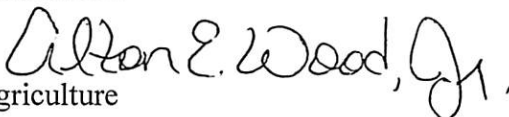


May 29, 2019

To: Pasquotank County Producers

From: Alton E. Wood, Jr. 
Extension Agent, Agriculture
Pasquotank County

Re: Corn: The Current Situation and What to be Thinking About/Watching For
2019 Northeast Ag Expo Corn Variety Trials
Monitoring for Insects in Pasquotank
Something to Think About with Early Planted Early Maturing Soybeans
Results of Non-Foliar & Foliar Yield Enhancement Products in NC Soybeans
2018 Northeast Ag Expo Field Day Test Results
2019 Northeast Ag Expo Hosted by Currituck County
Pasquotank Farm Tour Being Planned
Wheat Meeting Being Planned
Salt Water Intrusion Project Field Day

Corn: The Current Situation and What to be Thinking About/Watching For

Although we had a somewhat late as well as slow start on planting corn, it is looking reasonably good and it is making up for lost growth. We have very good stands with uniform distribution (good singulation of seed) and it generally had uniform emergence (many fields were up in a manner of 2 to no more than 3 days). With all these positive aspects of the crop, is there anything else that we need to look at or consider.

First, be on the watch for stink bugs, especially brown stink bugs in corn. This is a pest that we need to keep on our radar with regards to corn. There are certain hotspots in the region and most growers have an idea where they are. **There have been at least two fields that I am aware of that have been treated for stink bugs in the last 2 weeks.** The two main times we need to be looking at stink bugs in corn is during the seedling stage and just prior to emergence of tassels and silks, when the immature ear can be greatly affected by its probing mouthparts as it feeds. I have given specific information on this in previous newsletters, but this information can also be found with the following link:

<https://corn.ces.ncsu.edu/wp-content/uploads/2019/01/Stink-Bug-Management-in-Corn.pdf?fwd=no>

Second item to consider is fertility. I have seen very few fields that were off color that would indicate that the corn plant was deficient in certain nutrients, but with the weather we had this

past winter and on into spring, there are a couple of nutrients that could be deficient. These nutrients are potassium and sulfur (although there could be others). Sulfur deficiency has been a problem in wheat this spring in certain fields. The reason I say this is that both of these nutrients can be susceptible to leaching, especially on our sandier soils or in areas of fields that some people call sand ridges. With sulfur, we are not getting the free sulfur that we were once getting from combustible engine emissions and some factory smoke stacks. The way to tell that you have a crop nutrient deficiency is to take a tissue sample. If you have questions about how to take it, or would like someone to look at a crop problem, please contact me. The following link will take you to information on tissue sampling:

<http://www.ncagr.gov/agronomi/pdf/2012tissuesamples.pdf>

Third thing to consider is weed control. Important in the management of weeds in any crop is timeliness and the proper selection of chemical. At this time the corn crop looks good and we want to keep it clean, green and growing. There is lots of research that shows delayed weed control can take a big bite from your pocketbook. Not only are larger weeds hard to control, but it takes more to kill them, which means more expense per acre. Also, keep in mind those hard to control weeds that you may have such as glyphosate resistant marehail, palmer, and common ragweed. Make certain that you make the proper selection as well as timing to control them.

2019 Northeast Ag Expo Corn Variety Trials

If it were not for growers in the region assisting with the various on-farm tests and trials that the Extension Centers conduct, it would not be possible for the Extension agents and specialists to generate the data that the agricultural community needs and requests. The Northeast Ag Expo Team planted a corn variety trial in each of the 6 counties that the agents represent. For additional information about brands, number of corn varieties and location of plots, please use the following link: <http://www.ncneagexpo.com/variety-trials> A big thanks is in order for Charles Gray & Sons for cooperating with our corn variety trial in Pasquotank County.

Monitoring for Insects in Pasquotank

The Entomology Department at NC State University has a network of observers located about the state that monitors blacklight traps and records numbers of insects that are of economic importance to crops in the state such as soybean and cotton. **Crabbe Aviation of Elizabeth City has agreed to monitor and report the blacklight trap data so that our growers will have localized information and provide information to the state system.** The insects that will be reported are Corn Earworm, Tobacco Budworm, Brown Stink Bugs, Green Stink Bugs, and Armyworms. Monitoring of these insects will start about June 1st. The link to use to view the information is as follows:

<https://www.ces.ncsu.edu/trap-data/>

Something to Think About with Early Planted Early-Maturing Soybeans (Maturity Group III and IV)

It is well documented that with proper management, early maturity soybean (maturity group IV or earlier) when planted earlier than what we have normally been planting soybean, can provide extraordinarily high yields. We have also had this fact documented in Pasquotank County by some of our growers. Having said that, I feel that it is important to know that this system has its own special demands/issues. One of those is green stem. Growers have been aware for some time that soybeans can stay green longer for a number of reasons including night lights messing with the photoperiod of soybeans, severe defoliation of soybean by foliage feeding insects, and some foliar fungicides. But in the last several years, it has been seen especially with maturity group IV or earlier maturing soybeans, that under a certain set of environmental conditions at a certain stage of growth, that the soybean can have green stem (the stems stay green longer delaying harvest, but not the pods/seeds). I do not know if we know exactly how to handle this situation at this time and additional work on this topic is needed. But there is one issue that we have more control over (unless weather conditions get crazy) and that is seed quality.

One of the tests conducted at the 2018 Northeast Ag Expo field day site was a planting date test. There was one maturity group III and one maturity group IV planted at three planting dates (see table below). Not only yield, but protein, oil, damaged seed, and purple seed stain was measured.

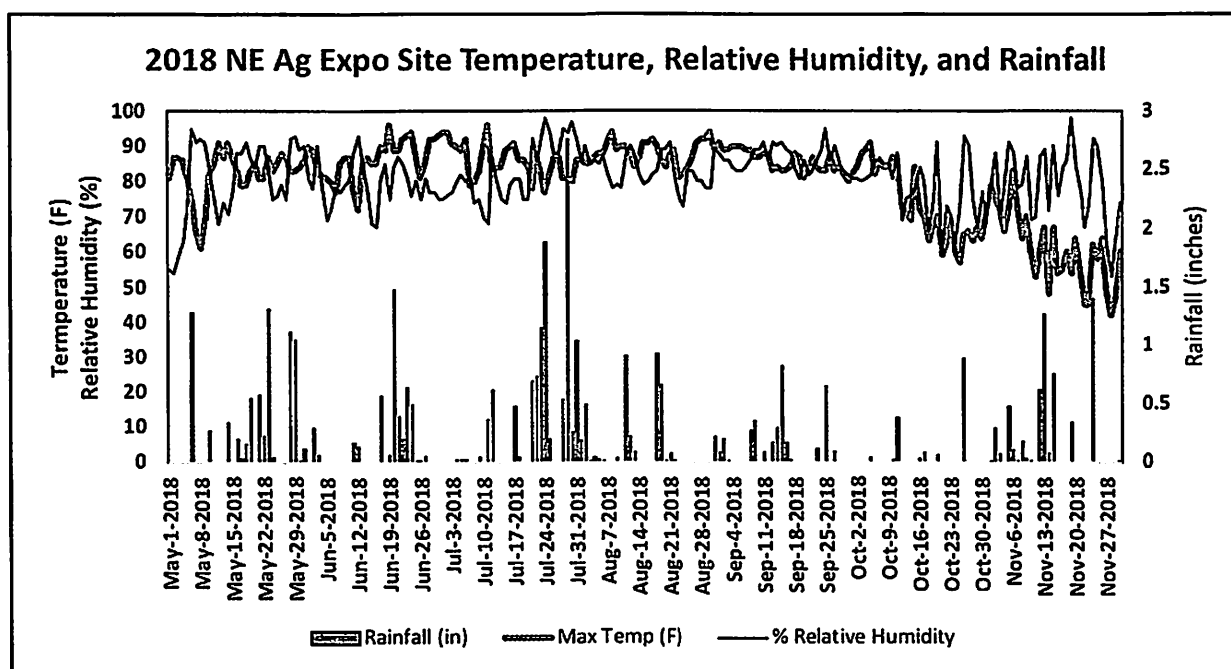
Table 1. Impact of Planting Date in Early Maturing Soybean (MGIII and MGIV) on Yield, Protein, Oil, Damaged Seed, and Purple Seed Stain

Planting Date	Variety	Yield (bu/A)	% Protein	% Oil	% Damage	% Purple Seed Stain
May	P38T42	79.1A	37.1A	22.4A	4.2A	5.9A
June	P38T42	76.0A	34.2B	20.7B	2.5AB	1.6B
July	P38T42	45.0B	32.9C	20.3B	1.8B	0.3B
May	AG48X7	77.7A	36.5A	19.3A	9.0A	4.6A
June	AG48X7	61.8B	36.6A	19.1A	3.7B	0.3B
July	AG48X7	37.2C	36.0A	18.8A	1.4C	0B

With both maturities, planting dates impacted soybean yield. Generally, yield declined as planting date was delayed.

Both seed damage and purple seed stain were impacted by planting date for both maturity groups. The highest percent damage was observed with the earliest planting date; the earlier the planting date, the earlier these soybeans were maturing and therefore environmental conditions (high humidity, higher temperatures: see graph below for weather) were conducive for seed quality to decline. For damaged seed, the May planting date had 2 to 4 times greater damage than the July planting date. Despite more damage at the earlier planting dates, higher yields were achieved which would likely outweigh dockage at the elevator for quality. Similar trends were also seen with purple seed stain for both maturity

groups. Timely harvest at early planting dates is critical with these soybean maturity groups to prevent seed quality declines. Growers that are unable to harvest their early planted, early maturing soybeans in a timely manner, whether it is because they get their crop custom picked or are busy with other farm tasks such as harvesting of corn, may not want to use them due to potential for seed quality declines.



Results of Non-Foliar Yield Enhancement Products in NC Soybeans & Foliar Yield Enhancement Soybean Trials in North Carolina

Dr. Rachel Vann, NC State University Extension Soybean specialist, has recently compiled 2 long term studies initiated by Dr. Jim Dunphy. They are the non-foliar yield enhancement products in NC soybeans & foliar yield enhancement soybean trials in North Carolina. Videos about these studies as well as a more comprehensive summary of these studies can be found at the following link:

<https://soybeans.ces.ncsu.edu/>

2018 Northeast Ag Expo Field Day Test Results

One of the goals of the Northeast Ag Expo Team is to compile and make available the results of tests conducted at our field day sites. The Northeast Ag Expo Team greatly appreciates the support of all our sponsors/exhibitors in helping to make this event as well as the research results possible. Much of the research was funded by the NC Soybean Producers Association. **To find a complete copy of the “2018 Northeast Ag Expo Field Day Test Results”, use the following link: <https://go.ncsu.edu/xjkwnn6>** Many of the tests in this publication was also conducted at other sites across the state as well as some of them in South Carolina. To see a video as

well as a more comprehensive summary of these studies put together by Dr. Rachel Vann, use the following link:

<https://soybeans.ces.ncsu.edu/2019/05/managing-early-maturing-soybeans-in-north-carolina/>

2019 Northeast Ag Expo Hosted by Currituck County

The 2019 Northeast Ag Expo will be hosted by the Currituck County Cooperative Extension Center on the **Roberts Brothers Farm at 169 North Gregory Road, Shawboro**. The date of the event will be **Thursday, July 25, 2019**. The commodities featured at the field day will be corn and soybean. Registration will begin at 7:45am with the welcome at 9:15am. The event will conclude with a sponsored lunch at 11:30am. For additional information use the following link:

www.ncneagexpo.com/home

Pasquotank Farm Tour Being Planned

The Pasquotank Extension Center will hold a farm tour in mid-August from morning to lunch. Topics covered will be corn and soybean variety trial, NC Official Variety Tests being conducted in Pasquotank, cover crops, as well as a study being conducted on salt water intrusion of farmland in the Tidewater region including Pasquotank County.

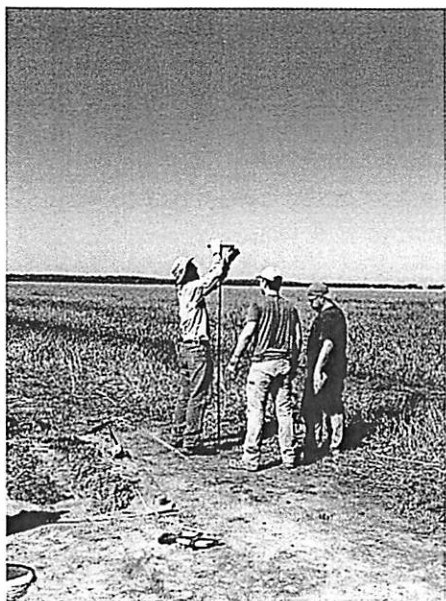
Wheat Meeting Being Planned

The Pasquotank County Center is in the process of planning a **wheat meeting for mid-August**. Keep a watch for future developments.



Salt Water Intrusion Project Field Day

June 10th
12 pm - 3 pm



.....

Please join us at Martelle's Feed House for lunch.
After lunch, we will travel to the field to discuss a collaborative project on salt water intrusion. This field day is open to farmers, Extension agents, NRCS, Soil & Water, and all others!

Location: Martelle's Feed House Restaurant (33301 US-264, Engelhard) and
Middle Creek Farms test site
(560 White Plains Rd, Engelhard or
35°28'19.43"N, 76° 1'3.81"W)

Agenda:

Welcome & Introductions

Soil Issues & Alternative Crop Trial:
Dr. Carl Crozier, NCSU

Monitoring Efforts:
Dr. Alex Manda, ECU

Geoelectrical Surveying:
Dr. Mike O'Driscoll, ECU

Other NE Counties:
Al Wood & Austin Brown, NCCES

Discussion:
Dr. Diana Rashash, NCCES

Please Pre-Register

A catered lunch will
be provided.

Please register to
Andrea Gibbs by
May 31st.



Recent NCCES Publication:
*Effects of Wind-Induced Sodium Salts on Soils in
Coastal Ag Fields* (<http://tinyurl.com/y4uopjya>)

Andrea Gibbs
Hyde/Tyrrell Co.
Ag Agent

252-926-4488 (Hyde)
252-796-1581 (Tyrrell)
andrea_gibbs@ncsu.edu