

AGRONOMY

UNIVERSITY OF
FLORIDA
IFAS EXTENSION

NOTES

August, 2003

DATES TO REMEMBER	
Aug. 28	Peanut Field Day - Marianna
Sept. 3-4	17 th Annual Georgia Peanut Tour - Macon, GA
Sept. 5	Row Crop Field Day - Jay Research Farm
Feb. 24-25, 2004	FL Weed Science Society Annual Meeting, Ft. Pierce
May 27, 2004	Corn Silage Field Day, Citra

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Corn Disease and Dry Down

Weather conditions in 2003 have been very conducive to outbreaks of southern corn leaf blight and rust. This occurs during periods of high rainfall and high temperature. Late planted corn is usually more susceptible than early planted corn due to a larger spore load late in the season. Corn is much more susceptible after it reaches the reproductive stage than it is during the vegetative stage. Seemingly healthy corn, at the start of tassel emergence may completely fall apart after 4-5 weeks with leaves turning brown and drying up from the base toward the tassel. Silage hybrids, that are planted late, should be watched closely since they can go from being green to completely brown almost over a weekend due to disease. Double crop corn is especially susceptible to disease attack at a young age if a lot of plant residue is left in the field from the first corn crop. Some of the tropical hybrids have much better resistance to disease than early planted mid-west type hybrids and should be considered for 2nd crop planting.

DLW

New Cotton Variety Requires Aggressive Growth Regulator Application

DP 555 BG/RR is one of the new generation of high yielding transgenic cotton cultivars. It is tall growing and needs mepiquat chloride (MQ) applications early to keep growth down. Rain in 2003 resulted in fast early growth. DP 555 should have the first application of MQ earlier than most varieties and at higher rates. Normal rates of MQ are often 8 oz/A at the 10th to 12th node stage. However, this variety should have rates of 12-16 oz/A soon after square initiation. Generally, MQ with surfactants become rain fast after a 4 hour period. Therefore, spraying in the morning may be advised when in periods of afternoon rain showers.

DLW

Sulfur Deficiency in Cotton

Many fields of cotton have a yellow cast to them even though adequate nitrogen (N) has been applied. Additional N has not solved this problem and only makes it worse. Sulfur (S) deficiencies often occur in years like this one when frequent and heavy rains will leach the nutrients below the root zone. Rooting may not be as deep either since soils may be water logged, thus limiting rooting depth. Sulfur and N deficiency can be distinguished from the other since unlike N, S is not mobile in the plant. This means that S deficiency symptoms will occur in the new growth at the top of the plant while the bottom part of the plant may not show symptoms. However, S deficiency is often thought to be N deficiency. N deficiency shows up first on the older leaves at the bottom of the plant. There are several materials that supply S to the crop. The most commonly used S sources are materials like 28-0-0-5 which have both N and S. However, ammonium thiosulfate can be used alone and contains 26-43% sulfur. Other materials like gypsum have been used and contain about 15-18% S and have been shown to give as much as a bale increase in yield when S was deficient. Therefore total S needs for a cotton crop is about 35-45 lbs/A.

DLW

Pesticide Registrations and Actions

On June 18, the Florida Department of Agriculture and Consumer Services (FDACS) conditionally registered BASF's plant growth regulator Pentia® (mepiquat pentaborate) for foliar application to cotton to assist in height reduction, open canopy, better early boll retention, possibly larger bolls, less boll rot, improved defoliation, and better harvest efficiency. The EPA registration number for the product is 7969-191. (FDACS PREC July Agenda).

Based on a request by Bayer CropScience, tolerances have been established for residues of the herbicide flufenacet in or on field corn grain/stover/forage (0.05/0.4/0.4 ppm) and on soybean seed (0.1 ppm). (*Federal Register*, 6/25/03).

Albaugh has requested the deletion of red potato off their 2,4-D LV4 herbicide label. This was one of the two 2,4-D formulations available for this use registered in Florida. The other product is Riverdale 2,4-D LV6 (EPA Reg. # 228-95). (*Federal Register*, 6/25/03).

MAM

What To Do With a Wet Hay Crop?

Sometimes we just can't get the grass hay dry enough to bale. It may be at 20 to 22 percent moisture, but we need to get it down to 15% or less in order for it not to mold. Daily thunder showers have set in and the next hay crop has started growing, and we need to get that grass off the field! What to do? The grass is too dry to make roll bale silage. For the ensiling process to work properly, the grass should be at 55 to 65 percent moisture. And, if we roll up grass that is 22% moisture and wrap it in plastic - we will just have moldy, rotten "hay" wrapped in plastic! It might be possible to use a hay preservative (propionic acid), but it will take some time to get rigged up, have the preservative shipped etc. The best solution just might be to bale the grass, stack it, cover it with plastic and treat it with anhydrous ammonia. Anhydrous ammonia is an excellent preservative and will suppress the growth of molds. For additional information treating hay with anhydrous ammonia, see the publication "Improving the Feeding Value of Hay by Anhydrous Ammonia Treatment", Bulletin 888, go to: <http://edis.ifas.ufl.edu/AA203>

The following was extracted from the above mentioned publication: "Anhydrous

ammonia has antimicrobial effects. In several cases livestock producers have ammoniated hay which was baled too wet (about 25% moisture). Ammonia inhibited mold growth, and the hay was fed successfully. In another case a livestock producer baled forage shortly after cutting. The intention was to bale the forage wet and treat it with anhydrous ammonia at 4% of the forage dry matter to inhibit spoilage, mold growth, and improve feeding value. The baled forage was very wet (about 60% moisture). Anhydrous ammonia has a strong attraction for water, and the resulting treated forage had a strong ammonia odor which reduced intake by yearling cattle. Because of potential intake problems, it is recommended that forage greater than 25 to 30% moisture content not be treated with anhydrous ammonia at 4% of the forage dry matter. Hay that is 25 to 30% moisture can still be treated at 4% but should be ammoniated shortly after baling to reduce heating that occurs in wet hay. Some producers treat silage or hay with anhydrous ammonia at 1% of the forage dry matter. Application of anhydrous ammonia at 1% of the forage dry matter yields different results compared to ammoniation at 4% of the forage dry matter. Treatment at 1% of the forage dry matter limits mold growth and can be used successfully with wet (65% moisture) forage, but does not enhance forage nutritional value to a large extent."

CGC

Harvest Excess Grass For Silage

High humidity and frequent rainfall during August makes hay harvest difficult. Grass can be harvested and stored as silage without interference from frequent rains, since the grass is stored at a high moisture content (55 to 75 percent moisture). Hay must be dried to less than 20 percent moisture.

CGC

Fertilize for Fall Hay Production

In central and south Florida much of the hay is made in October and November when damage by rain is less likely than in the spring and summer. Production of a large fall hay crop usually requires an application of fertilizer sometime from late August through early October. Fertilizing Pangola digitgrass, Floralta limpgrass, Callide rhodesgrass, one of the stargrasses or improved bermudagrasses in late August will provide enough time for adequate growth before the cool, dry weather begins when plant growth slows. Some producers delay fertilization until early October in an attempt to avoid problems with foliage feeding worms.

Fields to be used for fall hay production can be grazed or mowed close in August or early September to remove mature growth. This will contribute to a higher quality hay at harvest-time since there will be less of the overly mature and dead plant material in the hay. Those who have facilities and equipment to use silage might want to consider harvesting excess summer grass as silage, and then use the fall growth for hay.

CGC

Stockpile (reserve) Forage for Winter Feed

In central and south Florida stockpiling forage (letting grass accumulate in the field) is one way to supply part of an animal's winter feed supply. The stockpiled forage is usually allowed to grow 10 or more weeks in the fall before being utilized. One of the problems associated with this system is the decrease in digestibility with increase in age of the forage. This problem can be partially overcome by selecting the proper grass to use as a stockpiled forage. Pangola and the other digitgrasses have been used for many years for this purpose. Their digestibility drops with increase in age but palatability is maintained. Floralta limpgrass (Hemarthria) can also be used as a stockpiled

forage. It maintains a relatively high level of digestibility with increase in age, thus making it especially suited for stockpiling. Also, Floralta may make more growth during the cool season than Pangola. The quality and feed value of stockpiled forage continues to decline with time, and therefore it should be used up before other feed sources are utilized.

CGC

Fall Armyworms in Fertilized Pasture and Hay Fields

It's that time of year again when the fall armyworm attacks fertilized grasses. Spot check recently fertilized fields to determine if a serious infestation of worms is present. The cattle egret (white bird) feeding in pastures may be a tip off indicating the presence of worms. Feeding by birds may be a control factor, but its effectiveness has not been determined. Action should be taken immediately if an outbreak of worms occurs. First, consider using the grass before the worms destroy it. In hay fields, if enough growth has accumulated to harvest, then it may be wise to go ahead and harvest immediately rather than waiting to accumulate additional growth. If the grass can be grazed, concentrate a large number of cattle in the area and graze it off quickly. Second, consider the use of an insecticide to control the worms. For additional information on control, go to: <http://edis.ifas.ufl.edu/IG061>

CGC

Spittle Bugs in Hay Fields

The two-lined spittle bug may cause severe damage in hay fields or pastures. The young spittlebug or nymph can be found in the spittle (white, frothy material) at the base of the grass plant. The nymph which is soft and white in color will over a period of several weeks develop into an adult spittlebug. The

adult is a flying insect that is dark in color and has two very narrow orange stripes across each wing. Although both the nymphs and adults feed on the plants, it is the adults that cause injury. Adult spittlebugs can be found in May and June then again in late August through September into October.

Control – Spittlebugs are usually not a problem when a pasture is intensively grazed throughout the summer or where repeated cuttings of hay are taken. Where grass is allowed to accumulate during the summer spittlebugs may cause serious injury to the grass. Insecticides have been used in the past to kill the adult spittlebug but timing was critical. At the present time, no insecticide are registered for use on spittlebugs. For additional information, go to: <http://edis.ifas.ufl.edu/IG061>

CGC

Summer Forage Legumes = Protein

Cows and calves grazing the tips of branches and stems of summer legumes will be eating forage with a protein content of 15% plus on a dry matter basis. This high protein content usually does not exist in our warm season perennial grasses during August. Thus, summer legumes can be a real plus for calves that need a high level of protein. Research has shown that calves will make extra weight gain when summer legumes are available.

CGC

Getting Ready for Winter

It is not too early to start thinking about how much hay or other conserved forage will be needed for the winter, and whether or not you will be planting some winter pasture. For information on winter pasture, recommended varieties etc. see the publication “Fall Forage Update 2002”. Contact the county extension office or go to:

<http://edis.ifas.ufl.edu/AA266>

CGC

Weed Control Reminder

Plateau herbicide has a supplemental label for use on established bahiagrass to control sandbur.

Sandbur has been a problem in hayfields as well as recreational areas. The following was taken from Weeds in the Sunshine: Weed Management in Pastures and Rangeland - 2003. “Apply postemergence prior to seedhead formation. Always add a non-ionic surfactant at 0.25%(v/v) of the spray volume when using water as a carrier. A methylated seed oil is **not** recommended because it will increase injury to bahiagrass. If a nitrogen based liquid fertilizer is used as the spray carrier, a surfactant is not required.

Use only the 4 oz rate in bahiagrass

[higher rates can be used in bermudagrass].

Rates higher than 4 oz may kill the bahiagrass. Use of Plateau will result in a temporary reduction in bahiagrass growth. It may result in the loss of one hay cutting.”

For additional information on weed control in pastures and hayfields go to:

<http://edis.ifas.ufl.edu/WG006>

CGC

Pesticide Potpourri

The U.S. Agriculture Department reported that farmers cut soybean planting back to 73.7 million acres this year - the lowest since 1998, the third year in a row in which farmers have reduced their soybean acreage. However, growers in 15 states increased their soybean acreage, particularly in southeastern states like North Carolina, where persistent rains drenched the soil, hampering efforts to plant cotton and corn. Although overall soybean planting is down, states continue to increase their use of genetically engineered soybean. The survey

said that 76 percent of the soybean crop is Roundup Ready® soybean, a figure that is six percent higher than last year's planting. Arkansas farmers generated the greatest increase in biotech soybean use, up 16

percent to 84 percent of the state's 2.9 million acres. In contrast, Ohio and Michigan increased their biotech soybean crop by just 1 percent. Ohio's 4.4 million acres of soybean are 74 percent biotech, and Michigan's 2.1 million acres are 73 percent genetically engineered. (Associated Press 6/30/03, via Agnet).

MAM

PUBLICATIONS

The following publications have been recently **UPDATED** and are available through EDIS (<http://edis.ifas.ufl.edu/>). A PDF file for each publication is also available.

- SS-AGR-01 Weed Management in Tobacco - 2003
- SS-AGR-03 Weed Management in Peanuts - 2003
- SS-AGR-09 Weed Management in Sugarcane - 2003
- SS-AGR-10 Weed Management in Rice - 2003
- SS-AGR-14 Herbicide Prepackage Mixtures - 2003
- SS-AGR-15 Diagnosing Herbicide Injury - 2003
- SS-AGR-16 Approximate Herbicide Pricing - 2003
- SS-AGR-27 Conversion Factors
- SS-AGR-91 SunOleic/High Oleic Peanuts
- SS-AGR-100 Principles of Weed Science
- SS-AGR-103 Recrop Intervals for Herbicides Used in Cotton, Corn and Peanut in Florida
- SS-AGR-104 Trade Name, Common Name and Registrant of Some Herbicides
- SS-AGR-106 Names and Addresses of Some Herbicide Manufacturers and Formulators

The following **NEW** publication is available through EDIS (<http://edis.ifas.ufl.edu/>). A PDF file for this publication is also available.

- SS-AGR-193 Crabgrass as a Forage and Hay Crop

Please visit the Agronomy Department Homepage (<http://agronomy.ifas.ufl.edu/>) for other publications on field and forage crops.

The use of trade names does not constitute a guarantee or warrant of products named and does not signify approval to the exclusion of similar products.
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