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Agricultural News From Craven County Extension

1 message

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NC Cooperative Extension, Craven Center

Agricultural Update

January 2023

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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

Auxin Trainings – Auxin trainings will be available via Zoom provided by NC State faculty. All meetings will begin at 8:30 AM. One (1) NCDA & CS pesticide credit will be applied to the email and NC Pesticide license number used when registering. Obtain the password by emailing a NC Cooperative Extension Agent working with field crop production after registration. Click [HERE](#) to register: (Please request the password in advance of the meetings. For security reasons, the password is stored within the office and we have many meetings and events during January -March away from our office. Waiting until the day before or the day of the meeting to obtain a password may result in the inability to obtain the password)

	Date	Time	Day of week
1	January 19	8:30 AM	Thursday
2	February 14	8:30 AM	Tuesday
3	February 22	8:30 AM	Wednesday
4	March 14	8:30 AM	Tuesday
5	March 29	8:30 AM	Wednesday

If these dates are not convenient, manufacturers of the products will also provide self-learning modules, webinars and other sessions. Read more in the article, [2023 Auxin Training](#).

Agricultural Community QPR for Farmers and Farm Families – This Zoom training scheduled for January 18, 2023 at 1 PM (12 PM Central) targets farmers and farm families to learn the "QPR" method of identifying and responding to mental health crises on the farm. To attend this training participants must be 18 years of age or older. In this 1.5-hour QPR training, we will provide information on the unique challenges farmers face that can lead to stress, depression, and suicide. The meeting will aid participant's ability to provide aid with someone at risk for suicide as well as providing information on how to help someone at risk of suicide. Registration [HERE](#).

CPR & AED Training for Farmers and Farmworker – This CPR certification course is OSHA-compliant and will cover adult CPR and AED use. Participants that complete the course will be issued a digital certification card that is valid for 2 years. Space for this training is limited to 12 participants per class. A waitlist will be available on a first-come, first-serve basis. For more information about the event or to schedule an on-farm training, email Alyssa Spence at arramsey@ncsu.edu or call 252.527.2191. [REGISTER HERE](#)

Brassica Pests and Weed Management for Mixed Vegetable Growers – On February 8, 2023 from 2:00 – 4:00 pm at the Lenoir County Extension Office ([1791 North Carolina 11 Kinston, NC](#))

learn about pests of brassica crops, emerging control options and weed control for mixed vegetable growers. Weed control as it applies to mixed vegetable growers will be discussed as well as management of yellow nutsedge. Pesticide credits: 2 hours of N, O, D, X

[Click here for registration](#)

Flue-Cured Tobacco Production and GAP Recertification - On February 1, 2023 in cooperation with GAP Connections, NC Extension will provide tobacco production update and GAP Recertification. Registration begins at 9 with presentation scheduled to begin at 9:30 am. GAP Connections, US Department of Labor and NC State faculty will present presentations from 9:30 until noon. A meal will follow. Registration limited to the first 60. Register [HERE](#).

Area Corn & Soybean Production – On February 15, 2023, beginning at 10 AM, various NC State faculty will present agronomic and pest management updates for corn and soybean production as outlined below. NCDA & CS pesticide credits of 2.0 hours for N, O, D & X have been applied. Registration is via Eventbrite [HERE](#)
Tentative Schedule:

10 am-12 pm	Dr. Chad Poole (Water Resiliency Specialist), Dr. Rachel Vann (Soybean Specialist), Dr. Charlie Cahoon (Weed Specialist Corn)
12 - 1 pm	Meal and Sponsor Comments
1 - 3 pm	Dr. Ron Heiniger (Corn Specialist), Ryan Heiniger (OVT Coordinator), Insect Management TBD

Cotton Production Updates - On February 14, 2023 beginning with a noon meal, NC State faculty will provide updates on cotton management at the Jones County Civic Center [832 North Carolina Highway 58 Trenton, NC 28585](#). Two hours of pesticide credits will apply. Click [HERE](#) to register.

NC Cooperative Extension Communication & Cash – Immediately following the cotton meeting on February 14, 2023 (aiming for 3 pm), help us improve Extension communication and win up to \$150 cash! Dr. Dominic Reisig, NC State Entomology will provide an hour presentation and interactive activity. Participants will win prizes. One is eligible if you: 1) help in farm financial planning, 2) select corn seed for the farm, 3) farm in areas with historical drainage issues. Call our office at 252-633-1477 to register.

Cucurbit Disease Update and Seedling Production Considerations – On February 24, 2023 from 10:00 am – 12:00 noon at the Lenoir County Extension Office ([1791 North Carolina 11 Kinston, NC](#)) learn of diseases of cucurbits and their control. Discussion will also include developing a disease spray program. A short update on pumpkin variety performance as well as management for seedling greenhouse transplant production will be included. Pesticide credits: 2 hours of N, O, D, X

[Click here for registration](#)

- 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](#)

Private Applicator Safety Training

For those whose Private Applicator license expires in 2023 that need the two-hour Safety Training, (Category V) credits, plan to attend one of the classes below. Those within Craven will be held in the auditorium of the Craven County Agricultural Building, 300 Industrial Drive, New Bern, NC and those within Carteret will be held on the 3rd floor of the CMAST Building, (303 College Circle, Morehead City, NC). In the event of changes due to adverse weather, information will be posted to NC Extension websites.

2023 Private Applicator Safety Classes (Category V)

<u>DATE</u>	<u>TIME</u>	<u>Location*</u>	<u>Registration Limit & Deadline</u>	
Tuesday, January 31	2 pm – 4 pm	Carteret	20	Jan. 28th
Registration Link: https://www.eventbrite.com/e/491863004487				
Monday, February 6	10 am – 12 pm	Carteret	20	Feb. 4th
Registration Link: https://www.eventbrite.com/e/491866575167				
Wed. February 8	9 am – 11 am	Craven	40	Feb 7th
Registration Link: https://www.eventbrite.com/e/490058075897				
Thurs. February 23	2 pm – 4 pm	Craven	40	Feb 21st
Registration Link: https://www.eventbrite.com/e/490058366767				
Friday, March 3 2nd	3 pm – 5 pm	Craven	40	March
Registration Link: https://www.eventbrite.com/e/490058567367				

*Updates, registration links, inclement weather announcements, or other information will be posted at both Craven and Carteret Extension webpages. **Soil Fumigation credit for 1.0 hours is available with advance notice.***

Sesame Seed Production

For those that did not attend the Sesame seed production meeting, below are some highlights of the event. For more information, contact our office.

- Sesame is currently selling for \$0.60/lb. and typical yield is 1000 lbs./ac. Production cost is low. Using the same equipment costs for the 2023 projected soybean budget, production, sesame yields about \$100 in profit. This is greater than average soybean, cotton and corn.
- Fertility for sesame to date has included nitrogen ranging from 100-200 lbs./ac (not much increase above 100-150 lbs./ac), the NCDA & CS recommended phosphorus and no potassium added. Pretty simple.
- Contracts are not necessary for production and sale but it makes life much simpler.
- Sesame is planted in late May through mid-June. (Soils must be 70 degrees F)
- One can utilize existing planters with plates similar to those used to plant canola or other small seed. Kits are available from contractors to adopt to planters.

- Researched row width are 7-30 inches. Row width does not translate to any yield advantage but narrow row are more subject to lodging from strong winds.
- Plant appear to perform best in well drained sandy soils. However, it has been grown at the Plymouth Research Station on heavier soils as well as on clay soils within the Piedmont. It appears that good, loose, soils at planting with no rainfall within 5-7 days favors emergence.
- Sesame is perhaps one of the most drought tolerant plants noted and apparently deer do not eat it.
- In spite of the small seed size, plants appear to emerge well from 1 inch planting depth. Some research has planted deeper. The target seeding depth should be about 0.5 inches below the soil moisture line.
- A firm press-wheel or other implements that firm the seedbed furrow actually inhibits seedling emergence. Aim to keep the soil behind the planter "loose". The tiny seed does not have great vigor. It cannot germinate through crusty soils. Fortunately, it generally emerges 3-5 days after planting.
- Even with great care, survival of seedlings may be lower than desired. However, even a low population of plants has provided high yield since the plant compensates by growing more branches when planted in lower populations.
- Existing, legal herbicide selection is limited. Rows capable of cultivation will help.
- Insects identified as causing yield loss to date include aphid and the corn earworm (and others that might feed on the pod).
- It is highly probably that desiccating the plant will be necessary to harvest.
- Harvest occurs September and early October. For us, this means we have a greater risk of loss due to tropical storm systems.
- Harvest will require duct tape to close any holes or cages that will allow the seed to disperse in the field rather than collect in the combine. Similarly, transport equipment will need the same examination.
- Contracting companies will coordinate with growers to have a truck for transport at the grower's field the day of harvest.
- This crop has great tolerance to root knot nematodes. Some evidence points to the fact that it may actually reduce root knot nematode numbers. However, this is still being researched.

While this is a very quick overview, realize that it is indeed a new crop for this area. We don't have all the answers to production. As such, it is not advised to produce a large amount the first year. This may be a viable, profitable rotation crop for us. Time will tell.

Can One Reduce Production Inputs?

With increasing prices of inputs and uncertainty of the stability of commodity prices or yield, many have called to discuss whether elimination of inputs would aid in potential profit. Regrettably, many of the items folks wish to reduce or eliminate, in my opinion, are not ones to reduce. As such, the comments below.

Items We Need to Include:

- **Don't Avoid LIME:** Dr. Jim Dunphy has reported soybean yield increases due to lime even when applied the day of planting. Likewise, corn has been well documented to perform best a soil pH 6.0 and above. Cotton is extremely sensitive to aluminum toxicity and aluminum compounds are highly associated with low soil pH. Even peanuts respond dramatically to proper soil pH since rhizobia respond positively to produce inoculant for nitrogen fixation. Too, at soil pH below 5.8, peanut gypsum is often underutilized or may even decrease yield! For all of these reasons, lime is essential.
- **Don't Avoid PRE-EMERGENCE HERBICIDES:** Use of pre-emergence herbicide is often the only product still controlling pigweed for some growers. As such, apply such products within the burndown

as well as at planting. Follow this by pre-emergence at early seedling stage and/or layby, depending upon the crop and existing weed population. While this is expensive, as stated, it often is all we have to gain control of pigweed when timeliness of a post-emergence may be altered by operation size or weather. Too, when compared to yield without these inputs, rarely does reducing pre-emergence use yield more or is more profitable than when compared to utilizing them.

- **Don't Neglect Micronutrients** – We often focus on N, P & K for plant nutritional needs. For many soils within this area, P & K are high to excessively high. Rather than spend money on these nutrients, make sure the limiting yield factor is not Zn, Mn or Cu!
- **Sulfur is Needed For Most Soils**– Sulfur is needed by all crops. Generally 20-30 lbs./ac is required as an addition to the soil and we hope to gain more from the existing levels in the soils. This is generally true for all but the sandier soils. Sandier soils essentially require we add 20-30 lb./ac or more annually. Without adequate sulfur, plants will not utilize available nitrogen.
- **Deep Tillage to Eliminate Hard Pans:** Sandy soils with hard pans will limit nutrient and water uptake. In wet years, they may even create water saturated conditions eliminating oxygen that deplete N as well as cause root diseases. Use a deep tillage implement to break this hard pan. Should hard pans exist on soils with a shallow clay layer (generally 10 or less inches), then a chisel plow used when soils are dry will help. Similarly to poor soil pH, hard pans limit root growth which in turn, limits plant water and nutrient uptake. As such, what other management inputs we provide does not matter since the hardpan or low soil pH is the most limiting yield factor.
- **A target goal and price!** If you don't have a goal, how can you make decisions? Determine your break-even yield and price. This will aid in providing you decisions regarding inputs all year long. Don't have a written budget yet? Use the one in the article, [2023 Commodity Enterprise Budgets & Break-Even Prices](#)
- **Don't avoid Gypsum on Virginia Peanuts:** Virginia type peanuts have always required utilization of gypsum to produce high yield. Runner types may or may not so this may be one way to reduce cost.
- **Magnesium (Mg):** Oddly, Mg does not need to be in the soil at extremely high content to be beneficial but crops do indeed need Mg. Dolomitic lime is the normally cheapest and easiest way to obtain Mg. However, if no lime is needed, examine the soil index Mg levels. If low, another source of Mg may be warranted.

In our next newsletter, we'll discuss items we CAN consider to reduce or eliminate. We will also be discussing this with NC State faculty during our winter meetings. Plan to attend!

Gramoxone Recertification or Certification (A reminder)

The current regulations requires training for anyone hauling, handling, storing, or applying Gramoxone and generic equivalent products. This certification is for a three year cycle. Since this is an EPA requirement, neither the NCDA & CS nor NC Extension has a record of when you need to recertify. As such, it seems logical to simply obtain and /or recertify this training the same year as your Private Pesticide Applicator's license.

If you have taken the training but no longer have the required certificate or documentation, to be quite blunt, it is easier and quicker to simply take the course again. As stated earlier, only the EPA has a record of your course completion. The NCDA & CS Pesticide Division can request the information from the EPA but the information provided to them by the EPA is pages and pages of pesticide numbers in order of course completion. This whole process may take a few weeks to a month.....or more.

The easiest training available is online at www.usparaquattraining.com. One will need to register on

the site, watch a 45-minute video presentation, and complete a quiz. A score of 100 is necessary to obtain the certificate (For those concerned, there is unlimited attempts to make 100 on the quiz).

Crop Comparison Tool

Simply as a reminder, estimation of crop expense can vary for each producer. This will be even more true in 2023 since many factors may influence costs. We suggest you develop a budget for each crop. Utilize break-even chart and figures to track how changes impact potential profit. Lastly, don't assume the crops you intend to grow will be the most profitable. Rather compare them with the [NCSU Crop Comparison Tool](#). Below are some examples of this tool. IF you would like assistance with this process, call our office at 252-633-1477 or email me at mike_carroll@ncsu.edu

ARC vs PLC. Which is best?

The price that triggers corn payments through the PLC federal programs is \$3.70/bu for corn and soybeans is \$5.70/bu. December futures for both of these crops are currently trading much, much higher than these price levels. Short of incredibly odd circumstances, odds of events triggering prices this low is very small. As such, PLC payments are not likely. In contrast, ARC relies upon the entire county yields becoming low. Thus, this seems a greater chance than reaching incredibly low commodity prices, yet still relies upon the probability of climatic events impacting the entire county. It may happen, but will it?

At the time of writing, it seems that one could choose whichever program desired. There is a slight advantage that ARC may provide a payment, but again, still relies upon a low probability of occurrence. To be truthful, odds are low that any payment will be made regardless of what you choose.

Regardless of what you choose, stay within a program. Realize that we approach a new Farm Bill. Records of enrollment in either program will establish yield and production acres for the "new" program. We do not know what the final bill will reveal, but history has shown us that previous year (s) dictate enrollment options and established yield.

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.

Coming Soon:

Sesame Seed Production

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.

NC Cooperative Extension, Craven Center

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