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Lime requirements

Soil testing in the fall has always been the recommended practice. This is a slow time of year for many of the farm supply dealers and is a good time to apply lime to fields that need it. It also allows time for the lime to react with the soil to adjust pH for the summer row crops. For those growers who use minimum tillage and strip tillage, surface applications are acceptable. We have long term plots that have not been turned or had lime incorporated for more than 30 years that are still producing good yields of peanuts, cotton, corn, soybeans, small grain, etc. A high calcium and phosphorus layer can develop in the top 2-3 inches after many years of surface applications of fertilizer and lime and does not appear to be necessary to turn it under.

Importance of variety trial information

Universities spend major resources in doing variety trial work across a number of locations and a number of crops. It is important to look at the information when deciding on what variety of crops to grow as it can provide you with good information on how crops do under irrigated or non-irrigated conditions or across a wide range of management and environments. Some of the best varieties will perform well across a wide variety of conditions as well as over years and often is 10-20% higher yielding than other cultivars. Most states have variety testing for row crops and information can be found on line or through your county extension office. Look for information nearest you first as your local environment is different from other locations.

Calendar of Events

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

Jan 6-8 American Forage and Grassland Council Annual conference, Covington KY http://www.afgc.org

Feb 4-7 Weed Science Society of America Annual Meeting, Baltimore, MD http://www.wssa.net

June 2-5 National Association of Plant Breeders Annual Meeting, Tampa, FL http://www.plantbreeding.org/napb/Meetings/pbccmeeting2013.html
Agroecology: A New Distance Education Program at UF

A concentration of courses, all available by distance education and leading to a Master of Science degree (non-thesis or thesis), should appeal to working professionals and others who wish to pursue a graduate degree but are unable to relocate or travel to the UF campus to take courses. The first online Agroecology Master of Science program in the U.S. is now offered through a joint collaboration of the Agronomy and Soil & Water Science Departments at UF. This program is a diverse, interdisciplinary program with a core curriculum of courses emphasizing sustainability, resource management, ecosystem services, system productivity, and profitability. The program is designed to provide students an understanding of current global issues related to agriculture and production systems and develop the needed skills for a profession in the agricultural sciences. Those with relevant backgrounds and interests who wish to further their education in the agricultural sciences are encouraged to consider the Agroecology concentration.

Additional details about this program can be found at:
http://agronomy.ifas.ufl.edu/agroecology/

and by contacting:
Diane Rowland (dlrowland@ufl.edu) or
Jerry Bennett (jmbt@ufl.edu) in the Agronomy Department

or George Hochmuth (hoch@ufl.edu) in the Soil and Water Science Department.
Planting Bermudagrass

Bermudagrass used for forage production is mainly of the sterile hybrid type, which does not produce viable seed. Bermudagrasses in this group include Coastal, Tifton 85, Tifton 44, Jiggs, and Alicia. These types must be planted by vegetative cuttings, either sprigs (underground stems) or tops (above ground stems or ‘runner’) in uplands not subject to flooding or standing water.

If planting sprigs, the planting season for Florida is mid-January through March. Winter-Spring planting may face less weed pressure compared to summer planting but will likely be subject to the spring drought that usually afflicts peninsular Florida if no irrigation is available. If planting sprigs in very sandy soils, make sure this vegetative material is placed deep enough where they cannot dry easily but care must be taken not to place them too deep where the reserves of the planting material will be used up completely before the new growth reaches the soil surface. Choose an area where pH is between 5.5 and 7, and plant on a well prepared seedbed.

Dig the amount of sprigs that you will be able to plant immediately. Minimize the time the dug sprigs remain exposed to weather conditions (sun and wind) because it will dry them and negatively affect the percent of sprigs alive at planting.
Timing preemergence herbicide applications in turf for early emerging weeds in Florida

Although we are still in the middle of the winter, it is a good idea to start thinking about the right time for preemergence (PRE) control of those weeds that will start growing within the turf in the spring. In general, PRE herbicides are the most common control tool for this purpose. There are multiple options depending on the weed species and the turfgrass species and cultivar. The University of Florida's Pest Control Guide for Turfgrass provides a detailed description of herbicide alternatives depending on the situation (visit: http://turf.ufl.edu).

For optimum results, it is imperative that PRE herbicides are applied before weed seeds start germinating. Although these herbicides do not kill weed seeds, many of them will only affect seedlings that have not yet emerged. Therefore, if the application of the herbicide is done after weed seed germination and seedling emergence have started, it is likely that many weed seedlings will not be killed, and they will cause problems during the spring. Also, it is important to remember that a moderate irrigation after the application will help placing PRE herbicides at the right depth within the soil to maximize their action.

Not all weed species emerge at the same time. Their emergence timing depends on their temperature requirements for germination and growth. Crabgrass (Digitaria spp.) is a weed that can form dense populations within the turf, and for which control is more likely to be achieved using PRE herbicides than postemergence (POST) herbicides. Because this weed is one of the summer annual weed species that emerge first at the beginning of the year in Florida, it can be used as a reference for weed control timing early in the spring.

Crabgrass will start germinating when the soil temperature is at least 50-55°F. For this reason, as a rule of thumb, it is recommended that PRE herbicide applications be done no later than February 1, February 15 and March 1 for South, Central and North Florida, respectively. However, if the winter is unusually cold or warm, applications can be delayed or rushed accordingly to make sure that the herbicide is applied before seed germination starts.

Properly timing PRE herbicide applications will provide a cleaner environment during the spring helping the turf to form a denser canopy that will shade late emerging weeds simplifying weed management during the spring and summer.

Photo source: EDIS ENH1134.
Reducing the risks of herbicide resistance in sugarcane

Many sugarcane growers are using different weed control programs in both newly planted and stubble (ratoon) sugarcane fields for early postemergence weed control. These programs are used to enable sugarcane to have an initial competitive advantage against weeds. Growers use tank-mixes of herbicides to broaden the spectrum of weed control in order to ensure early season sugarcane advantage over weeds. The most common tank-mix for early postemergence weed control is a combination of Atrazine and Evik (ametryn) applied at up to 4 pts/acre and 0.5 to 1.5 lbs/acre, respectively depending on the weed pressure. This combination is used to control broadleaf and grass weeds in sugarcane. Common lambsquarters, goosegrass, and fall panicum are the most common weeds associated with sugarcane at this time of the year. Atrazine is also used in subsequent postemergence applications as needed depending on the weed pressure and not to exceed 10 lb active ingredient per acre per year.

Both Atrazine and Evik are triazine herbicides (WSSA Group 5) implying that they have the same target site. There is a potential that repeated use of these triazines over and over in sugarcane (especially in successive sugarcane) can select for herbicide-resistant weed biotypes. Triazine-resistant common lambsquarters is a widespread problem in the northcentral United States following repeated use of triazines for weed control in corn over several years. Herbicide resistance is the acquired ability of a weed population to survive a herbicide application that previously was known to control the population. Potential development of triazine-resistant biotypes such as common lambsquarters in sugarcane from repeated use of these herbicides can be reduced by using herbicide tank-mixes with other modes of action. Herbicides with other modes of action should also have similar efficacy against the target weed species. In sugarcane, these herbicides can be tank-mixed with 0.5 lb acid equivalent of 2,4-D amine per acre to broaden the spectrum of weed control. The 2,4-D is a phenoxy acetic acid herbicide (WSSA Group 4) with a different mode of action. However, there are restrictions on 2,4-D use at this time of the year because of potential drift to vegetable crops. Combination of Atrazine and Callisto (mesotrione) at 1 pt/acre and 3 fl oz/acre, respectively can be used in situations where 2,4-D cannot be used. Callisto is a triketone herbicide (WSSA Group 27) with a different mode of action. Aim, a triazolinone herbicide (WSSA Group 14) can also be applied as a tank-mix with other herbicides. The potential for development of herbicide-resistant biotypes in sugarcane especially triazine-resistant common lambsquarters should receive serious attention from growers. All growers should adapt proactive management strategies in sugarcane to prevent development of triazine-resistant weed biotypes in sugarcane.
Soil Fumigant Phase 2 Labels Take Effect

As of December 1, 2012, a final set of soil fumigant product label changes went into effect, fully implementing important new protections for workers and bystanders. The amended product labels incorporate the second and final phase of mitigation measures required by the EPA’s 2009 Reregistration Eligibility Decisions (REDs) for the soil fumigants methyl bromide, chloropicrin, metam sodium/metam potassium, and dazomet. These measures will help protect workers, handlers and bystanders from exposure to potentially harmful airborne concentrations of the fumigant pesticides.

The new measures appearing on soil fumigant Phase 2 labels include buffer zones and posting, emergency preparedness and response measures, training for certified applicators supervising applications, Fumigant Management Plans, and notice to State Lead Agencies who wish to be informed of applications in their states. Measures added to labels in the first phase of implementation included Phase 1 Fumigant Management Plans, good agricultural practice requirements, and new worker protection measures among other things. Phase 1 labels were approved in 2010.

After December 1, 2012, only soil fumigant products bearing the Phase 2 measures may be sold and distributed by registrants. Distributors and retailers who are not registrants may sell and distribute existing stocks of products bearing Phase 1 labels until their supplies are exhausted. Likewise, growers and applicators may apply products bearing old labels until those supplies have been exhausted. The newly approved labels are available through the Pesticide Product Label System (PPLS) at www.epa.gov/pesticides/ppls. Visit the Office of Pesticide Programs’ Soil Fumigant Toolbox at www.epa.gov/pesticides/reregistration/soil_fumigants/ for more information about soil fumigants and new requirements for their safe use.