

AGRONOMY

UNIVERSITY OF
FLORIDA
IFAS EXTENSION

NOTES

October, 2003

DATES TO REMEMBER

Feb. 24-25, 2004	FL Weed Science Society Annual Meeting, Ft. Pierce
May 27, 2004	Corn Silage Field Day, Citra

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Fertilizer Usage in Corn

Yields of corn have increased dramatically since the 1950's due to use of hybrids. With higher yields, higher rates of nutrients have been removed from fields with both grain and silage. The average use of fertilizer on a per acre basis in 1950 was N- 17 lbs/A, P-26 lbs/A as the oxide, and K- 17 lbs/A as the oxide. In 2000 the average fertilizer use rate had risen to: N- 150 lbs/A, P- 64 lbs/A, and K- 91 lbs/A. In the Corn Belt, fertilizer may be fall-applied while all nutrient are applied just prior to or during the growing season in Florida due to nutrient susceptibility to leaching or runoff during erosion.

DLW

Defoliating Cotton

Cotton can be defoliated without yield loss when at least 60% of the cotton is open. Defoliant and boll openers work together to remove leaves and open all mature bolls within a two week period after treatment. Picking ahead of this schedule may result in unopened bolls and leaves or more trash in the seed cotton and consequently discounts. Generally defoliant and boll openers work better under warmer conditions and with lower rates than later in the season when temperatures are cooler.

DLW

Nutrients in Grain of Corn

N, P, and K are very important for high yields of corn silage and grain. The amount of nutrients stored in the grain as a percentage of the total in the plant is as follows: N- 60%, P- 75 %, and K- 35 %. Therefore, most of the N taken up after silking and tasseling goes into the grain (about 150 lbs/A). Ear size and rows of grain and essentially grain yield are determined early so additional N applications late in the season only increases grain protein content and has little

influence on final yield. Nitrogen status early in the season until tasseling is very important. The majority of the P is in the grain. Therefore, only low levels of starter P are necessary to get corn off to a fast start. Corn that is knee high has only taken up about 3 lbs/A of P. Phosphorus uptake late in the season is important as well as small amounts of starter P near the row at planting. Potassium is important early in the season since more of it is used in leaf and stalk development than for the other nutrients. It also plays a big role in general health of the corn plant and standability.

DLW

Alfalfa

Alfalfa is a high-quality legume forage crop that is mainly used for hay or silage but can be green chopped or grazed in some situations. It can be utilized by horses, dairy, and beef cattle. There is a great demand for alfalfa hay by the Florida horse and dairy industries. Thousands of tons of alfalfa hay are shipped into Florida each year. Thus, occasionally there is interest in growing alfalfa in the state. For additional details see the new fact sheet "Alfalfa Production in Florida" located at <http://edis.ifas.ufl.edu/AG192>

CGC

Collect Soil Samples from Pastures

Soil samples collected in late October and November can be analyzed and results returned in time to plan for February and March applications of lime and fertilizer. In October and November, pastures are usually dry enough so that samples can be collected without interference from excessive moisture.

CGC

Cool Season Pasture Legumes

Legumes used in pastures fix nitrogen for their growth as well as that of the accompanying grass. Thus, they can be used to replace part of the fertilizer nitrogen cost. The legumes not

only provide nitrogen but contribute to the total growth or yield. They usually increase the quality of the pasture in that they are often more digestible and have a higher level of protein than a pure grass pasture. Cool season legumes planted in a warm season perennial grass pasture extend the grazing season. These plants will continue to grow and produce feed at cool temperatures where most of the warm season grasses will have essentially stopped growing and the top growth may even be killed by frost. The most critical factor in growing legumes is water. They can only be grown in soils with good water holding capacity, highwater table, or irrigated soils. This restricts the use of cool season legumes in Florida to the clay soils of the northwest region and to certain irrigated areas in the peninsular section.

Cool season legumes that have been grown in Florida are alfalfa, white clover, red clover, crimson clover, arrowleaf clover and sweetclover. Several other minor legumes have been grown in “food plots” for deer and can be seen growing in waste areas or along the roadsides. See the fact sheet “Winter Forage Legume Guide” at <http://edis.ifas.ufl.edu/DS127> for a brief summary of each cool season (winter) legume that can be grown in Florida.

CGC

Fall Forage Update

Cool-season forages can supply excellent grazing for livestock. They are usually higher in total digestible nutrients and protein than our summer perennial grasses. Planting and growing these forage crops can involve considerable expense; therefore, they are often used only to supplement frosted perennial grass pastures or low quality hay. Some livestock producers may reserve them for young animals that need higher quality forages. Winter forage cannot be grown everywhere in the state and on every soil type. Some areas and some soils are too dry during the cool season to successfully grow plants. Therefore, the type of winter forage and the site where it is grown should be carefully selected. See the revised fact sheet “Fall Forage Update”

at <http://edis.ifas.ufl.edu/AA266> for the recommended cool-season forages and varieties that can be grown in Florida with some success.

CGC

Perennial Peanut: Planning Ahead

If you are wanting to establish a new planting of perennial peanut, start planning now. Check out the revised source list for planting material. See the fact sheet “Perennial Peanut - Source List of Planting Material (Rhizomes) and Hay” which can be found on EDIS, <http://edis.ifas.ufl.edu/index.html> in the near future. If you want to establish the new planting on a bahiagrass sod, you will need to spray the sod with Roundup herbicide now (before frost) in order to kill the bahiagrass. Yes, kill the bahiagrass. If you don't kill the bahiagrass, it will compete with the peanut seedlings during the spring for soil moisture which is very critical for establishment of the peanut. If you want to establish on a clean tilled seedbed, you will need to do the primary tillage in November or December. Be ready to plant in February and March. Irrigate to guarantee successful establishment.

CGC

Sweetclover

Hubam Sweetclover can be grown in Florida. It is an annual white sweetclover with the scientific name *Melilotus alba* (Figure 1). Another variety, Floranna, has been grown, but seed are no longer available. Sweetclover is not a true clover as is white, red, or crimson clover (*Trifolium sp.*), and is placed in an entirely different genus or group. It is more closely related to alfalfa and when seed are inoculated at planting, an alfalfa - sweetclover inoculant must be used. There are biennial types of sweetclover grown in the U. S., but not in Florida. Volunteer plants of an annual yellow flowered type (*Melilotus officinalis*) can occasionally be seen in Florida. Leaves of sweetclover have three leaflets that tend to be toothed around the margins. Sweetclover develops an extensive root

system with a deep taproot. Once established it is able to grow under somewhat dryer soil conditions than true clovers. See the new fact sheet "Sweetclover Production and Use in Florida" located at <http://edis.ifas.ufl.edu/AG191> for complete details on growing sweetclover in Florida.

CGC

Cool Weather Effects on Peanuts

Cooler weather and shorter days slow the development and maturity of peanuts below that realized during the summer. Before digging, be sure to check for maturity of the pods to insure getting the best yield and grade possible. Adjustments should also be made in the drying temperature for peanuts during cool weather. The general rule of thumb is to heat the air only 15-20 degrees above the ambient, but not to exceed 95 degrees. During the warmer days of August and September, the 95 degree setting is adequate during the day, with a possible lowering the setting at night. As the temperatures drop in October and November, it is advisable to lower the thermostat, especially at night. Drying the peanuts at a fast rate can result in the skin separating from the seed during shelling, resulting in 'bald-head' peanuts and also increased splitting of kernels. This damage is generally done at the beginning of drying when the moisture content of the peanuts are at their highest level.

EBW

Marketing Peanuts

While some farmers had pre-harvest contracts that provided for the delivery of the peanuts at harvest, others may sell their peanuts at harvest for the current price, or they may place them under loan and sell them at a later date. At present the market price and loan rate (\$355 per ton) are almost the same. The grower may join a cooperative marketing association that will store the peanuts and sell them when it seems advisable, or the farmer may use on-farm storage and sell them at an opportune time.

EBW

Peanut Crop Report

The September crop report estimated the 2003 average peanut for the United States would be over 3100 pounds per acre, with all production areas having excellent crops. If realized, this average yield would be an all-time record. Quality is also reported to be excellent.

EBW

Preparations for the 2004 Tobacco Crop

It is now time to start preparing plant bed areas for seeding later this year. All weeds or crop residue should be incorporated in the soil so that it will decompose before the beds are fumigated. Perhaps the most important task in preparing for 2004 would be to calculate the cost of production for the 2003 crop. If there is a quota buyout, the price level for tobacco would probably change from the current levels and growers would be better prepared to evaluate contracts by knowing the cost of producing a pound of tobacco.

EBW

Tobacco Buyout Proposals

Legislation is being introduced in the U. S. House of Representatives to provide for a buyout of tobacco quota, which would eliminate the current tobacco program. It is expected that this proposal will eventually reach a conference committee that would consider the Senate bill and also another Senate measure that would provide for FDA regulation of tobacco products. The House bill calls for a buyout of quota that would provide \$8 per pound for quota owners and \$4 per pound for growers. The payment period would be over seven years. The bill also calls for Tobacco Advisory Boards to recommend future limits on production and would keep the traditional growing areas. Many changes and clarifications may develop as the legislation is considered.

Tobacco Market Update

The two tobacco contract centers in Florida should soon complete the 2003 season. Over 10 million pounds of tobacco has been delivered to them for an average price of \$1.85 per pound. Some Georgia and Alabama tobacco is delivered to the Florida centers, and some Florida tobacco is delivered to centers in Georgia. There are no auction markets in Florida, but over 70% of the US tobacco sold at auction has gone under loan.

EBW

September Crop Report

The USDA's National Statistics Service reported the following estimates of 2003 crop productions of September 1:

Crop	Florida		United States	
	Harvested Acres (x1000)	Yield per acre	Harvested Acres (x1000)	Yield per acre
Peanuts	107	2900 lb	1277	3121 lb
Cotton, all	99*	621 lb*	12,192	667 lb
Tobacco, all	4	2500 lb	414	2008 lb
Sugarcane	441	40 ton	996	36.2 ton

*August estimates.

Other crops are not estimated for Florida, but soybean and corn estimates in the United States are down from those of a month earlier.

EBW

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.

Prepared by: J. M. Bennett, Chairman; C. G. Chambliss, Extension Agronomist; M. A. Mossler, Pest Management Information Specialist, E. B. Whitty, Extension Agronomist. D. L. Wright, Extension Agronomist.