



UF UNIVERSITY of FLORIDA

IFAS EXTENSION

The Green Machine

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SOLUTIONS
for your LIFE

In this issue:

Crop preparations 1

Planting guide 2

Strawberry production
workshop September
14th 3

Selected UF/IFAS
publications 4

The Bradford County Extension Service is your direct link to technologies developed by the University of Florida Institute of Food and Agricultural Sciences and is funded by the University of Florida and Bradford County.

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Fall planting season has arrived!

If you haven't already turned your soil under in preparation for this year fall crops you should do it now. Soil pathogens and nematode populations survive on crop residues and susceptible weed hosts that occur in old crop areas. Destroying all plant material by turning the soil under and letting the plant material fully decompose helps reduce the impact of these organisms.

Be sure to clean equipment before moving it from one field to another. In addition to pests, weeds can be introduced to areas through the movement of soil and plant debris.

Selecting resistant cultivars is an important tool in helping to minimize losses to crop pests. Plant resistance to nematodes and specific diseases are listed on the seed packet. Starting with clean seeds and plant material is the first and best defense towards producing a healthy crop.

If you experienced problems in the previous crop, consider rotating your crop to one that is not susceptible to that organism. Crop rotation can be tricky because nematodes and plant diseases have different host ranges. For this reason, crop rotation selection is usually based on managing the most damaging pest. Consult your local extension agent for help in determining your rotation strategy.

There are several pre-plant nematode, disease management and weed control chemical alternatives available to producers with proper pesticide applicator certification. Most soil sterilants are restricted use pesticides that cannot be purchased without proper license.

Have you had your soil tested yet? The Bradford County Extension Service is sponsoring a soil testing effort by delivering your soil sample for testing, thus eliminating the cost and bother of having to mail your sample to the soil testing lab. **Bring your soil samples with \$7/sample to the Extension office on September 7th.**

Need more information? Call us or visit our website to learn more about all the programs your local Extension office offers visit our website at: <http://bradford.ifas.ufl.edu/>

A	B	C	D	E	F	G	H
Bean, lima	85	8	July Aug	7-10	55-60		5.5-7.0
Bean, snap	75-80	6	May June	7	48-50		6.0-7.0
Beet	75	4	Oct	7-14	55-70		5.6-6.6
Broccoli	65-75	18	Oct Nov	5-10	90-110 *	6	6.0-7.0
Brussels sprout	68-75	18	Oct Nov	5-10	80-115 *	6	6.0-7.0
Cabbage	68-75	12	Oct Nov	5-10	65-120 *	6	6.0-8.0
Cantaloupe	80-85	4	June July	5-10	80-90 *	3	6.0-7.0
Carrot	75	3	Oct	12-15	120-150		5.5-7.0
Cauliflower	65-75	18	Oct Mar Apr	5-10	90-110 *	6	6.0-7.0
Celery	70-75	6	Oct Mar Apr	10-14	90 *	10	6.0-7.0
Collard greens	70-75	6	Oct	5-10	80-90		6.0-7.0
Corn	75-85	12	May to Aug	7-10	65-95		5.5-7.5
Cucumber	70-85	18	Apr	7-10	60-75 *	3	5.5-7.0
Eggplant	75-85	18	May to Aug	10-12	80-90 *	8	5.5-6.4
Endive	70-75	8	Oct	10-14	50-60		6.0-7.0
Kale	70-75	12	Oct	5-10	50-60		6.0-7.0
Kohlrabi	70-75	8	Oct	5-10	50-60		6.0-7.0
Lettuce	60-70	4-6	Mar Apr Oct Nov	7-10	40-90		6.0-7.0
Melon	80-85	48	July to Sept	5-10	85-95 *	3	6.0-7.0
Mustard greens	70	6	Oct Apr	5-10	35-45		6.0-7.0
Okra	80-85	18	July to Sept	7-14	60-70		6.0-8.0
Onion, bulbing	70-75	4	Oct	10-14	90-150 **	12	5.0-7.0
Onion, bunching	60-70	4	Mar Apr Oct Nov	10-14	50-60		5.0-7.0
Parsnip	70	4	Oct Apr	14-21	150		5.0-7.0
Snap or snow pea	60-70	4-8	Mar Apr Oct Nov	7-14	60-70		5.5-7.0
Pepper	78-85	18	May to Aug	10-14	80 *	8	6.0-8.0
Pumpkin	70-75	60	Oct Apr	7-10	100-120 *	3	5.5-7.5
Radish	60-70	2	Mar Apr Oct Nov	5-7	30		6.0-7.0
Rutabaga	60-70	8	Mar Apr Oct Nov	7-15	80-90		5.5-7.0
Spinach	70	4	Oct Apr	7-14	40-50		6.0-7.5
Squash, summer	75-85	4	May to Aug	7-14	50-60 *	3	6.0-7.5
Squash, winter	75-80	4	May to Aug	7-14	85-110 *	3	5.5-7.0
Swiss Chard	70-75	6	Oct	7-14	50-60		5.0-7.0
Tomato	75-80	18	May June	7-14	75 *	8	5.5-7.5
Turnip	60-70	4	Mar Apr Oct Nov	7-14	45-75		5.0-7.0
Watermelon	75-85	8	May to Aug	7-14	85-95 *	3	5.5-6.4

Column Headings:

- A. Crop
- B. Best germination soil temp °F
- C. Row spacing in inches
- D. Optimum germination months
- E. Days to germination
- F. Days to maturity (from plants* from sets**)
- G. If growing transplants, sow seeds this # of weeks before planting date
- H. Optimum soil pH

This vegetable planting guide was created by Master Gardener Sam Williams. She took information published by the University of Florida and the accessed UF/IFAS Florida Automated Weather Network (FAWN) to customized the guide for Bradford County soil temperatures. Average soil temperatures in Bradford County from January Until December are 60, 58, 65, 70, 77, 76, 84, 82, 81, 74, 63 & 56 °F.



Strawberry Production Update

Tuesday September 14th, 12 noon - 2:00pm

Bradford County Extension Office

2266 North Temple Avenue, Starke, Florida



No cover:

3 acre-inches per acre water use

Dr. Bielinski M. Santos is a vegetable and small fruit horticulturist who has worked in strawberry and vegetable production during the last 12 years. His research has focused on increasing the farmer's bottom line through more efficient use of water, fertilizer and production practices. He has done extensive work on using protected structures to increase strawberry yields while using less water.

Workshop attendees will learn about opportunities for better water and nutrient management, as well as the potential for using protective structures to increase crop yields and net profits.



Protected cover:

zero water for frost protection

Agenda

- 12:00 Lunch, welcome and introductions *Jim DeValerio, Bradford County Extension*
- 12:10 Advanced fertilizer & water management (including frost protection)
The ABC's of protective structures for vegetable and small fruit production
Selecting cultivars based on production strategy
Novel opportunities for Bradford farmers
Dr. Bielinski M. Santos, Gulf Coast Research and Education Center
- 1:45 Strawberry pesticide update *Jim DeValerio, Bradford County Extension*

\$5.00 Registration Fee will cover lunch and materials.

Please call 904-966-6299 to register and RSVP for the lunch.

For individuals with disabilities requiring special accommodations, please contact the Bradford County Extension Service at least 5 working days prior to the program in order for proper consideration to be given to the request. An Equal Opportunity Institution.

EENY033/IN160 Asian Citrus Psyllid, *Diaphorina citri* Kuwayama (Insecta: Hemiptera: Psyllida e), an 8-page illustrated fact sheet by F.W. Mead, is part of the Featured Creatures collection. It describes this serious pest of citrus which is a vector for citrus greening disease or Huanglongbing — identification, distribution, description, life history, damage, and management. Includes references. Published by the UF Department of Entomology and Nematology, July 2010. <http://edis.ifas.ufl.edu/in160>

EENY473/IN855 Varroa Mite, *Varroa destructor* Anderson and Trueman (Arachnida: Acari:Varroidae), an 8-page illustrated fact sheet by James D. Ellis and C. M. Zettel Nalen, is part of the Featured Creatures collection. It describes this devastating pest of Western honey bees — distribution, description, life cycle, economic importance, detection, and management. Includes references. Published by the UF Department of Entomology and Nematology, June 2010. <http://edis.ifas.ufl.edu/in855>

EENY474/IN854 Small Hive Beetle, *Aethina tumida* Murray (Insecta: Coleoptera: Nitidulidae), a 5-page illustrated fact sheet by James D. Ellis and Amanda Ellis, is part of the Featured Creatures collection. It describes this small beetle native to sub-Saharan Africa, which can cause considerable damage to colonies of European honey bees outside of its host range — distribution, description, life cycle, economic importance, and management. Includes references. Published by the UF Department of Entomology and Nematology, June 2010. <http://edis.ifas.ufl.edu/in854>

EENY062/IN856 Introduction to Soil Solarization, a 6-page illustrated fact sheet by Robert McSorley and Harsimran K. Gill, describes this practice of covering soil surface with plastic to harness the sun's heat to manage soil weeds, nematodes, diseases and insects in soil. The authors answer frequently asked questions and outline steps for conducting soil solarization. Includes references. Published by the UF Department of Entomology and Nematology, June 2010. <http://edis.ifas.ufl.edu/in856>

FE836 Non-Governmental Organizations Serving Farmworkers in Florida, a 15-page fact sheet by Carlene Thissen and Fritz Roka, is a compilation of the non-governmental organizations that serve farm workers in Florida. Published by the UF Department of Food and Resource Economics, July 2010. <http://edis.ifas.ufl.edu/fe836>

FE837 Sample Avocado Production Costs and Profitability Analysis for Florida, a 4-page illustrated fact sheet by Edward A. Evans and Sikavas Nalamang, provides an estimate of the costs and returns associated with avocado production in Miami-Dade County and a brief analysis of the profitability of the industry. Includes references. Published by the UF Department of Food and Resource Economics, June 2010. <http://edis.ifas.ufl.edu/fe837>

HS798/CV274 Vegetable Insect Identification and Management – Florida, a 24-page guide by S. E. Webb and R. C. Hochmuth, provides instruction in management and control of insects and mites in greenhouse vegetable production — crop scouting and monitoring, identification of insects and mites, record keeping, management strategies and tactics, banker plant system, insecticides and miticides, storage of pesticides, safety, and control of specific greenhouse pests. Includes references. Published by the UF Department of Entomology and Nematology, June 2010. <http://edis.ifas.ufl.edu/cv274>

HS1166 Methyl Bromide Fumigant REDs Regulations Overview, a 10-page fact sheet by Andrew M. MacRae and Joseph Noling, provides growers, applicators, and owner/operators with an overview of new mitigation measures and reporting requirements for methyl bromide. Published by the UF Department of Horticultural Sciences, April 2010. <http://edis.ifas.ufl.edu/hs1166>

HS1167 Overview of New EPA Regulations Affecting Use of Metam Sodium and Metam Potassium, a 10-page fact sheet by Andrew MacRae and Joseph Noling, provides a general overview of the new mitigation measures growers and certified applicators will be required to implement, based on the new reregistration eligibility decisions (REDs) for metam sodium and metam potassium. Published by the UF Department of Horticultural Sciences, April 2010. <http://edis.ifas.ufl.edu/hs1167>

HS1181 Mineral Nutrition Contributes to Plant Disease and Pest Resistance, a 5-page illustrated fact sheet by Timothy M. Spann and Arnold W. Schumann, provides a summary of plant mineral nutrition, discussing how nutrient levels may affect plant growth and potential susceptibility to plant diseases and pests. Published by the UF Department of Horticultural Sciences, July 2010. <http://edis.ifas.ufl.edu/hs1181>

PI229 Pest Control Devices, a 3-page illustrated fact sheet by Frederick M. Fishel, explains the difference between a pest control device and a pesticide. Includes references. Published by the UF Department of Agronomy, June 2010. <http://edis.ifas.ufl.edu/pi229>

PI230 Is Our Food Safe from Pesticides?, a 5-page illustrated fact sheet by Frederick M. Fishel, describes the integrated pest management practices followed by growers of our food supply, how tolerances for pesticides in foods are determined by the EPA, and how annual testing of commodity samples for pesticides is conducted. Published by the UF Department of Agronomy, June 2010. <http://edis.ifas.ufl.edu/pi230>

PI231 Pesticide Formulations, a 14-page illustrated fact sheet by Frederick M. Fishel, provides a basic understanding of formulation types and factors a user should consider when selecting a pesticide formulation. Includes a glossary and references. Published by the UF Department of Agronomy, June 2010. <http://edis.ifas.ufl.edu/pi231>

SL323/SS535 Spring Mix: An Emerging Crop for Florida, a 3-page illustrated fact sheet by Santiago Rosaro, Alan L. Wright, David D. Sui, Nikol Havranek, and Yigang Luo, describes the components of spring mix, explains the reasons why consumers are looking for these mixes, and why growers in the Everglades Agricultural Area of Florida are producing them. Published by the UF Department of Soil and Water Science, June 2010. <http://edis.ifas.ufl.edu/ss535>

SSAGR333/AG343 Forage Sorghum (*Sorghum bicolor*): Overview and Management, a 13-page illustrated fact sheet by Yoana Newman, John Erickson, Wilfred Vermeris, and David Wright, provides an overview of the types of sorghum, criteria for selection, cultural practices, pest management, and marketing strategies. Includes references. Published by the UF Department of Agronomy, July 2010. <http://edis.ifas.ufl.edu/ag343>

SSAGR335/AG345 Sugarcane Nutrient Management Using Leaf Analysis, a 7-page illustrated fact sheet by J. Mabry McCray and Rao Mylavarapu, provides growers with sufficiency categories of leaf nutrient concentrations and with nutrient management suggestions for each category. Includes references. Published by the UF Department of Agronomy, July 2010. <http://edis.ifas.ufl.edu/ag345>