

# Vegetable Crops<sup>1</sup>

George Hochmuth<sup>2</sup>

#### **VEGETABLE CROPS SERVICE PROGRAMS**

## Non-parasitic Disorders Clinics for Vegetable Crops

This service diagnoses disorders (other than parasitic diseases, insects, nematodes, etc.) which affect vegetable crops. This includes problems with (1) nutrition, (2) injury from cold, heat, wind, soluble salts, etc., (3) fruit set problems, (4) plant and fruit abnormalities, (5) varietal deviations, and (6) other questionable abnormalities of any sort.

Send representative specimen and background information to:

Horticultural Sciences Department 1143 Fifield Hall Institute of Food and Agricultural Sciences University of Florida Gainesville, Fl. 32611

### **Vegetable Handling Advisory Service**

This service covers vegetable commodities from harvest to consumer. Advice is available on (1) harvesting, (2) handling, (3) packaging, (4) precooling,

(5) packinghouse layout, management and sanitation, (6) consumer-oriented information, (7) laws and regulations, and (8) any problems with vegetable commodities from harvest to consumer if answers are not available elsewhere.

Send requests for advice to:

Horticultural Sciences Department 1143 Fifield Hall Institute of Food and Agricultural Sciences University of Florida Gainesville, Fl. 32611

### **VEGETABLE CROP PUBLICATIONS**

The materials listed in Table 1 and Table 2 (for Commercial Production and Home Gardening, respectively) are available from the Horticultural Sciences Department and associated Departments as indicated.

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Table 1. Commercial Production

Reference Number	Title
LA	AND PREPARATION AND MULCHING
VCR 76-8	Preparation of Land for Vegetable Production
Circ. 805	Polyethylene mulching for early vegetable production in north Florida (1988)
	VARIETIES
VC Ext. Rpt 85-1	Vegetable Seed Sources (revised Sept. 1987)
Circ. 530-C	Commercial Vegetable Cultivars for Florida (Nov. 1987)
VEC 86-01	Snow Pea and Snap Pea Cultivar, Fertilizer, and Spacing Studies
Circ. S-336	Minilee and Mickilee (Dec. 1986)
Circ. 762	Vegetable Variety Demonstrations: A manual for County Extension Faculty (Feb., 1987)
PLA	NTING DATES, RATES, AND SPACING
Ext. Cir. 318	Hot Water Treatment of Vegetable Seed-Equipment and Methods (Oct. 1967)
	TRANSPLANT PRODUCTION
VCR 76-1	Vegetable Transplant Production
	SOIL TEST INTERPRETATIONS
Soils-County Agents' Handbook. I-6	Soil Testing by IFAS.
	pH AND LIMING
Soils-County Agents' Handbook. I-3	Soil Reaction: Acidity and Alkalinity
Soils-County Agents' Handbook. I-4	Lime and Liming
	FERTILIZATION
Soils-County Agents' Handbook. I-5	Soils, Fertilizers and Plant Nutrition
VEC. 87-06	Diagnosing Nutritional Disorders of Vegetables
VEC. 87-07	Foliar Nutrition of Vegetables
Circ. 225	Commercial Vegetable Fertilization Guide (1988)
Circ. 806	Commercial Vegetable Crop Nutrient Requirements
Notes in Soil Science No. 32	Calculating fertilizer rates for vegetable crops grown in raised bed cultural systems in Florida (1989)
SS-VEC-42	Plant Tissue Analysis and Interpretation for Vegetable Crops in Florida
SS-SOS-907	IFAS Standardized Fertilization Recommendations for Vegetable Crops
SS-VEC-45	Fertilization Application and Management for Micro or Drip Irrigated Vegetables in Florida
	NEMATODE CONTROL
SP-54	Florida Nematode Control Guide
	INSECT CONTROL
SP-51	Florida Insect Control Guide
	DISEASE CONTROL
Bull 857	Diseases, Nematodes, Mites, and Insects Affecting Strawberries in Florida (Nov. 1985)
SP-52	Florida Plant Disease Control Guide
Plant Pathology Fact Sheets: PP-1	Rhizoctonia Seedling Blights of Vegetable and Field Crops
Plant Pathology Fact Sheets: PP-2	Downy Mildew of Cucurbits
Plant Pathology Fact Sheets: PP-3	Bacterial Spot of Tomato and Pepper
Plant Pathology Fact Sheets: PP-4	Stem Rot of Agronomic Crops and Vegetables
Plant Pathology Fact Sheets: PP-6	Late Blight on Potatoes and Tomatoes

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Reference Number	Title
Plant Pathology Fact Sheets: PP-7	Early Blight on Tomatoes and Potatoes
Plant Pathology Fact Sheets: PP-8	Early, Late, and Bacterial Blights of Celery
Plant Pathology Fact Sheets: PP-10	Bacterial Speck of Tomato
Plant Pathology Fact Sheets: PP-11	Wet Rot of Vegetable Crops
Plant Pathology Fact Sheets: PP-12	Bacterial Soft Rots of Vegetables and Agronomic Crops
Plant Pathology Fact Sheets: PP-13	Black Rot of Crucifers
Plant Pathology Fact Sheets: PP-14	Powdery Mildew of Vegetables
Plant Pathology Fact Sheets: PP-22	Sclerotinia Diseases of Vegetable and Field Crops in Florida
Plant Pathology Fact Sheets: PP-27	Gummy Stem Blight of Cucurbits
Plant Pathology Fact Sheets: PP-32	Alternaria Leafspot of Cucurbits
Plant Pathology Fact Sheets: PP-33	Downy Mildew on Crucifers
Plant Pathology Fact Sheets: PP-34	Alternaria Diseases of Crucifers
Plant Protection Pointers: No. 6	Florida Vegetable Plant Disease Chemical Control Guide
Plant Protection Pointers: No. 10	Chemicals for Plant Disease Control-Chemicals Common and Trade Names
Plant Protection Pointers: No. 11	Selected Literature List Pertaining to Plant Diseases and Their Diagnosis
Plant Protection Pointers: No. 13	Plant Disease Resistance
Plant Protection Pointers: No. 20	Guidelines for Effective Chemical Control for Plant Diseases
Plant Protection Pointers: No. 22	Integrated Pest Management-Development of an Alternative Approach to Control Tomato Pests in Florida
Plant Protection Pointers: No. 25	Control of Soilborne Diseases of Peppers, Tomatoes, and Tobacco in Transplant Beds
Plant Protection Pointers: No. 26	Interpretation of Recommendations for Fungicide and Bactericide Usage
Plant Protection Pointers: No. 28	Tomato Pest Management Program-Guidelines for Scouts
Plant Protection Pointers: No. 31	Small Batch Preparation of Fungicides
Plant Protection Pointers: No. 33	Toxicity of Fungicides -(Revision 1)-June 1985
Plant Protection Pointers: No. 36	Integrated Pest Management for Florida Snap Beans - March 1984
Plant Protection Pointers: No. 37	The Use and Purpose of Spray Adjuvants for Foliar Fungicides - September 1983
Plant Protection Pointers: No. 39	Target Spot of Several Vegetable Crops - May 1988
	WEED CONTROL
VC 17	Estimated Effectiveness of Recommended Herbicides on Selected Common Weeds in Florida Vegetables
Ext. Cir. 275-B	Calibration of Pesticide Applicators
Weeds in the Sunshine, WIS-102	Diagnosing Herbicide Injury
Weeds in the Sunshine, A-82-8	Common Weedy Grass Identification Using Vegetative Characteristics
SP-53	Florida Weed Control Guide
VC-188	Weed Control in Beans and Peas
VC-201	Weed Control in Carrot and Parsley
VC-202	Weed Control in Celery
VC-189	Weed Control in Cole and Brassica Leafy Vegetables
VC-190	Weed Control in Cucurbit Crops
VC-191	Weed Control in Eggplant
VC-203	Weed Control in Lettuce, Endive, Escarole, and Spinach
VC-192	Weed Control in Okra

Table 1. Commercial Production

Reference Number	Title
VC-193	Weed Control in Bulb Crops
VC-199	Weed Control in Peppers
VC-194	Weed Control in Potatoes
VC-196	Weed Control in Strawberries
VC-197	Weed Control in Sweet Corn
VC-198	Weed Control in Sweet Potato
VC-200	Weed Control in Tomato
	IRRIGATION
Agricultural Engineering - County Agents' Handbook.	Part D: Irrigation.
IFAS Water Council Fact Sht No. 2	The Water Needs of Florida Vegetable Crops
Cir. 607	Determination of Water Requirements for Florida Vegetable Crops (Oct. 1984)
Cir. 784	Selection of an Irrigation System for Vegetable Production in Florida (May, 1988)
Bull 204	Trickle irrigation scheduling 1: Durations of water applications (1985)
	HANDLING AND STORAGE
VC 1	Water Chlorination for Vegetable Packing houses
VC 28	Postharvest Water Loss Control for Vegetables
VC 29	Ripening Tomatoes With Ethylene
VC 30	A Flow-through System for Introducing Ethylene into Tomato Ripening Rooms
VC 31	Tomato Packinghouse Dump Tank Sanitation
VC 33	Produce Handling for Roadside Markets
VC 34	Ethylene in Postharvest Horticulture
VC 35	Simple Modification that Improve Air Distribution Within Tomato Ripening Rooms
Р	ostharvest (Available on VAX only)
SS-VEC-921	Handling Florida Vegetables: Broccoli (1989)
SS-VEC-922	Handling Florida Vegetables: Snapbeans (1989)
SS-VEC-923	Handling Florida Vegetables: Cabbage (1989)
SS-VEC-924	Handling Florida Vegetables: Cauliflower (1989)
SS-VEC-925	Handling Florida Vegetables: Sweet Corn (1989)
CROP PRODU	CTION GUIDES AND CULTURAL INFORMATION
Ext. Cir. 96	Watermelon Production in Florida (Mar. 1987)
Ext. Cir. 98	Tomato Production Guide for Florida
Ext. Cir. 99	Sweet Corn Production in Florida (Apr. 1988)
Ext. Cir. 100	Snap Bean Production in Florida (Apr. 1988)
Ext. Cir. 101	Cucumber Production Guide for Florida
Ext. Cir. 102	Pepper Production Guide for Florida (Sept. 1988)
Ext. Cir. 103	Squash Production in Florida (Apr. 1988)
Ext. Cir. 117	Cabbage Production Guide for Florida (Jan. 1988)
Ext. Cir. 118	Potato Production in Florida (Feb. 1983)
Ext. Cir. 122	Muskmelon Production Guide for Florida (Feb. 1988)
Ext. Cir. 142	Strawberry Production Guide for Florida

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Reference Number	Title	
Ext. Cir. 176	Onion Production Guide	
Ext. Cir. 478	The Southern Pea in Florida (Dec. 1982)	
Ext. Cir. 492	Okra in Florida	
Ext. Cir. 551	Sweet Potatoes in Florida (Feb. 1984)	
Ext. Cir. 555	Broccoli and Cauliflower Production in Florida (Oct. 1985)	
Bull. 841	Strawberry Production in Florida (Aug. 1984)	
Bull. 238	Bulb Onion Production in Florida (June, 1987)	
VEC Special Series	Watermelon Institute	
VEC Special Series	Pepper Institute	
Bull. 857	Diseases, Nematodes, Mites, and Insects Affecting Strawberries in Florida (Nov. 1985)	
	SMALL FARMS - VEGETABLES	
	Aternate Crop Production Review Fact Sheets: Cucumber	
	Aternate Crop Production Review Fact Sheets: Pumpkin	
	Aternate Crop Production Review Fact Sheets: Watermelon	
	Aternate Crop Production Review Fact Sheets: Muskmelon	
	Aternate Crop Production Review Fact Sheets: Onion	
	Aternate Crop Production Review Fact Sheets: Southern Pea	
Ext. Cir. 473	Aternate Crop Production Review Fact Sheets: Growing Quality Vegetables in Florida (Aug. 1984)	
	MARKETING	
FRED Economic Information Report	Production Costs for Selected Florida Vegetables (yearly)	
GREENHOUSE AND HYDROPONICS		
Bull. 218	Soilless Culture of Greenhouse Vegetables (Nov. 1985)	
Circs. SP 46,47,48	Florida Greenhouse Vegetable Production Handbook (3 volumes)	
SSVEC-41	Design Suggestions and Greenhouse Management for Rockwood Vegetable Greenhouses in Florida	
SSVEC-44	Nutrient Solution Formulation for Hydroponic (Rockwood and NET) Tomatoes in Florida	
MISCELLANEOUS		
Ext. Cir. 728	Row Covers for Commercial Culture in Florida (May 1987)	
VC 36	Production of miniature vegetables in Florida (1989)	

Table 2. Home Gardening

Reference Number	Title	
GENERAL		
Ext. Cir. 104	Vegetable Gardening Guide	
Ext. Cir. 463	Grow A Row of Vegetables in Florida	
VC 2	Garden Planning and Design	
VC 3	Soil Preparation and Liming	
VC 4	Composting and Manure	
VC 5	Fertilizing the Garden	
VC 6	Seeding the Garden	
VC 7	Starting the Garden with Transplants	

Table 2. Home Gardening

Reference Number	Title
Notes in Soils Science No. 6	IFAS Soil Test Report and the Vegetable Gardener
	SPECIALIZED GARDENING
Ext. Cir. 375	Organic Vegetable Gardening
VC 10	Grow Your Own Vegetables Without Soil
VCR 76-7	Minigardening
	PEST CONTROL
IFAS Cir 399	Control of Plant Diseases and Nematodes in a Home Garden
Plant Protection Pointer No. 12	Nematode Control in the Home Garden with Preplant Soil Fumigant
SP-51	Florida Insect Control Guide
	INDIVIDUAL VEGETABLES
VC-SP 41	Manual of Minor Vegetables (for sale)
Ext. Cir. 570	Herbs in the Florida Garden
VCR	Growing Strawberries in Barrels
VC 8	Tomatoes in the Florida Garden
VC 9	Strawberries in the Florida Garden
VC 10	Cucumbers in the Florida Garden
VC 15	Gardening Lots of Okra
VC 18	Gardening Lots of Radishes
VC 19	Gardening Lots of Squash
VC 20	Gardening Lots of Southern Peas
VC 21	Gardening Lots of Sweet Corn
VC 22	Gardening Lots of Tomatoes
VC 23	Gardening Lots of Cucumbers
VC 24	Gardening Lots of Greens
VC 26	Gardening Lots of Potatoes
	MISCELLANEOUS
VC 32	Exhibiting Vegetables in Florida
VCER 87-1	Vegetable Seed Sources
VCER 86-2	Descriptive List of Gardening Videos
Ext. Cir. 601	How Not to Lose Your Shirt Gardening
Ext. Cir. 420	Vegetable Gardening, Florida AMU Demonstration Garden
	4H GARDENING
4H 130	Plant Science Experiments
4H 131	Growing Vegetables in Containers
4H 132	Vegetable Gardening
4H 133	Vegetable Judging, Grading and Identification Workbook
4H 379	4H Horticulture Identification Contest Vol 1 Fruits and Vegetables
4H 396	Horticultural Demonstrations
4H 395	Vegetable Gardening Project Manual
4H 380	Vegetable Judging, Grading, and Identification Workbook