



UNIVERSITY OF
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Cooperative Extension Service

Institute of Food and Agricultural Sciences

VEGETARIAN

A Vegetable Crops Extension Publication

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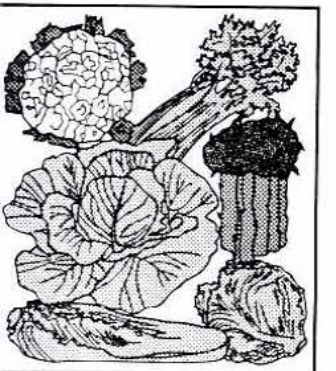
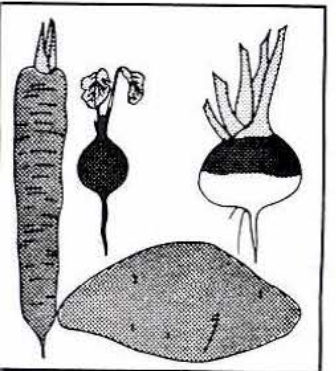
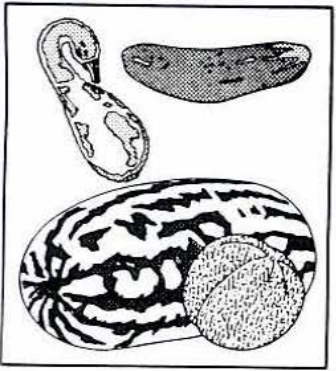
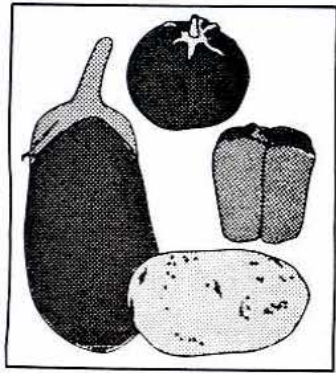
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I. NOTES OF INTEREST

A. Vegetable Crops Calendar.

September 6, 1995. Tomato Institute, Ritz Carlton, Naples, FL. Contact C. Vavrina, Southwest Florida REC, Immokalee.

II. COMMERCIAL VEGETABLES

A. Tomato Fertigation.

We are presently in the process of summarizing results of work on fertigation programs with tomato conducted at Quincy (Fred Rhoads and Steve Olson) and Gainesville (George Hochmuth, Sal Locascio, and Ed Hanlon). The research involved testing treatments of various amounts of preplant N (with K at Gainesville) including 0,40, and 100% and testing several injection schedules (even amounts over 6 or 12-week periods and injection via the growth curve).

At Gainesville with very sandy soils, application of 40% N and K preplant resulted in better yields than no preplant or 100% fertilizer applied preplant under the mulch. On heavier soils at Quincy, the 100% preplant treatment was best one year and there were no differences for yield among the three treatments in another year. These results are not new. We know preplant N is the way to go on sandy soils but we do not know for sure what percentage because proportions less than 40% may work as well.

Injection schedule and timing had no effect on yields. So, once the decision is made to apply some N preplant, then the remainder can be injected via the growth curve or in as few as six weekly injections.

We also evaluated the fertigation programs for effects on leaf N and K concentrations and on petiole sap N and K concentrations. Treatment effects on yield were related mostly to N nutrition in the plant. The sap and leaf N and K concentrations were highly correlated so that petiole sap can be a good measurement of plant N or K status.

Sap N profiles for the season were affected mostly by preplant N amount and not by injection schedule. Therefore, once the decision is made to apply some N preplant, then regardless of how the remaining N is fertigated, the same sufficiency profile can be used to monitor petiole sap N during the fertigation period.

Sap N was correlated with yield, but the correlation was best for the period of 5 to 10 weeks after planting. Therefore, early or very late-season monitoring probably will be of little benefit for helping judge plant nutrient status and predicting final yield. Our research shows that if the action is not taken by week 8 or 10, then yield response will not happen.

In summary, tomatoes respond to N fertigation and the specific program should be tailored to the soil type. Decisions about preplant N are more important and have more impact on yield than decisions about what type of fertigation (injection) schedule or plan. Sap testing for N is a useful, easy, and quick technique to evaluate plant N status, but testing should be focused on the period 5 to 10 weeks after planting. A more detailed report will be available from the 1995 Tomato Institute Proceedings.

(Hochmuth, Vegetarian 95-08)

III. VEGETABLE GARDENING

A. 4H Horticulture Activities Results - 4 H Congress, 1995.

1. "Plant Connections" Demonstration.

<u>Individuals</u>		<u>Placing of Presentations</u>	
	<u>Name</u>	<u>County</u>	<u>Title</u>
1.	Carrie Harn	DeSoto	The Cycle of Forage
2.	Cindy Clark	Marion	Plant Propagation
3.	Joshua Durr	Escambia	Using Plant Pesticides Safely
4.	Jody Paradis	Lake	Plant Propagation
5.	Teresa Thomas	Hillsborough	Plants Poisonous to Cattle
<u>Teams</u>			
1.	Jana Adams and Suzanne Stancil	Marion	Budding Citrus
2.	Amber Grigsby and Fawn Grigsby	Hendry	Tropical Soda Apple
3.	John Lucas and Jonathan Nosavahn	Volusia	Parts of Aspidistras
<u>Overall</u>			
	Jana Adams and Suzanne Stancil	Marion	Budding Citrus

When: Thursday, July 27, 1995

Time: 9:00 A.M. until completed

Where: Room 357, JWRU

Judges: Jackie Host, (Ornamentals greenhouse manager)
Cathy Kelly (Horticulture biologist)
Kenda Woodburn (Chestnut Hill Nursery)

Specialist in charge: Jim Stephens, Horticultural Sciences Dept.

Awards: Individual (1st, 2nd, 3rd) Plaques

Team (1st, 2nd, 3rd) Plaques

Overall Best Demonstration - Trip to national contest at National Junior Horticultural Association Convention, Niagara Falls, NY, Oct. 27-31, 1995.

2. 4H Horticulture Identification and Judging Contest 1995 - State Finals Results

Ten county teams competed in the contest, which was won by Marion County, coached by agent Bob Renner. The second place team was from Clay County, coached by Ray Zerba and 3rd place was Orange Co., coached by Tom Wichman. The team placings are as follows:

<u>Place</u>	<u>County</u>	<u>Name</u>	<u>Individual Score</u>	<u>Team Score</u>
1	Marion	Jenni Upton**	795.00	2241.75
		Tori Lundock***	753.00	
		Ashley Dobbs	647.00	
		Jay Deen	693.75	
2	Clay	Ben Pourcian	527.25	1942.25
		Mike Griggs*	805.75	
		Josh Shramo	609.25	
		Aimee Huskey	513.00	
3	Orange	Meriah Bradshaw	391.75	1586.75
		Kevin Floyd	459.25	
		Jennifer Rawlings	735.75	
4	Hendry	Bonnie Etgerton	494.50	1542.25
		Troy Gonzalez	566.00	
		Chris Jordan	244.25	
		Robbi Wehrwein	481.75	
5	Duval	Cheryl Anderson	511.25	1528.50
		Taylor Boydston	434.25	
		Anton VanBuskirk	365.25	
		Elaine Vivoni	583.00	
6	Sarasota	Michelle Peters	159.75	1523.75
		Jennifer Clarkson	427.75	
		Christy Biggy	526.00	
		Patrick Haley	570.00	

<u>Place</u>	<u>County</u>	<u>Name</u>	<u>Individual Score</u>	<u>Team Score</u>
7	Putnam	Heather Allen	350.25	1442.25
		Jessica Taylor	575.50	
		Darius Trunk	516.50	
		Desiree Mathe	326.00	
8	Volusia	Kris Schultz	266.75	1180.75
		Adam Schwarz	349.00	
		Teresa Schwarz	342.25	
		Michael Savery	489.50	
9	Manatee	Larry Betts	246.00	1170.00
		Eric Theilen	175.25	
		Karen Smith	579.25	
		Gary Graf	344.75	
10	Santa Rosa	Casey Bryan	55.00	1090.50
		Katie Mullins	481.00	
		Ashley Moore	410.00	
		Nicole Hancock	199.50	
Indiv.	Nassau	Kadie Massengale	366.50	
Indiv.	Hendry	Matthew Gaozalez	389.75	

*First Place Individual

**Second Place Individual

***Third Place Individual

The sweep of these two horticultural events by Marion County means Florida will be represented by Marion County youth at the National Junior Horticultural Association Convention at Niagra Falls in October. Marion County also had 12 out of the 33 4-H youth participating in the Horticulture

Leadership Training Track held during 4H Congress. It appears Marion County has laid down the challenge to other counties to reach for excellence in the area of horticulture.

A Group - Horticulture Track - 4H State Congress



(Stephens, Vegetarian 95-08)

Prepared by Extension Vegetable Crops Specialists

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