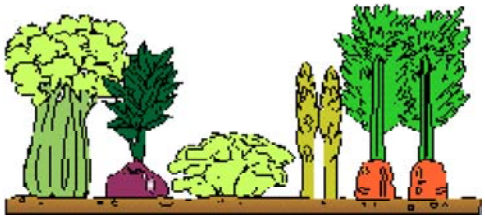

Vegetarian Newsletter

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Vegetarian 02-06
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University of Florida
Institute of Food and Agricultural Sciences
Cooperative Extension Service

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Vegetarian Archive

Print Version

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VEGETABLE GARDENING

(no article this month)

List of Extension Vegetable Crops Specialists

Events Calender

American Society for Horticultural Sciences (in conjunction with XXVI International Horticultural Congress). Toronto, Ont., Canada. August 11-17, 2002.

Florida Tomato Institute. Ritz Carlton Hotel, Naples, Fla. Begins September 4, 2002. Contact Charles Vavrina for information.

Commercial Vegetable Production

On-Farm Demonstration of a Controlled Release Fertilizer Program for Potato Production

A Cost Share Program to encourage Best Management Practices (BMP) has been implemented for growers in the Tri-County Agricultural Area (TCAA, St. Johns, Putnam, and Flagler counties) in Northeast Florida. The program is managed by the St. Johns River Water Management District (SJRWMD). The goal of the BMP program is to reduce non-point source nitrate pollution from the 38,000 acres in agricultural production in the lower St. Johns River watershed.

The BMP nitrogen rate for potato production in the TCAA is 200 lb N/acre. Growers are concerned, however, that this nitrogen rate may not be sufficient to produce historical yields in all years. In years with heavy rainfall, nitrogen can be leached from the beds making it both unavailable to the potato plant and a potential pollutant. Provisions to allow growers to apply more nitrogen have been made in the BMP program for such occurrences. However, depending on when rainfall events occur, growers may not be able to side-dress the crop before the critical tuber bulking stage.

Controlled release fertilizers (CRF) could overcome the concerns of growers and regulatory agency personnel by supplying nutrients to the crop over the entire season while reducing the chance of off-site movement of nitrogen. This is possible because CRFs meter out nitrogen to the plant gradually. The timing of nutrient release from the CRF prill is dependent on soil temperature and polymer coating thickness on the prill and not soil moisture. CRFs blends can be developed that release nutrients based on the timing of crop demand. Therefore, CRFs can be a more efficient method of fertilizing a crop i.e. more fertilizer ends up in the crop and less is available to move off-site.

A CRF program was developed for an on-farm trial in spring 2002 based on two years of results from small plot trials at the University of Florida's Yelvington Farm. The goal of the demonstration was to compare potato production after application of a grower applied BMP fertilizer program (200 lb N/acre) to a CRF program (150 lb N/acre).

The experiment was conducted on a 235 acre chip potato farm in the Hastings area. The soil type was Ellzey fine sand and the crop was irrigated with sub-surface (seepage) irrigation. The experiment was arranged in a randomized complete block design with three blocks. Blocks were spaced at three varied locations on the farm. The two treatments were CRF and grower applied BMP fertilizer program. CRF plot sizes in each block were 0.87, 0.70, and 0.97 acres. Grower plots were adjacent to each CRF plot and were of similar size.

Potatoes (var. 'Atlantic') were planted on February 6 and 11, 2002. All production practices in both plots were the grower standard practices except for the application of CRF.

The grower applied 225 lb P/A and 330 lb K/A in both the CRF and grower BMP beds prior to planting. The nitrogen program for the grower BMP beds was 124 and 81 lb N/acre applied on February 26, 2002 and March 22, 2002, respectively. The nitrogen source was liquid 32-0-0.

The CRF nitrogen program was a 50:50 (N rate) mix of 37-0-0 and 43-0-0 products (The Scotts Company, Marysville, OH) broadcasted and incorporated at layby, 21 days after planting. A total of 150 lb N/acre was applied.

Eight sub-plots, each 20 feet long, were harvested from each plot on May 22, 2002. Potatoes were transported to the University of Florida's Yelvington Farm where they were washed and graded with commercial equipment into five standard size classes. Specific gravity was measured by the weight-in-air/weight-in-water method.

This on-farm trial demonstrated the potential of a CRF program in potato production in the TCAA. Potato plants fertilized with the CRF program (150 lb N/acre) produced 21 cwt/acre more tubers in total yield than plants fertilized with the grower BMP nitrogen program (200 lb N/acre) without negatively impacting quality or grade (Table 1).

Additional trials are planned for next season with "second-generation" CRFs. These materials will be blended to more closely match the uptake requirement of the potato plant. If production results remain constant after future testing, a savings of 50 lb N/acre without a yield loss would be a positive step forward for growers and regulating agencies in the TCAA. This would result in one million pounds less nitrogen applied in the lower St. Johns River basin annually.

Material cost is the last challenge to be overcome before wide-scale CRF use becomes a reality in row crop production. Cost of CRFs to the growers in the TCAA will ultimately be determined by the rate of material used, pricing by the manufacturer based on large scale production (economies of scale), and whether CRFs are adopted as a reimbursable BMP in the SJRWMD Cost Share Program.

Table 1. Yield of 'Atlantic' potatoes grown with a controlled release fertilizer program (150 lb N/A) and a grower applied BMP fertilizer program (200 lb N/A) on a commercial farm in Hastings, FL..

Fertilizer Program	Total Yield (cwt/A)	Marketable Yield [1] (cwt/A)	Marketable Yield [1] % Grower Program	Size Distribution by Class (%) [2] 1	2	3	4	5	Size Distribution (%) 2 to 4	3 to 4	% Culls[3]	Specific Gravity
Grower Practice	343	324	100	4	47	45	4	0	96	49	1	1.080
200 lb N/acre												
CRF	364	348	108	3	42	50	5	0	97	55	1	1.078
150 lb N/acre												
LSD [4]	20	21	-	0.8	ns	4.5	ns	-	0.9	5.3	ns	ns
p value	0.039	0.025	-	0.04	0.09	0.04	0.63	-	0.03	0.04	0.49	0.13

[1]Marketable Yield: size classes 2 to 4.
[2]Size classes: 1 = <1 7/8", 2 = 1 7/8 to 2.5", 3 = 2.5 to 3.25", 4 = 3.25 to 4", 5 = >4"; Size Distribution by Class was calculated with the following formula: Class (wt)/Total Yield (wt) – culls (wt).
[3]Culls: growth cracks, sun-burn, miss-shapes, and/or rots.
[4]Means separated within columns with LSD mean separation test.

(Hutchinson, Austin Tilton, extension agent, Putnam County, and Simonne, Vegetarian 02-06)

GCREC Winter 2001-2002 Cabbage Variety Evaluation

Cabbage was harvested from 7900 acres in Florida in the 1999-2000 season. The average yield was 507 50-lb crates per acre and the total production was over 4 million crates. With an average price/crate of $5.04 the crop was worth over 20 million dollars. Florida ranked fourth among the states in value of fresh market cabbage, exceeded only by California, New York, and Texas.

The EauGallie fine sand soil was prepared in mid-November 2001. 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 center after the beds were pressed and before the black polyethylene mulch was applied. The total fertilizer applied was equivalent to 220-0-304 lb N-$P_2 0_5$-$K_2 0$/acre. 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.

Seeds were sown on 17 October into 1.5 x 1.5 x 2.5 inch containerized cells of Styrofoam transplant flats filled with a commercial mix. Supplemental nutrients were supplied periodically as liquid 20-20-20 (N-$P_2 0_5$-$K_2 0$). The seedlings were hardened by withholding water and nutrients during the final phase of production.

Transplants were set in the field on 27 November in two rows per bed with plants spaced 12 inches within rows and each row was 8 inches to each side of the bed center. Twenty-four plant plots per entry were arranged in a randomized complete block design with four replications. Data was collected from the center 20 plants in each plot.

Cabbage was harvested with three to four wrapper leaves, graded for marketability, measured and weighed. Six heads per plot were sampled and cut longitudinally through the core and inspected for density.

Cabbage yields ranged from 740 50-lb crates for 'Red Dynasty' to 1361 50-lb crates/acre for 'Atlantis' (Table 1). Yields of nine other entries were not different from those of 'Atlantis'. The proportion of heads harvested varied from 79% for 'Red Dynasty' to 99% for 'Atlantis', 'Pruktor' and 'Green Cup'. Yields in this trial were similar to those obtained in 2000-2001 at this location and 1.2 to 2.2 times greater than the state average yield of 620 cwt/acre in 2001. Average head weight ranged from 2.7 pounds for 'Red Dynasty' to 4.0 pounds for 'Atlantis'. Accordingly, all entries produced heads that would make 18 or less per 50-lb crate.

Equatorial dimensions were 5.0 inches for 'Red Dynasty' to 6.9 inches for 'Atlantis' (Table 2). Polar dimensions varied from 5.8 inches for 'Ducati' to 7.5 inches for 'Gideon'. 'Blue Dynasty', 'Cardinal', 'Emblem', 'Gideon', 'Gloria', 'Izalco', 'Pruktor', 'Ramada', 'Red Dynasty', 'Rio Verde', 'Solid Blue 780' and 'Solid Blue 790' had oval heads; 'Ducati' and 'Matsumi' were flat and the other entries were nearly round. Core length was greatest in 'Emblem' and shortest in 'Matsuma'. Core diameter was greatest in 'Red Dynasty' and least in 'Atlantis', 'Izalco', 'Cardinal' and 'Red Success'. 'Atlantis', 'Bravo', 'Cheers', 'Ducati', 'Emblem', 'Gideon', 'Gloria', 'Green Cup', 'Izalco', 'Matsuma', 'Pruktor', 'Ramada', 'Rio Verde', and 'Solid Blue 790' are currently recommended for production in Florida.

Table 1. Cabbage seed source, yield, average weight, and days to first harvest. Winter, 2001-2002.

Entry	Source	Marketable Yield[1,2] (crates/A)	Marketable Yield[1,2] (%)	Avg Wt (lb)	Days to First Harvest[3]
Atlantis	Seminis	1361 a[4]	99 a	4.0 a	66 b
Pruktor	Daehnfeldt	1316 ab	99 a	3.8 a-c	66 b
Rio Verde	Syngenta	1294 a-c	95 ab	3.9 ab	66 b
Matsuma	Bejo	1255 a-d	96 ab	3.7 a-d	66 b
Cheers	American Takii	1229 a-e	98 ab	3.6 a-d	66 b
Augusta	Syngenta	1217 a-e	98 ab	3.6 a-e	66 b
Emblem	Sakata	1207 a-e	94 ab	3.7 a-d	66 b
Solid Blue 790	Abbott & Cobb	1204 a-e	93 ab	3.7 a-d	74 a
Gloria	Daehnfeldt	1201 a-e	89 a-c	3.9 ab	66 b
Bravo	Harris Moran	1193 a-e	98 ab	3.5 a-e	66 b
Blue Dynasty	Seminis	1130 b-f	96 ab	3.4 c-g	66 b
Ducati	Bejo	1115 c-f	93 ab	3.5 b-f	66 b
Ramada	Bejo	1106 c-f	91 ab	3.5 a-f	66 b
Green Cup	American Takii	1072 e-f	99 a	3.1 e-h	66 b
Gideon	Bejo	1050 ef	85 bc	3.5 a-e	74 a
Izalco	Syngenta	995 f	96 ab	3.0 gh	66 b
Cardinal	Harris Moran	984 f	86 a-c	3.3 d-g	66 b
Red Success	Orsetti	974 f	94 ab	3.0 gh	66 b
Solid Blue 780	Abbott & Cobb	964 f	91 ab	3.0 f-h	69 b
Red Dynasty	Seminis	740 g	79 c	2.7 h	74 a

[1]Crate = 50 lb. A = 8712 linear bed feet. Double rows, staggered with 12 in. between plants and 16 in. between rows. Beds on 5 ft centers.
[2]As a percentage of plants set.
[3]From transplant date 27 November 2001.
[4]Mean separation in columns by Duncan's multiple range test, 5% level.

Table 2. Cabbage head and core dimensions. Winter 2001-2002.

Entry	Marketable Heads					
	Head Dimensions				Core Dimensions	
	Equatorial[1] (in.)	Polar[1] (in.)	Equatorial:Polar Ratio[2]		Length[1] (in.)	Diameter[1] (in.)
Atlantis	6.9 a[3]	6.9 c-e	1.00 bc		3.1 e-h	1.0 e-g
Pruktor	6.6 a-d	7.3 ab	0.90 de		2.9 f-i	1.3 ab
Rio Verde	6.5 a-e	6.8 c-e	0.95 cd		3.3 c-e	1.2 b-e
Matsuma	6.8 ab	6.0 hi	1.13 a		2.6 i	1.1 c-f
Cheers	6.8 a-c	6.7 c-f	1.01 bc		3.2 c-f	1.2 a-d
Augusta	6.7 a-c	6.5 e-g	1.03 b		3.5 bc	1.1 d-g
Emblem	6.4 a-f	7.0 b-d	0.92 de		3.9 a	1.2 a-d
Solid Blue 790	6.2 d-g	6.9 c-e	0.90 de		3.8 ab	1.3 a-c
Gloria	6.4 b-g	7.0 bc	0.91 de		3.3 c-f	1.2 a-d
Bravo	6.8 ab	6.6 c-g	1.03 b		3.2 c-f	1.1 c-f
Blue Dynasty	5.9 g-k	6.6 d-g	0.90 de		3.0 e-i	1.2 b-d
Ducati	6.6 a-d	5.8 i	1.14 a		2.7 g-i	1.1 c-f
Ramada	5.9 h-k	6.5 e-g	0.91 de		3.2 c-f	1.2 b-e
Green Cup	6.3 c-h	6.3 f-h	1.00 bc		2.7 g-i	1.2 a-d
Gideon	5.6 jk	7.5 a	0.74 g		3.1 c-g	1.2 b-e
Izalco	5.7 i-k	6.6 e-g	0.87 e		2.7 hi	1.0 g
Cardinal	6.1 e-i	6.8 c-e	0.89 e		3.5 b-d	1.0 fg
Red Success	6.0 f-j	6.0 hi	0.99 bc		3.3 c-e	1.0 e-g
Solid Blue 780	5.5 k	6.3 f-h	0.87 e		3.2 c-f	1.1 c-f
Red Dynasty	5.0 l	6.3 gh	0.80 f		3.1 d-h	1.4 a

[1]From a sample of 6 heads per plot.
[2]Values <1 = oval shape, 1 = round, >1 = flattened.
[3]Mean separation in columns by Duncan's multiple range test, 5% level.

GCREC Fall 2001 Tomato Variety Evaluation

In 1999-2000, 43,200 acres of tomatoes were harvested in Florida, yielding 62.2 million 25-pound cartons worth over $418 million. Tomatoes accounted for almost 30% of the total value for all vegetables grown in Florida during 1999-2000, making it the most important vegetable produced in the state. The Palmetto-Ruskin area (west-central Florida) accounted for over 36% of the state's total fresh market tomato production in 1999-2000.

A tomato variety trial was conducted in fall 2001 at the Gulf Coast Research and Education Center-Bradenton located in west-central Florida to evaluate 31 fresh market tomato varieties and breeding lines in a replicated yield trial.

Seeds were sown on 13 July 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 land was prepared in early 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 white polyethylene mulch was applied. The total fertilizer applied was equivalent to 282-0-392 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 21 August and spaced 24 in. apart in single rows down the center of each bed.

Fruit were harvested at or beyond the mature-green stage on 7-8 and 19-20 November and 3-4 and 14-15 December. Tomatoes were graded as cull or marketable by U.S. standards for grades and marketable fruit were sized by machine (see table footnotes for specifications). Marketable fruits of each size were counted and weighed, cull fruits were weighed.

Seasonal yields from four harvests ranged from 1658 cartons/acre for HA 3061 to 3268 cartons/acre for NC 99405. Ten other entries had yields similar to those of NC 99405. All entries produced yields greater than the state average yield for fall 1999 of 1053 cartons/acre.

Yields of extra-large fruit varied from 960 cartons/acre for HT-250 to 2516 cartons/acre for ‘Sanibel’. Yields of ‘Sanibel’ extra large fruit were not different from those of 18 other entries. Large fruit yields ranged from 254 cartons/acre for HT-320 to 847 cartons/acre for NC 99405. Cull fruit for the entire season varied from 11% by weight for EX 1405037 to 33% for HA 3061. Prominent blossom-end nipples, rough shoulders, and small fruit were the principal defects during the latter part of the season. Average fruit weight was from 5.3 oz for HT-310 to 6.9 oz for Fla. 7943.

Yields in the fall 2001 season surpassed those in recent fall seasons at this location. This was due in part to four harvests instead of the usual three harvests. On the other hand, marketable fruit yields were high despite a high proportion of cull fruit. Exceptional experimental hybrid performers in fall 2001 were NC 99405, HA 3057, Fla. 7943, XTM 0227, TX 99963, PX 150535, and Fla. 7973.

Table 1. Seed source, total marketable yields, average marketable fruit weight, and cull percentages for fresh market tomato entries in fall 2001. (Harvest Dates: 7-8, 19-20 November and 3-4, 14-15 December 2001).

		Total Harvest					
		Total	X-Large	Large	Medium	Culls	
Entry	Seed Source	----------(cartons/A)[1]---------- (%)[2]					Avg. Fruit Wt. (oz)
NC 99405	NCSU/UF-GCREC	3268 a[3]	2158 a-c	847 a	263 a	16 f-k	5.8 i-m
Sanibel	Seminis	3092 ab	2516 a	505 c-g	71 c-g	16 g-k	6.5 a-g
HA 3057	Hazera	2973 a-c	1912 a-e	810 ab	251 ab	20 d-j	6.1 c-j
Fla. 7943	UF-GCREC	2787 a-d	2255 ab	440 d-j	93 e-g	14 i-k	6.9 a
Agriset 911	Agrisales	2731 a-e	1940 a-e	649 a-d	142 c-f	22 c-g	5.9 g-k
XTM 0227	Sakata	2708 a-e	2275 ab	367 f-j	66 e-g	14 i-k	6.5 a-g

XTM 0227	Sakata	2700 a-e	2279 ab	501 f-j	66 e-g	14 i-k	6.6 a-g
TX 99963	Harris Moran	2700 a-e	1923 a-e	629 b-e	149 c-f	20 d-j	6.0 e-j
PX 150535	Seminis	2679 a-f	2112 a-c	519 c-g	48 fg	15 h-k	6.4 a-h
Fla. 7973	UF-GCREC	2633 b-f	2196 ab	371 f-j	65 e-g	14 i-k	6.6 a-c
Solar Set	Seminis	2614 b-f	1927 a-e	545 c-g	142 c-f	18 e-k	6.0 f-j
RFT 0247	Syngenta	2589 b-f	1962 a-d	549 c-g	78 e-g	16 f-k	6.2 b-i
RFT 6153	Syngenta	2573 b-f	2011 a-d	480 c-i	82 c-g	17 f-k	6.3 b-i
RFT 0417	Syngenta	2546 b-f	1975 a-d	505 c-g	66 c-g	17 e-k	6.4 a-h
Florida 47	Seminis	2533 b-f	1955 a-d	495 c-h	82 e-g	15 i-k	6.1 c-j
EX 1405037	Seminis	2527 b-f	2118 a-c	360 f-j	50 fg	11 k	6.6 a-c
SVR 1432427	Seminis	2523 b-f	2070 a-c	385 f-j	69 e-g	13 jk	6.5 a-f
RFT 0442	Syngenta	2511 b-g	2109 a-c	349 g-j	53 fg	22 c-i	6.7 ab
HA 3650	Hazera	2485 b-g	2192 ab	260 ij	32 g	25 b-d	6.6 a-c
HMX 0800	Harris Moran	2435 c-h	1778 b-f	550 c-g	107 d-g	16 f-k	6.0 d-j
Agriset 761	Agrisales	2392 c-h	1735 b-f	527 c-g	130 c-g	22 c-h	5.9 g-k
Florida 91	Seminis	2286 d-h	1968 a-d	276 h-j	42 fg	15 h-k	6.6 a-d
HA 3603	Hazera	2274 d-h	1753 b-f	443 d-j	78 e-g	19 d-j	6.4 a-h
RFT 0418	Syngenta	2262 d-i	1894 b-e	325 g-j	42 fg	17 e-k	6.8 ab
HT-280	Abbott & Cobb	2243 d-j	1405 d-h	674 a-c	163 b-e	16 f-k	5.6 j-m
Fla. 7964	UF-GCREC	2130 e-j	1347 e-h	582 c-f	200 a-d	19 d-j	5.6 j-m
BHN 555	BHN Research	2125 e-j	1570 c-g	420 e-j	135 c-g	27 bc	6.1 c-j
HT-320	Abbott & Cobb	2045 f-j	1743 b-f	254 j	48 fg	23 c-f	6.5 a-g
HT-250	Abbott & Cobb	1904 g-j	960 h	663 a-d	282 a	21 c-i	5.4 lm
HT-310	Abbott & Cobb	1867 h-j	1107 gh	547 c-g	213 a-c	30 ab	5.3 m
HA 3648	Hazera	1668 ij	1196 f-h	404 f-j	68 e-g	23 c-e	5.9 h-l
HA 3061	Hazera	1658 j	1083 gh	416 e-j	159 b-e	33 a	5.4 k-m

[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 02-06)

Sweet Onion Variety Trial, Spring 2002

Sweet (short-day) onions are a relatively minor crop in Florida. Production exists as both dry bulbs (mature) and green tops (immature). Limited production has existed throughout the state. The biggest deterrent for increased production is from competition from established markets in south Texas and middle Georgia areas. However, the potential exists for expanding production, especially in the areas of local sales and direct marketing.

The objective of this trial was to evaluate the performance of sweet onion varieties under northwest Florida conditions.

The transplants for this trial were produced from field beds at the NFREC, Quincy. Fifteen entries were seeded on 1 Oct 2001. Seed were planted at rate of about 30 seed per ft into rows spaced 12 inches apart. Preplant fertilization of seedbeds was 30-40-40lbs/a of N-P_2O_5-K_2O. Goal 2XL was applied was applied over the top at 1 pt/a after seedlings reached the 2 true leaf stage. Seedbeds were top dressed once with 34 lbs N/a. Entries were transplanted into the production field on 10 Jan 2001. Soil type was an Orangeburg loamy fine sand. Preplant fertilization was 60-80-80 lbs/a of N-P_2O_5-K_2O. Production scheme was 3 rows spaced 15 inches apart under a 6 ft tractor and in-row spacing was 4 inches (65,340 plants/a). Goal 2XL at 2 pts/a was applied on soil surface before transplanting and Dacthal 75 W at 9 lbs ai/a was applied over the top after transplanting. Nitrogen was applied twice during the season at 50 lbs N/a each time. One top dressing of K_2O as KCl at 60 lbs/a was made during the season. Registered pesticides were applied as needed to control pests.

Entries were harvested as they matured, where mature is defined as when about 25% of the tops of an entry had fallen down naturally. Bulbs were lifted, allowed to dry for a few hours and tops and roots removed. Bulbs were then placed in bushel baskets and dried for 72 hours at 100° F in large drying rooms. After drying time was complete, onions were removed, allowed to cool down and graded. Grading consisted of discarding culls (small onions, splits, off color and decayed) and sizing into medium (1.5-2 inches), large (2-3 inches) and jumbo (>3 inches) categories. Bulbs were then weighed and counted.

Harvest occurred from the period of 24 April to 7 May. Total yields ranged from 738 50 lb bags/a for 'Sugar Belle' to 118 50 lb bags/a for 'PS 7292' (Table 1). Four other entries produced yields as high as 'Sugar Belle'. Yields were good to very poor in 2002. A late freeze in February did not kill plants but caused a lot of leaf damage which translated to high incidence of bulb rotting at harvest time. The spring 2002 crop was one of the worst crops of onions produced at NFREC over the past 15 years due to bulb rot. The Vidalia area this spring had a very high incidence of bulb rot and estimates of crop loss is about 60 %. 'Linda Vista' produced the largest bulb at 11.5 oz and 'PS 7292' produced the smallest at 8.0 oz. Percent marketable bulbs ranged from a low of 18.3 % for 'PS 7292' to a high of 83.2 % for 'SSC 6436'. Percent bolting level was very low (<1%) on all entries. Days to harvest from transplanting ranged 134 days for 'Sugar Belle', SSC 6436' and 'Georgia' to 147 days for 'Linda Vista'.

Table 1. Sweet onion variety trial results spring 2002, NFREC-Quincy.

Entry	Source	Marketable yield (50 lb sacks/A)			Marketable (%)	Bulb wt. (oz)	Days to harvest [z]
		Large	Jumbo	Total			
Sugar Belle	Shamrock	29.6 b[y]	705 a	738 a	81.5 a	11.1 ab	134 e
SSC 6436	Shamrock	76.7 a	585 ab	671 ab	83.2 a	9.9 b-d	134 e

Nirvana	Sunseeds	39.2 b	602 ab	647 ab	77.6 a	10.2 a-c	140 d
*Granex 33	Seminis	38.0 b	585 ab	626 ab	70.6 ab	11.1 ab	145 b
SSC 6372	Shamrock	39.8 b	576 ab	620 ab	79.0 a	10.3 a-c	140 d
Georgia	Shamrock	42.4 b	494 bc	544 bc	69.2 ab	9.7 b-d	134 e
Sweet Melissa	Sunseeds	48.4 b	373 cd	428 cd	50.1 c	9.6 b-d	142 c
Linda Vista	Seminis	30.6 b	380 cd	417 cd	46.2 cd	11.5 a	147 a
Granex 7092	Seminis	51.8 b	340 de	396 cd	53.5 bc	9.8 b-d	143 c
Rio Bravo	Sunseeds	27.4 b	343 de	375 d	47.1 cd	9.5 b-d	142 c
Savannah Sweet	Seminis	33.6 b	331 de	367 dc	46.2 cd	9.9 b-d	143 c
Yellow Granex Imp.	Sunseeds	30.1 b	250 d-f	286 de	38.2 cd	9.1 c-e	143 c
Chula Vista	Seminis	41.5 b	221 e-g	268 d-f	37.2 c-e	9.9 b-d	143 c
Sweet Melody	Sunseeds	34.9 b	177 fg	213 ef	29.2 de	8.6 de	143 c
PS 7292	Seminis	27.9 b	88 g	118 f	18.3 e	8.0 e	143 c

z From transplanting.
y Mean separation by Duncan's Multiple Range Test, 5 % level.

(Olson - Vegetarian 02-06)

Section 18 for AIM for Tomato, Pepper and Eggplant Row Middles

The Environmental Protection Agency (EPA) has granted a specific exemption under Section 18 of FIFRA for the use of carfentrazone-ethyl (Aim 2EC) on fruiting vegetables (except cucurbits) to control paraquat resistant nightshade, common ground sel and morning glory. A total of 20,000 acres of tomatoes,10,000 acres of peppers and 1,000 acres of eggplants may be treated in Florida.

Applications may only be made to row middles of fruiting vegetables by ground application with spray hoods. One to 2 fluid ounces of Aim 2EC (0.016 to 0.031 lbs ai/A) per application may be made. Three to 6 applications per season up to 0.076 lb ai (6 fl. oz. product) may be made. Allow 14 days between applications. A 1 day preharvest interval (PHI) will be observed. The Section 18 will expire on May 30, 2003. The exemption was applied and granted through FFVA and the FDACS.

Section 18 for Sandea on Tomatoes

The Environmental Protection Agency (EPA) has granted a specific exemption under Section 18 of FIFRA for the use of halosulfuron-methyl (Sandea) for the control of purple and yellow nutsedge in tomato. A total of 43,200 acres of tomatoes may be treated in Florida.

A maximum of 0.094 lbs of active ingredient (ai) or 2 ounces of Sandea 75DF may be applied per acre per year. A total of 2 applications may be made per acre per year. Applications are to be made using ground equipment. Aerial applications are prohibited. Two applications of Sandea 75DF may be applied as either:

- one pretransplant soil surface treatment of 0.5 to 0.75 ounces Sandea 75DF (0.024 to 0.036 lbs ai);
- one "over-the-top" application 14 days after transplanting of 0.5-0.75 oz. product; and /or
- postemergence application(s) of up to 1 ounce product (0.047 lb ai) to the row middles between planted rows of tomatoes may be made.

A 30-day PHI will be observed. The Section 18 will expire on June 4, 2003.

The Section 18 was applied for and granted through efforts of the Florida Fruit and Vegetable Association (FFVA) and the Florid Department of Agriculture and Consumer Services (FDACS).

(Stall - Vegetarian 02-06)

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