

AGRONOMY

UNIVERSITY OF
FLORIDA
IFAS EXTENSION

NOTES

June, 2004

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Corn Growth and Development

The cool, dry spring that we encountered this year has resulted in corn being under stress and showing many symptoms that may not normally occur. The early season purpling was caused by phosphorus deficiency which will normally disappear as the weather warms up and roots grow and explore more soil. Starter fertilizer usually contains 20-35 lbs/A of N and the same rate of P or more depending upon soil test and minor elements. The first sidedress application of nitrogen should be applied near the row before the plant becomes N deficient from starter N. This normally occurs by the time corn reaches 12-15 inches tall. Another sidedress application is usually needed on sandy soils by the time corn reaches 24-30 inches tall. Other applications can be made through irrigation water. Likewise, potassium should be split on sandy soils or K deficiencies symptoms will be noted on leaves of the plant. Magnesium deficiency usually occurs later than other nutrients and is often seen on foliage during peak uptake of N. These symptoms occur as yellow stripes on leaves and will soon disappear as Mg uptake catches up with N uptake if adequate levels of Mg are present in the soil. Application of dolomitic limestone several months prior to planting supplies adequate Mg.

DLW

Late Nitrogen Fertilization of Corn

Nitrogen fertilization should be done on a timely basis. This means that N applications should be made as plant needs it throughout the vegetative period. Late applications after silking and tasseling are not advisable. Yields are usually not increased but grain protein content may increase. Nitrogen deficiency early in the season can result in significant yield reduction.

DLW

Timely Management on Cotton

June is a critical month to get the crop off to a good start. Good weed control and early thrips control can make other management decisions easier later on. Cotton will normally be side dressed with nitrogen about 40 days after planting and rapid growth starts after this period. Scouting for insects at early square formation starts during the same time as the nitrogen application. Even though most growers use Bt and Roundup Ready cotton, the crop should be observed closely to detect any nutrient deficiency, insects, or

weed problems that can damage the crop. Growth regulators should be applied to cotton early before rank growth begins which will normally be by the 8-10th node. One of the most common mistakes is to let cotton get too rank before beginning applications of growth regulators.

DLW

Ally Herbicide Changed to Cimarron

For several years the herbicide Ally has been used to control weeds in pastures. Ally was particularly useful against Pensacola bahiagrass, plantains, red sorrel, wild radish and others. However, the name 'Ally' has been replaced by 'Cimarron'. Cimarron contains metsulfuron and is sold as a 60 DF formulation just as Ally was traditionally marketed. So why the name change? DuPont has significantly changed the product label and chose to also change the product name to bring added attention to these alterations.

The two most notable changes are listed below.

Application Rate: Ally was labeled at a single rate of 0.3 oz/A. Cimarron now possesses a rate range of 0.1 to 1.0 oz/A. This has allowed new weeds to be added to the label that are controlled at these elevated rates.

Application Timing: Cimarron is currently labeled for use during the establishment of certain grass species at 0.1 oz/A. Although bermudagrass still carries the 60 day restriction after establishment, other species do not. Cimarron is currently being sold at approximately \$24 per ounce.

Another product being marketed by DuPont is Cimarron Max. This is a co-pack product that contains metsulfuron (the active ingredient in Cimarron) and 2,4-D + dicamba (similar formulation to Weedmaster). Although little research has been conducted with this product in the South, these herbicides are complimentary and should effectively control a wide range of weedy pests.

JAF

Bermudagrass Hayfields

Dry weather once again has delayed growth of bermudagrass. The drought may be over with recent thunder storms and hopefully the bermudagrass will start growing and be ready for harvest in three to four weeks.

Bermudagrass hay producers should keep a careful watch for armyworm infestation. Check your fields

regularly. Look for the small worms (caterpillars) and be ready to harvest, -- or spray if the grass is not large enough to harvest. Watching for cattle egret activity in the field may be helpful, but the worms could be quite large before the birds find them. Small worms are easier to control than large worms. In the recent past, large outbreaks of armyworms have followed an extended spring drought. Whether or not there is a cause and effect relationship is not known by the author but it is a good idea to be vigilant in any case.

CGC

Grazing Management During a Drought

During a drought, be careful not to overgraze pastures. Some leaf surface should be maintained on all of the improved grasses at all times. When Floralta Limpograss (hemartheria) and other upright growing grasses are grazed short, cattle should be moved to a new pasture where growth has accumulated; or if grass is not available on any of your pastures, move the animals onto bahiagrass which has the ability to maintain some leaf by growing it flat against the soil surface where cattle are usually not able to remove it. Feed hay or other supplements on bahiagrass when there is no longer any grazing left anywhere on the ranch.

CGC

Poisonous Plants

Due to the April/May drought, many pastures are no longer providing grazing. Animals are hungry and may tend to eat plants that they would not normally eat. In low wet areas around the edges and within somewhat open woodlands, the plant "bracken fern" can often be found growing. This plant is poisonous to cattle. Producers should be especially careful if they are moving cattle into new areas, such as into the woods. These areas should be checked for bracken fern and other poisonous plants. If bracken fern is found, do not put animals into those areas or at least observe the grazing habits of the cattle to see if they are eating the fern. A couple of other poisonous plants to watch for are lantana and wild cherry. When the summer rain pattern starts, afternoon thundershowers with accompanying wind gusts may blow down wild cherry trees that are growing in the fence rows. Cattle will tend to eat the leaves which are poisonous.

CGC

Producing High Quality Grass Hay

Crude protein and total digestible nutrients (TDN) are two important measures of hay quality. Stage of maturity or age of the plant at harvest is the most important factor influencing hay quality. As plants increase in age, crude protein and digestible energy concentration decrease. The improved hybrid bermudagrasses and stargrasses should be harvested at 15 - 18 inches for the first cutting and then cut every 4 to 5 weeks. During mid summer, some producers are harvesting stargrass for silage every three weeks to produce feed that has a protein concentration of 15 percent or greater and a relatively high TDN.

All hay equipment should be serviced and repaired before the hay season begins. A breakdown during harvest almost guarantees rain damage to the hay. Rain leaches soluble nutrients from the grass. It prevents the grass from drying quickly and thus, increases respiration loss and the possibility of mold. Respiration is the breakdown of sugars etc. in the plant. This process occurs in all living plants, and it continues after the plants are cut. Respiration stops when the moisture content drops below 40 percent. In Florida's climate, rain damage is difficult to avoid. Frequent thunder showers in the summer will usually hit one or more hay harvests. During the summer if a suitable period of weather occurs for harvesting hay, and if the grass is long enough (15 inches), it may be wise to start harvesting even though the regrowth has not reached a 4 or 5 week schedule.

CGC

Summer Annuals for Hay?

Producers occasionally ask about choices for a summer hay crop that can be grown on cultivated land. Various crops could be used such as pearl millet or sorghum x sudangrass, japanese or brown top millet, crabgrass, and perhaps rhodesgrass, cowpeas, soybeans and alyceclover. Those attempting to grow pearl millet or sorghum x sudangrass for hay should be aware that their large stems make drying difficult. A hay conditioner that crushes or breaks the stems will be needed. Brown Midrib (BMR) sorghum-sudangrass varieties are available, and these have a higher level of digestibility than the traditional varieties. High quality hay can be made from adapted soybean varieties, but producers should be aware of problems associated with growing soybeans such as getting good nodulation when planted on ground where soybeans have never been grown before. Also,

insects and nematodes may be a problem. Alyceclover may be the best choice. Following a highly fertilized crop, such as watermelons or other vegetables on well-drained soils, alyceclover produces excellent quality forage that may be grazed or harvested as hay. This summer annual legume should be planted between April 15 and June 30 at the rate of 12 to 15 pounds of seed per acre. Seed are usually broadcast and covered with a cultipacker or planted with a grain drill that has a small seed box and covered to a depth of 1/4 to 1/2 inch. Fertilize and lime according to soil test recommendations. If alyceclover is planted immediately following a highly fertilized crop, it may not be necessary to add lime or

fertilizer. Do not plant alyceclover on land known to be infested with rootknot nematodes, since alyceclover is susceptible to this pest. Do not plant alyceclover (intended for hay harvest) on land infested with coffeeweed. Coffeeweed is toxic to livestock. Herbicides are not available that will remove coffeeweed from alyceclover. If the coffeeweed were to grow taller than the alyceclover (which is not likely), it might be possible to remove it with a weed wiper and Roundup.

CGC

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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