedless watermelon variety trials have been conducted at this location each spring season since 1988. The highest yields ranged from 507 cwt/acre in 1996 to 1253 cwt/A in 2002. The highest yield in 2003 was 959 cwt/acre which greatly exceeded the 877 cwt/acre average high during the entire 16-year period.

These reports in their entirety are available from the author as GCREC Research Reports. They are also available on the GCREC website (gcrec.ifas.ufl.edu).

Table 1. Total yields, average fruit weight, fruit per plant, percentages of cull fruit, and soluble solids of diploid watermelons. Gulf Coast Research and Education Center, Bradenton. Spring 2003.

Entry	Seed Source	Weight (cwt/A)[1]	Avg Fruit Wt (lb)	Fruit per Plant	Cull (%)[2]	Soluble Solids (%)
Montreal	Sunseeds	729 a[3]	19.9 c-f	2.4 a	6 b-d	12.2 d-f
Dulce	Willhite	723 a	25.4 a	1.8 a-c	4 b-d	12.2 c-f
HSR 2965	Hollar	698 ab	19.2 ef	2.4 a	9 a-d	13.6 a
Jamboree	Syngenta	677 ab	20.9 c-f	2.1 a-c	6 b-d	12.2 d-f
Summer Flavor 790	Abbott & Cobb	672 a-c	19.2 ef	2.3 ab	6 b-d	12.1 d-f

RWM 8151	Syngenta	668 a-c	24.3 ab	1.7 a-c	3 cd	12.6 a-f
Sangria	Syngenta	662 a-c	19.2 ef	2.2 a-c	10 a-d	13.4 a-c
Daytona	Sakata	646 a-c	21.1 c-f	1.9 a-c	11 a-d	13.0 a-e
ZG 8903	Zeraim Gedera	634 a-d	20.0 c-f	2.0 a-c	9 a-d	13.5 ab
Summer Flavor 800	Abbott & Cobb	615 a-d	21.3 c-e	1.8 a-c	13 a-d	12.7 a-f
Olé	Willhite	609 a-d	22.2 bc	1.8 a-c	10 a-d	13.0 a-e
HSR 3028	Hollar	604 a-d	20.3 c-f	1.9 a-c	12 a-d	13.4 a-c
SSC 46104	Shamrock	591 a-d	20.5 c-f	1.8 a-c	2 d	12.5 a-f
Rojo Grande	Willhite	579 a-d	19.6 c-f	1.8 a-c	5 b-d	12.3 b-f
Mardi Gras	Syngenta	572 a-d	21.0 c-f	1.8 a-c	13 a-d	11.9 ef
HSR 2955	Hollar	564 a-d	20.3 c-f	1.9 a-c	7 b-d	12.6 a-f
Jube-ette	Willhite	564 a-d	20.5 c-f	1.7 a-c	13 a-d	12.2 c-f
HSR 3034	Hollar	555 a-d	19.8 c-f	1.8 a-c	11 a-d	13.5 ab
Celebration	Syngenta	550 a-d	20.3 c-f	2.0 a-c	12 a-d	11.6 f
Fiesta	Syngenta	540 a-d	18.5 f	1.9 a-c	11 a-d	12.9 a-e
Sentinel	Seminis	522 a-d	21.9 cd	1.6 c	12 a-d	12.9 a-e
ZG 8901	Zeraim Gedera	519 a-d	18.9 ef	1.9 a-c	15 ab	13.0 a-e
Gold Strike	Willhite	497 b-d	20.2 c-f	1.6 bc	14 a-c	12.8 a-e
ZG 8902	Zeraim Gedera	496 b-d	19.0 ef	1.8 a-c	10 a-d	13.2 a-d
WX264	Willhite	461 cd	19.4 d-f	1.5 c	20 a	13.1 a-e
Delta	Seminis	424 d	19.5 d-f	1.5 c	13 a-d	13.4 ab
98212	Sakata	424 d	18.7 ef	1.5 c	13 a-d	13.1 a-e

[1]Acre = 4840 lbf.
[2]By weight.
[3]Mean separation in columns by Duncan's multiple range test, 5% level.

Table 2. Total yields, average fruit weight, fruit per plant, percentage of cull fruit, and soluble solids of triploid watermelons. Gulf Coast Research and Education Center, Bradenton. Spring 2003.

Entry	Seed Source	Weight (cwt/A)[1]	Avg Fruit Wt (lb)	Fruit per Plant	Cull (%)[2]	Soluble Solids (%)
WX28	Willhite	959 a[3]	26.5 a	2.3 a-e	6 bc	12.2 ab
RWT 8145	Syngenta	932 ab	20.4 b	3.0 a-c	2 c	13.1 ab

Super Seedless 7177	Abbott & Cobb	911 ab	17.6 c-g	3.4 a	4 c	13.6 a
Dillon	Hazera	893 a-c	18.2 b-e	3.3 a	6 bc	11.4 b
HA 5015	Hazera	882 a-d	19.9 bc	2.8 a-d	8 bc	13.5 a
Millionaire	Harris Moran	844 a-e	18.0 c-f	2.9 a-d	7 bc	13.2 ab
Cooperstown	Seminis	834 a-e	17.3 d-g	3.0 ab	12 a-c	13.5 a
Super Seedless 7187	Abbott & Cobb	810 a-e	17.7 c-g	2.8 a-d	7 bc	12.3 ab
Super Seedless 7167	Abbott & Cobb	807 a-e	18.4 b-f	2.8 a-d	10 a-c	12.2 ab
SWT 6903	Sakata	788 a-e	17.6 c-g	2.8 a-d	3 c	13.6 a
HSR 3005	Hollar	779 a-e	17.6 c-g	2.8 a-d	4 c	12.4 ab
Tri-X Palomar	Syngenta	766 a-e	17.2 e-h	2.9 a-d	7 bc	13.6 a
Sweet Slice	Willhite	759 a-e	17.1 e-h	2.8 a-d	7 bc	13.6 a
Revolution	Sunseeds	753 a-f	19.0 b-e	2.5 a-e	4 c	13.3 a
USS 2330	U.S. Seedless	747 a-f	18.2 b-f	2.5 a-e	14 a-c	13.9 a
Sunny	Willhite	745 a-f	19.7 b-d	2.3 a-e	5 bc	13.5 a
HA 5002	Hazera	736 a-f	18.0 c-g	2.5 a-e	8 bc	12.6 ab
SSC 31829	Shamrock	716 a-f	16.6 e-h	2.7 a-d	6 bc	13.7 a
Olympia	Seminis	714 a-f	18.6 b-e	2.5 a-e	5 bc	13.3 a
SWT 8706	Sakata	706 a-f	17.4 d-g	2.5 a-e	5 bc	12.9 ab
Tri-X 313	Syngenta	700 a-f	16.9 e-h	2.7 a-d	12 a-c	12.3 ab
XP 4510759	Seminis	699 a-f	17.0 e-h	2.5 a-e	4 c	12.3 ab
Sweet Delight	Syngenta	697 a-f	18.3 b-f	2.4 a-e	10 a-c	12.8 ab
Fandango	Shamrock	688 a-f	17.8 c-g	2.4 a-e	8 bc	12.5 ab
USS 2286	U.S. Seedless	669 a-f	16.7 e-h	2.5 a-e	7 bc	13.3 a
Sugar Slice	Willhite	656 a-f	16.8 e-h	2.4 a-e	9 bc	13.5 a
Summer Sweet 5244	Abbott & Cobb	651 a-f	17.8 c-g	2.5 a-e	10 a-c	12.5 ab
SR8021WM	Sunseeds	644 a-f	16.8 e-h	2.4 a-e	9 a-c	12.1 ab
ZG-8016	Zeraim Gedera	621 b-g	16.0 f-i	2.4 a-e	10 a-c	13.5 a
Trillion	Abbott & Cobb	621 b-g	16.7 e-h	2.3 a-e	9 bc	12.3 ab
Gypsy	Harris Moran	569 c-g	17.2 e-h	2.0 b-e	13 a-c	13.4 a
Omega	Seminis	552 d-g	19.0 b-e	1.9 b-f	18 ab	12.9 ab
Talladega	Sakata	541 e-g	17.1 e-h	2.3 a-e	8 bc	13.4 a
USS 2231	U.S. Seedless	508 e-g	16.0 f-i	2.1 b-e	11 a-c	13.3 a

ZG-8818	Zeraim Gedera	471 e-h	15.5 g-i	1.9 b-f	21 a	13.9 a
ZG 8801	Zeraim Gedera	458 e-h	17.4 c-g	1.6 d-f	38 a	12.9 ab
Genesis	Shamrock	421 f-h	15.5 g-i	1.7 d-f	11 a-c	13.2 ab
Imagination	Syngenta	421 f-h	14.8 hi	1.8 c-f	22 a	12.3 ab
HSR 2920	Hollar	322 gh	14.0 i	1.4 ef	9 a-c	13.4 a
USS 2121	U.S. Seedless	195 h	13.7 i	0.9 f	9 a-c	12.6 ab

[1]Acre = 4840 lbf.
[2]By weight.
[3]Mean separation in columns by Duncan's multiple range test, 5% level.

(Maynard - Vegetarian 03-08)

GCREC TRIPLOID MINIWATERMELON VARIETY EVALUATION, SPRING 2003

Triploid miniwatermelons, also called personal-size watermelons, were introduced in 2003. There are no officially assigned weight parameters to this new class of watermelons, however, they generally might be considered to weigh 3-8 lbs each. Production thus far is quite small, but they have been well-received by consumers so production is expected to increase.

Nine commercial or experimental hybrids (Table 1) were evaluated in the spring 2003 season at GCREC-Bradenton. Seeds were planted in a peat-lite growing mix in planter flats (1¼ x 1¼ x 2¼ in. cells) on 4 February. The watermelon transplants were grown by a commercial plant grower.

The EauGallie fine sand was prepared in mid February. Beds were formed and fumigated with methylbromide:chloropicrin, 67:33 at 350 lb/treated acre. Banded fertilizer was applied in shallow grooves on the bed shoulders after the beds were pressed and before the black polyethylene mulch was applied. The total fertilizer applied was equivalent to 150-40-208 lb N-P_20_5-K_20/A. The final beds were 32-in. wide and 8-in. high, and were spaced on 5-ft centers with six beds between seepage irrigation/drainage ditches, which were on 41-ft centers.

The transplants were set in holes punched in the polyethylene mulch on 11 March at 2.5-ft in-row spacing that provided 12.5 ft^2/plant. The replicated plots were 20 ft long and had eight plants each and were repeated four times in a randomized, complete block design. 'Summer Flavor 800' watermelon transplants were planted in every fourth hole to serve as the diploid pollenizer.

Watermelons were harvested on 22 and 30 May. Marketable (U.S. No. 1 or better) fruit according to U.S. Standards for Grades of Watermelons were separated from culls and counted and weighed individually. Six fruit from each entry were used to determine soluble solids (a measure of sweetness) with a digital, hand-held refractometer, polar and equatorial dimensions, rind thickness, flesh color, and the incidence and severity of hollowheart.

Yield data calculations did not include the 'Summer Flavor 800' pollenizer area, but were determined as if the miniwatermelons were planted on the entire acre. Yield data were calculated in three formats based on individual fruit weight: 4 to 6 lb.; 3-7 lb.; and 3-8 lb. because there are no generally agreed weight parameters for minimelons at this time.

Fruit number per acre of 4-6 lb. fruit varied from 1924 for 'Bambino' to 6861 for 'Vanessa' while weight per acre ranged from 96 cwt/acre for 'Bambino' to 349 cwt/acre for 'Vanessa'. Average fruit weight was similar among all entries. Fruit per plant varied from 0.6 for 'Bambino' to 2.0 for 'Vanessa'.

For fruit in the 3-7 lb. weight class, fruit per acre ranged from 4102 for 'Bambino' to 10,128 for ZG 8905. On the basis of weight, yields varied from 220 cwt/acre for 'Bambino' to 514 cwt/acre for 'Vanessa'. Average fruit weight varied from 4.9 lb for ZG 8905 to 5.9 lb for 'Extazy'. Fruit per plant ranged from 1.2 for 'Bambino' to 2.9 for ZG 8905 and 'Vanessa'.

For fruit in the 3-8 lb. class, fruit per acre varied from 4901 for 'Bambino' to 11,217 for 'Vanessa'. Weight ranged from 277 cwt/acre for 'Bambino' to 604 cwt/acre for 'Vanessa'. Average fruit weight varied from 5.0 lb. for ZG 8905 to 6.4 lb. for 'Extazy'. Fruit per plant ranged from 1.4 for 'Bambino' to 3.2 for 'Vanessa'.

Regardless of weight parameters, 'Vanessa', 'Petite Perfection', ZG 8905, and RWT 8149 proved to be the highest yielding minimelons in this trial. SR 8102WM, although producing acceptable yields, must be disqualified because many fruit were found to contain seeds and the rind was extremely brittle.

Soluble solids varied from 11.4% for ZG 8905 to 14.4% for 'Petite Perfection'. Accordingly, soluble solids in all entries far exceeded the 10% specified for optional use in the U.S. Standards for Grades of Watermelons to describe very good internal quality. Hollowheart did not vary among the entries although minor all separations were noted in 'Bambino', RWT 8149, SR 8102WM, SR 8103WM, and ZG 8905.

If 3-9 lb. is considered to be an acceptable weight for minimelons, then a very high proportion of RWT 8149 (98%), 'Vanessa' (98%), 'Petite Perfection' (97%), 'Extazy' (92%) fruit were in the acceptable minimelon weight range. A high proportion, 20% or more of SR 8102WM, ZG 8905, SR 8103 WM, and 'Bambino' fruit did not fall in the 3-9 lb. range. If 3-7 lb. minimelons are desired, RWT 8149 (75%), ZG 8905 (75%), 'Vanessa' (80%), and 'Petite Perfection' (81%) produced a high proportion of fruit in this weight class.

Triploid minimelons are an exciting new class of watermelons that are of special interest to one to two person households, households with children, and occasional watermelon consumers. It is likely that they will become a permanent segment of the watermelon market, but its size is difficult to estimate at this time.

This report in its entirety is available from the author as a GCREC Research Report. It is also available on the GCREC website (http://gcrec.ifas.ufl.edu).

Table 1. Miniwatermelon entries, fruit descriptions, and seed sources. Gulf Coast Research & Education Center, Bradenton. Spring 2003.

Entry	Description	Source
Bambino	Round/oval. (7.5 x 7.7 inches). Medum-green rind. Rind-0.7 inches thick. Flesh color-4.1.[1]	Seminis
Extazy	Oval. (7.4 x 7.8 inches). Indistinct, hazy, wide, dark-green stripe on light-green background. Rind-0.7 inches thick. Flesh color-4.4.	Hazera
Petite Perfection	Oval/round. (7.1 x 7.3 inches). Distinct, narrow medium-green stripe on light-green background. Rind-0.3 inches thick. Flesh color-3.5.	Syngenta
RWT 8149	Round/oval. (6.8 x 7.0 inches). Fine, very dark-green lines on a dark-green background. Rind-0.3 inches thick. Flesh color-4.0.	Syngenta
SR 8101WM	Round/oval. (7.5 x 7.7 inches). Distinct, narrow, dark-green stripes on medium-green background. Rind-0.7 inches thick. Flesh color-4.0.	Sunseeds
SR 8102WM	Round/oval. (7.4 x 7.6 inches) Distinct, narrow, dark-green stripe on medium-green background. Rind-0.5 inches, very brittle. Many fruit were seeded. Flesh color-3.9.	Sunseeds
SR 8103WM	Round. (7.6 x 7.5 inches). Narrow, distinct, dark-green stripe on light-green background. Rind-0.6 inches thick. Flesh color-3.6.	Sunseeds
Vanessa	Round. (6.8 x 7.0 inches). Dark-green rind. Rind-0.5 inches thick. Flesh	Sunseeds

[illegible]	color-3.9.	[illegible]
ZG 8905	Oval. (6.4 x 7.2 inches). Narrow, medium-green stripe on light-green background. Rind-0.4 inches thick. Flesh color-3.5.	Zeraim Gedera
[1]Flesh color: 1 = light pink, 5 = deep red.		

(Maynard - Vegetarian 03-08)

CONTAINER GARDENING SUCCESS REQUIRES THE RIGHT POTTING MEDIUM

The production of vegetables and culinary herbs in containers is on the increase. Though proper fertilization, watering, pest control and other practices are important, the choice of a potting medium is the most basic and important consideration.

A good potting medium has the ability to retain nutrients and moisture for extended periods of time yet is porous enough to allow sufficient air to reach the root system. There are many "recipes" for making one's own potting mixture. Almost any gardening book, garden center, nursery or Extension office can provide one. Most urban gardeners however, find it impractical to make their own and prefer to purchase bulk or prepackaged potting mixtures.

Most potting mixtures available to urban gardeners are offered prepackaged in various sized containers ranging in volume from one quart to four cubic feet or more. The quality of commercial potting media products varies from poor to excellent, depending upon the ingredients used and the ratio of coarse to fine particles.

How to Choose a Good Potting Medium

- First, gardeners should resist the urge to use soil or "yard dirt" as a container medium or adding it to increase the volume of a commercial potting mixture. This is a common practice and often defeats the purpose of using an artificial medium by introducing plant damaging pathogens and adding excessive density and weight to the medium. Even a soil that produces high quality vegetables in the garden will not perform the same when placed in a container.
- Quality potting mixtures have the right balance of coarse, medium and fine textured particles. Some of the basic ingredients currently used include perlite, vermiculite and pine bark as coarse components plus one or more fine textured ingredients to enhance the nutrient and moisture holding ability.
- Don't purchase a heavy, fine textured product that has the look and feel of "dirt". Such a potting medium becomes compacted, difficult to wet when dry and retains too much moisture once saturated.
- Determine if the potting medium includes other amendments. Has the pH been adjusted to an optimum range for vegetable production? Some of the high quality products are amended with dolomitic limestone when required, to raise the pH and to ensure that calcium and magnesium levels are adequate.

Some prepackaged potting mixes include "starter" fertilizer. Others might also contain controlled or slow release products that provide nutrients for weeks or months. Have micro-nutrients or minor elements been added? Knowing what amendments have been included by the manufacturer allows the gardener to adjust fertilization practices during the growing season.

Too often gardeners try their hand at container gardening and fail, blaming themselves for a lack of horticultural expertise. In many cases the failure is the result of using the wrong potting mixture. Though there are some excellent products on the market, there are some that are downright sorry. Success depends upon choosing the right one.

(Dan Mullins, ext. agt. IV, Santa Rosa County - Vegetarian 03-08)

SWEET CORN PRODUCTION IN FLORIDA

Florida continues as the nationwide leader in the production of fresh market sweet corn followed by California. Growers in Florida planted 41,000 acres and harvested 38,900 acres in 2001-02. The total production was 12.7 million 42-pound crates valued at $100.3 million. The value per crate averaged $7.85. Growers received prices of $10.61 per crate during August to December and $7.62 during January to July. The average state yield was 329 crates per acre. The Everglades region continues to lead production with about 60 percent, followed by the Southeast and Southwest regions with 25 percent.

Popular yellow sweet corn varieties include: ACX844 Abbott & Cobb; GSS-0966VP Syngenta; Flagship II Seedway, and Summer Sweet 8100R Abbott A& Cobb. Bicolor varieties used include: BSS-0977VP Syngenta; ACX538 Abbott & Cobb; Summer Sweet 8102 Abbott & Cobb; and Big Time VP Syngenta. White varieties are not planted in large acres but include: Summer Sweet 8101R Abbott & Cobb; Boreal VP Syngenta; WWS-1921 Syngenta; and White Saturn Seedway.

A spring sweet corn variety trials were conducted in Central Florida in 2002 for white and 2003 for yellow varieties of Sh_2 types. Plots were three rows wide, 25 feet long and replicated four times in a randomized complete block. Seeds were planted in early March eight inches apart within the 42 inch rows. A limited number of varieties were evaluated. Results of the yellow varieties are in Table 1 and the white varieties in Table 2. Yields are lower than the state average due to variables in water control on the Wabasso sand during both years.

The ear tip fill (data not shown) for AC7311 was 3.8 on a scale of 1 to 5 where anything below 3.5 is not acceptable. AC7311 also had an ear diameter of 5.2 cm, which is on the large size. AC7311 might be better adapted for fall production in Central Florida. Boreal's production was lower than expected and was probably due to having two plots in a section of the field where moisture levels were too high. Evaluation data from one season in one location is valuable, but needs more testing before good recommendations can be made.

Table 1. Yellow Sh_2 sweet corn variety trial results, Apopka, FL. 2002.

Variety	Source	Days to Harvest	42- lb Crates/A	Ear (cm)	
				Diameter	Length
8111R	Abbott & Cobb	75	297a[z]	4.9ab	19.3a
8101R	Abbott & Cobb	76	285ab	4.8b	18.3cd
Tahoe	Rogers	74	273ab	4.7b	18.7b
Vail	Rogers	75	262ab	4.7b	18.1de
7111	Abbott & Cobb	69	231ab	5.0a	17.9e
7311	Abbott & Cobb	68	225ab	5.2a	18.6b
Boreal	Rogers	76	218b	4.7b	18.5bc

[z]Means separation in columns by Duncan's Multiple Range Test, 5% level.

Table 2. White Sh_2 sweet corn variety trial results, Apopka, FL. 2003

Variety	Source	Days to Harvest	42-lb Crates/A	Ear (cm)	
				Diameter	Length
Cronus	Siegers	70	288a[z]	4.9a	17.8b

Prime Plus	Siegers	74	221a	4.6b	19.3a
Winstar	Siegers	75	240a	4.9a	19.0a
SS8100R	Abbott & Cobb	78	210a	4.7ab	19.5a
[z]Means separation in columns by Duncan's Multiple Range Test, 5% level.					

(White - Vegetarian 03-08)

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Florida Cooperative Extension Service
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