

Volume 34:04

April 2010



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# Strip Till Cotton

Kill cover crops 3-5 weeks prior to planting cotton. Cotton may be planted in warm soils in late April. When cotton is planted in late April, it will start blooming in early July and needs to have low moisture stress during the first 3-4 weeks of bloom to set bolls for top yields. Residual herbicides will have to be used in most Florida cotton this year due to palmer amaranth in many of the cotton growing regions. Cotton may be strip tilled and residual herbicides used at planting and at layby with hoods. Growers can manage these weeds without tillage.

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## Relative Salt Index Of Commonly Used Fertilizers

Several different types of liquid and dry fertilizer are used in corn and cotton production as starter fertilizers. Each material has a different salt index and can result in decreased germination if placed too near the seed. The following are salt indexes of common fertilizers used as starter fertilizer on crops in Florida:

Anhydrous ammonia	47.1
Ammonium nitrate	104.7
Ammonium phosphate	61.1
Ammonium sulfate	69.0
Diammonium phosphate	29.9
Gypsum	8.1
Dolomite	0.8
Nitrogen solution	95.0
Potassium chloride	116.3
Sulfate of potash-magnesia	43.2
Superphosphate	10.1
Urea	75.4

Nitrogen sources and nitrogen solutions should be placed about 1" from the seed furrow for each 10 lbs N/A since they have a fairly high salt index. Potassium chloride has a high salt index but may be applied close to the row if mixed with the soil. DAP is a granular material that is often used as a starter fertilizer and has a fairly low salt index and is often banded near the row.

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## New Bahiagrass UF Riata - Update on Seed Availability

UF Riata bahiagrass is the latest release from University of Florida that will be sold by variety name only and has been licensed exclusively to Ragan and Massey Inc, seed company in Louisiana. This spring small amounts of seed are available to customers who were on their list.

In July large amounts of seed will be available to interested growers. If interested contact Ragan and Massey (1-800-264-5281).

UF Riata was developed for fall and early spring forage production by Dr. Ann Blount, forage breeder. This bahiagrass shows lower daylength sensitivity, improved leaf tissue cold tolerance, and increased forage production during the cool season compared to the standards cultivars. As with Tifton 9, UF\_Riata is not tolerant of severe overgrazing.

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## Bahia- And Bermudagrass Warm Temperature And Light Needs

This winter and spring have been colder than normal. But we are in spring and we are in Florida where weather tends to follow an oscillating pattern with wide differences between minimum and maximum temperatures, especially during spring. This situation is confusing to many who are trying to get ahead with their pasture fertilizer applications. With a colder than normal spring, late rather than early might be better for fertilization practices.

Bahia- and bermudagrass are tropical plants sensitive to freezing temperatures. Temperatures below 30°F kill the leaves and stems but growth will continue with night temperatures as low as 34°F if day temperatures are near 70°F. Soil temperatures of 65°F and above are necessary for growth of rhizomes/roots and stolons. Wait for your fertilizer application until consistent warm soil temperatures (65° and above) are present. Optimum soil temperature for root growth is around 80°F. Optimum daytime temperature is between 95 and 100°F. These grasses are most productive from May to September when average daily temperatures are above 75°F.

In terms of light, bahia- and bermudagrass have high light requirements. What are the implications?

They do not grow well under shady conditions like under trees, under a companion summer crop that will shade them, or under the spring growth of ryegrass. If ryegrass or other cool-seasons have been overseeded into bahiagrass or bermudagrass fields, they need to be removed very early in the spring otherwise they may compromise the persistence of the warm-season grass.

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# Calendar

To follow the link, press “Ctrl” and put cursor over link, and “click.”

- April 17**                    [Equine Fair](#) (The Hay Exchange, Inc.) Plant City
- May 5-7**                    [Florida Beef Cattle Short Course](#), UF Gainesville, Hilton UF
- June 6-8**                    **Soil and Crop Science** (SCSSF) meets jointly with the  
[Florida State Horticultural Society](#) (FSHS), Plantation Golf Resort
- July 11-17**                    [Caribbean Food Crops Society](#) meeting,  
Boca Chica, Dominican Republic
- July 12-16**                    [Greater Everglades Ecosystem Restoration Meeting](#), Naples
- Aug. 1-5**                    [Ecosystem Restoration Conference](#) (NCER), Baltimore, MD

## Spring Blackberry Control



*Blackberry in a pasture during spring is most effectively controlled with pesticide application when the plant blooms (typically in the fall.)*

*Photo: J. Ferrell*

This is the time of year that pastures are starting to green up, and so are the weeds. After a long winter, everyone is getting ready to gear up the weed control program. This time of year we commonly get questions about spraying blackberry. So, when is the best time to spray this deep-rooted perennial?

Blackberry control can be accomplished if a herbicide is applied when blooming or applied late in the fall. Our research has shown that applications made when blackberry is blooming tend to be more inconsistent than when applied in the fall. This is because carbohydrates are moving from the root to the shoot in the spring. If a herbicide is applied at this time, translocation to roots can be limited and the kill incomplete. Spraying in the fall, when the plant is nourishing the root/rhizome, will likely allow more herbicide to translocate underground.

Spraying in the fall is not an instant recipe for success and regrowth of blackberry from a fall application is likely. However, it has been our experience that spring applications are more likely to fail than those applied in the fall.

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# Peanut Varieties And Ca Needs

There is a wide selection of peanut varieties available from which to choose in 2010. Most of the new varieties are large seeded varieties that will require high Ca levels in the pegging zone. Georgia-06G, Florida-07, and Tifguard will all need supplemental Ca for high yield and quality. We have had relatively good soil moisture which moves Ca in soil solution to the pegging zone since the release of these three varieties. If we have a dry year during pegging, yields and quality of these varieties may suffer more than the smaller seeded varieties. Plan on using gypsum on these varieties to maintain yield and quality.

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## EPA Proposing New Drift Label Language

Drift can be defined simply as the airborne movement of pesticides to non-target areas. In Florida, drift can also have legal meaning, as there are penalties for damage caused to sensitive crops by certain types of herbicides. Off-target movement can be in the form of:



*This tree became contaminated with pesticide that was intended for a nearby field and became airborne, affecting plants outside of the original target area.*

*Photo: Fred Fischel*

### **Spray droplet drift Vapor drift Particle (dust) drift**

Studies have shown that a significant percentage of pesticides may never reach the intended target site because of drift. It is impossible to eliminate drift totally, but it is possible to reduce it to a tolerable level.

Where significant drift does occur, it can damage or contaminate sensitive crops, pose toxicity problems to bees and other pollinators, pose health risks to humans and animals, and contaminate soil and water in adjacent areas.

**Applicators are legally responsible for the damages resulting from the off-target movement of pesticides.**

In late 2009, EPA released a Pesticide Registration Notice (PRN) proposing guidance for new pesticide labeling to

## **Continued . . . EPA Proposing New Drift Label Language**

reduce off-target spray and dust drift. The new instructions, when implemented, are an attempt to improve the clarity and consistency of pesticide labels and help prevent harm from spray drift. The draft PRN contains two types of statements:



*Close-up of tree leaves affected by drift.*

*Photo: F. Fishel*

- (1) A general drift statement containing a risk-protective standard which varies according to product type, and
- (2) Examples of product-specific drift use restrictions, along with a format for presenting these statements on product.

Due to Worker Protection Standard regulations, many products already bear the statement “Do not apply this product in a way that will contact workers or other persons, either directly or through drift.”

In addition to protecting workers and other people that may come into direct contact with pesticide drift as covered by the WPS

regulations, EPA is concerned about human exposures to deposited drift residues, and about exposures of non-target organisms and sites not covered by the WPS regulations. Therefore the proposal is to have all products currently subject to WPS requirements add the following statement to their labeling immediately after, and without removing or altering, the existing WPS statement: “In addition, do not apply this product in a manner that results in spray (or dust) drift that could cause an adverse effect to people or any other non-target organism or site.”

If this is finalized, this presents problems to applicators of agricultural pesticides. The wording of this new statement introduces a zero drift tolerance standard. From the beginning, EPA and FDACS have acknowledged that some level of drift will inevitably occur, but such a level is considered to not pose “unreasonable adverse effects.” The proposed terminology, “could cause an adverse effect,” is an invitation, potentially subjecting growers to senseless litigation.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) have set standards into place that approve product labels through rigorous testing procedures. After years and millions of dollars, manufacturers of pesticides currently have incorporated data and information into labels resulting through the testing process that addresses drift mitigation measures. The current EPA proposal is unrealistic and will “cause an adverse effect” to agricultural producers if approved.

The 23-page PRN, including the proposals concerning product-specific drift use restrictions, may be viewed in its entirety as a pdf at <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480a4e204>.

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