

# AGRONOMY

UNIVERSITY OF  
**FLORIDA**  
IFAS EXTENSION

# NOTES

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## **Corn Seed Supplies**

Corn hybrids with the Roundup trait from all of the companies appear to be in good supply for the new year. However, it is good to place orders early to ensure that you are able to get the hybrids that you desire. Plant diseases (rust and leaf blight) are one of the main impediments to harvesting high quality corn silage and grain. Severe disease outbreak often results in corn dying 2-3 weeks ahead of maturity which affects both yield and quality. A disease susceptible hybrid may not be suitable for silage if it is essentially killed 2-3 weeks before a custom harvester gets to it.

DLW

## **Cotton Use and Export in the U.S.**

Many of the cotton mills in the SE have closed and moved overseas in the past 2-3 years. Cotton acreage has remained around 14-15 million acres in the U.S. for the past 10 years. In 1997 the U.S. consumed 11 million bales of cotton and exported about 6 million bales. In 2004, since the closing of the mills, the U.S. consumes 6 million bales of cotton and exports 12-13 million bales. U.S. cotton is in the global markets and being processed by mills overseas and shipped back as finished products. Presently, over 90% of the cotton clothes bought in the U.S. are imported.

DLW

## **Perennial Grasses Followed by Corn or Other Grass Crops**

Grass sod crops are excellent for most crops when used in rotation and higher yields are normally expected for crops grown after bahia or Bermudagrass. However, where

corn follows a sod crop at least 50 pounds of additional nitrogen is needed to help decompose the sod and extensive root system. Florida research shows that yields of corn can be depressed if extra nitrogen is not used.

DLW

## **Expanded Peanut Production**

It is expected that Florida's peanut acreage will increase again in 2005 as current growers expand and new growers enter production. New buying points are opening which will serve many of the new growers. Prospective growers should carefully review budgets on the cost of production to estimate potential profits using current and projected prices for peanuts. New growers often produce high yields because they are planting peanuts on land that has not been used recently for peanuts, and therefore have fewer disease problems. It is important for growers to incorporate a crop rotation plan that would prevent peanuts from being planted on the same land no more than once in four years. Good rotation crops for peanuts would be non-legume plants such as grass crops, which includes corn, as well as bahiagrass and others. Cotton is another good choice. The rotation crops should not be susceptible to the peanut root-knot nematode, white mold, the various pod-rot organisms, and other diseases.

EBW

## **Inoculants for Peanuts**

Being a legume, peanuts need nitrogen-fixing bacteria to be present in the soil so that nodules form on the roots and enable the bacteria to fix atmospheric nitrogen into a form that can be used by the peanut plant.

Use of nitrogen fertilizers to supply the needed nutrient is considerably more expensive than relying on bacteria. If the bacteria are not present in the soil, they can be added as an inoculant at planting, and are available as a powder that can be mixed with the seed, or as a granule or liquid that is placed in the furrow as the seed are planted. In general the in-furrow applications are more suitable because mixing the powder with the seed before planting may not result in uniformity of application, or damage to the seed coat may occur in efforts to thoroughly mix the seed with the powder inoculant. Mixing is also a time-consuming effort. If the granule applicator needs to be used to apply an in-furrow insecticide, then a second set of granule applicators would be needed to apply the granular inoculant. In many cases, the liquid formulation of inoculant may be the best method of in-furrow application. The liquid inoculant should be mixed with enough water for uniform application in the furrow as the seed are planted.

EBW

### **Phase II Tobacco Payments**

A court suit developed after the tobacco quota buyout in October when the tobacco companies claimed that provisions of an agreement they signed a few years ago to contribute to a 12-year fund to pay tobacco farmers for loss of income due to the master settlement with the states would end if there was a quota buyout. This fund was called the Phase II as the master settlement was the Phase I fund. Since the quota buyout was enacted on October 22, they contend that they are absolved from making the 2004 Phase II payments, which were expected to be mailed to growers in late December. The resulting case is being heard in North

Carolina and a decision is expected before Christmas. It is likely that the decision will be appealed by the loser in the case, which means that the 2004 Phase II payments, if there are any, would not be paid until well into 2005 after the appeal has been heard and a decision rendered.

EBW

### **Tobacco Contracts**

Prices offered by the tobacco companies for 2005 production were less than expected by farmers, resulting in a reluctance by many growers to sign the contracts. If this reluctance persists until the deadlines to sign contracts expire, there may be a substantial reduction in the amount of tobacco grown in Florida in 2005 compared to previous years. The tobacco quota buyout in October resulted in the end of the federal tobacco program, including the price support provisions. As a result prices declined nearer to world prices. Extensive use is being made of budgets showing the cost of production and expected returns in an effort by the farmers to predict the likelihood deriving a profit from growing tobacco.

EBW

### **Tobacco Cooperative Proposal**

The Flue-Cured Tobacco Stabilization Corporation, a farmer-owned cooperative, has proposed a buying program for tobacco. If a farmer is interested, he would sign a contract with the coop to deliver his tobacco to them and at that time receive an advance payment, which would be generally less than average commercial contract prices. The tobacco would be processed and stored, and if sold at a later date for a price greater than the advance payment, profits would be

distributed on a pro rata basis to the participating growers. This proposal can be reviewed at <ustobaccofarmer.com> by clicking on the proposal section. The cooperative also plans to conduct auction sales at marketing centers.

EBW

### **Proper Liming of Soils**

This is a slow time of year for many of the farm supply dealers and is a good time of year to have lime applied 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 28 years that are still producing good yields of various crops. A high calcium and phosphorus layer can develop in the top 2-3 inches after many years of surface applications of fertilizer and lime.

DLW

### **Role of Ammonium Sulfate with Glyphosate Herbicides**

There are currently scores of glyphosate containing herbicides on the market. These products have different names, differing amounts of active ingredient per gallon, different formulations, and may or may not need a surfactant added. However, all these products recommend that ammonium sulfate (AMS) be added to the spray tank. Why is this?

Surfactants and crop oils are added to spray mixtures in order to improve herbicide retention and uptake by the leaf. AMS is

required for a much different reason. Glyphosate is a weak acid herbicide that possesses an overall negative charge. When placed in water with high amounts of positively charged ions like calcium or magnesium (aka hard water), the glyphosate rapidly binds to these ions and immediately loses all herbicidal activity. In areas where groundwater routinely registers high levels of calcium (as in most of Florida), the effectiveness of glyphosate can be greatly reduced when mixed with hard water. Additionally, all glyphosate formulations are susceptible to antagonism by calcium and magnesium.

However, adding AMS to the spray tank is an easy and relatively inexpensive way to remedy this problem. The AMS will immediately begin reacting with the calcium in the water and not allow for glyphosate antagonism. It is important to note that the AMS must be added to the spray mixture before the glyphosate is added in order to see the maximum benefit.

The amount of AMS required to reverse calcium antagonism is totally dependent on the amount of calcium and magnesium in the water and these concentrations can vary greatly with region. This is why the glyphosate labels suggest adding between 4.5 to 17 pounds of AMS per 100 gallons of water. However, calculations have shown that 8 pounds of AMS per 100 gallons of water should often be sufficient unless extreme conditions occur.

JAF

### **December Crop Report**

Cotton and sugarcane are the only agronomic crops grown in Florida that are estimated by the National Agricultural

Statistics Service for the December report. Cotton yields were estimated to increase over the November figures, which would be even a greater record crop. The 22.8 million bales that were estimated in December 2004 would be 25 percent above the 2003 production. Average yields are expected to be 828 pounds per acre, which also would be a record. The previous record was in 2003 at 730 pounds per acre. Florida cotton

yields and production are not estimated until annual report in January. Sugarcane production for sugar and seed was estimated at 420,000 acres in Florida, with a yield of 36 tons per acre. For the United States, the estimates were for 31.6 tons per acre on 961,400 acres.

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.

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