

AGRICULTURAL UPDATE

July 2006



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THE GOOD, BAD & UGLY

Far too often, we tend to ignore or forget to brag on folks for doing good. Instead, we concentrate on the worst. The next paragraph or so will tackle a bit of what I have observed as “good” to the “ugly”. Hopefully, you will see more of yourself in the “good” category. I’ll aim to continue this part of the newsletter from time to time.

THE GOOD

- Great job to all producers that took the potential threat of Round-up resistant pigweed and horseweed seriously! Virtually all burn down materials included materials other than Round-up (some other chemistry/mode of action or some preemergence material was used) Good job!
- Cutting production cost to make crops more profitable! Many of you discussed with me or your local dealers, ways to reduce broadcast fertilization, apply more accurate herbicide rates, select better varieties, reduce the amount of phosphorous in starters, and simply eliminate non-essential inputs. Way to go!

THE BAD

- Failure to properly clean your tanks! Cool temperatures lead to slow growing and somewhat weaker plants. ANY adverse conditions seemed to aggravate this condition. I have been on numerous visits where the producer was his own worst enemy! Make sure you read and follow the label carefully regarding tank cleaning. A bit of water and ammonia is often all it takes but you must include the hoses, nozzles, strainer and other portions of the tank (even the lid) ! Today’s products can be

very potent - even very low doses.

- Follow the label. It can’t be said enough. Companies and universities conducting research do allow for some margin of error during application, but they also assume you will read and follow directions. For example, adding MSO surfactants or crop oil when the label calls for 8020 surfactant can really mess things up.
- That miracle product that you have been given to “try” may be cheap (or free), but do you really want to risk it? If you feel like you must be on the “cutting edge” then at least limit the acreage of application. Please, please don’t apply it to 100% of your crop! If it does not work or damages the crop, even your insurance might not be so willing to assist! Make sure you stick to proven products! If the products being promoted were actually as good as we are led to believe, then why have we not heard of it before? Where is the data to back up these claims? Has any unbiased source reviewed any data or claims? What is the actual return on your investment? I doubt you can get a good answer to many of these tougher questions. (Note: Part of the value of the North Carolina Cooperative Extension is providing an unbiased testing of many of these products. Check with us before use. You might be surprised to find that it was indeed tested but simply did not work!)

THE UGLY

- Slow growing plants under stress from excessively long cool nights and wet soils simply do not need excessive fertilization. The fertilizer tends to increase soluble salts and decrease the pH around the root zone. This further retards growth by limiting root growth. Thus, we shot ourself in our own foot! The more we applied to get the plants to grow, the more we decreased root growth. Regardless, we seemed determined to “stay on schedule”. Thus we had plants “laid by” that were not even a foot tall! Don’t let the calendar or “the way you’ve always done it” dictate what you should do to any crop. Instead, learn to pay attention to the crop itself and let the growth dictate management.
- A majority of problem samples sent to the NCDA from Craven County came back as low pH. Not just marginal situations but really, really low pH levels. It tells me this. Either we do not take soil samples, we take them but can’t or don’t read/follow them or we’ve cut out the wrong production input!

Regardless of the correct answer this is ugly! It can be corrected easily. Plan to take and follow a soil sample based upon the NCDA's recommendations.

Note: My apology if you saw yourself in one of the "bad or ugly" categories.

BLUE MOLD FOUND IN NC

Blue mold has been confirmed in the western portion of North Carolina in Buncombe County. The field was a burley field, and estimates from specialists place the infection as greater than 10 days old. Thus, be aware of the situation, and monitor the progress at <http://www.ces.ncsu.edu/depts/pp/bluemold/index.php>. This web site also offers excellent control suggestions, links to labels and other pertinent and current information on blue mold.

As you know, plants that have been topped are less susceptible to blue mold. However, the uneven growth and excessive suckers make some fields still at risk. According to research, blue mold may start on suckers or smaller plants and then move into the upper canopy of other plants.

There have been some changes in typical control measures. Acrobat MZ is no longer being manufactured and almost all of it is off the shelves. Acrobat 50 WP is also no longer being manufactured but is still on the shelves. Instead, Forum will replace Acrobat 50 WP. This label requires a tank mix with mancozeb, (the only option on tobacco being Dithane DF rainshield. However, Dithane DF applications can only be made 30 days before harvest. Thus, this is simply not an option for most of us.)

Other products that may fit include the following:

- *Actigard* - can be applied up to 21 days before harvest
- *Acrobat / Forum* - can be applied up to the day of harvest (but must be tank-mixed with another fungicide labeled for blue mold)
- *Aliette* - can be applied up to 3 days before harvest
- *Quadris* can be applied up to 1 day before harvest. Only one application per year is permitted so if Quadris was applied earlier for leaf spot this is probably not a good option.

As stated earlier in this newsletter, read and follow the label should you choose to apply any of these products. The range of volume and rate is tremendous. For example, Acrobat labels suggest 100 GPA and pressures of 100-250 psi for plants about topping size. Actigard does not specify any specific pressure but recommends 20-50 GPA volume. Too, it must be applied at least 3 days prior to any infection to be most effective. Coverage to the upper and bottom leaves is critical for all products.

Should you discover blue mold in your fields, please contact our office. We submit samples of the infected leaves as a routine part of research.

SOYBEAN RUST UPDATE

The closest confirmed field of soybean rust to

us lies approximately 400 miles away. Excessive heat and a lack of northeast or east winds strong enough to deposit the spores in our area are likely to keep us in that trend. However, tropical storms or lows that move up the coast from Florida or Alabama into our area are likely candidates for deposition of spores into our fields. Monitor the progress or threat potential at <http://www.ces.ncsu.edu/depts/pp/soybeanrust/index.php>. This site is updated frequently and provides the projected path of outbreaks. Predictions have been very accurate when conditions favor development.

Keep in mind that under favorable conditions spores can develop rapidly. Once a field has 5% infection, it is basically too late to obtain good results from fungicides. Thus, preventative treatments are necessary.

LEACHING ADJUSTMENTS?

Most of the county has experienced heavy downpours of rain some time shortly after the final nitrogen application. For tobacco, some made adjustments, and others did not based upon the total nitrogen applied, crop stage and soil types. All decisions that I know of were good decisions. However, for cotton, the decision is somewhat more of a challenge.

The best advice I can give is to take a tissue sample of scattered fields on various farms and soil types. Samples should be taken 7-10 days after the storm event to allow the plants time to recover fully from the excessively wet soils.

Normally, it would not be such a critical issue. However, the cotton crop is still somewhat behind. Thus, the time to fully mature this crop will be somewhat shorter. Don't misunderstand, we still have time to set and make an excellent crop. The point is that we should guard against excessive nitrogen rates that promote rank growth. Too, based upon the last several years, our best cotton has been our earlier cotton. Part of this has been due to storms. The other reason, and maybe the primary reason, is that early cotton simply provides the best quality.

Before you simply add additional nitrogen, make sure it is warranted. Secondly, make sure you supply enough. This may mean multiple trips.

COTTON PEST MANAGEMENT

Black light results for Craven County are posted at our web site, <http://craven.ces.ncsu.edu/> or <http://www.ces.ncsu.edu/craven/agriculture/06blacklight.html>. Other black light locations and results can be found at <http://ipm.ncsu.edu/cotton/insectcorner/>

If the season progresses as normal, we should expect an increase some time during July 18th - July 23rd. While most of the cotton is Bt, timely sprays are still critical. Please monitor these light trap catches and intensify your scouting as the bollworm catches begin to increase. If desired, you may also call the Extension Teletip at 1-800-662-7301. Select "4"

to hear Dr. Jack Bachelor's comments regarding pest management. (Note: We will not be sending an additional post card to alert producers of the increase since many acres are already scouted and much is Bt cotton.)

Several points need to be considered regarding pest control for this crop. First, consider bollworm control. The size, maturity and amount of soil moisture varies incredibly from farm to farm. One general recommendation can not be made that will fit all situations. The drought stressed fields at bloom are likely candidates for bollworm egg depositions deep within the plant canopy and on bloom tags. Monitor these fields closely. The bloom and bloom tags offer great shelter for the bollworms. Thus, thresholds are much lower and are likely to be met much more quickly this year. Likewise, the lush, late planted cotton that has adequate moisture is likely to attract a greater number of moths. These fields are likely to have greater egg numbers but deposition on the upper leaves. Lastly, fields at bloom but without a full crop canopy will be targets regardless of soil moisture. Please refer to the suggested economic thresholds listed in the *2006 Cotton Information*. (page 157 for Bt cotton). Remember, for Bt cotton even 1% live worms for three consecutive scoutings warrant treatment.

Another issue that we need to address is stink bugs. Light trap catches are not always a reliable measure of the true threat since stinkbugs are not attracted to these lights. Scouting and monitoring the pest is the only method available. Based upon the number of stinkbugs I've seen in the corn and cotton fields, we need to make sure to address this issue. There has been scattered fields of severe losses over the last few years. Much of it went unnoticed until defoliation and many bolls were hardlocked. Make sure to include this pest when scouting. It is no longer a "secondary" pest. It has become a primary reason for lint loss.

Both the green and brown stinkbug seem to be abundant this year. Unlike other years, we did not have a week or two of bloom prior to the presence of this pest. Thus, damage may be higher. Pyrethroids offer some control of the green stink bug but will not control the brown stinkbug. According to the *2006 NC Agricultural Chemicals Manual*, Orthene, Bidrin, Vydate and PennCap-M (methyl parathion) are labeled for control of stinkbugs. While we may not be accustomed to adding these products to pyrethroid applications, it may be warranted. Based upon recent research, even 1-2% stinkbug damage could result in losses that greatly exceed the cost of treatment.

Lastly, aphids and spider mites have been a sporadic pest. Both can build up to tremendous levels if left unchecked. Fortunately control is often obtained from weather (wet weather greatly hinders spider mites), fungus and beneficial insects. Chemical controls offer some control, but populations can rebound relatively quickly. Generally, natural control is preferred. However, examine the crop stage and be a bit more aggressive for the fields that are further behind than normal. Delays in blooming at this point may also delay crop maturity.

WHEAT VARIETY SELECTION

It may seem strange to mention wheat at this time of the year. However, the current prices are higher than normal and many of you have booked wheat at these higher prices. If so, don't wait to order seed. Help your dealer and yourself by examining the yield results and disease resistance that fits your needs. Ordering now can ensure that you get the best variety and probably a better price. An overview of varietal performance and disease resistance is provided in this mailing.

COMMUNITY SUPPORTED AGRICULTURE

We can grow many commodities in Eastern North Carolina. Finding a market at a profitable price is more difficult! One means of getting your product to consumers is through what is called community supported agriculture. Simply put, individuals agree to purchase some agreed upon amount of fresh fruits and vegetables and an individual producer or group of individuals agree to grow for this purpose. Delivery points are set up for weekly sales and can be the producers farm or some agreed upon location. Typically, producers have targeted local business as drop off or sales points. The NCDA has also set up such a program for delivery to points in Raleigh. This ensures that what you grow has a market and a price that will afford you a profit.

Craven County has grown to a point where we are beginning to receive calls from consumers desiring a reliable supply of fresh fruits and vegetables. Many of you have examined the possibility of fruits and vegetables but don't like the unreliable pricing of fresh markets. This type of marketing system may be a feasible option if you would like to diversify production. If so, please contact our office. This is a project that may be easily accomplished, but plans must be in place soon if a fall crop is desired.

MOBILE PHONE USAGE

As many of you are aware, Craven County supports the operation cost of our office. The North Carolina Cooperative Extension across the state is a true cooperative receiving financial support from federal, state and local government. In my case, Craven has agreed to supply me with a mobile phone. The intended use is simply for emergencies or contacts to set up an appointment. As such, the amount of minutes is extremely limited. It was recently pointed out that two individuals in our office consumed almost 7% of the entire county cell phone allotment during May. (And yes, I was one of them). In order for me to maintain the privilege of having a phone, please keep this in mind before automatically calling my mobile. I will not be allowed to continue such usage without penalty.

ON-FARM TEST STIES

As always, producers have willingly cooperated with us to conduct on-farm tests and demonstrations. Following are brief descriptions and location of sites within Craven. If you would like additional information, please contact our office.

- **Phosphorous Index & Starters:** These sties include soils that have a high phosphorous index (80 or above). Plots include crops where a starter fertilizer with nitrogen only is compared to one that contains both nitrogen and phosphorous. This is part of a two year, statewide research. Present data shows that yield has not been significantly different when using nitrogen alone verses nitrogen and phosphorous on these soils with high phosphorous. Cooperating this year are Wetherington Farms in Cove City (Jason & Gary Wetherington) and Perry Gaskins of Vanceboro.
- **Soybean Fungicide Trial:** This test includes three different maturity groups and a range of fungicides products to determine the feasibility and efficacy of fungicide applications to soybeans. It will double as a soybean rust management plot should soybean rust appear in this area. Cooperating with this test is Randy Register of Cove City.
- **Soybean Response to Small Grains:** This test includes wheat and triticale varieties to determine if a late planted soybean yield response is evident among the different variates of small grain.

Cooperating with this test is TRC Farms (Timmy Cox) of Cove City.

- **Black Shank Disease Survey:** This survey involves samples from across the state from tobacco fields. The survey and testing aims to evaluate if any specific Black Shank Race is dominant across the state and, if so, whether soil type , production history or other factors tend to favor certain races. Cooperating with this test is Dale Eborn of New Bern and Mills & French Farms (Danny & Joe French) of Vanceboro.
- **Cotton Defoliation Test:** This site will use various defoliation materials treated at two different dates. The purpose is to afford you the opportunity to see which products perform well given local conditions and evaluate timing of application. No cooperator has been selected yet. (To be honest, I'd prefer to be in the Cove City/Ft. Barnwell area since the last test was in Vanceboro. If you'd like to volunteer, contact me.)

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