

UF/IFAS EXTENSION ALACHUA COUNTY

UPDATE

2800 NE 39TH AVENUE • GAINESVILLE, FL 32609 • (352) 955-2402

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Greetings from UF/IFAS Extension Alachua County Office

by: Dr. Cynthia Sanders, Director/Livestock Agent

Dear Alachua County Clientele,

Our HOT, WET, summer is almost over. Then, if tradition holds true we will be dry in September and October. Let's hope we make it through fall without a major hurricane or tropical storm or we will really be wet. I am sure everybody is ready for fall, time for fall vegetables, gardens, harvest time, and cooler days. Please feel free to call our agents for any questions you may have. We have several new agents, if you have not met them yet, give them a call to come and visit your farm.

Look forward to seeing you at Extension programs this fall.



LET'S DISCUSS 4H...

*by: Amanda Morgan
4H Agent*

The new 4-H year kicks off September 1st. Check out our clubs and become a part of the 4-H family!

4-H has a 100+ year history and is still going strong. Alachua County 4-H has community clubs, works with youth through school enrichment programs and offered 9 summer day camps. 4-H has its roots in agriculture but has adapted over the years to meet the changing needs of our youth. For example, while we still have livestock clubs we also have a robotics club, running club and clubs that focus on community service. All these programs and clubs have the same thing in common; they focus on life skills and positive youth development.

What makes 4-H different from other youth programs is that it is linked back to each State's Land Grant University, in our case the University of Florida. The youth development and subject matter knowledge links back to current knowledge research. Every county in the US plays a part in the 7 million 4-H'ers annually. Another unique quality of 4-H is there is no cookie cutter plan. Each county operates differently to meet the communities needs but they all practice Essential Elements. These 4 elements are belonging, mastery, independence and generosity. Because of this, some of the characteristics of our program are developing talents, building health, becoming a responsible citizen and making friends.

The best way to get involved is to find a club that matches your interests and meets at a good time/location for you (a club directory is provided on the website <http://alachua.ifas.ufl.edu>). Clubs meet about once or twice a month, do community service projects, participate at county 4-H programs, show at the fair and participate in camps. Youth can do some of these alone but, the complete 4-H experience is being involved in a club and participating in them.

For more information contact Amanda Morgan, 4-H Extension Agent, at amorgan@alachuacounty.us.

EYES ON THE WHITEFLIES

by: Dr. Tatiana Sanchez

Commercial Horticulture Agent

Photo: Adults of *Bemisia tabaci*
(Rhyncho: Aleyrodidae)

Photo Credit: Stephen Ausmus
US Department of Agriculture



Out of the 1500 species of whiteflies worldwide, over 75 have been reported in Florida. These small white insects can cause direct and indirect damage to a broad variety of plants in the ornamental and vegetable industries. Whiteflies cause direct damage by removing the sap from the host plant. They excrete honey dew which creates a perfect resource for sooty mold development giving the affected plants a dark moldy appearance. Indirect damage can also be caused when the whitefly species vectors plant viruses.

There is a particular whitefly that is a continuous topic of conversation, *Bemisia tabaci*. There are multiple biotypes of *B. tabaci* and a couple of them are of major agricultural importance as these can be devastating for many crops. In Florida, *B. tabaci* Biotype A, an indigenous species of the new world, has narrow host range, seemingly, it lacks the potential to transmit viruses and up until the mid/late 1980's was rarely a concern. With the introduction of the B biotype (a.k.a Silverleaf Whitefly) in 1985, things started to get more complicated for vegetable growers and plant producers. Unlike Biotype A, the invasive Biotype B has more than 500 host plants and has the ability to transmit more than 100 plant viruses. One of the major consequences of the establishment of Biotype B in Florida was the introduction of *Tomato Yellow Leaf Curl Virus* (TYLCV). This virus can eliminate fruit production if the plants are infected at an early age. Since the 1990's, growers have been battling this pest and TYLCV which continue to impact vegetable production primarily solanaceous crops (tomatoes, eggplants, etc.). Because of the harmful effects Biotype B can have, the management of this pest is highly dependent on the use of insecticides which can give rise to insecticide resistance. Things got even more complicated back in 2004 where a new biotype was reported in Arizona. *Bemisia tabaci* Biotype Q (a.k.a Sweetpotato Whitefly). This new biotype quickly made its way into Florida where it was first detected in 2005 in retail nurseries. As well as Biotype B, Biotype Q is capable of transmitting plant viruses and also has a broad host range (although it has not been found yet on vegetable production except for sweet potato). What is concerning about Biotype Q is that this species is even less susceptible to the major classes of insecticides used for whitefly control. Therefore, concerns about insecticide resistance are even greater. This implies that the typical chemical control strategies used for whitefly control will not work effectively resulting in great production and economic losses. But *B. tabaci* story doesn't end here. Biotype Q was restricted in greenhouses and nurseries for the last ten years after its first detection in Florida until last year, when multiple reports of Biotype Q outside of the greenhouses and nurseries triggered an alarming situation for Florida's agriculture. The establishment of biotype Q in the field and open landscapes could be a nightmare for growers, landscapers, and home owners because of its natural potential to be resistant against commonly used insecticides. The task force with collaborations among University of Florida, U. S. Department of Agriculture and Division of Plant Industry, has already established to stop the further spread of Biotype Q in Florida.

Biotypes B and Q, are one of the major threats to agriculture and the landscaping industry in Florida. Both are morphologically identical and can be distinguished only with a molecular test. What is relevant about distinguishing among the two biotypes, is what strategy to follow to manage them. It is fundamental to understand the biological and ecological differences to approach their management more effectively. Cases like Biotype Q remind us of the importance of Integrated Pest Management (IPM) where multiple approaches are dedicated to managing pests. IPM is particularly important when insecticide resistance renders chemical control futile. To keep a close eye on *B. tabaci*, different institutions are partnering to accurately identify this whitefly's biotypes and monitor the spread. Locally, whitefly samples for identification can be submitted to the whitefly identifier, Dr. Zee Ahmed, at [Division of Plant Industry](#). Please contact us at the UF/IFAS Extension office in [Alachua County](#) if you have questions about how to [sample](#) or manage whiteflies in your crops, [ornamental production](#) or landscape.

Acknowledgement: Dr. Zee Ahmed, Division of Plant Industry

UPCOMING EXTENSION PROGRAMS

Please call (352)337-6209 (voicemail) to register for the programs listed below or (352)955-2402 for additional information. Unless otherwise stated, programs will be held at the UF/IFAS Extension Alachua County Office, 2800 NE 39 Avenue, Gainesville.

Program	Date	Time	Instructor	Cost	Registration	Description
Pesticide Training for Private Applicator in Ag & Horticultural Industries	September 6	8:30 am - 4:30 pm	Tatiana Sanchez	\$18.00 (includes lunch)	Register through Eventbrite at http://tinyurl.com/y8pe36ng . If you register after September 1st, or pay at the door the registration fee is \$20.00.	This workshop is designed to provide training for the private applicator agricultural pest control license. The private applicator license is required for anyone that applies restricted use pesticides to their own farm, greenhouse or nursery. CEUs will be available. No refunds.
Growing Cool Season Vegetables in the Garden - CLASS IS FULL	September 7	6:30- 7:30 pm	Doug Collins, Master Gardener	No cost	Register through Eventbrite at http://tinyurl.com/y7nqezhm . This class is limited to 30 participants.	Fall & winter are a great time to garden in Alachua County. This class will cover which plants to grow & how to grow them (cabbage, kale, broccoli & different greens will be covered). This class will be held at the Newberry Library Branch, 110 S Seaboard Dr., Newberry, FL 32669.

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Perennials in the Florida-Friendly Landscape™ - CLASS IS FULL	September 13	9:30-11:00 am	Maria Huff Edwards, Master Gardener	Class included in \$8.00 entrance fee to KBG	Register through Eventbrite at http://tinyurl.com/y9qstqgp This class is limited to 30 participants.	Perennial plants can add low maintenance, color, and attract butterflies & hummingbirds. Learn how to create a perennial garden that is beautiful & Florida-Friendly. Participants will be given a tour of the gardens. Entrance is free if you have a membership. This class will be held at Kanapaha Botanical Gardens, 4700 SW 58 Dr., Gainesville, FL 32608.
Master Gardener Palm School	September 15	8:30 am-3:30 pm	Denise DeBusk	\$20.00 (includes lunch & snacks)	Register through Eventbrite at http://tinyurl.com/y9nmccls by September 1st - only 75 spaces available.	This Palm School will be conducted for Master Gardeners only. Topics include: palm anatomy & morphology/ diagnosing palm problems, palm physiological disorders, palm nutritional deficiencies, palm fertilization & pruning, and the top 3 palm diseases. No refunds. This class will be held at the Freedom Center, 7430 SW 41 PL, Gainesville, FL 32608.
Alachua County Youth Fair & Livestock Show Steer Weigh-In	September 16	7:00-10:00 am	Cindy Sanders			For more information contact Cindy Sanders at 352-955-2402. This event will be held at the Santa Fe High School, 16213 NW US Hwy 441, Alachua, FL 32615.
Alachua County 4-H Barn Dance	September 16	5:30-8:30 pm	Amanda Morgan	\$15.00 (4-Hers) \$20.00 (non-4-Hers) \$60.00 (family)	Register through Eventbrite at http://tinyurl.com/y8leoffe	Enjoy an evening of line dance lessons, square dancing, food, campfire, outside movie, horse drawn carriage and photo booth benefiting Alachua 4H County Council. For more information contact Amanda Morgan, 4H Agent, at 352-955-2402. This event will be at C-Bar Ranch, 22889 N SR 121, Alachua, FL 32615.
Landscaping for Newcomers	September 18	10:00 am-12:00 pm	Denise DeBusk	\$5.00	Register through Eventbrite at http://tinyurl.com/y8trbx8s Limited to 40 participants.	This class is geared to the new homeowner or newcomer to Alachua County. It focuses on Florida-Friendly Landscaping™ principles, as well as Alachua County ordinances & soil and weather conditions specific to Alachua County and Florida. Participants will receive a newcomer's packet filled with information & water-saving devices. No refunds.
Fall Pond Workshop Series	September 21 October 17 November 14	6:30-8:00 pm	Kevin Korus	\$6.00 per class	Register through Eventbrite at http://tinyurl.com/yblge3rj http://tinyurl.com/ybo4j768 http://tinyurl.com/yauh4n6l . Limited to 35 participants for each class.	Workshop topics include: fish pond management, fish health and water quality, and aquatic weed management. No meal will be provided but light refreshments will be available. If you want to attend all 3 classes, you must register for each class separately. No refunds. The workshops will be held at UF Fisheries & Aquatic Sciences, 7922 NW 71 St., Gainesville, FL 32653.
Building Your Own Farm's Food Safety Manual	September 25	8:00 am - 5:00 pm	Tatiana Sanchez	\$38.00 1st person & \$17.00 per additional person	Register through Eventbrite at http://tinyurl.com/lstdxq43 by September 21st. Includes refreshments and lunch.	This workshop is designed for fruit and/or vegetable farming operations. A one-day workshop to help growers actually develop their own food safety manuals. Upon completion of this workshop, participants will have built the main parts of their own food safety manual & will understand what is needed to complete their plan. No refunds. This program will be held at UF/IFAS Straughn Center, 2142 Shealy Dr., Gainesville, FL 32608.
Self-Watering Container Gardening	September 27	2:30-4:30 pm	Denise DeBusk	\$20.00 (includes class & container)	Register through Eventbrite at http://tinyurl.com/y7j3zmvb Limited to 25 participants.	This workshop teaches you how to build self-watering containers with supplies that can easily be found locally. No refunds.
Do It Yourself Hydroponics	September 29	1:00-4:00 pm	Tatiana Sanchez	\$20.00	Register through Eventbrite at http://tinyurl.com/y7dw9tlw by September 21st. Late registration fee is \$25.00.	Join us for an interactive class where you will learn how to put together your own hydroponic system. No refunds.
Homestead Poultry Workshop	September 30	9:00 am-3:00 pm	Cindy Sanders	\$12.00 (includes lunch)	Register through Eventbrite at http://tinyurl.com/y94qp97v by September 25th.	Workshop topics include: breed selection, disease & parasites, nutrition for backyard laying flocks, biosecurity, harvesting guidelines, and more. No refunds. This workshop will be held at UF/IFAS Extension Marion County Office, 2232 NE Jacksonville Road, Ocala, FL 34470.
Florida Agriculture Network (FAN) Meeting	October 2	4:00-7:00 pm	Tatiana Sanchez	\$15.00	Register through Eventbrite at http://tinyurl.com/uwo88tt by September 25th. Late registration fee is \$20.00.	This meeting will cover agritourism as a business opportunity for farmers who want to learn more about it. Learn the pros and cons of agritourism, how a farm can become a destination for agritourism, and how to collaborate with other farmers involved with this topic to offer a complete experience. No refunds. This meeting will be held at Deep Spring Farm, 16419 W. CR 1491, Alachua, FL 32615.
Limited Commercial Landscape Maintenance	October 11	8:15 am-5:00 pm	Tatiana Sanchez	\$30.00 (includes lunch)	Register through Eventbrite at http://tinyurl.com/zedsfzt by October 6th. Late registration fee is \$35.00.	This workshop trains commercial landscape maintenance personnel to make correct pesticide applications to ornamentals and plant beds only. CEUs will be available. No refunds.

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Butterfly Gardening	October 11	9:30-11:30 am	Linda Burleson, Master Gardener	Class included in \$8.00 entrance fee to KBG	Register through Eventbrite at http://tinyurl.com/ydxkqync this class is limited to 30 participants.	Florida is home to over 170 species of butterflies. Learn which plants will attract the beautiful visitors to your environmentally friendly garden. Participants will take a tour of Butterfly Hill. Entrance is free if you have a membership. This class will be held at Kanapaha Botanical Gardens, 4700 SW 58 Dr., Gainesville, FL 32608.
Crash Course for N FL Gardening (2 days)	October 13 October 27	8:30 am-12:30 pm	Denise DeBusk	\$50.00 per person	Register through Eventbrite at http://tinyurl.com/y83nduoq Limited to 25 participants.	Learn about trees, plants, and gardening in Florida during a two-day seminar for newcomers and those wanting to learn more. Notebooks, refreshments and plenty of garden material will be given away to participants. No refunds.
Green Industries Best Management Practices	October 18	8:15 am-3:30 pm	Tatiana Sanchez	\$25.00 (includes lunch)	Register through Eventbrite at http://tinyurl.com/hg54jrf by October 13th .	Florida law states that all commercial fertilizer applicators must have a certificate from FDACS. To get this certificate, each commercial applicator must be trained in the GI-BMPs and receive a certificate of completion from UF/IFAS and FDEP. CEUs will be available. No refunds.
Beekeeping Series - Preparing for Winter & Hive Set-Up	October 21	9:00 am-12:00 pm	Tatiana Sanchez	\$5.00	Register through Eventbrite at http://tinyurl.com/lpso9hj by October 6th .	This class will focus on hive preparation for the cold months. No refunds. Please note this class will be held at the UF/IFAS Extension Alachua County Office, 2800 NE 39 Ave., Gainesville, FL 32609.
Growing Herbs in the Garden	October 25	7:00-8:00 pm	Dr. Paul Kroeger, Master Gardener	No cost	Register through Eventbrite at http://tinyurl.com/y8aw7nvg Limited to 60 participants.	Learn about herbs that will grow successfully and when to plant them in the north-central Florida garden. This class will be held at the Millopper Library Branch, 3145 NW St., Gainesville, FL 32606.
Beekeeping Series - Gardening & Bees	November 18	9:00 am-12:00 pm	Tatiana Sanchez	\$5.00	Register through Eventbrite at http://tinyurl.com/k7muw9n	Final class of the series and will cover gardening, pollinator habitat, and conservation. No refunds. Please note this class will be held at the UF/IFAS Extension Alachua County Office, 2800 NE 39 Ave., Gainesville, FL 32609.

