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Cotton Varieties Sold Under Different Trade Names

As new technology comes on the market, there are several companies that do not have breeding programs, or the rights to a given technology, and will purchase varieties to sell under their trade name. Here are some from different varieties that I have been made aware of that are the same variety sold under different trade names: 450001G is the variety and will be sold as DG 2520 B2RF, CG 4020 B2RF, ST 4357 B2RF, BW 4630 B2F, Americot 1532 B2RF, and MCS 423 B2RF. 370001G variety will be sold as DG 2100 B2RF, CG 3020 B2RF, BW 3255 B2RF, and Americot 1504 B2RF. 530001G variety will be sold as CG 3520 B2RF and ST 4700 B2RF. 010001G will be sold as DG 2215 B2RF, NG 3273 B2F, and BW 4021 B2RF. 170001G variety will be sold as ST 5007 B2RF. The variety has to be on the bag so you can compare if you are buying seed from several companies. ST is Stoneville, CG is Croplan Genetics, DG is Dynagro, and BW is Beltwide Cotton Genetics.

David Wright

Time of Kill for Bahiagrass Influences Nitrogen Needs of Following Crops and Decomposition of Plant Residues

As a general rule, organic materials with a high C:N ratio (greater than 30) will immobilize soil nitrogen and slow the decomposition process. Due to a high C:N ration, bahiagrass decomposes very slowly. Therefore, recent research has shown that crop yields are higher and less nitrogen is needed on subsequent crops if bahia is killed in the fall vs. the spring. The extra 3-4 months over winter period allows the bahiagrass to go through decomposition and narrow the C:N ratio. The C:N ratio may be closer to 10-12:1 in the spring if bahia is fall killed vs. the higher C:N ratio if killed in the spring. Yields of crops after spring killed bahiagrass have been increased to the level of fall killing if an additional 40-60 lbs N/A is applied to increase decomposition. However, this is an extra expense and effort should be made to kill bahiagrass in the fall if at all possible. It should also be noted that bahiagrass is easier to kill in the fall as compared to the spring.

Bahiagrass has also been shown to leave channels through the soil profile which increases water infiltration and soil moisture. This results in cooler and more moist soils that retain a higher level of organic matter in equilibrium with its environment.

David Wright

Peanut Seed Availability

It is important to relate to your seed suppliers what variety of peanut you would like to plant next year. There have been many comments that AP3 and C99R were in short supply this season. These varieties have performed very well where TSWV has been a problem and rank near the top of most trials in the SE. Although many of the older varieties of peanuts still produce superior grades, yields have fallen in recent years due to less disease tolerance.

Georgia Green still maintains its dominance on the seed supply and will be the most commonly planted variety again this season. However, more seed of the newer varieties should be available next year. If possible, get a few bags of a new variety this season to test its fit on your farm.

David Wright
**Drought and Weed Control**

Weed control under dry conditions can be problematic for two reasons. 1. Weed competition is most severe during a drought and, 2. Weeds are less affected by herbicide applications under dry conditions.

*Preemergence herbicides.* Preemergence herbicides require rainfall for incorporation into the soil. Without rain, the herbicide will be less active and will result in more weed escapes. Additionally, many of our soil applied herbicides are degraded by sunlight. So, without incorporation by rainfall, there is less herbicide in the soil and degradation by sunlight is more common.

*Postemergence herbicides.* Postemergence herbicides are also affected by drought. Weeds growing under drought stress are more difficult to control. Under dry conditions, weeds have more wax on their leaf surfaces, which restricts movement of the herbicides into leaf tissue. Additionally, most herbicides need to translocate throughout the plant to achieve a complete kill. A drought-stressed plant is growing very slowly and herbicide movement within the plant is greatly reduced. This means that less herbicide enters drought-stressed plants and what does enter is poorly translocated. Together, these factors lead to poor control.

For postemergence applications, the addition of the proper adjuvant can improve weed control operations under dry conditions. Some herbicide labels specifically list which adjuvant should be used under such conditions. In any case, it is best to be familiar with the label to optimize herbicide activity under any environmental condition.

If weeds are actively growing, herbicide applications can be highly effective. However, if weeds are wilting during the day and recovering over the night, an herbicide application should be delayed until rainfall has been received and weeds resume active growth.

Brent Sellers

**Early-Season Weed Control**

In the last 20 years, herbicide technology has come a long way. We have transgenic crops and herbicides that allow us unprecedented levels of weed control. But, the effect of early-season weeds is still as important as ever.

With the development of glyphosate resistant crops approximately 10 years ago, there has been a gradual decline in the use of soil-applied herbicides. Additionally, many producers are delaying their first glyphosate application hoping to control more weeds with a single application. However, these practices allow weed competition during the “critical period” for the crop and can dramatically reduce crop yield. Weed competition during the first 6 weeks after crop emergence is the most critical to final yield. Late-season weeds can make a field look bad and complicate harvest, but these late weeds rarely impact crop yield.

As a rule of thumb, if your crop does not remain clean until July 4th, you will loose yield. Therefore, using a preemergence herbicide and properly timing the first postemergence application is the key to improving crop yield.

Jason Ferrell
Nitrogen Prices and Use of Legumes

For years commercial nitrogen prices were relatively cheap and many growers stopped using legumes and manure to supplying nitrogen to subsequent crops. However, this is changing since higher energy cost has led to an increase in the cost of nitrogen fertilizers. Growers need to carefully consider legume crops that can be used during the off season or cash crops that can supply nitrogen. Crops that fix nitrogen and have been widely used in Florida as a cash or cover crop are: red clover-110 lbs N/A, white clover-100 lbs N/A, cowpeas- 90 lbs N/A, vetch- 80 lbs N/A, soybeans- 60 lbs N/A, peanuts- 40 lbs N/A, and green beans- 40 lbs N/A. The actual amount fixed will depend on environmental and soil conditions and length of growing season. Soybeans, green beans and field peas can be planted late in the season (August-September) and frost may kill them or they may be harvested for grain if planted early enough. Clovers and vetch can be planted in the fall after harvest of most crops and used for cover crops or grazing.

David Wright

Soil Nitrogen Availability in Relation to Management

Fertilizer costs have escalated over the last few years. This has resulted in growers looking for ways to more efficiently utilize applications. The graph below shows the difference in the amount of nitrate nitrogen available in the top foot of soil by applying the same amount of nitrogen in 3 applications vs. 2. Multiple applications can maintain about 50% more available nitrogen in the top 12” of soil. Split applications of fertilizer and timing of amounts according to plant needs are good ways of ensuring proper fertility at the proper time. Split application of nitrogen will result in increased efficiency and utilization by plants and result in higher yields with less loss to leaching and runoff.

David Wright

Spring Weather Conditions and Planting Dates for Row Crops

The Southeast Climate Consortium has predicted dry conditions for Florida row crops this spring (www.agclimate.org). However, recent reports suggest that normal weather is returning. To date, conditions have been dry and many growers are waiting on rain to finish tillage and begin planting. Producers who strip tilled or bedded their land early may have enough moisture to plant on time. However, some are still waiting to plant corn. Late planted, non-irrigated corn may do better than early planted corn this season. The recommended planting date for corn is Feb. 15- April 15. Early planted corn often starts silking and tasseling by mid May, which is typically dry. Since summer rains often start by the mid June, May planted corn will likely have moisture prior to tasseling. Although late planted corn often has problems with insects and diseases, selecting transgenic hybrids with the Bt gene and good disease resistance may avoid these problems.
Cotton should be planted in April or early May, if possible. In dry years, cotton seed can lay in the soil and not germinate until rains occur in mid June. Yields are often reduced by this scenario since bolls do not fully mature before frost. Although late-planted cotton grows well and looks good, yield is always reduced. Therefore, cotton should be planted earlier, rather than later, if the chance of any rain arises.

Peanuts are unique since they can be planted deeper than any of the other row crops. Peanut seed will emerge from 2-3 inches, or deeper. However, like other seed that are high in oil content, seed should be planted into moisture for rapid germination. Before tomato spotted wilt (TSWV) virus, peanuts were planted in April. The emergence of this disease has forced later planting such that the recommended date is now May 11-May 25. Peanuts perform well when planted through the first week of June, but will suffer yield loss if planted later than this. Early planted peanuts (any time in April) will likely suffer serious yield loss from TSWV.

Soybeans can be planted from April to late August. However, best yields will be made from May 15- June 15 plantings. Irrigated soybeans can do very well if planted late, even when double cropped behind other crops in June, July, or August. Maturity group (MG) V soybeans are often the best choice when considering our typical summer rainfall patterns. If soybeans are planted in late May or early June, the maturity of the soybeans fall around September 25 for MG V, October 7 for MG VI, October 20 for MG VII, and November 7 for MG VIII soybeans. Since rainfall often cuts off after September 15, MG V soybeans may yield 10-15 bushels per acre more than later group soybeans unless irrigation is used.

Planting date for peanut and cotton is April and May, corn from February until May, and soybeans May and June. This is a short period for most of the crops, and in a dry year, the main cash crop for many Florida growers can suffer greatly if sufficient rainfall does not occur to get the crop up to a good stand during their ideal planting date. Irrigation may pay for most of these crops considering the high price for inputs and land rent.

David Wright

**UF/IFAS Pesticide Information Office Offers On-line Presentations**

A new feature of the Pesticide Information Office website is on-line, interactive presentations available for public viewing. The presentations include voice narration, interactive quizzes, and video footage. At the present time, there are 9 presentations completed and available for public use and comment. Users must have Macromedia Flash Player to run each program; users who do not presently have that system may install it from the Pesticide Information Office site. Each program takes between 30 and 50 minutes to complete, excluding time needed for the interactive quizzes. The following are now offered:

- The Value of Pesticides in Florida
- Understanding Agricultural Pesticide Applicator Licenses under FDACS
- Agricultural Crop Pest Control
- The Worker Protection Standard
- Pesticide Labeling: The Label
Notice of Applications/Posting and Information Display under the WPS
WPS Training: A Worker Protection Standard Training Component
Agricultural Row Crop Pest Control: Application Equipment
Agricultural Application Equipment Calibration

To access the site, go to http://pested.ifas.ufl.edu/pio_presentations.htm.

Fred Fishel

New Publications
SS-AGR-33 2005 Cotton Variety Trials in Florida: Early-Maturing Cultivars
SS-AGR-34 2005 Cotton Variety Trials in Florida: Mid- and Late-Maturing Cultivars

Updated Publications
SS-AGR-71 Forage Grasses for Florida's Organic Soils

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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