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Excessive Cotton Growth

One of the main varieties of cotton grown in Florida, DPL 555, tends to exhibit the most vegetative growth of any variety currently being grown in the Southeast. Use of growth regulators is very common on this variety. In 2003 there were reports of very high rates of mepiquat chloride (MC) being used and the cotton was still too tall for sprayers to get through. Once cotton is tall, it cannot be reduced in height. MC will reduce cotton growth but it must be started before the cotton gets too tall. There has been little research to show that yields are actually increased from MC applications but height will be reduced the crop will look more uniform and greener and it may be easier to maneuver sprayers and pickers through the rows.

DLW

Management Influence on Hardlock Cotton

There are several things that can cause cotton to hardlock or not fluff out at harvest. Some factors such as fertile soil areas and Fusarium hardlock are difficult to control. However, Fusarium hardlock is under investigation and is being reduced by fungicide applications. Another common cause of hardlock is due to damage caused by stinkbugs. Stinkbugs often flock to nearby cotton from maturing corn in late July just as young bolls start developing. This damage can be controlled by careful scouting and timely control measures. July and August are the months that are essential for scouting and control of these insects.

DLW

Wet Conditions and Nitrogen Applications on Cotton

Rain in the main cotton growing counties has resulted in growers trying to catch up on weed control and N applications. The question is often asked "when does it get too late to apply N

to cotton or can we make foliar applications". Nitrogen applications should ideally go out after the cotton starts squaring and the 3 weeks after that time. However, nitrogen may be applied until about the 3rd week of bloom. Later applications have not shown any yield increases over no nitrogen if the crop has a fairly good fruit set. Every effort should be made to apply nitrogen from first square to the 3rd week of bloom. Foliar applications of urea are not very effective for increasing cotton yields but will result in an increase in vegetative growth. Foliar applications are much more expensive than 28-0-0-5 or other similar materials.

DLW

Layby Herbicides for Cotton

During this time of year many cotton growers are considering which herbicide, or herbicide combination, will be best suited for post-directed application on their farm. We are fortunate that several new post directed herbicides have been labeled this year. However, with the numerous choices it can be difficult to decide which herbicide to use. I will outline some of the new additions below.

Valor. Valor has been used in peanuts for a few years now, but just recently added a cotton label. Valor is a contact herbicide that provides excellent control of morningglory, pigweed, and other broadleaf weeds. Valor will also provide 4 to 6 weeks of soil residual activity. This herbicide is somewhat less effective on grasses and glyphosate or MSMA should be added if grass weeds are present. It must be noted that Valor is an extremely hot herbicide that will severely injure cotton if applied incorrectly. Cotton must be at least 18 inches in height with 4 inches of bark on the stem and Valor must be applied to the bottom 2 inches of bark. Applications made to green stems will likely result in moderate to severe cotton injury. If tropical spiderwort is present, Valor plus MSMA has been shown to be the most effective herbicide treatment.

Suprend. Suprend is a combination of Envoke + Caparol. This combination will provide the weed control commonly observed with Caparol, plus excellent control of sicklepod, sedges, and morningglory. Directed applications can begin as early as 6 inch cotton. Suprend may be tankmixed with a number of other herbicides for a broader weed control spectrum.

ET. ET is a new herbicide that has been recently introduced to the crop market. Although little research has been conducted with this herbicide, ET is believed to have activity on several broadleaf weed species. ET is a contact herbicide that will injure cotton if applied incorrectly. Therefore, cotton must be at least 18 inches tall with 3 inches of stem bark. The addition of glyphosate or MSMA may be necessary to control certain species and weeds greater than 6 inches will not likely be controlled with ET applications.

Linex. Linex is a herbicide that has similar weed control activity to that of diuron (Direx). However, Linex has less soil residual activity than diuron and thus fewer carry-over concerns to subsequent crops. Linex plus glyphosate can be an excellent combination for broad spectrum weed control. It is important to spray Linex on small weeds and include a non-ionic surfactant.

Along with these new additions to the post-directed market, glyphosate, diuron, Aim, Caparol, Cotoran, Goal, Cobra and MSMA are still labeled for use. Although these new herbicides may have many advantages, it is important to choose a herbicide program that you are comfortable with. If your current program provides good weed control at a low cost, there may be no need to change. However, if you have been unsatisfied with your traditional layby program, these new additions may bring some much needed relief.

JAF

Hairy Indigo an Oldy But Goodie

Hairy indigo (Indigofera hirsuta L.). is a summer annual legume that has been used by Florida Ranchers for many years. It is a true annual that makes seed in the fall and is killed by the first hard frost. If not grazed, plants may reach a height of 4 to 7 feet. Widely spaced plants may branch to fill in spaces up to 5 feet in diameter. The stems become very woody as the plant matures. Stems and leaves are covered with short, bristle-like hairs. There have been reports that these hairs have caused irritation of the grazing animal's skin when the animals were grazing for extended periods of time and when heavy dews were present. Hairy indigo produces 30 to 70 percent hard seed. These seed may drop to the ground, but do not germinate during the year they are produced. They will germinate in future years when dormancy is broken, thus insuring a good volunteer stand. For this reason some vegetable and most agronomic row crop growers consider hairy indigo a weed! Hairy indigo is adapted to high dry upland sands, but will also grow on well drained flatwoods.

The leaves of hairy indigo are very high in protein and are highly digestible. Animals may take one or two days to learn to eat hairy indigo. In a creep grazing study calves learned to eat hairy indigo and gained 1.80 pounds per day where as on the control treatment (bahiagrass alone) they gained 1.50 pounds per day. Some producers stockpile hairy indigo for use in the fall. Cows will lick the leaves off the plants leaving the course woody stems.

"Production Recommendations for Florida"

- 1. Plant on well-drained soils between March 15 and June 15.
- 2. Graze grass as close as possible (less than 3 inches) if planting in perennial grass sod.

- 3. Drill in 5 to 10 pounds of seed per acre or broadcast 10 to 15 pounds per acre with a prepared seedbed and 15 pounds per acre, broadcast in established pasture. Plant seed no more than ½ inch deep.
- 4. Fertilizer application should be based on soil tests, the producer's knowledge of his field and pasture fertility, and his production objectives. No nitrogen should be applied.
- 5. Lime to a target pH of 6.0.
- 6. Graze when the crop reaches 12 to 18 inches in height.
- 7. Cut for hay when the crop is 2 feet to 3 feet in height, leaving a 3-inch stubble.
- 8. Practice rotational grazing.
- 9. If you wish to obtain a harvestable seed crop, remove the cattle two weeks prior to flower initiation."

(Source Circular S-318, "Hairy Indigo a Summer Legume for Florida" by D. D. Baltensperger and others)

CGC

Hay and Pasture Insects

Be on the look out for fall armyworms and grass loopers. Fertilized pastures and hay fields seem to attract the fall armyworm moth. They especially like bermudagrass. Populations reach a peak in late July, August and September. A large congregation of cattle egrets in a field fertilized for fall hay production may indicate an infestation of fall armyworms.

Spittlebugs build up in fields where grass has been allowed to accumulate throughout the summer. Circular spots where the grass is dying back indicates spittlebug damage. Fields with a severe spittlebug infestation should be grazed or harvested for hay or silage. This will open the field up and allow sunlight to desiccate the young nymphs. If the adults are emerging or have emerged at the time when the field is harvested, then they can be killed with an application of insecticide. Burning of fields in the winter helps in spittlebug control.

Susceptible plants include digitgrass (Pangola), limpograsses, and bermudagrasses. Chinch bugs have been a problem on Callide Rhodesgrass. Chinch bug damage usually occurs on the higher, dryer ground. Populations should diminish in September.

CGC

Mowing Pastures

Late July - early August may be a good time to mow pastures. Usually by this time, dogfennels are large but have not made seed. Mowing them at this time may reduce their regrowth. Also, pastures will have been spot grazed and mowing the tops off of accumulated bahiagrass will allow new growth to develop that will be more palatable and nutritious. For the commercial cattle operation, mowing should be avoided if possible for economic reasons. In some situations, use of a herbicide for weed control may be called for.

CGC

Summer Annual Grasses/Grazing Management

Pearlmillet and the sorghum x sudangrass hybrids can add quantity and quality to a summer forage program. These crops, when planted on well drained, fertile soils and with proper fertilization and management, can furnish grazing for 2 or more cows per acre from June into September. Forage quality declines rapidly as plants mature so grazing management should be designed to keep the plants in a young vegetative state. Rotational grazing can be used with either grass. Allow the plants to grow to a height of 25 to 30 inches and then graze down to 6 to 8 inches. Continuous grazing can be used on pearl millet, if the stocking rate can be adjusted to keep the forage at 10 to 12 inches. Close continuous grazing reduces the stand and lowers subsequent production. The sorghum x sudangrass hybrids

should not be grazed continuously because of the danger of prussic acid poisoning when young forage is consumed. This crop should not be grazed before plants reach 30 inches.

CGC

Vegetative Propagation of Forage Grasses

In order to obtain good stands, Coastal bermudagrass, Tifton 85, stargrasses, and other vegetatively propagated grasses require special attention. When preparing a seedbed, two factors are important: 1) dug sprigs or tops should be planted in moist soil and 2) the seedbed should be free of weeds.

There are four common reasons for stand failures: 1) planting in fields that have stands of other grasses (common bermudagrass), 2) using dried out sprigs or tops, 3) prolonged drought after planting, and 4) grazing before the grass is established. The planting material should be planted on a clean, moist seedbed that is free of other growing grasses. When planting tops, use

mature grass 8 to 10 weeks old. Use fresh planting material with at least three nodes or joints. Plant sprigs or tops the same day they are harvested. Cover the planting material immediately or within 15 minutes after dropping on the soil surface. Experience has shown that bermudagrass tops will dry out quicker than bermudagrass sprigs and quicker than tops of Pangola digitgrass. Packing or firming the soil around the planting material after it has been distributed and covered is very critical in maintaining adequate soil moisture in the soil surface and thus preventing the planting material from drying out and dying. Grass planted in the summer usually requires 90 days or more before it is established well enough for any type of harvest to be taken. If less than 100% stand establishment has occurred, caution should be exercised during the first year after planting to allow for complete stand development. In north Florida, try to complete summer plantings by August 15.

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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