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Improving Marginal Crop Land

In recent meetings with growers many of the growers say they have as much as 20% of their farm land that does not returned a profit due to physical, chemical, or pest limitations of the soil. In most cases, these same growers say that if they have extra fertilizer or lime left over after spreading a field, they will put the “extra” fertilizer on the poor sites and the yield will still be marginal. We have been promoting the sodbased rotation to growers and some growers have started using the system with their crops. When you consider that it costs a minimum of $500/A to plant cotton and peanut, and if you farm 800 acres and 20% is marginal then about 160 acres are break even each year and if cotton and peanut are planted on it at least $80,000 is risked on that acreage to return $80,000 if that. These marginal areas of the farm are areas that would benefit from planting bahiagrass for 2-3 years with little risk and when it is taken out to plant into crops, these areas are often some of the most productive on the farm for 2-3 years. We would encourage growers to look at areas of their farms as potential areas to try the sod based rotation. This will give growers a chance to see if the system can improve their overall operation of the farm if they converted the whole farm to the system.

Corn seed in short supply for 2012

Conditions for producing corn seed in the mid-west were unfavorable in 2011. There were early rains that delayed planting, floods in some areas, gale-force winds that downed corn, extreme temperatures during pollination, and early frost in the north that has resulted in a corn-seed supply that is estimated at 35% below projections. There is enough seed to plant over 90 million acres in the US but it may not be the hybrid or technology that growers want in every case. Most seed companies plan on producing seed from several locations to make sure that each hybrid has enough seed from overlapping sites to meet the demand from growers. With corn prices near record prices there will be a high demand for hybrids and growers should consider booking corn early to make sure they have the hybrids they want. Many are already locking in hybrids at this time.
Hay Storage Losses

Hay is a practical method to retain the nutritive value of the plant better than standing forage. The main feature of hay is the low moisture content that inhibits the growth of microorganisms such as the spoiling bacteria and fungi. Despite being a forage conservation method, losses do not stop at baling. During storage, losses can occur on the dry matter as well as on the nutritive value of the forage. Unfortunately, there are many more losses during storage, without counting feeding losses, that go by undetected by many farmers and ranchers.

Typical inside storage losses are approximately 5% for hay well cured (well cured hay is less than 20% for square bales or less than 18% for round bales)—and they correspond to some respiration and residual microorganisms which are almost impossible to eliminate.

Dry matter losses can be the result of weather conditions on hay, or ‘weathering’. Weathering mainly affects the bale of hay in the outer layers of the bale more than on the inner layers. Therefore, losses will vary depending on the size of the bale. The graph shows dry matter losses as a function of spoilage depth for varying round bale sizes. Regardless of bale size the more spoilage depth into the bale the greater the dry matter losses. And this is accentuated when the size of the bale is smaller.

Weathering may occur slowly but it progresses fast because water passes through easily on the weathered hay. Properly storing hay by protecting the bottom of the hay from direct ground contact (using tires, rocks, pallets, or any other item that does not retains or traps water) and cover (plastic wrap, plastic cover) makes the difference in losses that can go from 5 to more than 50% losses. In any case if storing uncovered, hay should be stored in an open sunny location, ideally an area where breeze flow. Avoid storing hay under trees or shady areas where drying would be slow.

Storage or lack of it can also affect the nutritive value of the hay. On weathered hay dry matter loss occurs by leaching or removal of nutrients by the rain water moving through the bale. Soluble carbohydrates and digestible crude protein tend to be affected the most. These losses usually show up as increased fiber and lignin. Usually weather effects tend to be more pronounced on legume than on grass hay.
Poisonous Plant Watch

There are dozens of poisonous plants that infest pastures. Most of these species are native to Florida and they are present for a majority of the grazing season. However, late summer and early fall is when animal poisoning most often occurs.

The most common poisonous plants in pastures are sicklepod, coffee senna, and showy crotalaria. As stated previously, these species are most problematic in the fall. One reason for this is animals rarely browse these species when grass is abundant and succulent. But in the fall, bahiagrass leaf production has greatly slowed. With the decline in available forage, animals will begin to experiment on the other plants present. Additionally, toxins most commonly accumulate in seeds with a much lower concentration in the leaves and stems. It is possible that some animals browse these poisonous plants all season with minimal ill effect. However, with the days becoming shorter and seed production proliferating, casual browsing of seed pods can quickly impact animal health.

As we draw nearer to frost, the presence of these poisonous plants becomes even more important. The coffee weeds, for example, are much more tolerant to frost than bahiagrass. A light frost can turn bahiagrass totally brown while these plants remain unaffected. This rapid and dramatic reduction in available forage can force almost any animal onto poisonous plants.

If coffeeweeds, crotalarias, and other known poisonous species are present in your pastures, develop a management plan for them now. This can consist of spraying GrazonNext or simply mowing. If you suspect animal poisoning, the most common signs are dark urine, listlessness, and weight loss. If these signs are present, contact a veterinarian without delay.
**Ripener Application in Sugarcane**

The growing season for sugarcane in south Florida is relatively short in comparison to other sugarcane production regions. Sugarcane harvested at the beginning of the harvest season in mid-October typically has lower sucrose content when compared to sugarcane harvested later in the harvest season. Furthermore, the combination of warm temperatures and abundant rainfall from July to September or October enhances sugarcane growth instead of sucrose accumulation and storage. Sugarcane with high sucrose content is usually more economical for the milling process than high-biomass, low sucrose content sugarcane. Since the end of the harvest season cannot be extended to economically run sugarcane mills, it is necessary that the harvest season begins earlier even for sugarcane that has not reached full maturity. To overcome the low sucrose content early in the harvest season, aerial application of sugarcane ripeners is conducted in many fields in south Florida. Ripeners, mostly of herbicide origin, nutrients, or hormonal regulators are used to enhance sucrose concentration in many regions worldwide. Glyphosate, the only registered ripener in Florida and other sugarcane production areas of the United States has been shown to stimulate sucrose accumulation in sugarcane, but this comes at the expense of reduced gross cane yields. Glyphosate is restricted to the final ratoon sugarcane in Florida because of concerns of reduction in productivity of subsequent ratoon crops. The recommended use rate of glyphosate as a ripener is 5 to 12 fl oz per acre 3 to 5 weeks before harvest, which is much lower than the use rate for weed control. It is important that growers should know that there will be varietal difference with regard to the degree of anticipated sucrose response to use of glyphosate as a ripener. Also, application of glyphosate as a ripener to sugarcane under conditions of natural ripening may not increase the sucrose content. Currently, there is ongoing research at the Everglades Research and Education Center aimed at finding additional ripeners for use in Florida sugarcane. This is because glyphosate can only be used in the final ratoon crop. In addition, glyphosate causes injury to the emerging ratoon crop the following spring which is a concern for many growers who have to decide fields to keep or destroy following glyphosate application.

**What’s the Proper Tank-mixing Order?**

Ever had to shovel a gelatinous mess out of a large spray tank?

If so, you probably know that certain pesticide formulations are not compatible if combined. Or, it could be that they were not mixed in the proper sequence when introduced into the tank. Or, in some circumstances a compatibility agent adjuvant could have been added to prevent the mishap. New smart phone apps have been developed to help growers save time and money in the field.

Precision Laboratories Mix Tank is an app to give recommendations for products and mixing.

Go to http://www.mixtankapp.com/

for a useful site that provides information on the proper sequence of mixing pesticides. The information provided by this feature can save the hassle of wasted pesticides and the chore of cleaning up a mess.
Hay Storage  - Things to Remember

Hay is a practical method to retain the nutritive value of the forage better than standing forage. The main feature of hay is the low moisture content that inhibits the growth of microorganisms such as the spoiling bacteria and fungi. Despite being a forage conservation method, losses do not stop at baling. Unfortunately, there are many more losses.

Calendar of Events

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

Nov. 7  2011 Sugarcane Field Day, North FL REC, Quincey, FL. http://gadsden.ifas.ufl.edu/

Nov. 8  Limited Commercial Landscape Maintenance Training, Lake City, FL. Columbia Co. Extension Office.

Nov. 9  Florida Ag Expo, Gulf coast REC, Balm, FL.


Nov. 10 Cold Sensitive Plant Care. Orange County, Winter Garden, FL. http://ocextension.ifas.ufl.edu


Dec. 5  2011 Basic Meat Goat Production. Gainesville, FL. For registration, contact 352-955-2402


Feb. 29 The second Generation (G2) of Best Management Practices (BMPs) for Crop Production. Apopka, Fl. For information, contact 352-273-4814