

Calendar

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Crumple Leaf Virus in Manatee County

New Herbicide Labels in Vegetables

Notes from 2007 Tomato Institute

2007 FL Ag Expo Educational Program Agenda

Insert: 2007 Florida Ag Expo Registration Form



Phyllis Gilreath
Extension Agent,
Vegetables

September/October 2007

(also available online at www.manatee.ifas.ufl.edu/vegetables)

- Oct 10** Florida farm Bureau federation Annual Meeting - Daytona, FL. For more information contact Chris Miller at christine.miller@ffbf.org
- Oct 16** UF/IFAS Annual Blueberry Short Course. H.W.Stuart Conference Center, 1710 US Hwy 17-98, South. Bartow. 3:00 PM-Late registration. Only pre-registering guarantees you a meal. To register email Sheri Brothers at berrygirl629@aol.com For more information give me a call or check out the Blueberry Growers Association website at <http://www.floridablueberrygrowers.com/>
- Nov 14** Suwannee Valley Fall Workshops - NFREC, Quincy. Information: 850-875-7100.
- Nov 8-17** Manatee County Farm City Week. Farm Tour: Friday, November 16.
- Nov 27-29** First International *Phytophthora capsici* Conference. Cheeca Lodge & Spa, Islamorada, FL. For information, go to <http://conferences.dce.ufl.edu/pcap>
- Dec 6-7** Florida Ag Expo. GCREC Balm. See insert for registration details.
- Dec 7** Florida T-GAP training as part of Florida Ag Expo. This all day program will meet the annual educational requirements under the T-GAP program for tomato producers. While this meeting is geared to meet the new Tomato Food Safety requirements, the information will be pertinent to all vegetable operations in terms of future requirements.

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Publications and Websites of Interest

► <http://research.ifas.ufl.edu/tomato/index.asp> The Florida Tomato industry has been actively working with State and Federal regulatory officials and industry members to enhance the food safety of tomatoes and to identify specific areas of research needs. Our **Tomatoes and Food Safety site** offer GAPs, BMPs, research references and key links, as well as presentations from various Food Safety meetings and forums.

► **New Florida Vegetable Production Guide 2006-07** The new production guide is available from your county extension office. Please note that these are too large to mail. Please call for information on getting your copy. The Guide is also available online at http://edis.ifas.ufl.edu/TOPIV_VPH.

► At the recent Tomato Institute, copies of the CD containing the new **Grower's IPM Guide for Florida Tomato and Pepper Production** were distributed. Extra CDs are not available, but that information is available online at the Florida IPM Website at http://ipm.ifas.ufl.edu/resources/success_stories/T&PGuide/index.shtml. The Tomato and Pepper Insect ID Deck (SP436) should be available soon from the IFAS Bookstore. This laminated card deck is a field companion to the guide.

► The **2007 Tomato Institute Proceedings** are also available online at the GCREC Balm website. Go to <http://gcrec.ifas.ufl.edu/vegetables.htm>. Back issues are also available at this website. There were very few extra hard copies available this year.

► Also distributed at the Tomato Institute this year was a special research report "**Critical Issues in Tomato Production in Florida**", which includes reports on rapid postharvest breakdown problems, sour rot on tomatoes, an analysis of the fresh market tomato decay outbreaks during 2006, and a report on utilization of tomato packinghouse waste and waste water. Call or drop by your county extension office to get a copy.

New Weed Scientist at GCREC

GCREC welcomes *Dr. Andrew MacRae* as the center's new Assistant Professor of **Weed Science**. Dr. MacRae comes to UF from the outstanding agriculture program at the University of Georgia's Tifton Campus. His research at UGA included work on methyl bromide alternatives and aspects of weed control, plant back intervals and gas dissipation through various mulches. Dr. MacRae will start his new position at GCREC October 1st.



New Tomato Breeder at GCREC

GCREC welcomes Dr. **Jeremy Edwards** as the center's newest faculty addition to the **tomato breeding program**. Dr. Edwards will be developing a new tomato breeding program that will compliment the current program directed by Dr. Jay Scott. A former employee of GCREC in the 1990's, he received his PhD from Cornell, then worked as a postdoctoral researcher at the University of Arizona. He is committed to applied research aimed at cultivar development using state of the art techniques. This position was made possible by an endowment from Paul DiMare.

LA NIÑA Watch Issued for Alabama, Florida and Georgia



A La Niña watch has been issued by the Southeast Climate Consortium and the state climatologists of Alabama, Florida and Georgia. Chances are very good that La Niña conditions will develop, strengthen and persist through the fall and winter months. Under La Niña conditions, sea surface temperatures along the equator in the eastern and central Pacific Ocean are a few degrees colder than normal for a minimum of five months. La Niña typically returns every two to seven years. La Niña conditions usually bring a warmer and drier cool season (October through March) to Florida, central and lower Alabama, and central and south Georgia. With the arrival of La Niña, there is a good chance that drought conditions, currently ranging from exceptional across much of Alabama and Georgia to moderate in south Florida, will continue and possibly worsen throughout the winter and into next spring.

The Southeast Climate Consortium has estimated the impacts on climate based on past La Niña events. For central Florida, the probability of normal or above rainfall for January 2008 is only 8 percent. The chance of moderately dry (rainfall amounts from just below normal to half of normal) is 20 percent, and for very dry conditions (less than half of normal rainfall) is 72 percent. For the Panhandle of Florida, south Georgia, and lower Alabama the probability of normal or above rainfall in January 2008 is 20 percent, for moderately dry 50 percent, and for very dry 30 percent. More information on the developing La Niña and its potential impacts can be found at www.AgClimate.org and www.CoastalClimate.org.

EQIP Deadline Approaching

The Environmental Quality Incentives Program (EQIP) is a key program under the 2002 Farm Bill that provides federal cost-share funds to working farms and ranches for conservation improvements. **The 2008 EQIP application period will be open until November 13, 2007.** The early deadline is a continuing effort to improve the funding process and allow producers time to complete practices during the first years of their contracts. This accelerated process makes early contact with NRCS staff more important than ever. Producers that get in early

have more time to resolve certain program or land eligibility issues. For more information on the 2008 EQIP program, contact your local NRCS District Conservationist. For Manatee and Sarasota Counties, that number is 941-907-0011.

Comment Period Extended for Soil Fumigants

As part of EPA's ongoing evaluation of soil fumigant pesticides, and in response to further requests from stakeholders, the Agency is extending the public comment period on risk reduction options until November 3, 2007. On May 2, 2007, EPA issued revised human health risk assessments and requested public comment on risk-reduction options for the soil fumigants: methyl bromide, metam sodium, dazomet, and chloropicrin. Another soil fumigant, 1,3-dichloropropene (telone) is included for comparison purposes, but its reassessment is complete and few if any regulatory changes are anticipated. More information on soil fumigant risk mitigation options, and how to submit comments is available on EPA's Web site at http://www.epa.gov/oppsrrd1/reregistration/soil_fumigants/risk_mitigation.htm

Crumple Leaf Virus in Manatee County

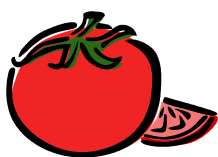


Dr. Jane Polston reports that *Cucurbit leaf crumple virus* was found at a fairly high incidence in squash fields in North Florida. They are in the process of assaying them as well as samples from Central Florida, but this virus is hard to detect and thus takes time; however, it appears we do have positives from this area. As you may recall from a previous article, this is another whitefly vectored begomovirus. Dr. Polston has collected whiteflies from watermelon fields in North Florida and put them on healthy watermelons, and those are showing some good symptoms already. Cucurbit leaf crumple virus infects watermelon but the plant **does** grow out of itif no others viruses are present. It seems that the virus does not disappear if other viruses are present in the plant at the same time. However, squash and pumpkin plants do not recover from infection with this virus and both plant development and fruit development can be severely affected. **If you see unusual symptoms in the field (melons or squash) including, as the name implies, crumpling and yellowing of the leaves, sometimes with only the older leaves showing symptoms, while newer leaves seem fine, please call me so we can get samples submitted for testing in order to determine the distribution of this virus.** Once again, prevention depends on whitefly control, but this virus does not cause the complete crop destruction that watermelon vine decline does. More information can be found at <http://edis.ifas.ufl.edu/IN716>

New Herbicide Labels in Vegetables

Rely (glufosinate) herbicide has received labeling in Florida for the **desiccation of potato vines** before harvest. Apply at the beginning of natural senescence of potato vines at 3 pints

per acre (0.375 lb ai). Apply one application per harvest. Thorough coverage of the potato vines is essential. Do not harvest potatoes until 9 or more days after application.



Prowl H2O (pendimethalin) has received Supplemental Labeling for use on Tomato and Pepper (including bell pepper, chili pepper, cooking pepper, pimento, sweet pepper). Prowl H2O may be applied as a post-directed application to transplanted or established direct-seeded tomatoes and peppers at 1.0 to 1.5 pints per acre (0.475 to 0.7125 lb ai). Rainfall or irrigation is needed to activate the herbicide; otherwise, mechanical incorporation is needed. Prowl H2O is labeled for a broadcast pre transplant surface application also, but not to rows to be covered with plastic. PHI is 70 days.

Prowl H2O has received Supplemental Labeling for use on Strawberry at 1.5 to 3.0 pints per acre (0.7125 to 1.42 lb ai) pre transplant. Do not apply to the bed or row if plastic mulch is applied. Adequate rainfall or irrigation after application is needed prior to weed emergence for most effective weed control. Do not apply within 35 days of harvest. Labeling for these herbicide uses must be in the possession of the user at the time of pesticide application. (Dr. Bill Stall, UF Hort. Sciences Dept., Vegetarian Newsletter, Sept. 2007)

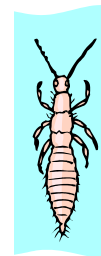


Notes from 2007 Tomato Institute

◇ **Dr. Dave Schuster** presented recent findings regarding **resistance of whitefly to commonly used insecticides** based on RS_{50} values. Increasing values suggest decreasing susceptibility with values of 10 or greater warranting attention. In two locations (Parrish and NE Collier) values for spring 2007 were particularly high for Admire with RS_{50} values of 47.8 and 85.8, respectively. Also mentioned at the meeting, but not included in this table, were extremely high RS_{50} values for the pyrethroids, emphasizing the importance of not relying on pyrethroids for whitefly control. For additional information, please check out the Tomato Proceedings article at <http://gcrec.ifas.ufl.edu/vegetables.htm>.

◇ **Dr. Jane Polston** discussed the begomoviruses, the largest genus of viruses....which includes TYLCV and accounts for 10-15% of all known plant viruses. This huge increase has occurred in roughly the last 15 years due to movement in commercial trade in plant material, the increase in global distribution of the WF vector and their movement from infected weeds to tomato plants, and the ability of begomoviruses to exchange parts of their DNA sequences and form new virus strains and new viruses. She also discussed Tomato Chorusis Virus (TOCV). While this whitefly transmitted virus has been present in Florida since 1989, I don't think it was recognized until recently due to its resemblance to nutritional deficiency, especially N or Mg. It's geographic distribution does seem to be increasing. Dr. Polston also discussed what are called DNA β satellites, sequences of DNA which can decrease the plants' resistance to begomoviruses. Also, new diseases can arise from mixtures of begomoviruses and DNA β satellites. To date, DNA β satellites have not been found in the New World.

◆ **Dr. Joe Funderburk** reported that while Florida flower thrips are still the predominant thrips in central and southern Florida, several localized outbreaks of western flower thrips have been noted recently. In May 2006, a large population was detected on a large east coast vegetable farm which had been spraying on a 'calendar' schedule with many insecticides, including spinosad. The population was very resistant to spinosad, but subsequent data indicated the population reverted to normal susceptibility with lower resistance levels in populations on pepper ending in the May 2007 season, during which time the farm sprayed fewer insecticides of all chemical classes. Bioassays of western flower thrips from several other farms in southern Florida indicated a mix of susceptible and resistant populations in 2007. In pepper, natural populations of minute pirate bugs are very effective in controlling thrips; thus, it is recommended that growers use control tactics for thrips and other pests that conserve beneficial populations.



◆ **Dr. Jerry Bartz** presented information on **preventing rapid postharvest breakdown of fruit**. Since harvest season will soon be upon us, below are the field practices that are recommended for preventing losses to postharvest decay.

- Provisions should be made for insuring adequate drainage, particularly if unsettled weather might occur during the production season.
- Recommended disease and insect control practices should be used.
- If at all possible, fruit should not be harvested if the plants are wet, even if there are only a few droplets of free moisture on or at the edges of leaves as this will lead to the spread of decay pathogens among the fruit.
- Clean and disinfect all harvest containers prior to first harvest and periodically during the harvest season. Some packers clean and sanitize bins after each use.
- Immediately clean and disinfect any container that has been in contact with decayed fruit.
- Teach harvest crews to avoid handling or picking partially decayed fruit.
- Require harvest crews to wear gloves so that the glove surfaces can be washed in chlorinated water immediately after encounters with decaying fruit, as well as periodically during the day (lunch breaks, etc.).
- Avoid mechanically injuring fruit during harvest and avoid excessive load shifting during transport to the packinghouse.
- Bins or gondolas of harvested tomatoes should not be exposed to rainfall or suffer prolonged exposure to direct sunlight; loads hauled from fields to distant packinghouses should be covered with a tarpaulin.

