

# Central Florida Fruit Production News

[View this email in your browser](#)



## Industrial Hemp

UF/IFAS had an Industrial Hemp Pilot Project Partners Workshop in Citra on August 10 that I attended. It was a sold-out event, so I thought I would provide some of the information I learned.

Hemp is the same genus and species as marijuana, but it has a low level of the psychotropic THC (less than 0.3%). You cannot tell industrial hemp from marijuana by looking at it. You must do an analysis of the plant to determine the THC levels. To make matters worse, drought and other stresses can cause the industrial hemp to produce more THC, possibly making it go over the 0.3% level. THC and Cannabidiol (*CBD*) are both created in the flowers, but industrial hemp normally makes much more CBD than THC. Both hemp and marijuana are illegal to grow, but the 2014 Farm Bill allowed states to start pilot programs for industrial hemp production. These programs must provide security and have documented control procedures. For example, plants in fields are periodically tested and if any test over 0.3% THC, the entire field is destroyed.

Some states got started quickly and have implemented wide-spread piloting by growers controlled by the state (Kentucky), while others have been slower and are still working out ways to provide security process and control. In Florida, the Florida Department of Agriculture and Consumer Services approved their rule in April 2018 and are in the process of working out the procedures and next steps for the UF/IFAS pilot program. Currently three sites for pilot plantings are planned in Florida - southern, central, and panhandle sites - with more possible with funding/sponsorship.

The pilot program is currently planned for two years and will involve testing 31 varieties chosen to possibly do well in our environment. Hemp may be grown for grain, fiber or CBD oil production and the current breakdown of cultivars to be tested are 1/3 fiber, 1/3 grain, and 1/3 dual purpose. Fiber and grain cultivars are commonly from Canada and Northern Europe and may not do well

here. Cultivars from China and Australia may have more chance of survival. The pilot project will also assess the invasive potential and management practices and cropping systems viable for Florida. The hemp produced from the pilot program will have to be destroyed if there is no sponsorship for pilot processing systems, so the UF/IFAS leaders are looking for sponsors and those interested in processing.

Hemp grown for grain will cost about \$3/lb of seed. In Kentucky the pilot producers got an average yield per acre of 518 lbs per acre, and a return of about \$1.70 per lb. of grain. One problem found is that the grain shatters – the seeds fall off the head easily. This means that during combining lots of seed may be lost and then volunteer the next year. This is a big problem with control since fields must be registered and carefully monitored if involved in the pilot project. Escaped hemp must be destroyed in the fields. Grain is used for animal feed, chemical extracts, and human food.

Hemp grown for fiber also will cost about \$3/lb, but the planting rate is about three times higher since you want the plants to grow tall for longer fiber. The fiber is so strong that cutting machines have been known to fail and burn up in the field. Kentucky growers yielded an average 2,556 lbs fiber/acre and a return of about \$0.34 per pound of fiber. Machines are being developed to better harvest both grain and fiber hemp. The fiber can be used to make “hempcrete” as well as textiles.

Hemp grown for CBD was by far the most popular because of the returns – average yield per acre of 1,024 lbs, and \$7.20/lb. However, supply and demand will have an effect on this eventually. CBD oil is an essential oil extracted from the flowers and buds. CBD hemp are only female plants, clonal material (all in field have same genetics), and cannot be grown with a pollen source nearby. Setbacks from hemp grown for other purposes will need to be determined to exclude the possibility of pollen movement to the CBD fields. CBD hemp seed prices are up to \$20 per seed and foundation plants for propagation up to \$500 per plant. The majority of the cultivars for this purpose have originated in the US.

The UF/IFAS Industrial Hemp Research team includes a number of researchers. Dr. Zachary Brym is the main contact at 786-217-9238, [brymz@ufl.edu](mailto:brymz@ufl.edu). The web site will be up soon to provide all the information provided at the workshop. [More information on the pilot program in Kentucky.](#)

## New EPA Approved WPS Posters Available

Thanks to Dr. Steve Futch, I have copies of



the new EPA approved Central Posting WPS Posters to give to growers. Let me know you are coming and I can give you one. There are two sizes available, 11x17 and 22x34. You can also find them and other WPS resources at the [Pesticide Educational Resources Collaborative](#).

## Food Safety Modernization Act's Produce Safety Rule Preparing for regulatory inspections

FDA has asked the states to delay all farm inspections until 2019 to give the states and farms time to complete an On-Farm Readiness Review (OFRR), IF an operation chooses to do so. FDACS will be conducting the on-farm Produce Safety Rule inspections. We anticipate these inspections will start sometime around Spring 2019. The OFRR program is voluntary and there is no fee to participate as federal funding (through those cooperative agreements to the states) to provide this service to growers was mandated under FSMA. It's a great way to see how the Produce Safety Rule requirements can be satisfied in a specific operation. The OFRR is a collaborative effort between FDACS and IFAS. The registration is all handled by FDACS. [Registration link](#). [Link for advice for growers](#) implementing the Produce Safety Rule (based on experience working on the development of the NASDA On-Farm Readiness Review and our attendance at an FDA regulator training).

FDA has also recently posted a video on youtube called "[Produce Safety Inspections for Regulators Virtual Produce Tour](#)" which sheds some more light on what an inspection may actually look like on a produce farm.

## [Water Testing](#)

FDA has now recognized a multitude of water testing methods as being equivalent to the method 1603 specified in the Produce Safety Rule. With the announcement of these equivalent methods every commercial water testing lab in Florida offers at least one of the recognized tests. All of the recognized test methods for preharvest ag water are still quantifiable methods, however, some presence/absence test methods have been approved for harvest and postharvest water where the microbial standard is no detectable generic *E.coli*.

[Full list of equivalent methods.](#)

Keep in mind that all of the water requirements are under review and growers are not required to begin testing their water for four years after their compliance date so the earliest anyone would be required to begin testing water would be January 2022.

Although the inspections won't start until 2019, compliance dates remain the same:

January 2018 for anyone over \$500,000 in total annual produce sales.

January 2019 for anyone between \$250,000 and \$500,000 in total annual produce sales.

January 2020 for anyone between \$25,000 and \$250,000 in total annual produce sales.

## Upcoming Programs

### **Produce Safety Alliance Grower Training**

This is the one-day course for fruit and vegetable growers and packers who fall under FSMA's Produce Safety Rule.

[8/27/18 – Ft. Pierce](#)

[09/13/18 – Homestead](#)

[9/17/18 – Lake Alfred](#)

[10/3/18 – Live Oak](#)

[10/9/18 – Palmetto](#)

[10/23/18 – Sebring](#)

[11/7/18 – Tavares](#)

[11/27/18 – Homestead](#)

[12/13/18 – Immokalee](#)

[12/17/18 – St Augustine](#)

### **Citrus CUPS and Blueberry Growth Regulators and Container Production**

October 9, Lake County Extension Center, Tavares. [Details and registration.](#)

### **USDA Whitmore Farm Tour**

October 11, 23402 USDA Rd, Groveland, FL 34736. Dr. Brian Scully will give a tour of the research going on at the USDA citrus research site. [Details and registration \(free\)](#).

### **Farm Safety Day**

October 31, 2018, Lake County Extension Center, Tavares. Have your workers receive annual safety training including WPS training (Spanish and English), and receive a certificate of completion. [Details and registration](#).

### **Weather Resilient Fruit Production**

November 15, 2018, Lake County Extension Center, Tavares. Successful fruit production now requires resiliency to cold, lack of cold, drought, and storms. Find out what the weather is predicted to be this winter, and what you can do to manage these risks. [Details and registration](#).



---

*Copyright © 2018 UF/IFAS Extension Lake County, All rights reserved.*

**My mailing address is:**

jjopenoe@ufl.edu

lake.ifas.ufl.edu

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#)

The Foundation for the Gator Nation

An Equal Opportunity Institution