2005 Duplin County Contest Winners

2005 Duplin County Corn Contest winners were recognized at the March 9 Duplin County Agribusiness Council Annual Membership Meeting. Duplin County Extension, Murphy-Brown, and Nash Johnson & Sons sponsor the annual contest.

The third place winner was Greg Bradshaw of Faison with a yield of 184.45 bushels/acre. Greg’s winning entry was non-irrigated and no-till. He planted Pioneer 31G98 at a final plant population of 26,000 plants/acre in 38 inch rows. Greg received a plaque and a $50 check.

The second place winner was Vic Swinson of Beautancus with a yield of 188.77 bushels/acre. Vic's winning entry was non-irrigated and strip-till. He planted DeKalb C69-71 at a final plant population of 28,000 plants/acre in 38 inch rows. Vic received a plaque and a $100 check.

The first place winner was Dail Brothers of Kenansville with a yield of 250.01 bushels/acre. Henry and Edward's winning entry was irrigated and conventional till. They planted Pioneer 31N28 at a final plant population of 38,000 plants/acre in 30 inch rows. Dail Brothers received a plaque and a $200 check. This entry also received second place recognition in the NC Corn Yield Contest irrigated division. This entry also received NC first place recognition in the National Corn Yield Contest irrigated class.

Congratulations to our winners!

Lifelines To Profit Opportunity

At the January 24 Duplin/Sampson Counties Corn/Soybean Meeting, Dr. Ron Heiniger, NCSU Extension Corn Specialist, highlighted 4 lifelines to profit opportunity for corn. While the corn planters are already rolling, a review is appropriate.

Lifeline 1 is proper hybrid selection. Standability, stress tolerance, and yield are the keys for a high yielding NC corn variety.

Lifeline 2 is strong plant population. Higher plant populations promote high yield without the risk of crop failure in dry weather. Do not exceed 34,000 seeds per acre.

Lifeline 3 is proper root development. Is your soil pH at the proper level? Is your soil potash level adequate? Are you using a 2X2 placement 1:1:0 ratio starter fertilizer?

Lifeline 4 is proper plant-to-plant spacing. Is your planter properly maintained and adjusted? Is your planter operated at the proper speed based on the terrain and the manufacturer's recommendation?
New Admire Formulation

A new Admire formulation is available this year. Admire 2F is being replaced by Admire Pro. Admire Pro greenhouse tray drench rates are: 0.5 ounce/1000 plants for aphids and flea beetles, 0.6 ounce/1000 plants for aphids, flea beetles, and wireworms, and 0.8 ounce/1000 plants for aphids, flea beetles, wireworms, and tomato spotted wilt virus suppression.

While rinsing Admire from the plant foliage into the root ball continues to be important, less rinse water will be needed with the new formulation (Admire Pro). An Admire formulation rate conversion chart is shown below.

Tomato Spotted Wilt Virus

Tomato spotted wilt virus was a major topic of discussion at the January 3 Duplin County Tobacco Production Meeting.

Based on the history of tomato spotted wilt virus in Duplin County, a greenhouse tray drench of 1.8 ounces/1000 plants of Admire 2F or 0.8 ounce/1000 plants of Admire Pro is recommended. The Admire greenhouse tray drench should be applied 3-7 days prior to transplanting. Based on NCSU on-farm tests, this treatment offers 40-50% tomato spotted wilt virus suppression.

If you feel 40-50% suppression of tomato spotted wilt virus is not adequate for your farm, please give me a call. We will discuss Actigard as an additional greenhouse tray drench treatment. While this additional treatment increases the chance of early season plant stunting, tomato spotted wilt virus suppression is increased to 65-80%.

Fertilization

Tobacco fertilization was also a major topic at the January 3 Duplin County Tobacco Production Meeting. Since that meeting, I have worked with several growers toward new tobacco fertilizer programs. Most growers have interest in using liquid nitrogen (24S, 25S, or 30%) as their primary nitrogen source.

As Robbie Parker, NCSU Extension Tobacco Specialist, emphasized at the meeting, a fertilization program should provide the right nutrients at the right rate in the right place at the right time.

To develop a profitable, economical, and environmentally sound fertility program, you must begin with a NCDA Soil Test Report. This report provides lime and nutrient recommendations for the specific crop so fertility will not be a yield-limiting factor. This information is essential in developing a tobacco fertilization program that meets crop needs without nutrient overapplication.

For a complete discussion on tobacco fertilization, please refer to 2006 Flue-Cured Tobacco Information pages 70-97. Proper soil pH is the foundation of a fertilization program. The soil target pH for tobacco is 6.0 for mineral soils.
Below are some of the common questions I have been asked concerning new tobacco fertilization programs. Most of the questions relate to the fertilizer that is applied within 7-10 days after transplanting. Traditionally this fertilizer has been referred to as the N-P-K fertilizer. New program fertilizers may or may not include all three; N (nitrogen), P (phosphorus), and K (potassium). Due to this, I will simply refer to this fertilizer as the base fertilizer.

Should I include magnesium in the base fertilizer? What does your soil test report recommend? If a 0 is present as the magnesium recommendation, no additional magnesium is needed.

If a $ is present as the magnesium recommendation, soil magnesium levels are low. If lime is also recommended, use dolemitic lime. To be legally sold as dolemitic lime, it must contain at least 6% magnesium (120 pounds/ton). Dolemitic lime is the most economical source of magnesium. If lime is not recommended, add 20 pounds/acre of magnesium to the base fertilizer.

Should I include sulfur in the base fertilizer? For deep sandy soil fields, 20-30 lbs/acre of sulfur should be added to the base fertilizer.

Is chlorine important in the base fertilizer? Traditional tobacco fertilizers provided chlorine guarantees so adequate (but not excessive) amounts were present. The base fertilizer should provide a maximum of 30 pounds/acre of chlorine. Higher rates will not improve yield but can reduce quality.

Whether a dry or liquid (or combination thereof) nitrogen source is used, no more than 1/2 of the total nitrogen should be applied within 7-10 days after transplanting. Applying total nitrogen at or shortly after transplanting increases the chance of nitrogen leaching prior to crop use. This practice is unwise financially and environmentally.

Barn Testing

Duplin County Extension offers two types of barn testing in 2006. This program is voluntary.

The first type of testing is the gas analyzer. This instrument determines barn burner combustion efficiency. This test will help determine if you are maximizing curing fuel dollars. To participate, a person familiar with barn operation will need to be present. The barn burner serviceperson will also need to be present in the event an adjustment is needed. I will be present to operate the gas analyzer.

The second type of testing is the CO₂ meter. This instrument is used to determine the integrity of the heat exchanger. To participate, a person familiar with barn operation will need to be present. I will be present to operate the CO₂ meter.

Please call if you have interest in barn testing.

SOYBEAN RUST UPDATE

Rust has been found on kudzu in 11 Florida counties, 5 Alabama counties, 1 Texas county, and 4 Georgia counties. The closest site to Duplin County is Brooks County, Georgia, approximately 365 miles away.
The 2006 NC boll weevil assessment fee will be $3.25 per acre. The fee supports NCDA&CS Plant Industry Division's intensive trapping and monitoring program to detect any re-introductions of the boll weevil. A total of 130,945 traps were placed and maintained on 67,315 cotton fields in 53 counties last year.

On May 25, all users of feed and fertilizer can vote to determine if they will continue assessing themselves 3 nickels for each ton of feed and fertilizer they purchase. The funds are used to support agricultural extension, research, and teaching programs in the College of Agriculture and Life Sciences at NCSU. Polls will be open from 8:00 am - 5:00 pm at the following locations: Harvey Fertilizer (Beulaville), Sholar Fertilizer (Pin Hook), Southern States (Wallace), Southern States (Mt. Olive), Dixie (Warsaw), Royster Clark (Pink Hill), and the Duplin County Extension Center.

Please plan to vote!

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