


March 4, 2019

To: Pasquotank County Farmers

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

Re: Mid-Season Wheat Crop Update Meeting
Industrial Hemp Meeting
Testing and Review Session for Pesticide License as Well as Pesticide License School
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Use of Pre-Emergence plus Post-Emergence Herbicides Is Becoming the Norm

Mid-Season Wheat Crop Update Meeting

A mid-season wheat crop update meeting will be held at the Pasquotank County Center on **Tuesday, March 12th starting at 7:30am with a sponsored breakfast**. Dr. Angela Post will provide what the current situation is with the wheat crop in the region as well as timely management tips that will need to be addressed for much of the remaining growing season. If you plan to attend, call the Pasquotank County Center at 252-338-3954 to make reservations.

Industrial Hemp Meeting

Due to scheduling conflicts, the Industrial Hemp meeting had to be rescheduled. **The meeting will be held on Tuesday, March 12th, starting at 11:00am at the Pasquotank County Center**. Dr. Post will be sharing information on how the Industrial Hemp Program is being implemented in North Carolina as well as basic Industrial Hemp production information. If you are planning to attend, please contact the Pasquotank Extension Center at 252-338-3954 to make reservations.

Testing for Pesticide License as Well as Pesticide License School

The Pasquotank County Center is hosting two tests for people desiring to obtain a commercial pesticide or private (farmer) pesticide applicator as well as dealer license. The testing dates are on **Wednesday, March 13th, and Wednesday, November 13th**, and will take place at the N.C. Cooperative Extension, Pasquotank County Center located at **1209 McPherson St, Elizabeth City**. **Testing will begin at 1pm**. Anyone coming for the testing should bring a picture ID and a calculator. Also, if you are taking the test for a government job you should also bring the address for your place of employment since it will be needed when you sign up to take the test. **A review session in preparation for the testing will be held on Friday, March 8th, and Friday, November 8th, with both being from 9:00am to 11:00am at the N.C. Cooperative Extension, Pasquotank County Center**. If you plan to attend any of these, please call the office at 252-338-3954 to register.

To order the manuals in preparation for the testing, please see the N.C. Department of Agriculture and Consumer Services webpage.

<http://www.ncagr.gov/SPCAP/pesticides/exam.htm>

The N.C. Cooperative Extension, Pasquotank County Center in conjunction with the Pesticide Safety Education Program at NC State University and the NCDA&CS Pesticide Section will be offering a 2-day school for people who would like to obtain a private applicator (farmer) or commercial applicator/dealer license. **The date and time have not yet been determined but will be made available as soon as it is set.**

If you have questions about any of this information, please contact the office at 252-338-3954.

Keeping up with Your Pesticide Recertification Credits: Credit Status Report

For those commercial pesticide applicators with a certification period that ends on June 30, 2019 or private (farmer) pesticide applicators whose certification period ends September 30, 2019, they must have required continuing education credits by those dates. Commercial pesticide applicators must obtain the necessary credits in no less than two years. The North Carolina Department of Agriculture & Consumer Services, Pesticide Section provides a means for you to check your pesticide license credits received to date for the current recertification period. The URL for that site is as follows:

<http://www.ncagr.gov/aspzine/str-pest/pesticides/Recert/RTsearch.asp?LicNum>. If you have any questions about this, please contact the Pasquotank County Center at 252-338-3954.

Last Private (Farmer) Pesticide Applicator Recertification Class for 2019 and Completing the Renewal Process

If your private pesticide applicator license expires in 2019 and you have not already received the necessary training, then you need to come to the following training to get recertified. This is the last class for 2019. You must receive 4 hours of credit that includes the “v” and “x” training. To provide the 4 hours that private pesticide

applicators will need, the Pasquotank County Center is conducting a class on **Thursday, August 13th at the Pasquotank Extension Center** located at 1209 McPherson Street. If you plan to attend either of these trainings, please contact the Pasquotank County Center.

Private pesticide applicators (farmers) that had to get recertified in 2019 and have already received their 2 hours of “V” and 2 hours of “X” training before the first of March will soon be getting their renewal cards that **they must fill out and return with their \$10.00 check to the address indicated on the form. Only after you have done this does the NCDA&CS Pesticide Section issue you a new pesticide card and consider you up to date.**

Date/Time	Location	Topic	Speaker	Credits Provided
Thursday, August 13, 2019 5:30pm – 9:30pm 5:30pm – 7:30pm V 7:30pm – 9:30pm X Commercial credits provided during X	Pasquotank County Center	Private (Farmer) Pesticide Applicator Recertification Class – V & X Training	Al Wood, Extension Agent, Pasquotank County, Clay Hudson, NCDA&CS, Pesticide Section	Private Applicator 2 hours V 2 hours X Commercial Applicator 2 hours A, B, D, G, H, I, L, M, N, O, T

Pesticide Disposal Day in Perquimans

The Perquimans County Center jointly with the Structural Pest Control and Pesticide Division, North Carolina Department of Agriculture and Consumer Services will be conducting a **Pesticide Disposal Day on Tuesday, April 9th from 10:00am to 2:00pm at Southern States in Hertford located at 330 Ballahack Rd.** This Pesticide Disposal Day will be for home gardeners, home owners, and farmers to dispose of unwanted, damaged, and obsolete pesticides free of charge that are in containers that are not leaking and have identification of the contents. **THIS PESTICIDE DISPOSAL DAY IS FOR PESTICIDES AND NO OTHER SUBSTANCES.** If you have any questions, contact Dylan Lilley at 252-426-5428.

Ordering Soybean Seed: Don’t Delay

The 2018 growing season was a challenge in many parts (although not all) of the soybean producing area of the United States. Although, I have not heard of any major concerns about seed supply, it may be that at least for certain varieties, supplies may be limited. I know that this is a year with lots of uncertainty with regards to allocation of crop acres because of volatile markets, but having an approximate idea of acres of corn, soybean, etc. will allow you to better know how many soybean seeds (as well as for other crops) that you need to order.

The other thing that you may consider when ordering soybean seed is the type of seed treatments to have on your seed. There are a whole range of products that can be

included in seed treatments from insecticides, fungicides (for protection of the seedling), nematicides (to control early season nematode damage), inoculum for enhancing nitrogen fixation, to numerous biologicals that are said to have various benefits to the plants well-being. One thing that I have noticed is that seed treatments appear to have benefits in helping soybean to emerge and get established, especially in adverse conditions, such as wet, cold, hot, and/or dry conditions. At a minimum, a good combination of seed applied fungicides (ones that control oomycetes such as *Phytophthora* as well as *Rhizoctonia*) can be beneficial.

Plant Population and Seed Spacing Impact on Corn Yield

In the past, I have had questions about what the seed spacing of corn in inches would be for various populations at a given row width. **I have put together a table that gives the inches per seed for a range of plant populations and row widths** (*see Table below*).

Things to think about:

- **If your ears of corn in previous years are filled all the way to the tip, this may be a sign that you have not exceeded the yield potential of your soils, growing conditions, hybrids, and/or management practices and you could benefit from an increase in your corn plant populations.**
- **Make certain that your planter and the operation of your planter (i.e. any part of your planter such as brushes, vacuum/pressure settings, or the operation of your planter such as planter speed) are correct so as to provide precision seeding.** Studies have shown that for each inch you deviate or vary from your intended plant spacing, you lose about 6 bushels of corn per acre.
- **If you feel that you are leaving bushels of corn on the table (i.e. you have not reached the yield potential of your corn crop), then you may want to increase your seeding rate.** I would advise that you make incremental increases in your plant population such as 2,000 seeds per acre or so.
- **Some varieties have better standability than others and attention should be given to your particular corn hybrids when determining seeding rates.** On our most “thirsty soils” in the county, I would not use less than 28,000 seeds per acre. On most of our corn acres, seeding rates of 32,000 to 34,000 seeds would work. On our most productive land, I would not use any more than 36,000 seeds per acre, unless you have tested your corn hybrids and/or land at those higher seeding rates as well as have a means for supplemental water.
- **No matter what your row width, it is not advisable to have an in-row spacing of no less than 6 inches** (i.e. 6 inches between seeds) unless personal experiences with your corn hybrids and resources tell you otherwise.

I give you this information just to let you think about what is best for your operation. If you have questions, please give me a call.

	Inches Per Seed at Various Row Widths and Seeds Per Acre@							
Row Width (Inches)	24,000 Seeds Per Acre	26,000 Seeds Per Acre	28,000 Seeds Per Acre	30,000 Seeds Per Acre	32,000 Seeds Per Acre	34,000 Seeds Per Acre	36,000 Seeds Per Acre	38,000 Seeds Per Acre
20	13.1	12.1	11.2	10.5	9.8	9.2	8.7	8.3
24	10.9	10.1	9.3	8.7	8.2	7.7	7.3	6.8
26.6	9.8	9.1	8.4	7.9	7.4	6.9	6.6	6.2
30	8.7	8.0	7.5	7.0	6.5	6.1	5.8	5.5
36	7.3	6.7	6.2	5.8	5.4	5.1	4.8	4.6
38	6.9	6.3	5.9	5.5	5.2	4.9	4.6	4.3
40	6.5	6.0	5.6	5.2	4.9	4.6	4.3	4.1

@ Regardless of the row width and seeding rate, seed spacing should not be less than 6 inches. For the seeding rates and row widths shown in this table, the values highlighted in gray are not less (or just about) 6.0 inches between seeds

Use of Pre-Emergence plus Post-Emergence Herbicides Is Becoming the Norm

It appears that it is becoming a more routine practice to use both a pre-emergence and post-emergence herbicide in crops such as corn, soybean, and wheat. A lot of this appears to be due to all the herbicide resistant weeds. Although we do not have as bad a problem with glyphosate resistant Palmer Amaranth as some areas, we do have to deal with it and other herbicide resistant weeds. In addition, to herbicide resistant Palmer Amaranth, we have herbicide resistant common ragweed, and in the region, glyphosate resistant water hemp has been identified as well. One other scary fact is that certain weeds have been found to have resistance to multiple modes of action. We must be proactive on herbicide resistant weeds because we do not want to have the next new herbicide tolerant weed. That is not a distinction we want. Most of us have heard about the strategies to deal with these very troublesome weeds. I want to emphasize a couple of them.

One of the strategies to use in dealing with herbicide resistant weeds, is to use multiple modes of action. Modes of action is the way the herbicide/pesticide kills the weeds. With herbicides, the mode of action could be interrupting photosynthesis, (process for making food for the plant), inhibiting cell division (needed for growth), etc. By using different modes of action, you are less likely to select for plants (ones left surviving) that have genes that allow the plant to not be killed by the herbicide/pesticide used.

The other strategy is to use herbicides with different times of application such as pre-emergence herbicides vs post-emergence herbicides. Although not always true, by using pre-emergence herbicides in addition to a post-emergence herbicide, you can use a different mode of action as well as buy yourself more time before having to apply your post-emergence herbicide. Hopefully this will keep you from being blindsided with weeds too big to be controlled, especially with the Palmer Amaranths that grow so fast.

Even an herbicide system such as Liberty with Liberty Link soybean can benefit from a pre-emergence herbicide.

If you have problems with herbicide resistant weeds and you are not currently using a pre-emergence herbicide, then you may want to consider using one. The use of both a pre-emergence and post-emergence herbicide is like the boxer using both a left and right hook to bring down their opponent.

Staying Connected with Social Media

I am of the generation that saw the advent of calculators, computers and the internet and with each of these I have to some degree adopted it and become proficient enough to use them. With my Extension work, I have learned to use a number of means to distribute much needed information such as newsletters, meetings, emails, websites, and even pre-recorded phone messages. One of the social medias that I am using now with my work is Twitter. Much of my tweets are about what Extension is doing in Pasquotank County as well as the entire northeast, but I do share some instructional information as well. **If you do have a Twitter account and would like to follow me, my handle is as follows: @aewood73.** Just as a side note. The 73 was my high school football number. I played nose tackle.