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Agricultural News From Craven County Extension

2 messages

Mike Carroll <mike_carroll@ncsu.edu> To: cmcarro2@ncsu.edu

Wed, Apr 5, 2023 at 3:19 PM

NC STATE EXTENSION

NC Cooperative Extension, Craven Center

Agricultural Update



April 5, 2023

In this Newsletter.....

Upcoming Events

Optimum Time to Plant Soybean

NCSU Graduate Student Phosphorous Study

Utrisha™ N Nutrient Efficiency Optimizer as a Foliar Application as Yield Enhancement

Are All Soybean Varieties Suitable for Wet, Dry and Optimal Soil Water?

Prevailing Wage Survey by NC Department of Commerce

Wheat Management

Protect Your Crops!

Important Note: Registration deadline for events listed below will vary from as few as 24 hours prior the event to as much as 3-4 days prior the event so please register as much in advance as possible. Also, while attendance is open to anyone, meals, when served, will only be provided for those that register in advance.

UPCOMING EVENTS

If you still need pesticide credits, then consider these classes!

Turf and Landscape Disease Update - On April 11, 2023 from 10 am - 12 pm, Dr. Tom Glasgow will present information on turf and landscape disease management. This course will provide 2 hours of NCDA & CS Pesticide Credits for categories L, N, D & X,. Contact our office at 252 633-1477 or email Tom directly at tom glasgow@ncsu.edu with any questions or comments.

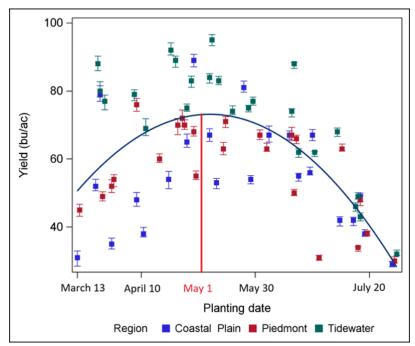
Insect and Weed Management Update for Turf and Landscapes - On May 23, 2023 from 10 am - 12 pm, Dr. Tom Glasgow will present information on turf and landscape insect and weed management. This course will provide 2 hours of NCDA & CS Pesticide Credits for categories L, N, D & X,. Contact our office at 252 633-1477 or email Tom directly at tom glasgow@ncsu.edu with any questions or comments.

If you desire other meetings or similar meetings in other counties, all meetings, field days, commodity events, etc. within the state are listed HERE

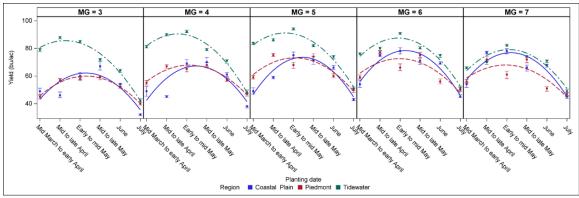
If you would rather obtain NCDA & CS pesticide credits online, click HERE

Optimum Time to Plant Soybean

Optimum yield is obtained from soybean when planted from about April 20 through May 20 each year. Note the graph below showing highest yield peaking about May 1st. There is little, if any yield difference in this data for dates between April 20 and May 20. Aim to have completed soybean planting within these dates to maximize yield.



While this is the general average of all tests, there is variance between regions planted and the soybean maturity group. Note that within the Coastal Plain area, this trend is true for maturity Groups III-V. However, there is a slight tendency for higher yield when Group VI and VII are planted about mid-May .



Read more in the article posted by Dr. Rachel Vann, NCSU at <u>Data-Driven Recommendations for NC</u> <u>Soybean Planting Date</u>

NCSU Graduate Student Phosphorous Study

Lily Kile is a graduate student working with Dr. Luke Gatiboni at NCSU in The Department of Crop and Soil Sciences studying soil phosphorus. An important aspect of all research is its applicability. So she is seeking input from growers that will be useful to you. She has developed a short survey to gain insight regarding your thoughts on phosphorus. It is short and should take much less than 5 minutes. Please aid her by filling out the survey at the link https://ncsu.qualtrics.com/jfe/form/SV 5vjWbYrl9Y9Z1fE

Prevailing Wage Survey by NC Department of Commerce

The North Carolina Department of Commerce hopes to better understand conditions of employment in agriculture and thus is conducting a survey of labor and wages. All personally identifiable information submitted will be kept confidential. This survey targets seasonal and or temporary U.S. workers (including permanent residents) and their wages BUT NOT those enrolled in the supervisors or foreign workers in the H2A program. If you have labor that fits this survey, please download the survey by selecting the button below (Note: This can be filled out in a MS Word format or printed to fill in)

NC Dept. of Commerce Wage Survey

Utrisha™ N Nutrient Efficiency Optimizer as a Foliar Application as Yield Enhancement

Utrisha N is a Corteva product that can be applied to corn as a foliar application up to about the 8th leaf. It is a biological type product promoted as fixing nitrogen for corn. We tried this last season and it did increase yield about 8-10 bu/ac. We'd like to try this again. Simply put, the cost is relatively inexpensive but generally, application of biological products may or may not provide great benefit, depending upon the climatic factors when applied . So, we'd like to continue examination of the product but we need cooperators willing to put it out. Too, if we conduct this trial, we need to place a request for the product donation now. If interested, we simply need a cooperator willing to put this out in strips across the field as a foliar application. (Simply spray a boom width and then skip a boom width or at least about 12 rows and repeat until the product is gone). We can harvest with your combine or harvest by hand, whichever is easier for you. If interested, please email, text or call me immediately. As stated, if we conduct this test, we need to request the product immediately.

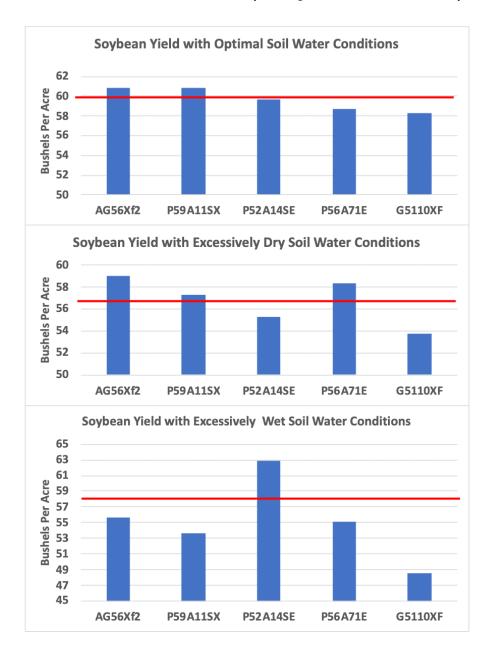
Are All Soybean Varieties Suitable for Wet, Dry and Optimal Soil Water?

Dr. Chad Poole, NCSU, continues to work to evaluate soybean performance according to soil drainage regimes. Note that when optimal soil water conditions exist, there is little difference in yield among varieties tested. However, top yielding varieties when soil conditions were excessively wet were not always the same top yielding varieties when grown in excessively dry (RF- Drain Free within the chart). This work will eventually provide data that will help you select varieties according to soil type. Face it, we all have farms that are sandy and excessively drained/dry but also have farms that are poorly drained/wet. We need differing varieties to fit the soil type! The data is limited. Hopefully in time we can better provide data and information.

Soil-Water Regime Company Entry MG Group n Yield† bu/acre CV Optimal Bayer AG56XF2 5.6 4 60.8 3.6 Pioneer P59A11SX 5.9 4 60.8 1.5 Pioneer P52A14SE 5.2 4 59.7 3.2 Pioneer P56A71E 5.6 4 58.7 2.5 AgriGold G5110XF 5.1 4 58.3 6.0 Average LSD, 0.05 3.1 4.1 58.3 6.0 RF-Free Drain Bayer AG56XF2 5.6 4 59.0 4.1 RF-Free Drain Bayer AG56XF2 5.6 4 59.0 4.1 Pioneer P56A71E 5.6 4 58.4 4.1 4.1 Pioneer P59A11SX 5.9 4 53.8 8.3 Average LSD, 0.05 5.0 5.0 5.0 Wet Pioneer P59A11SX	2022 Group V Soybean Resilience Trial Information									
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Pioneer P56A71E 5.6 4 55.1 7.3 AgriGold G5110XF 5.1 4 48.5 2.7 Average 57.2 4.7 LSD, 0.05 4.7 Overall Pioneer P52A14SE 5.2 12 60.0 6.2 Pioneer P59A11SX 5.9 12 59.9 7.2 Bayer AG56XF2 5.6 12 58.5 5.0 Pioneer P56A71E 5.6 12 57.4 5.4		Pioneer	P52A14SE	5.2	4	62.9	6.9			
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Pioneer P59A11SX 5.9 12 59.9 7.2 Bayer AG56XF2 5.6 12 58.5 5.0 Pioneer P56A71E 5.6 12 57.4 5.4			LSD, 0.05			4.7				
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Pioneer P56A71E 5.6 12 57.4 5.4		Pioneer	P59A11SX	5.9	12	59.9	7.2			
		Bayer	AG56XF2	5.6	12	58.5	5.0			
AgriGold G5110YF 5.1 12 53.5 9.7		Pioneer	P56A71E	5.6	12	57.4	5.4			
Agridold G3110AF 3.1 12 33.3 9.7		AgriGold	G5110XF	5.1	12	53.5	9.7			
Average 57.9			Average			57.9				
LSD, 0.05 2.3			LSD, 0.05			2.3				

Means with the same color band are not different at the LSD α =0.05 test level.

The chart above shows the exact data. Now examine the data in a slightly different view. Note that all varieties do not perform equally under differing soil water moisture content. The red line indicate the average yield for each water regime. (Note: The axis of each graphs differs and does not begin with "zero" to show slight difference in yield)



Wheat Management

When needed, fungicides have shown to improve wheat yield. However, with the exceptions as we will discuss below, most fungicides are restricted once the wheat head emerges. In fact, some are limited at the flag leaf stage. The points is that if one did not need to apply a fungicide already, then it is not likely that one is needed this late.

As just mentioned, two exceptions that do indeed merit continuous monitoring are Head Scab and Rust. Head Scab can result in high amounts of toxins in the grain resulting in poor yield that may not be marketable. Rust can simply degrade potential yield very rapidly. Both are monitored via webpages that provide risks associated with the spread of these diseases.

Monitor Head Scab at and rusts!

Protect Your Crops!

<u>Driftwatch</u>, FieldWatch and BeeCheck are all found linked to another. It is advised to not only check this site as noted on many pesticide labels, to avoid potentially harming beekeeper hives and drift to sensitive crops, but also to protect your crop. Since many crops have multiple herbicide tolerances that differ so widely, one should not assume that a neighboring field is tolerant of the same herbicide that you may be applying. This is especially true of the 2,4-D and dicamba tolerant crops but may also be critical if applying glufosinate near glyphosate tolerant crops. The point is that we should not assume that our neighbors know what herbicide tolerance we are using. These tools allow producer to post the herbicide tolerance so that others may note such. Post field information so that those that examine these maps will know what crop tolerances are planted. If time does not permit all posting, then at least post fields with neighboring producers within about 0.5 mile of the fields and all sensitive crops such as tobacco, and sweet potatoes.

Bulletins Live! Two is a website to check for potential endangered species risks associated with pesticide application. It is now required by many pesticide labels. Check this, and print the results, for each pesticide applied.

As a note, this is generally more critical for those near the Croatan Forest, Cape Carteret, along the coastline, and along specific areas of the Neuse where we know endangered species have been listed. This is not to say that other species have not been recently added! So check the site!

In Case You Missed It!

Corn, Soybean, and Wheat Update" from December 9th with Dr. Ron Heiniger, Dr. Rachel Vann, and Dr. Angela Post providing general research data and considerations for grain production in 2023.

Focus on Soils featuring Dr. Ekrum Ozlu, Dr. Mallory Choudoir, and Dr. Luke Gatibon presents information on general soil health, soil microbiome and roles of calcium, potassium and magnesium (i.e. application of gypsum, lime and fertilizers on plant-soil health)

Maximizing Crop Input Efficiency in 2023: Featuring Dr. Stephanie Keluza, Dr. Rachel Vann, Dr. Ron Heinger, Dr. Luke Gatiboni, and Dr. Chad Poole presenting information on poultry litter and waste applications, plant populations research for soybean, impacts of poor, excessive and optimum irrigation/drainage on yield, keys to corn production, and the impacts of higher fertilizer prices on production (role of N, P & K on yield and optimum use of nutrients).

The Endangered Species Act; What Farmers Should Know features Dr. Don Parker of the National Cotton Council, Rebecca Haynie from Syngenta, Dr. Charlie Cahoon, NC State Weed Specialist, Carroll Moseley of CropLife of America discussing the current EPA policy and procedures for pesticide evaluations, impacts this had upon agriculture and historical use of pesticides as it relates to

endangered species.

Sesame Seed Production - This video provides information from Dr. David Suchoff, NCSU regarding research data for production of sesame. Industry representative also provide insight into current contracts.

Applying foliar fertilizers in soybeans, Dr. Rachel Vann and Jenny Carleo

Monitoring soil moisture levels - Dr. Chad Poole

Disclaimer:

Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the NC Cooperative Extension Service nor discrimination against similar products or services not mentioned. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any product.

Graphs and charts used in this newsletter courtesy of Dr. Ron Heiniger and Dr. Chad Poole, NCSU.

NC Cooperative Extension, Craven Center

Dr. Tom Glasgow, Director and Consumer Horticulture Ashley Brook, 4-H & Youth Development Stephanie Stephenson, Family & Consumer Sciences Mike Carroll, Field Crop Production, Pesticide Coordinator **Brooke Zeleny, Livestock** Lisa Rayburn, Specialty Crops & Markets **Cynthia Mainor**

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NC State University and N.C.A&T State University commit themselves to positive action to secure equal opportunity and prohibit discrimination and harassment regardless of age, color, disability, family and marital status, gender identity, genetic information, national origin, political beliefs, race, religion, sex (including pregnancy), sexual orientation and veteran status. NC State, N.C. A&T, U.S. Department of Agriculture, and local governments cooperating.

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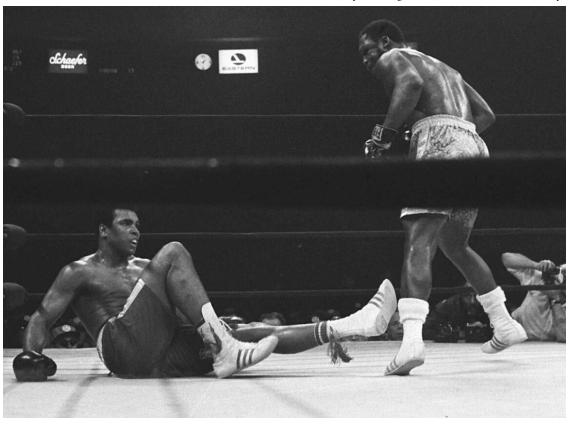
NC State University and N.C. A&T State University work in tandem, along with federal, state and local governments, to form a strategic partnership called N.C. Cooperative Extension.

This institution is an equal opportunity provider.

N.C. Cooperative Extension - Craven County Center, 300 Industrial Dr, New Bern, NC 28562, United States Click here to unsubscribe

Thomas Glasgow <teglasgo@ncsu.edu> To: Mike Carroll <mike_carroll@ncsu.edu> Thu, Apr 6, 2023 at 11:57 AM

It's a knockout!



On Wed, Apr 5, 2023 at 3:19 PM Mike Carroll <mike_carroll@ncsu.edu> wrote:



NC Cooperative Extension, Craven Center

Agricultural Update



April 5, 2023

In this Newsletter.....

Upcoming Events

Optimum Time to Plant Soybean

NCSU Graduate Student Phosphorous Study

Utrisha™ N Nutrient Efficiency Optimizer as a Foliar Application as Yield Enhancement
Are All Soybean Varieties Suitable for Wet, Dry and Optimal Soil Water?

Prevailing Wage Survey by NC Department of Commerce

Wheat Management

Protect Your Crops!

<u>Important Note:</u> Registration deadline for events listed below will vary from as few as 24 hours prior the event to as much as 3-4 days prior the event so please register as much in advance as possible. Also, while attendance is open to anyone, meals, when served, will only be provided for those that register in advance.

UPCOMING EVENTS

If you still need pesticide credits, then consider these classes!

Turf and Landscape Disease Update - On April 11, 2023 from 10 am – 12 pm, Dr. Tom Glasgow will present information on turf and landscape disease management. This course will provide 2 hours of NCDA & CS Pesticide Credits for categories L, N, D & X,. Contact our office at 252 633-1477 or email Tom directly at tom_glasgow@ncsu.edu with any questions or comments.

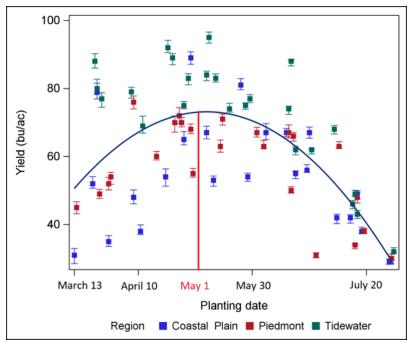
Insect and Weed Management Update for Turf and Landscapes – On May 23, 2023 from 10 am – 12 pm, Dr. Tom Glasgow will present information on turf and landscape insect and weed management. This course will provide 2 hours of NCDA & CS Pesticide Credits for categories L, N, D & X,. Contact our office at 252 633-1477 or email Tom directly at tom_glasgow@ncsu.edu with any questions or comments.

If you desire other meetings or similar meetings in other counties, all meetings, field days, commodity events, etc. within the state are listed **HERE**

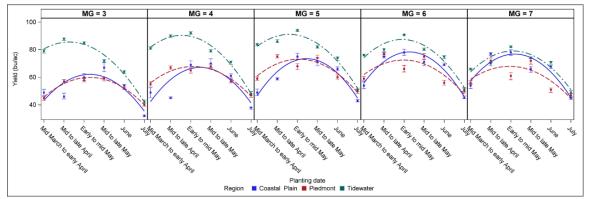
If you would rather obtain NCDA & CS pesticide credits online, click <u>HERE</u>

Optimum Time to Plant Soybean

Optimum yield is obtained from soybean when planted from about April 20 through May 20 each year. Note the graph below showing highest yield peaking about May 1st. There is little, if any yield difference in this data for dates between April 20 and May 20. Aim to have completed soybean planting within these dates to maximize yield.



While this is the general average of all tests, there is variance between regions planted and the soybean maturity group. Note that within the Coastal Plain area, this trend is true for maturity Groups III-V. However, there is a slight tendency for higher yield when Group VI and VII are planted about mid-May.



Read more in the article posted by Dr. Rachel Vann, NCSU at <u>Data-Driven Recommendations for NC</u> <u>Soybean Planting Date</u>

NCSU Graduate Student Phosphorous Study

Lily Kile is a graduate student working with Dr. Luke Gatiboni at NCSU in The Department of Crop and Soil Sciences studying soil phosphorus. An important aspect of all research is its applicability. So she is seeking input from growers that will be useful to you. She has developed a short survey to gain insight regarding your thoughts on phosphorus. It is short and should take much less than 5 minutes. Please aid her by filling out the survey at the link https://ncsu.qualtrics.com/jfe/form/SV 5vjWbYrl9Y9Z1fE

Prevailing Wage Survey by NC Department of Commerce

The North Carolina Department of Commerce hopes to better understand conditions of employment in agriculture and thus is conducting a survey of labor and wages. All personally identifiable information submitted will be kept confidential. This survey targets seasonal and or temporary U.S. workers (including permanent

residents) and their wages BUT NOT those enrolled in the supervisors or foreign workers in the H2A program. If you have labor that fits this survey, please download the survey by selecting the button below (Note: This can be filled out in a MS Word format or printed to fill in)

NC Dept. of Commerce Wage Survey

Utrisha™ N Nutrient Efficiency Optimizer as a Foliar Application as Yield Enhancement

Utrisha N is a Corteva product that can be applied to corn as a foliar application up to about the 8th leaf. It is a biological type product promoted as fixing nitrogen for corn. We tried this last season and it did increase yield about 8-10 bu/ac. We'd like to try this again. Simply put, the cost is relatively inexpensive but generally, application of biological products may or may not provide great benefit, depending upon the climatic factors when applied . So, we'd like to continue examination of the product but we need cooperators willing to put it out. Too, if we conduct this trial, we need to place a request for the product donation now. If interested, we simply need a cooperator willing to put this out in strips across the field as a foliar application. (Simply spray a boom width and then skip a boom width or at least about 12 rows and repeat until the product is gone). We can harvest with your combine or harvest by hand, whichever is easier for you. If interested, please email, text or call me immediately. As stated, if we conduct this test, we need to request the product immediately.

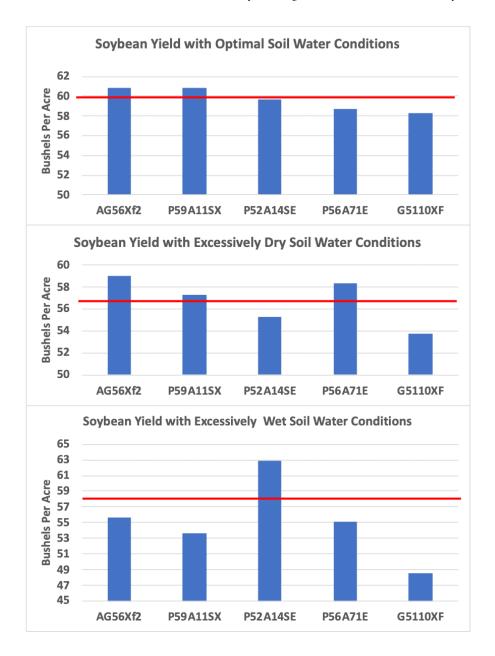
Are All Soybean Varieties Suitable for Wet, Dry and Optimal Soil Water?

Dr. Chad Poole, NCSU, continues to work to evaluate soybean performance according to soil drainage regimes. Note that when optimal soil water conditions exist, there is little difference in yield among varieties tested. However, top vielding varieties when soil conditions were excessively wet were not always the same top yielding varieties when grown in excessively dry (RF- Drain Free within the chart). This work will eventually provide data that will help you select varieties according to soil type. Face it, we all have farms that are sandy and excessively drained/dry but also have farms that are poorly drained/wet. We need differing varieties to fit the soil type! The data is limited. Hopefully in time we can better provide data and information.

2022 Group V Soybean Resilience Trial Information									
Soil-Water Regime	Company	Entry	MG Group	n	Yield [‡] bu/acre	CV			
Optimal	Bayer	AG56XF2	5.6	4	60.8	3.6			
	Pioneer	P59A11SX	5.9	4	60.8	1.5			
	Pioneer	P52A14SE	5.2	4	59.7	3.2			
	Pioneer	P56A71E	5.6	4	58.7	2.5			
	AgriGold	G5110XF	5.1	4	58.3	6.0			
		Average			59.6				
		LSD, 0.05			3.1				
RF-Free Drain	Bayer	AG56XF2	5.6	4	59.0	4.1			
	Pioneer	P56A71E	5.6	4	58.4	4.1			
	Pioneer	P52A14SE	5.2	4	57.3	4.9			
	Pioneer	P59A11SX	5.9	4	55.3	7.1			
	AgriGold	G5110XF	5.1	4	53.8	8.3			
		Average			56.8				
		LSD, 0.05			5.0				
Wet	Pioneer	P59A11SX	5.9	4	63.7	2.7			
	Pioneer	P52A14SE	5.2	4	62.9	6.9			
	Bayer	AG56XF2	5.6	4	55.7	3.1			
	Pioneer	P56A71E	5.6	4	55.1	7.3			
	AgriGold	G5110XF	5.1	4	48.5	2.7			
		Average			57.2				
		LSD, 0.05			4.7				
Overall	Pioneer	P52A14SE	5.2	12	60.0	6.2			
	Pioneer	P59A11SX	5.9	12	59.9	7.2			
	Bayer	AG56XF2	5.6	12	58.5	5.0			
	Pioneer	P56A71E	5.6	12	57.4	5.4			
	AgriGold	G5110XF	5.1	12	53.5	9.7			
		Average			57.9				
		LSD, 0.05			2.3				
*Means with the same color hand are not different at the LSD α=0.05 test level									

 † Means with the same color band are not different at the LSD α =0.05 test level.

The chart above shows the exact data. Now examine the data in a slightly different view. Note that all varieties do not perform equally under differing soil water moisture content. The red line indicate the average yield for each water regime. (Note: The axis of each graphs differs and does not begin with "zero" to show slight difference in yield)



Wheat Management

When needed, fungicides have shown to improve wheat yield. However, with the exceptions as we will discuss below, most fungicides are restricted once the wheat head emerges. In fact, some are limited at the flag leaf stage. The points is that if one did not need to apply a fungicide already, then it is not likely that one is needed this late.

As just mentioned, two exceptions that do indeed merit continuous monitoring are Head Scab and Rust. Head Scab can result in high amounts of toxins in the grain resulting in poor yield that may not be marketable. Rust can simply degrade potential yield very rapidly. Both are monitored via webpages that provide risks associated with the spread of these diseases.

Monitor Head Scab at and rusts!

Protect Your Crops!

<u>Driftwatch</u>, FieldWatch and BeeCheck are all found linked to another. It is advised to not only check this site as noted on many pesticide labels, to avoid potentially harming beekeeper hives and drift to sensitive crops, but also to protect your crop. Since many crops have multiple herbicide tolerances that differ so widely, one should not assume that a neighboring field is tolerant of the same herbicide that you may be applying. This is especially true of the 2,4-D and dicamba tolerant crops but may also be critical if applying glufosinate near glyphosate tolerant crops. The point is that we should not assume that our neighbors know what herbicide tolerance we are using. These tools allow producer to post the herbicide tolerance so that others may note such. Post field information so that those that examine these maps will know what crop tolerances are planted. If time does not permit all posting, then at least post fields with neighboring producers within about 0.5 mile of the fields and all sensitive crops such as tobacco, and sweet potatoes.

Bulletins Live! Two is a website to check for potential endangered species risks associated with pesticide application. It is now required by many pesticide labels. Check this, and print the results, for each pesticide applied.

As a note, this is generally more critical for those near the Croatan Forest, Cape Carteret, along the coastline, and along specific areas of the Neuse where we know endangered species have been listed. This is not to say that other species have not been recently added! So check the site!

In Case You Missed It!

Corn, Soybean, and Wheat Update" from December 9th with Dr. Ron Heiniger, Dr. Rachel Vann, and Dr. Angela Post providing general research data and considerations for grain production in 2023.

Focus on Soils featuring Dr. Ekrum Ozlu, Dr. Mallory Choudoir, and Dr. Luke Gatibon presents information on general soil health, soil microbiome and roles of calcium, potassium and magnesium (i.e. application of gypsum, lime and fertilizers on plant-soil health)

Maximizing Crop Input Efficiency in 2023: Featuring Dr. Stephanie Keluza, Dr. Rachel Vann, Dr. Ron Heinger, Dr. Luke Gatiboni, and Dr. Chad Poole presenting information on poultry litter and waste applications, plant populations research for soybean, impacts of poor, excessive and optimum irrigation/drainage on yield, keys to corn production, and the impacts of higher fertilizer prices on production (role of N, P & K on yield and optimum use of nutrients).

The Endangered Species Act; What Farmers Should Know features Dr. Don Parker of the National Cotton Council, Rebecca Haynie from Syngenta, Dr. Charlie Cahoon, NC State Weed Specialist, Carroll Moseley of CropLife of America discussing the current EPA policy and procedures for pesticide evaluations, impacts this had upon agriculture and historical use of pesticides as it relates to

endangered species.

<u>Sesame Seed Production</u> -This video provides information from Dr. David Suchoff, NCSU regarding research data for production of sesame. Industry representative also provide insight into current contracts.

Applying foliar fertilizers in soybeans, Dr. Rachel Vann and Jenny Carleo

Monitoring soil moisture levels - Dr. Chad Poole

Disclaimer:

Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the NC Cooperative Extension Service nor discrimination against similar products or services not mentioned. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any product.

Graphs and charts used in this newsletter courtesy of Dr. Ron Heiniger and Dr. Chad Poole, NCSU.

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