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*Alabama Cotton Crop Status: D. Monks, Extension Agronomist

As of this article (Friday, May 11, 2007), cotton acreage planted is well behind the 5-year average and soil moisture conditions in much of Alabama could best be described as dismal.


The drought in 2006 was a major blow to most of our row crop industry and we are still hoping for a better 2007. In our area of central and south Alabama, the AWIS has us over 4 inches behind in rainfall for April when compared to the long-term average. It’s hard to believe, but we are also behind in rainfall for this year compared to our status at this time in 2006. Most of the producers that I have talked with have indicated that corn is holding on and some even looks pretty good in the SW part of the state. However, we are getting closer to tasseling and silking time and most of what I have seen isn’t ready for that.

The question at this point is “what do I do about planting cotton?” The way I see it, there are three options: 1- Plant to moisture; 2- Dust it in; 3- Wait for rain. The first option can be pretty “iffy” if the seeds are planted deep and then we get rain. With our low organic matter soils and the crusting that often occurs after a rain, you can bury seed so deep that they will never come up. As far as dusting seed in, a lot of our producers are doing this and may very well be successful with it.
There are a couple things to be aware of if you choose this route. First, planting deep enough to get to marginal moisture can result in the seed swelling and ultimately dying. Be sure that the seed is truly “dusted in”. The second thing that can occur when seed are dusted in is that we may get just enough rainfall to germinate the seed on top of a dry layer of soil. In this situation, the radical may encounter a dry soil layer underneath the seed and still die. Most of the producers in the driest areas are simply waiting for rain. This seems like the best option at this point since it reduces risk all the way around. There is still time to plant without putting all that investment at risk. Recheck your crop insurance specifications as to how it addresses “prevented planting” during times of drought. I hope we get rain soon so you can have a successful year. Last year’s crop showed us that cotton can be very resilient when given half a chance.

If there is anything that our regional or county agents and specialists can help you with this growing season, regardless of the crop, please call upon us.

*Southeast Alabama Cotton Update: W. Birdsong, Regional Cotton Specialist

**Planting:** Planting has basically stopped in S. E. Alabama except for a few growers who are "dusting in" cotton seed. I would estimate that we are at around 70 percent planted. There are many producers who hooked the strip till up to the planter to have a "one pass" operation. Many of these producers have stopped planting due to the fact that the sub soil shank is pulling up too many large clods. This is the biggest disadvantage to being hooked up in a one pass system. The option of dusting in seeds is not available with this system, whereas if the rows had been laid earlier when moisture was available, the cotton could be planted into dry soil awaiting a rain. If planted into dry soil there is always the risk of only getting a shower to ruin the seed. If planting into dry soil I would recommend planting at depth of 1/2 to 3/4 of an inch in depth. This would allow for the upper 3/4 of an inch to dry out and the seed to still be into moisture - hopefully. Always be aware that a compacting rain might require a rotary hoe to assist with emergence.

**Insects:** Other than a few isolated incidences of sprays for grasshoppers, there have been no foliar sprays for any pest in cotton. With the very dry conditions and the vegetation drying down, I would expect thrips to be in high numbers in the coming weeks.

**Weather:** S.E. Alabama has been the oasis for rainfall this spring in four southeastern states and we are dry. I feel that the weather patterns will change around the middle to end of the month and we can get back into a more regular
rainfall pattern. I have never seen two extensive droughts back to back and I do not expect one this year; at least, I am hopeful that I will have never experience such.

*Insect Situation Report: R. Smith, Extension Entomologist*

The drying down of wild host plants, wheat, etc has forced high numbers of thrips to search for succulent vegetation. Seedling cotton plants offer an attractive place for migrating thrips to feed. As a result, cotton in the 1-5 true leaf stage is currently incurring heavy thrips pressure and damage. All at-planting treatments for thrips could profit from a foliar spray. The most susceptible stage of cotton for thrips injury is the early true leaf (1-4 true leaves) stage.

Grasshoppers are abundant in many fields statewide. Cotton in these fields are at risk to grasshopper feeding from the “crook” stage, as it emerges, up to about the 5th true leaf. Most fields now have a mixture of immature (jump but do not fly) and adult (jump and fly) grasshoppers. Adults are much more difficult to control and high label rates of all insecticide choices will be necessary for affective controls. About 80% control of adults may be about the best we can do. Pyrethroids, phosphate insecticides and IGR’s such as Dimilin or Diamond may be used. Growers will just have to make a judgment call on spray decisions depending on the number of grasshoppers present, stage of cotton and the level of risk they can accept.

We can now add one additional insect to our list of early season pests of cotton. Burrower bugs, an occasional economic insect of peanuts have been reported damaging stands in cotton planted behind 2006 peanuts. Burrower bug adults feed on the stems of seedling cotton below the soil line causing plants to wilt and die. These insects are black in color with some white on their posterior end. They are about one-fourth the size of a brown stink bug and are always found under the soil. Hopefully damage will be minimal and isolated since controls would be difficult.

* Postemergence Treatments in Dry Weather: M. Patterson, Ext. Weed Sci.*

Systemic foliar herbicides like glyphosate (Roundup, etc.), Staple, Envoke, Poast, Fusilade, Select and Assure need to get into the weed or grass leaves in order to be effective. Some herbicide formulations contain adjuvants (surfactants, penetrants, etc.) in the jug with the active ingredient to aid this process. Surfactants (surface active agents) have been described as materials that make “water wetter”. Penetrants like crop oil concentrates help break down the leaf cuticle to hopefully get the active herbicide into the living plant tissue. In dry conditions like we are currently having in Alabama and much of the
Southeast, the leaf cuticle is tough and harder for the postemergence herbicide to get through than it would be under more normal, wetter growing conditions. Under these conditions it is especially important to have a good quality (greater than 80 percent active) surfactant in the spray mix. Several formulations of glyphosate like Roundup Original or Weather Max and Touchdown Total have excellent adjuvants in the jug. Some generic formulations of glyphosate may or may not have good quality surfactants in the jug. Ask the distributor you are buying glyphosate from if the material he/she sells you has a good surfactant in sufficient quantity in the jug to work optimally in dry weather conditions. If not then buy a good quality non-ionic surfactant to add in the tank. Crop oil concentrates are not recommended for use with glyphosate.

Don’t expect foliar herbicides to work as well in drought conditions as they do in normal, wetter conditions. That said, we still often need to spray weeds that are under drought stress. Most of the time, waiting for a rain is not the best course of action. Roundup Ready cotton should be sprayed prior to the fifth leaf stage according to the label. I have seen years in which rainfall has kept sprayers out of the field for a couple of weeks. By this time the weeds have grown larger and the cotton may be past the five leaf stage. This doesn’t apply to RR Flex varieties that may be sprayed through blooming. So, if you need to apply glyphosate in drought, go ahead, just make sure the formulation you use has a good quality surfactant at the proper rate (one quarter to one half percent on a volume basis or 1 to 2 quarts per 100 gallons of spray mix). P. S. -- A new formulation of Select herbicide called Select Max is being marketed this year that allows the use of a nonionic surfactant in place of the crop oil concentrate that was previously needed with Select. The rate is 24 instead of 16 fl oz. but I have been told the cost is apparently the same.

*Market Report: B. Goodman, Extension Economist*

While corn shows remarkable resiliency and soybeans remain in the $7.80 range, the cotton market continues to slide lower. December futures have touched 52 cents. I have to say there seems to be good support there for the time being, but it may be just a bounce. There are a lot of negatives, and I hate to be negative but here is the bad news:

**Carryover:** We are staring a 10 million bale carryover in the face. We cannot possibly export enough cotton this year to avoid this catastrophe. This is a direct result of the death of the US textile industry and the end of Step 2. I hope somebody is doing a study on how much more the government is paying to store all this cotton than they would have paid to get it sold and out of here. In my opinion, the loss of step 2 is just another example of what can happen if you mess around with something that is working pretty well. If it ain’t broke, don’t fix it. And even if something is broken, you ought to only let folks who know what
they are doing work on it. Sometimes people who think they know how to fix something end up doing a lot more harm than good. I don’t want to name names, but his initials are Mike Johanns.

**Loan Forfeiture:** The experts say that we may see up to two million bales forfeited in the loan. That amount of cotton being marketed by the CCC would definitely put a lid on cotton price. It’s just another example of how the fundamentals of supply and demand are working against us.

**Certificated Stocks:** The consensus is that the futures market may be the best place for some of this cotton. There are around three quarters of a million bales of “certificated stocks”. That means that someone can actually deliver them on a futures contract if they choose. The bad news is that hardly anybody who is short on the futures market, especially some fund speculator, wants any cotton. They just want to trade it, not own the physical commodity itself. So, when faced with the idea that somebody might actually deliver cotton, they tend to sell their contract. Too many sellers and not enough buyers and what happens? Price falls.

**Stronger U.S. Dollar:** In the past year or so, the dollar has gained 10% or so against the yen. Whatever they use for money in China has lost value against the dollar so they have to pay relatively more for our cotton. The index of the value of the US dollar has been pretty stable on the whole since the beginning of the year. In fact, the value dollar has actually declined a little bit since January. But if you just take the countries we sell cotton to, it has gained in value, making our cotton more expensive. The dollar is up over 8% in India and over 5% in Turkey. The dollar is up 2.3% in China, 5.7% in Brazil, and 1.3% in Mexico. This increased in the value of the dollar is like the double whammy on our exports when combined with the loss of step 2.

**World Production and Foreign Subsidies:** India and China have adopted transgenics and their production of cotton is going to increase at a substantially higher rate than previously. India is expected to surpass the US as the second leading producer of cotton perhaps this year. China is paying farmers to plant “improved varieties” and they expect over 30 million bales again this year on a smaller acreage. For good or ill, we are firmly established on the “technology treadmill”. Right now it looks as if other countries are closing the gap. Just to survive we have to have access to new technology to enable us to compete as low-cost producers. That technology has not appeared to date. Declining profit margins make the R&D expenses that technological advanced require less attractive. It would be interesting to see what happens after the D&PL acquisition by Monsanto, but I’m not sure we have enough time.

**Farm Bill:** What I think is happening on the Farm Bill is that cotton is suffering from an excessive attention to “energy crops”. Typically short sighted and excitable, our legislators have decided to pander to proponents of the latest hot
topic of the day. Now that the US textile industry is dying, nobody wants to
discuss saving the cotton farmer. We will see what the future holds, but I hope
we can find somebody accountable when the impacts of this new farm bill,
whatever it turns out to be, hit the country. But don’t count on it.

**Market Fundamentals:** On the plus side, demand is forecast to outstrip
production by about 8 million bales this year, and perhaps even more next year.
Grain and oilseed prices remain high, tempting farmers to plant more of those
profitable crops and reduce cotton in the US and abroad. Long-term, I think the
cotton industry will survive. How, I don’t know. The new USDA supply and
demand report comes out on Friday May 11. Maybe it will give us some hope.

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*So Why Did Monsanto Really Buy Delta and Pine Land?*

*Bob Goodman, Extension Economist*

I read in the Farm Press where they are still talking about the Monsanto
purchase of D&PL. Nobody I know knows for sure why they are buying D&PL,
but I have been thinking about it, admittedly a dangerous thing to do with the
crude tools I have at my disposal. I will admit to seeing some advantages for
Monsanto, but the thing I could never understand is why they would be willing to
pay so much for Delta and Pine Land. (I also don’t understand how Delta and
Pine Land knew Monsanto would be willing to pay so much, but that is another
story.) After all, the RR tech fees that D&PL collect and already send on to
Monsanto are over $30 per acre. That works out to something like $150-180
million a year. The Bt tech fees probably adds $30 or $40 million, so Monsanto is
already getting somewhere around $200 million a year from D&PL already. What
would they be getting in addition by buying the company except a lot of debt?

If you capitalize the D&PL’s purchase price of $1.5 billion at 10% interest it works
out to a $150 million per year interest expense. Since that’s probably pretty
close to what they are getting now in royalties I guess you could say the royalties
are making the payment for buying D&PL. But D&PL has reported gross profit
much less than $150 million the last 6 years. Why would Monsanto spend way
over $150 million a year for a company with a gross profit in 2006 of 142 million?
Of course, at $142 million gross profit on a 50% market share D&PL’s profit per
bag is huge, but the cotton seed market is mature and may even be shrinking.
Obviously, we must not know the whole story.

It has been said that the reason was that D&PL was about to start using other
people’s genes in their flagship varieties and Monsanto wanted to put a stop to it.
DuPont’s GAT technology was licensed to D&PL last year and could have been
offered in some flagship varieties sometime in the future. So there may be some
truth to this argument, but that would only guarantee the status-quo and assumes
D&PL is able to maintain market share under Monsanto’s ownership. While
D&PL is a profitable company, and profits have been rising by $8-9 million annually over the past few years, it could take a long time for that $1.6 billion to pay out. In fact, even assuming D&PL profits keep going up as they have it would take 10-12 years before that $1.6 billion even shows a positive internal rate of return.

Now from a farmer’s point of view it may be that by including a RR gene and a Bt gene in their seed, and pricing it all in the bag, D&PL has been able to charge a lot more for a bag of cotton seed than they could just a few years ago. If you assume that the cost of producing a bag of seed hasn’t really doubled in the past decade, you reach the conclusion that a seed company like D&PL might be able to charge what farmers are really willing to pay for RR seed, not just the $30 or so per acre they say they are charging.

Suppose the real RR tech fee, the amount farmers are really willing to pay for herbicide resistance, is much higher – say $50-$55 per acre and that the germplasm still costs about what it always did; $40-$50 a bag. Buying D&PL would mean that Monsanto could be sure the profit on the stacked varieties, about $200 per bag, not less than $50, would keep coming their way. Do the math on that with D&PL’s market share and you get an annual cash flow of around $280 million. Subtract the $150 million annualized acquisition cost and you net a $130 million annual profit. When the Flex and Bt2 varieties hit the mainstream, these profits would increase even more, possibly 40-50%. They could also rise more if D&PL’s market share were to increase. Interestingly, that $150 million in profit calculated above is real close to what D&PL reported for 2006.

Why would D&PL try to disguise a seed cost increase as a tech fee? One possible reason is to keep farmers from demanding conventional seed. If the choice is between conventional at $110 per bag and RR at $260, more farmers are going to go transgenic. If the choice is between conventional at $50 and RR at $260, who knows what might happen. In fact, there are some farmers here in Alabama saving conventional seed (legally) and their seed cost is still under $20 per bag.

So that’s why Monsanto bought D&PL, and that’s why they paid so much. Not only did they insure that they continue to have a channel to get their genes on the market, by owning D&PL they capture all the value of the genes they were just licensing to D&PL. The tech fee is $30-$40, but the value of the gene to the farmer, thus the ultimate price of the “package” seems to be double that at least. Thus, Monsanto watched D&PL gross profits more than double in just a few years of transgenic era sales and felt they were being left out in the cold. Monsanto obviously sees continued profitability in the cotton seed business, just as when hybrids hit the corn market a generation ago. They don’t have to compete with other gene companies to get their genes in elite varieties, and they don’t have to share the profits with anyone.
We will see how it all plays out in the statistics on D&PL market share as ‘DP 555’ and ‘DP 444’ are retired and the dogfight for their replacements start next year.

As and aside to all this, let me say that in doing my web-research I found some interesting information. It seems that while farmers in the US are paying just about what the technology is worth for these genes, farmers in other countries are paying much less. In other words, for cotton in the US, taking the variety differences out, the conventional/Bt or RR decisions are just about a tossup when you figure the total cost of worm or weed control. You can do the job with conventional cotton for about the same total (unless we finally have another bad worm year). That doesn’t seem to be the case elsewhere:

“Profits in China for IR cotton were 340 percent of the levels for non-IR (IR=insect resistant) cotton as the 23 percent revenue increase and 67 percent reduction in pesticide costs far offset the almost doubling of seed costs. South Africa showed similar results with profits for IR cotton at 299 percent of the level for non-IR cotton as the 65 percent increase in revenue and 58 percent decline in pesticide costs offset the 89 percent higher seed costs. Profits in India were 69 percent higher for IR cotton as the 33 percent increase in revenue and 41 percent decline in pesticide costs offset the modest 17 percent increase in seed costs. Profits were 31 percent higher in Argentina as the sharply higher seed costs were offset by a 34 percent increase in revenue and a 47 percent decline in pesticide costs. In Mexico the reduction in pesticide costs offset the higher seed costs and resulted in a 12 percent increase in profits.” -The Economics of Biotech Crops in Developing Countries by: Ross Korves, Trade Policy Analyst, Truth about Trade and Technology.

I also discovered a Tennessee study that said farmers were more likely to plant RR cotton after it was introduced than they were before it was available:

“the (table in the article shows that the) probability of adopting herbicide-resistant seed was higher during the 1999-2004 period than in earlier years when it was not available....” (underlining is mine), which only goes to show how hard it is to adopt something that isn’t available.

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*2007 Cotton Calendar.  D. Monks, Extension Specialist*

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<td>June 5</td>
<td>Autauga County Extension Office</td>
<td>Leonard Kuykendall</td>
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<td>8:30 am – 12:30 pm, Autaugaville, AL</td>
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<td>June 6</td>
<td>Wiregrass Research &amp; Extension Center</td>
<td>William Birdsong</td>
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<td>8:30 am – 2:00 pm, Headland, AL</td>
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Use pesticides **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed. Do not use pesticides on plants that are not listed on the label.

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