

# The Johnston County Grower

Johnston County Center

January 2019

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## Contact us:

Johnston County Center  
2736 NC Hwy 210  
Smithfield, NC 27577  
(919) 989-5380 Phone  
(919) 934-2698 Fax  
[johnston.ces.ncsu.edu](mailto:johnston.ces.ncsu.edu)

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## Private Applicators Recertification/Safety Classes (2 hours V)

The North Carolina Cooperative Extension Service is inviting all private applicators whose license expires in 2019 to attend one of four Private Applicator Pesticide Recertification/Safety classes. These two-hour classes will be held on the following dates:

**Tuesday, February 5, 2019 beginning at 9:30-11:30 AM**

**Tuesday, February 19, 2019 beginning at 3:30-5:30 PM**

**Thursday, February 28, 2019 beginning at 6:30-8:30 PM**

**Thursday, September 5, 2019 beginning at 6:30-8:30 PM**

The classes will be at the Johnston County Ag Center in Smithfield on NC 210 Hwy. Applicators are reminded that licenses expire at the end of the year, but all recertification credits must be obtained before September 30<sup>th</sup> of the year the license expires. Applicators are asked to bring their Pesticide Credit Report Card with the bar code scan along with them to class. Please call Tim Britton at 989-5380 to check credits.

## Tobacco Production and GAP Meeting-January 11, 2019

Johnston County Cooperative Extension will host a Tobacco Production and GAP recertification meeting on Friday, January 11, 2019 beginning with registration at 8:30 AM at the Johnston County Agricultural Center. The meeting will begin at 9:00 AM and will conclude with lunch. Leaf dealers and contracting companies require growers to attend the GAP recertification meeting. If you are not able to attend this meeting, a complete list of meetings can be found at [www.gapconnections.com](http://www.gapconnections.com). The program will include a representative from the US Department of Labor who will give a labor management update. There will also be production updates from NC State University Tobacco Specialists. Pre-registration is required so that we can make adequate provisions for seating and food. Please bring your GAP Connections card, photo ID, and your Pesticide Applicator License to scan for credit. Please call [919-989-5380](tel:919-989-5380) to register.

## Fumigation Recertification-January 11, 2019 1:30 PM (1hour fumigation)

Fumigation recertification on Friday, January 11, 2019, immediately following the GAP meeting. Based on the fumigation labels, growers must attend a fumigation recertification training every three years. The NCDA&CS has linked this recertification with your License Renewal Date. For those of you, who will renew your Private Applicator certification in 2019, if you took the test, a fumigation Category (V X Z(SF)) will appear on your card.

### **Regional Cotton Production Meeting – February 11, 2019 10:00 AM (2 hours NODX)-Nash**

The North Carolina Cooperative Extension Service in Johnston, Wilson, Nash, and Edgecombe counties are inviting all growers to attend the Cotton Production meeting on Monday, February 11, 2019. The meeting will be held at the Nash County Center, 1006 Eastern Ave., in Nashville at 10:00 AM. . A sponsored meal will be served. Pre-registration is required for the meeting. Please call the Nash County Extension Center at (252) 459-9810 to register.

### **Small Grain, Corn and Grain Sorghum Meeting - February 5, 2019 12:00 PM (2 hours NODX)**

The North Carolina Cooperative Extension Service in Johnston County is inviting small grain and grain sorghum growers to a production meeting on Tuesday, February 5, 2019, at 12:00 PM. The meeting will be at the Johnston County Ag Center Auditorium, 2736 NC 210 Hwy, Smithfield, NC, and will end with a sponsored dinner. Presentations from Extension Specialist, NCDA, and Agents. Pre-registration is required for the meeting. Please mark your calendar and call the Johnston County Extension Center at (919) 989-5380 to let us know that you are coming.

### **Regional Cotton Production Meeting - February 28, 2019 10:00 AM (2 hours NODX)-Sampson**

The North Carolina Cooperative Extension Service in Johnston, Sampson, Cumberland and Harnett counties are inviting all growers to attend the Cotton Production meeting on Thursday, February 28, 2019. The meeting will be held at Sampson County Agricultural Expo Building, 414 Warsaw Rd in Clinton at 10:00 AM. . A sponsored meal will be served at the end of the meeting. Pre-registration is required for the meeting. Please call the Johnston County Extension Center at (919) 989-5380 to register.

### **Soybean Production Meeting - February 19, 2019 6:00 PM (2 hours NODX)**

The North Carolina Cooperative Extension Service is inviting all growers to attend the Soybean Production meeting on Tuesday, February 19, 2019 at 6:00 pm. The meeting will be at the Johnston County Ag Center Auditorium. A sponsored meal will be served. Pre-registration is required for the meeting. Please mark your calendar and call the Johnston County Extension Center at (919) 989-5380 to let us know that you are coming.

### **Regional Peanut Production Meeting - February 18, 2019 12:00 PM (1 hour NODX)**

The North Carolina Cooperative Extension Service in Johnston, Wilson, Wayne, Harnett, and Greene counties are inviting all growers to attend the Regional Peanut Production meeting on Monday, February 18, 2019 at 12:00 PM. The meeting will be held at the West Farm at 1365 NC 222 East, Fremont, NC 27830. This will be about 2 miles east of Fremont. A sponsored meal will be served. Pre-registration is required for the meeting. Please mark your calendar and call the Johnston County Extension Center at (919) 989-5380 to let us know that you are coming.

### **Regional Sweet Potato Production Meeting - February 21, 2019 12:00 PM-Wilson**

The North Carolina Cooperative Extension Service is inviting all growers to attend the Regional Sweet Potato Production meeting on Thursday, February 21, 2019 at 5:00 PM. Pre-register by calling the Wilson County Ag Center, (252) 237-0111.

### **Annual Fit Testing - January 28 and February 7, 2019**

Annual fit testing will be on **Monday, January 28<sup>th</sup> from 8:30 AM to 5:30 PM** and **Thursday, February 7<sup>th</sup> from 12:00 PM to 7:00 PM** at the Johnston County Ag Center. HRMA is charging \$25 per person for the fit testing. Payment will be collected at the time of the test. Please check seals by doing a seal test before coming in. If you were fitted last year, you must bring your respirator. If you were not fitted, you do not need to acquire a respirator prior to the fit testing. Medical clearance will be required for individuals who were not fitted last year. You can obtain medical clearance at **[www.respexam.com](http://www.respexam.com)** or at your local doctor's office. If you have questions, please call 919-989-5380.

### **Auxin Training – March 5, 2018 6:30 PM-8:30 PM (2 hours NODX)**

Labels for Engenia, FeXapan, and XtendiMax were revised again. Those products are now classified as Federal Restricted Use Pesticides. They can only be sold by Licensed Pesticide Dealers and purchased only by licensed/certified (commercial and private) applicators. **Only Licensed Pesticide Applicators who have taken the 2019 auxin training will be allowed to apply these auxin products.** This means that someone working under you without a license is not allowed to apply the restricted use Dicamba products. The 2, 4-D products, Enlist and Enlist Duo will only require the training in 2019 before making any application.

### **Interactive Pesticide Training - March 15, 2019 (2 hours, all codes except V)**

The North Carolina Cooperative Extension Service in Johnston County is inviting all commercial and private applicators, dealers, consultants and public ground operators to attend an Interactive Pesticide Training class. This two-hour class will be held at the Johnston County Livestock Arena on Friday, March 15<sup>th</sup>. The arena is located at 520 County Home Road, Smithfield, NC 27577. The class will begin at 10:00 AM. Please bring your Pesticide Credit Report Card with the barcode to this class. Please call Tim Britton at 989-5380 for more information about the credits to be offered.

### **2019 Pesticide Exam Schedule - Johnston County**

The North Carolina Pesticide exams will be offered on Wednesday, March 13<sup>th</sup> and Wednesday, August 14<sup>th</sup> at 1:00 PM at the Johnston County Ag Center. To take the exam, bring valid ID (Driver's License) and calculator. Please arrive by 12:30PM.

### **Cover Crop Meeting, March 20 2019, 7:30 AM (1 hour NODX)**

The North Carolina Cooperative Extension Service in Johnston County is inviting anyone interested in learning more about cover cropping systems to attend this meeting. Please mark your calendar and call the Johnston County Extension Center at (919) 989-5380 to let us know that you are coming.

### **Pesticide and Household Hazardous Waste Disposal Day - April 27, 2019**

Need to clean out the barn, the chemical storage building, pantry, or underneath the sink. On Saturday, April 27, 2019, North Carolina Cooperative Extension in Partnership with Johnston County Solid Waste and the NCDA will hold a Pesticide and Household Hazardous Waste Disposal Day. The event will take place at the Johnston County Livestock Arena at 520 County Home Road in Smithfield from 8:00 AM to 1:00 PM. Acceptable items include old and unused pesticides, household cleaners, fluorescent (high TCLP mercury) lamps and bulbs from homeowners, and all types of household batteries i.e. Nickel-Cadmium, Lithium, Alkaline and Metal Hydride. In addition, we will be accepting oil base paint only from the public, but not latex. The latex paint is a non-hazardous household liquid that can be solidified with sand, soil or kitty litter and disposed of in the landfill.

### **Johnston County Farmer Health Summit**

Farming is six times more dangerous than any other occupation in America. Our farmers put their lives and health on the line every day to feed and clothe the world. Did you know that **64% of farmers** in southeastern NC have **high blood pressure** or pre-hypertension? Did you know that **24% of farmers have diabetes**? Additionally, **64% of farmers are overweight** or obese which puts even more strain on the knees and spine.

Johnston County Cooperative Extension is hosting a Farmer Health Summit to help our farmers face these issues, increase their productivity on the farm, and save money in health care costs.

Join us on the following dates:

- January 14<sup>th</sup>: Opportunity for FREE Blood Pressure, Weight, and Blood Sugar Screening with brief educational session on healthier dietary habits
- January 28<sup>th</sup>: Skin Cancer Screening & Resources Available, Farm Stress Management Discussion
- February 11<sup>th</sup>: Let's Talk Back and Joint Pain
- February 25<sup>th</sup>: CPR training for On-Farm Situations with testimony

**This is a family-friendly event. There will be youth activities each night to correspond with adult sessions. Meals will be provided. Sessions begin at 5:30p each night. Please try to attend all sessions. Prizes will be awarded each week!**

Register your family by calling 919-989-5380.

### Cover Crop-Soil Health Meeting - March 20, 2019

The North Carolina Cooperative Extension Service, Johnston County Soil and Water, and NRCS are inviting all growers to attend the Cover Crop-Soil Health Meeting on Thursday, March 20, 2019 at 8:00 am with Breakfast. The meeting will be held at the Johnston County Ag Center Auditorium. Pre-registration is required for the meeting. Please mark your calendar and call the Johnston County Extension Center at (919) 989-5380 to let us know that you are coming.

### 2019 NC Commodity Conference - January 9-11, 2019

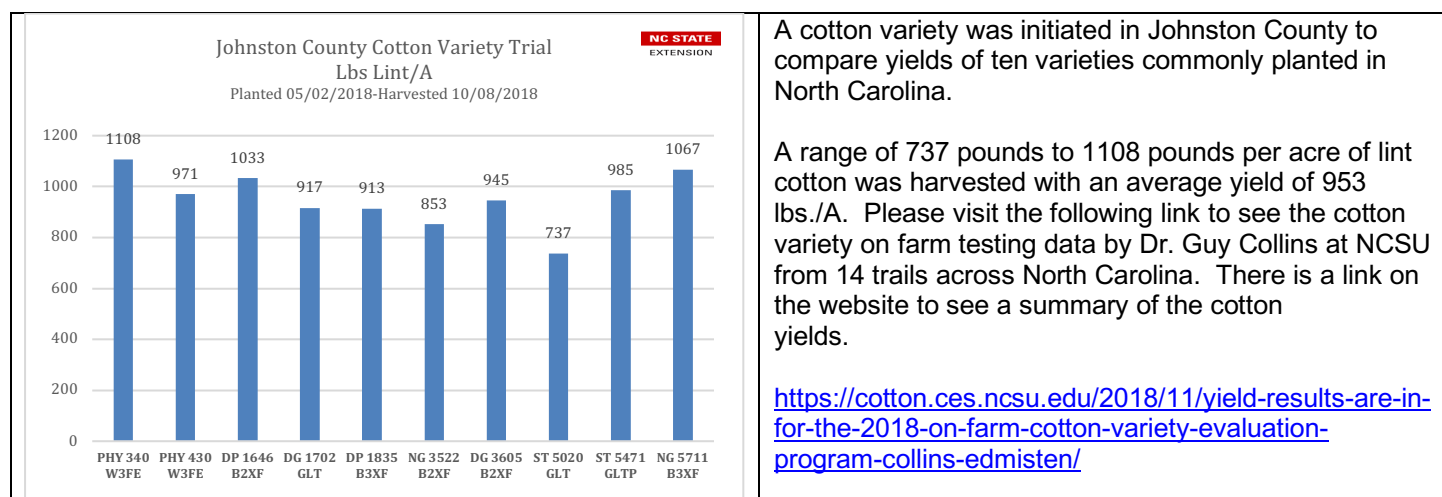
You are invited to attend the 30th Annual NC Commodities Conference of NC Small Grains, Soybeans, Corn & Cotton Producers Associations, an informative and educational conference dedicated to discussing challenges of farming in the 21st Century. Come along and find out the latest in trends and technologies, and hear from some of the leading figures in the industry today. Along with Extension Specialist, we will hear from leading growers in the State and from Randy Dowdy, who currently holds the world record for soybean production. The meeting will be held at the **Sheraton Imperial Hotel & Convention Center** 4700 Emperor Blvd, Durham, NC.

### Southern Farm Show - January 30 - February 1, 2019, NC State Fairgrounds

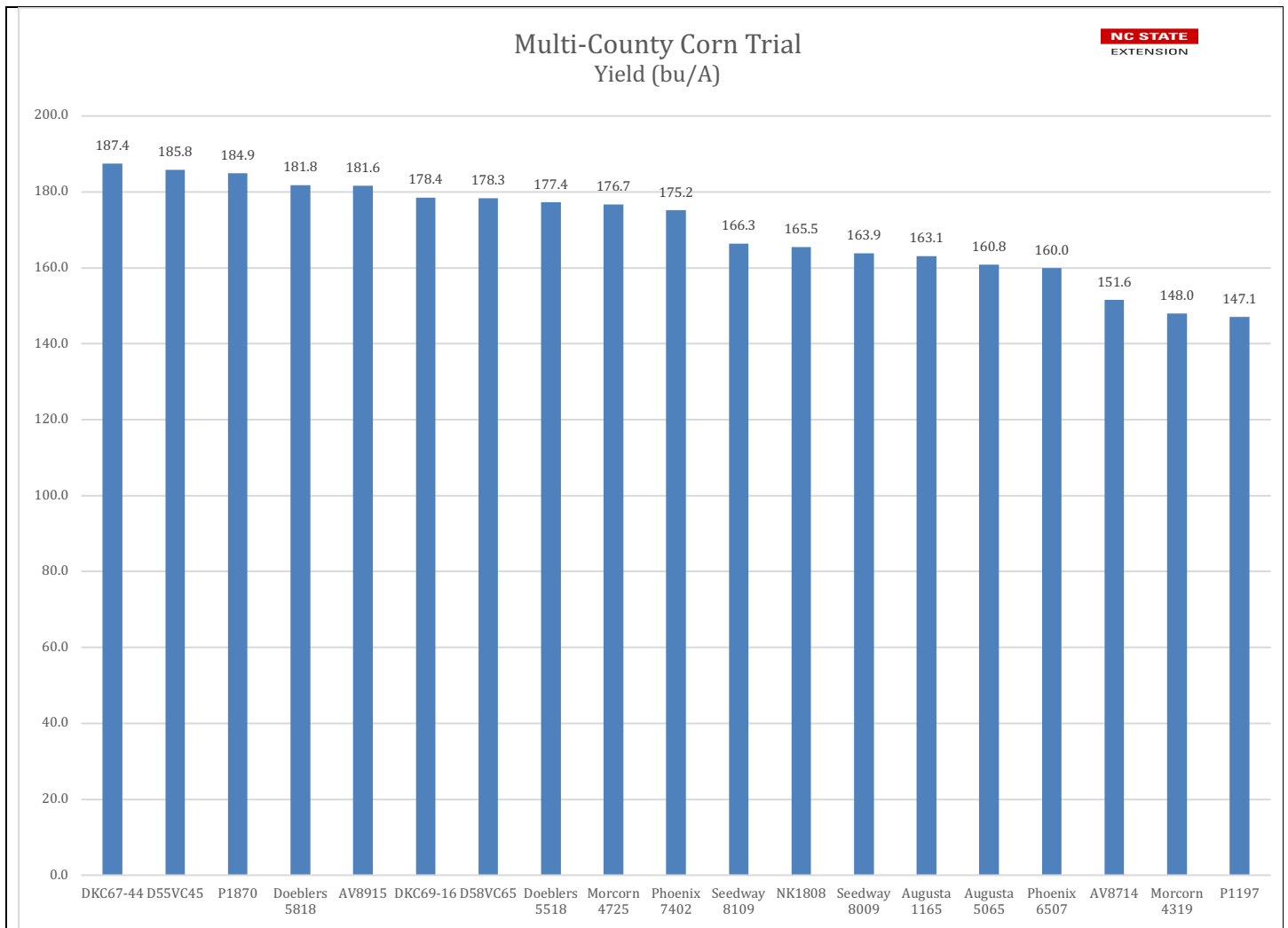
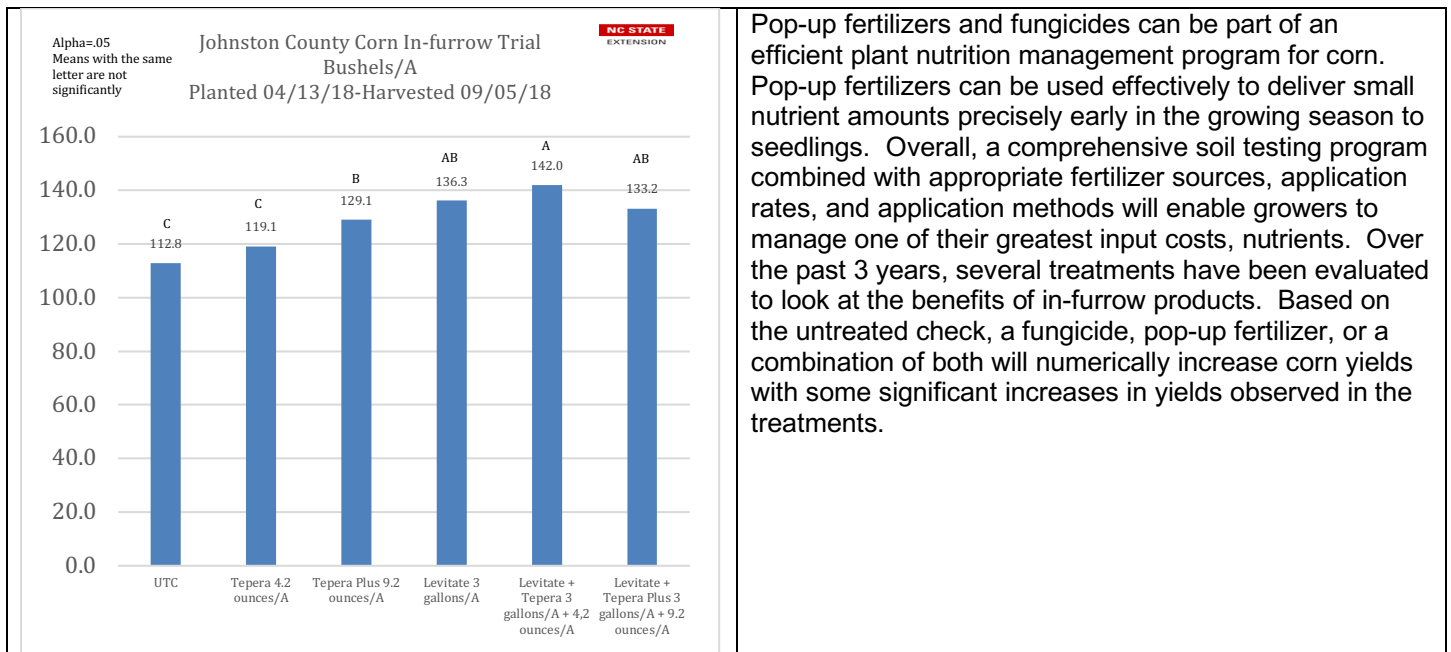
Over 400 exhibiting companies make the Southern Farm Show, the largest agricultural exposition in the Carolinas and Virginia. A tradition at the NC State Fairgrounds each February, the show hosts key industry events, and is known as the region's annual meeting place for farmers and agricultural leaders. Free admission and parking make the show a can't-miss for farmers, as well as allied professionals including landscapers and excavation contractors.

### Price Risk Management/Commodity Outlook Workshops - 10:00 AM January 23, 2019

The Marketing Division of the North Carolina Department of Agriculture & Consumer Services is planning a series of risk management workshops on "Managing Price Volatility/Identifying Macro Indicators". There is no charge for these workshops and the following topics will be covered: Introduction to Grain Hedging, Basis, Trading, Cost of Carry, Cotton Futures, Option Trading on Futures and Equities, and macro forces impacting the hedger. There will be an emphasis on the principles of options, spreading strategies, and using options to manage financial risk. Energy derivatives traded at the CME/NYMEX will be explained as well as trading strategies to manage your exposure to business community. The meeting will be at the Johnston County Extension Center on Wednesday, January 23<sup>rd</sup> at 10:00 AM. Please pre-register by calling the extension office at 989-5380 by January 19<sup>th</sup>.

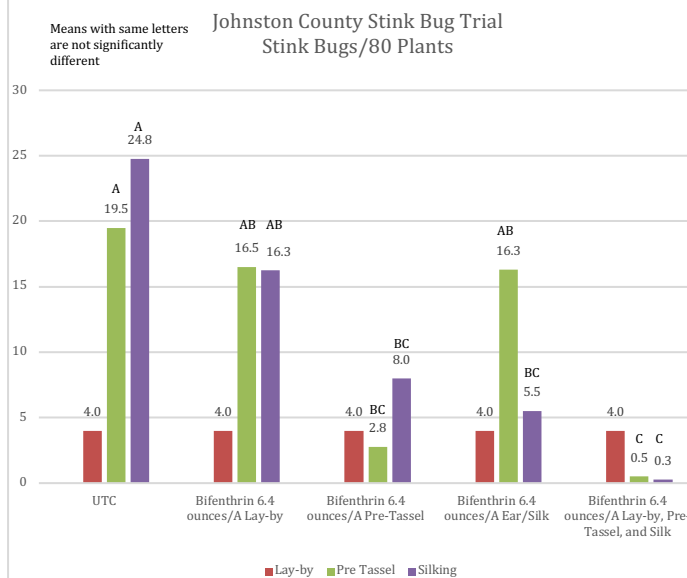
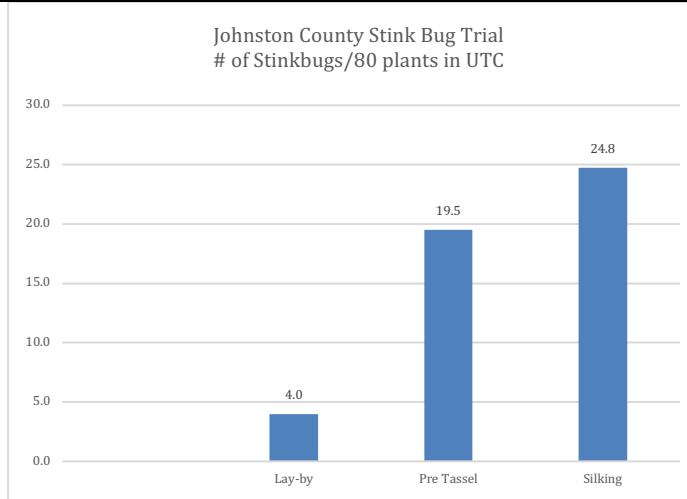


## Johnston County Cotton and Corn Trials Corn In-furrow Study



Corn OVT information can be found at <https://officialvarietytesting.ces.ncsu.edu/nc-measured-crop-performance-corn/>

## Johnston County Corn Stink Bug Trial



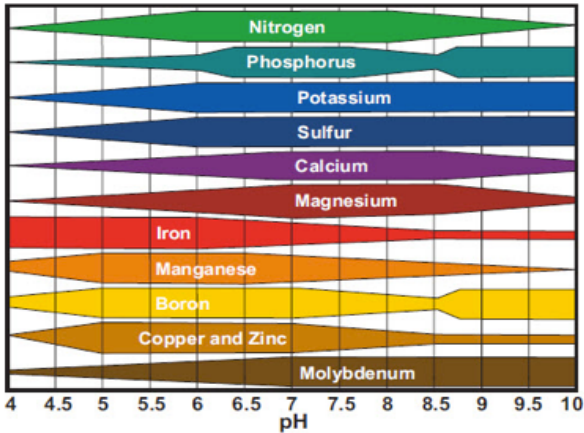
A field trial was initiated in Johnston County to evaluate the timing and insecticidal efficacy of bifenthrin on managing brown stink bugs; *Euschistus servus* in corn at various stink bug susceptible corn growth stages. Plots were arranged in a randomized complete block (RCB) design with 5 treatments including an untreated check. Treatments were replicated 4 times. Individual plots were 8 rows by 200 ft with 30 inch row spacings. Applications of bifenthrin at 6.4 ounces/A were made at layby, pre-tassel, and silking. Brown Stinkbug numbers did not increase until pre-tasseling. The application of bifenthrin at lay-by did not significantly lower the Brown Stinkbugs adults' numbers in the lay-by plots (Treatments 2 and 5) compared to untreated check at three days after treatment (3DAT). However, as populations begin to increase at the pre-tasseling corn growth stage, the application of bifenthrin on treatments 3 and 5 significantly lowered Brown Stinkbugs numbers at 3 DAT compared to the untreated check.

The **no treat** column represents the percent infested plants where you can be confident not to use an insecticide treatment. The **treat** column represents the percent infested plants where you can be confident that you should use an insecticide treatment. The **fixed threshold** column can be used as a guide to treat when numbers fall between the no treat and treat numbers. Using this threshold, do not treat below this number and treat at, or above, this number.




Growth stage	No treat (% infested plants)	Fixed threshold (% infested plants)	Treat (% infested plants)
V1 to V6	6	8	11
V14 to VT	16	21	26
R1 to R4	30	36	43

Similarly, the bifenthrin application during the silking corn growth stage on treatments 4 and 5 significantly reduced the stink bug counts compared to the untreated check. Moreover, during the last set of observations on June 29th, plots that received bifenthrin treatment- even at V17 corn growth stage continued to have a significantly fewer Brown Stinkbugs counts than untreated check, 17 DAT. Scouting for Stinkbugs is crucial in making an application decision. Spraying at lay-by was not effective in controlling Brown Stinkbug during the critical time of tasseling and silking when ear is most vulnerable due to reinfestation. Yields could not be analyzed due to dry weather. This information was summarized from a manuscript that will be published online in Arthropod Management Test by Dr. Arun Babu, Postdoctoral Research Scholar at NCSU.



<p>How pH affects availability of Nutrients</p> 	<p>In such cases, annual applications are the best way to supply enough potassium to sustain good soybean production. Split applications of potash during the early growth stage on very sandy-textured soils reduce leaching. Soybeans require large amounts of potassium. A crop yielding 50 bushels per acre removes about 100 pounds of potassium. Most of the potassium utilized by soybeans is taken up within 60–100 days after emergence. Therefore, adequate potassium must be provided within the first 100 days of growth. At maturity, soybean seeds contain 60 percent of the total potassium within the plant. Soybean production guidelines developed through research provide management information on a variety of factors that influence yields. Tillage practices, maturity groups, seeding rates and planting dates are all important. Good soybean production requires optimizing all of these factors.</p>
<p>Optimum soybean yields cannot be achieved without adequate lime. Soybeans are more sensitive to high levels of soil acidity than most other field crops. The optimum pH for soybeans on sandy and clay-textured soils ranges from 5.8 to 6.2. Yields on mineral soils decline as soil pH decreases below pH 5.5. For organic soils, optimum soybean yields can be achieved at pH 5.0. Research has shown a 15-bushel yield increase on acid soils with an application of one ton of lime per acre. Another factor that limits soybean yields across North Carolina is low potassium. Potassium deficiency restricts grain development, which reduces the size and weight of beans, thus, lowering yields. Most extremely sandy-textured soils do not have the capability to hold potassium against leaching and show little or no accumulation from long-term potash application</p>	<p>Soybeans respond well to recommended lime and fertilizer application. Such amendments increase profits for growers who carefully manage their soybean land. The resulting higher yields more than pay for production costs. The first step toward higher soybean yields is to have your soil tested and apply the recommended amount of lime and fertilizer.</p> <p>Soybean OVT results can be found at <a href="https://officialvarietytesting.ces.ncsu.edu/soybean-2018/">https://officialvarietytesting.ces.ncsu.edu/soybean-2018/</a></p>

#### Wheat Weed Control

		
Spike Stage wheat	Henbit	Annual Bluegrass

Last year, several products for pre-emergence control of Italian ryegrass and annual bluegrass in wheat were evaluated. None of the products had an adverse effect of wheat and gave good control of ryegrass where activated. Some mixtures provided good broadleaf control, and some products can be applied as a pre-emergence, but wheat has to be planted at a certain depth. There are too many variables, including soil type and rainfall to recommend a pre-emergence application.

**Below click on the products name for more information.**

#### Wheat Spike Stage

[Zidua WG 85](#) or Zidua SC (Group 15) - Apply to wheat at 80% spike through 4th tiller, using .7-2 oz/A (WG) or 1.25-4 fl oz/A (SC). Rainfall is needed to activate Zidua. Dry weather may limit preemergence weed control. Will not control emerged weeds. Preemergence Italian ryegrass and bluegrass residual control. Residual control or suppression of tough

grasses and small seeded broadleaf weeds. Zidua will not control germinated or emerged weeds, and should be applied with a tank mix partner that will control emerged weeds. See Label. Rotational Restrictions at 4oz/A= Tobacco 18 months, Sweet Potatoes 9 months.

**Anthem Flex** (Group 14 and 15) - A mixture of Aim and Zidua. Apply to wheat at 80% spike through 4th tiller, using 2-4.5 oz/A. Rainfall is needed to activate Zidua. Dry weather may limit preemergence weed control. You can apply this product before wheat germinates, but it is easier on crop to wait until spike stage. Rotational Restrictions at 4.5 oz/A= Tobacco 18 months, Sweet Potatoes 4 months

**Fierce** (Group 14 and 15) - A mixture of Valor and Zidua. Apply to wheat at 95% spike through 2 leaf, using 2-4.5 oz/A. Rainfall is needed to activate Fierce. Dry weather may limit preemergence weed control. Plant wheat 1-1.5 inches deep. \*\*\* Cannot use on Broadcast or lightly tilled wheat crop. Do not use a fertilizer or adjuvant with this product. Avoid applications on heavy sand or low organic matter soils. Rotational Restrictions at 4.5 oz/A= Tobacco 12 months, Sweet Potatoes 4 months

**Axion** (Group 5 and 15) - A mixture of Flufenacet and Metribuzin. Apply to wheat at 80% spike using 4-10 oz/A. \*\*\*Application rate is dependent on soil type. NC State research has shown best results with 6-7 oz/A on coarse soils and 8-9 oz/A on medium to heavy soil types. Rotational Restrictions at 4.5 oz/A= Tobacco 18 months, Sweet Potatoes 18 months

### Wheat Postemergence (new products)

**Quelex** (Group 2 and 4) - A mixture of Florasulam and Arylex applied at .75oz/A. Arylex is an Auxin that is safer than 2,4-D and Dicamba and can be applied from 2 leaf through flag leaf, product also contains Florasulam, an ALS Herbicide. It is labeled for Wheat, Barley, and Triticale. See Label for tank mix partners. Rainfastness - 4 Hours- Rotational Restrictions = Tobacco 15 months, Sweet Potatoes 15 months. (Hope to see reduction on Sweet Potatoes in 2018)

**Sentrallas** (Group 2 and 4) - A mixture of Harmony and Fluroxypyr applied at 11oz/A. Fluroxypyr is an auxin that is safer than 2,4-D and Dicamba and can be applied from 2 leaf through flag leaf, product also contains Harmony. It is labeled for Wheat, Barley, and Oats. See Label for tank mix partners. Rainfastness - 1 Hour- Rotational Restrictions = Tobacco 15 months, Sweet Potatoes 15 months.

The following chart can be found in the Agricultural Chemical Manual

### Weed Response to Herbicides in Small Grains

W. J. Everman, Crop and Soil Sciences Department

Ratings based upon average to good soil and weather conditions for herbicide performance and upon proper application rate, technique, and timing.

Table 7-8B. Weed Response to Herbicides in Small Grains

Species	Herbicide												
	Anthem Flex	Axial	Axiom	Banvel/ Clarity	Fierce	Finesse <sup>2</sup>	2,4-D	Harmony Extra	Hoelon	Osprey	PowerFlex <sup>7</sup> HL	Valor SX	Zidua/ Zidua SC
Annual bluegrass	E <sup>4</sup>	N	G <sup>4</sup>	N	E <sup>4</sup>	N	N	N	N	G	-	F <sup>4</sup>	E <sup>4</sup>
Annual ryegrass	E <sup>4</sup>	GE <sup>5</sup>	G <sup>4</sup>	N	E <sup>4</sup>	F	N	N	E <sup>1</sup>	E <sup>5</sup>	E <sup>5</sup>	GE <sup>4</sup>	E <sup>4</sup>
Buttercup		N	-	F	-	G	G	G	N	-	-	-	-
Chickweed, common	F <sup>4</sup>	N	G	G	E <sup>4</sup>	G	P	G	N	FG	-	E <sup>4</sup>	F <sup>4</sup>
Cornflower	-	N	-	FG	-	F	G	P	N	P	-	-	-
Curly dock	N			F	N	-	P	E	N	P	-	N	N
Cutleaf eveningprimrose	-	N	-	G	E <sup>4</sup>	-	E	G	N	P	-	E <sup>4</sup>	-
Field pennycress	-	N	-	F	E <sup>4</sup>	G	G	G	N	-	-	E <sup>4</sup>	-
Henbit	F <sup>4</sup>		GE <sup>4</sup>	F	E <sup>4</sup>	G	P	G	N	G	-	E <sup>4</sup>	F <sup>4</sup>
Knawel	-	N	-	G	-	-	P	G	N	-	-	-	-
Shepherd's-purse	-	N	-	FG	E <sup>4</sup>	G	GE	E	N	-	-	E <sup>4</sup>	-
Swinecress	-	N	-	G	-	-	G	E	N	E	-	-	-
Vetch	-	N	-	E	-	-	G	P	N	N	-	-	-
Virginia pepperweed	-	N	-	F	G <sup>4</sup>	-	E	G	N	-	-	G <sup>4</sup>	-
Wild garlic	N	N	N	F	N	P	F	E	N	P	-	N <sup>4</sup>	N
Wild mustard	P <sup>4</sup>	N	G <sup>4</sup>	F	E <sup>4</sup>	G	GE	G	N	E <sup>3</sup>	GE	E <sup>4</sup>	P <sup>4</sup>
Wild radish	P <sup>4</sup>	N	G <sup>4</sup>	F	E <sup>4</sup>	G	GE	G	N	E <sup>3</sup>	GE	E <sup>4</sup>	P <sup>4</sup>

Tim Britton  
Extension Agent - Agriculture

*Tim Britton*