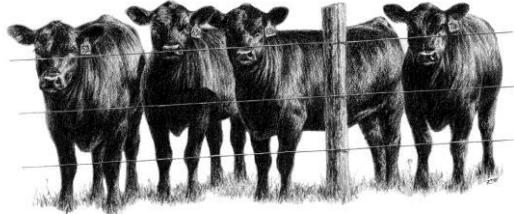


The Back Forty News



FULTON COUNTY U OF A COOPERATIVE EXTENSION SERVICE NEWSLETTER

Fall 2019

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From the County Agent's desk...



This summer has been far from normal but when we are receiving moisture and mild temperatures in May, June, and July it makes for good production and tolerable working weather. For starters, the abundance of rain has provided producers larger hay crops, which in turn means an increased supply for those winter months. The flip side to that though was finding time to get the hay cut and cured before the rain came. In most summers, that's hardly an issue. It is a good problem to have but can make it difficult when we are trying to get our hay rolled up and put in the barn. August, however, showed its true colors and the moisture supply shut off and the hot temperatures returned. Luckily, we are on that downhill side of summer and will soon be switching over to fall. With that in mind, producers need to begin making those fall preparations. This includes possible stockpiling forages. All too often, producers finish harvesting hay in the fall and then begin feeding it soon afterward. Adopting pasture management practices that extend the grazing season avoids investing more cost into forage that could be grazed instead of being harvested for hay. In Arkansas, the use of stockpiled forages has reduced winter feeding expenses for producers across the entire state. Some other things to consider heading into the fall season include wildlife food plot preparations, soil sampling and fertilizing, and hay sampling. If you are curious about any of these services or anything else related to your operation, please give me a call, as I would be happy to assist you in any way I can.

Bermudagrass Hay Yield Trial

Cory Tyler, Fulton County Extension Agent

Soil fertility is an important factor when it comes to producing forage for livestock. Whether it is for grazing or hay production, the end goal is to have the highest quality forage by using resources we have available to us. If you follow our Facebook page then you saw where we were working on soil fertility trails in Fulton and Baxter Counties. We started this project towards the end of May and the demonstration was conducted in Bermuda grass hay fields. In total, there were 9 different treatments (listed below) replicated 4 times at each location.

<u>Trt#</u>	<u>Treatment / Name</u>
1	Commercial Fertilizer Per Soil Test
2	17-17-17 @ 250 lbs/acre
3	17-17-17 + Q2 Foliar Spray(8 fl oz/acre)
4	Turkey Litter @ 2 tons/acre
5	Q2 Plus Foliar Spray only (8 fl oz/acre)
6	Commercial Fertilizer Per Soil Test + Q2 Plus (8 fl oz/acre)
7	Turkey Litter + Q2 Plus (8 fl oz/acre)
8	Commercial Fertilizer per Soil Test with Ammonium Sulfate to supply 1/5 of total N need and Ammonium Nitrate for the rest
9	Control (no treatments)

When the hay was ready to cut, we took yield samples from each plot and reported yield tonnage per acre and the \$ per lb. of dry matter (DM) yield. To understand the results of this demonstration Baxter County Extension Agent Brad Runsick explains those details below.

Bermudagrass Hay Yield Trial Results

Brad Runsick, Baxter County Extension Agent

Now, for a brief statistics lesson, which I'm sure everyone is thrilled to hear, but it matters. So, bear with me. The letters on each of the bars in the graph represent the statistical significance of the differences in those DM yields. Statistics allow us to discern whether the differences we see in the yield data are, in fact, due to the treatments themselves. For example, the average yield on the plot that received NPK per soil test with ammonium sulfate (21-0-0-24) is indicated by the letter "A". It was different enough from the others to be able to attribute that difference to the fertilizer that was applied. All of the treatments that contain B's are all "statistically" the same, even though the actual lbs. of DM (dry matter) yield are slightly different. For example, the Q2 Plus® only treatment at 8 fl. oz. /acre yielded 2,271 lbs. DM/acre, and the untreated control plots yielded 2,563. That's a difference of 292 lbs. /acre. That's a difference, for sure, but it isn't enough of one to say that it's a result of the different treatments in this study. It could be different in a different study on a different field. That's why each treatment was replicated four times, and the whole thing was repeated on a different farm in Fulton County under different conditions. You'll see those results a little farther down in the article.

Chart 1. Yield comparison of fertilizer sources (Baxter)

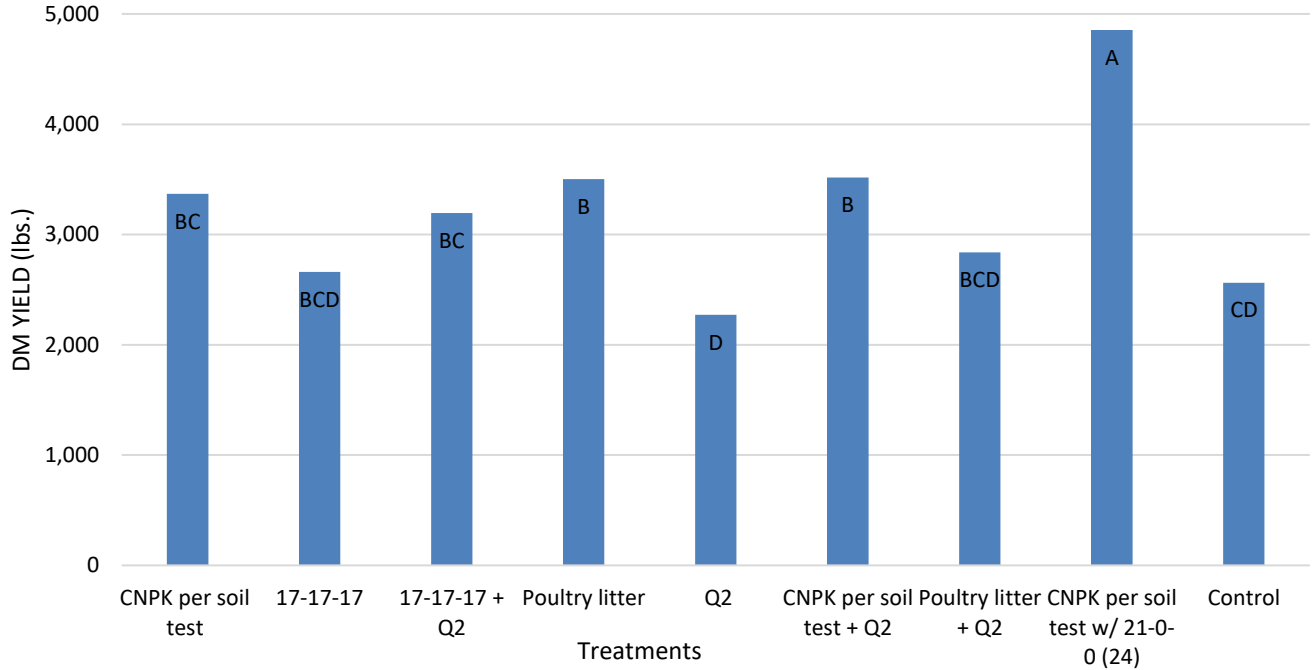
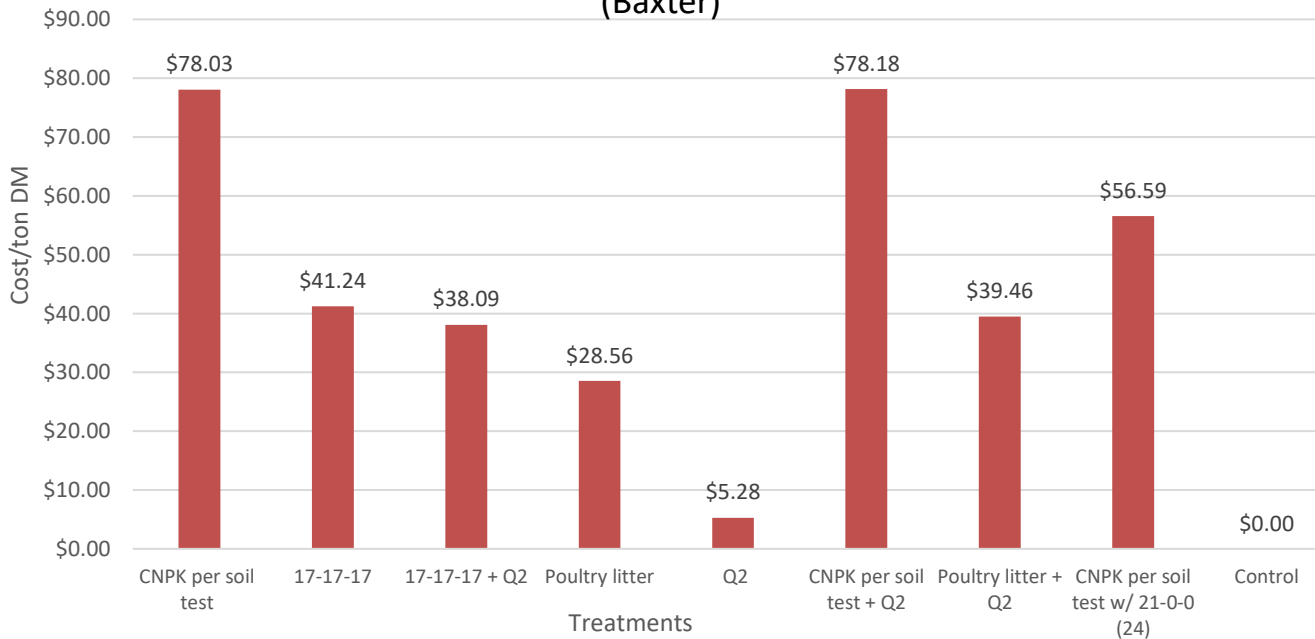
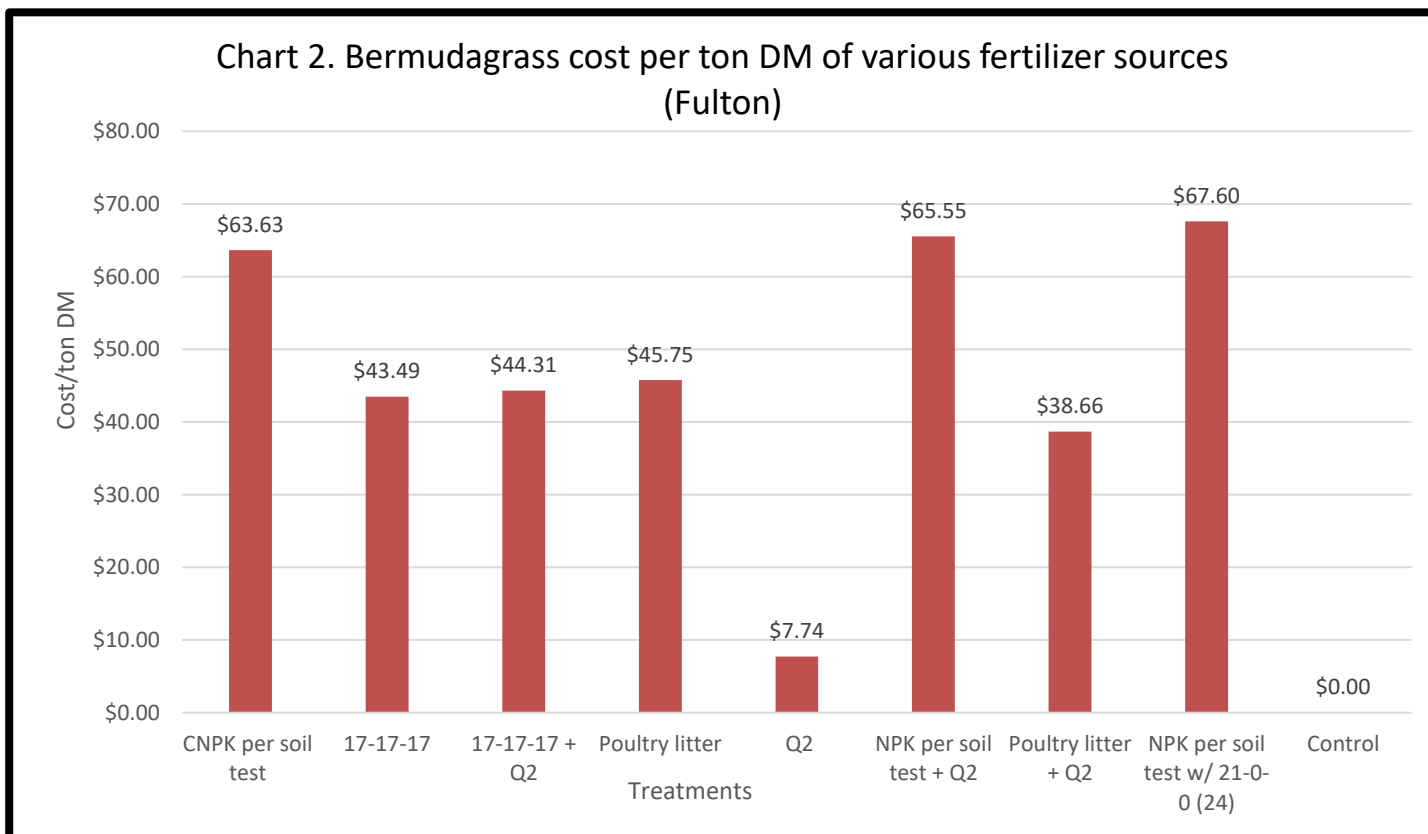
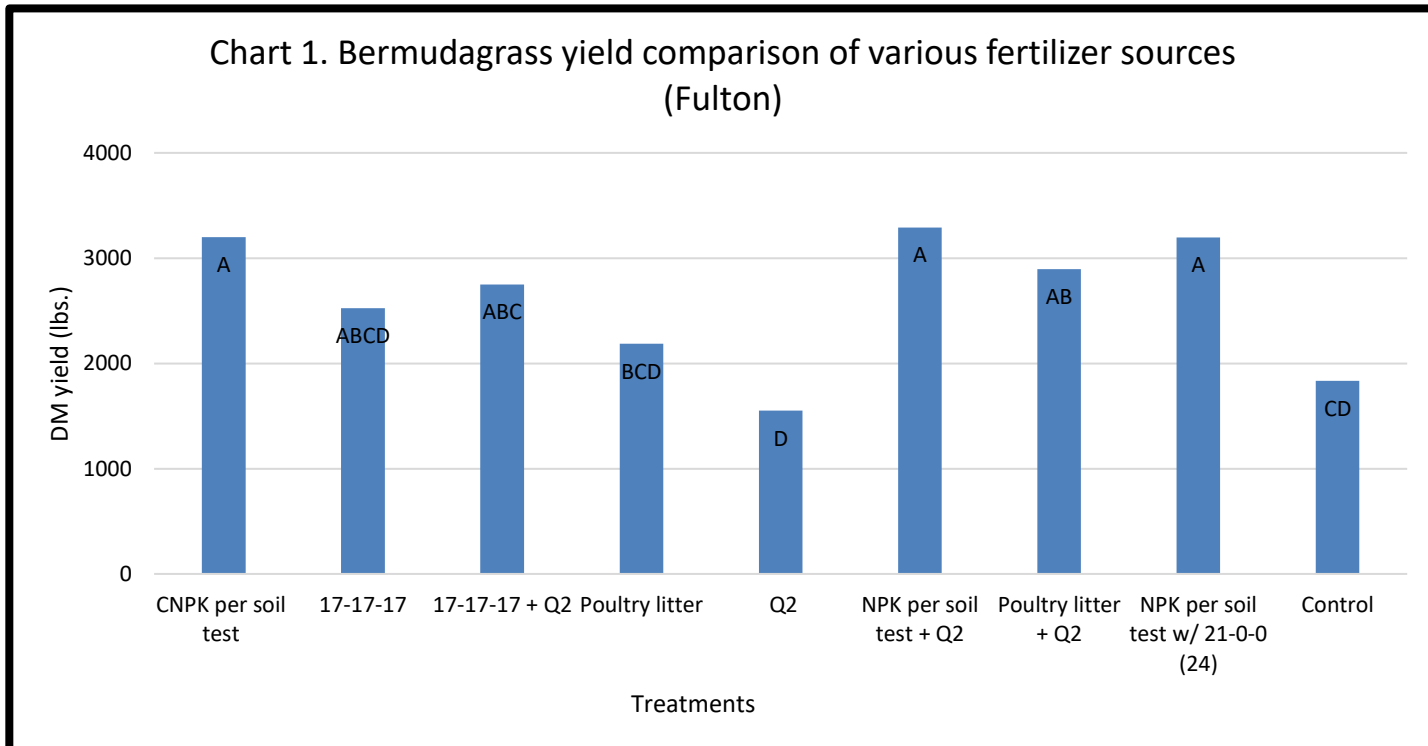


Chart 2. Bermudagrass cost per ton DM of various fertilizer sources (Baxter)



In the Fulton County trials, we did not have quite the variation. Some of that could have been attributed to the non-uniformity of the forage in the field due to large areas of Johnsongrass in the plots. Regardless, here are the results. In this trial, the NPK with sulfur, NPK without sulfur, NPK with Q2 Plus®, triple 17, triple, 17 with Q2 Plus®, and poultry litter with Q2 Plus® were all “statistically” the same. As is the Q2 Plus® only and the untreated control plot since they both contain “D”’s.



Conclusions

In summary, yields were the same in those plots that were treated with Q2 Plus® only and those that didn't receive any treatment (control). In both locations, when Q2 Plus® was coupled with a treatment, such as 17-17-17, poultry litter, or commercial fertilizer at soil test recommended rates, the forage yields did not differ from those treatments by themselves.

Important Dates

Private Applicator Training (PAT) for Restricted Use Pesticides

Local farmers, ranchers, and other agricultural producers who wish to renew an existing pesticide license or receive a first time private applicator license will have the opportunity to do so by receiving this required training. For those of you who are up for recertification, you should have received a letter from the State Plant Board indicating when your license expires. If you have received this letter, then according to our records and the State Plant Board records, your license is about to expire.

The training will be held November 14th, 2019 starting at 6:00 p.m. at the Fulton County Fairgrounds Hickinbotham-Miller Building. *This training is NOT for certification of commercial (for-hire) pesticide applicators!*

There is a \$20 fee (checks made to UACES or exact cash preferred) per person that MUST be paid at the door before the training. This fee does not relate to the licensing fee charged by the State Plant Board. It is only for the training. The fee for licensure is \$10 for a 1-year license or \$45 for a 5-year license. These fees will be paid by you after the training and sent to the State Plant Board for licensure, not the Fulton County Extension Office.

Fall "BANGS" Vaccinations

The fall brucellosis vaccinations are coming up soon. Livestock and Poultry technician, Franky Sharp, and I will **tentatively** be out on **Tuesday November 5th, 2019**. If you have heifers to be vaccinated, please let us know by **Friday, October 25th, 2019**. Return the enclosed cut-out card to our office in person, mail it to us at P.O. Box 308, Salem, AR 72576, or give us a call at 870-895-3301 to be added to the list. Include detailed directions to where the heifers will be. **Please be specific.**

Vaccinations are free of charge. Heifers must be at least 4 months old but not older than 12 months old to be eligible for vaccination. We will use the same procedure as in the past and notify you by letter before you are scheduled for vaccinations. You will need handling facilities to confine and work the calves. Also, you or a representative for you must be present at the time of vaccination or the technician will not vaccinate the heifers. If no one is there, we'll have to move along to the next stop. Remember, the time that we schedule for your stop could be give or take an hour or so. It depends on how fast or held up we are at prior stops.

Return by: October 25, 2019

To: County Extension Agent – Staff Chair

In reply to your inquiry, I have _____ heifer calves, 4 to 12 months of age, which I would like to have vaccinated for Brucellosis (Bang's Disease).

Name _____

Address _____

Phone _____

Community _____

Location of Farm _____

CES-443 Brucellosis Vaccination Reply Card

(8-01)

The Important of Soil Testing

I have received many calls on soil testing and the purpose it serves when it comes to our lawns, gardens, and pastures. What most people do not realize is that our office provides soil-testing services and even better, it is free of charge! Knowing what your soil needs to produce a quality garden, lawn, or grazing or hay pasture is important to each producer. With a soil test, we can get an estimate of the supply of plant food elements in the soil and if the soil is in the correct pH range (too acidic or too alkaline). After that soil test comes back to our office, I will look at it and calculate a custom fertilizer recommendation to your specifications. This includes plant food needed at planting or green-up and the lime needed to offset harmful soil acidity. I highly recommend if you have not taken a soil test to do so and bring it by. If you need help obtaining a soil sample, please give me a call as I would be more than happy to come assist. When it comes to taking soil samples, follow these tips listed below. This will ensure the most accurate reading when the test is conducted.

Before taking soil samples, draw a sketch showing the different fields or areas that will be sampled. Sample areas around shrubs separately from turf. If you have a large lawn or garden, sample areas separately, that have been managed differently or will be managed differently. Sample each field or management unit separately. Use the following procedure:

- Gently rake aside mulch or surface litter like straw, leaves and old stalks
- Take soil with a soil probe or shovel from at least 12 samples in each area to obtain a representative sample
- A zigzag sampling pattern is preferred

Sample crop fields to the depth of plowing, usually 6 inches.

Take samples in pastures, gardens, lawns, around shrubs and golf courses to a depth of about 4 inches and mature fruit trees at a depth of 12 inches.

At each stop, place a small core of soil in a clean bucket or paper bag. Mix soil thoroughly. **Discard rocks, gravels and roots.**

Allow the soil sample to air dry before filling the sample box. Spread the sample on a clean surface in the open. Spreading newspapers or large paper bags on a countertop or workbench works nicely. Do not heat the sample in an oven to speed drying!

Remove one pint for the laboratory sample. Label with the field number or name. Be sure to fill the pint container (containers can be obtained from any county extension office). Bring the samples back to your county extension office and they will then be sent to the laboratory. Be prepared to give a short history of each field.

A good sample with accurate information will result in a good recommendation. Your soil tests can serve as a guide for fertilizer practices for the next three or four years. **If you have tests over four years old, take samples again for up to date recommendations. If using intensive management or producing several crops per year, consider sampling yearly.**



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LITTLE ROCK, ARKANSAS 72204

OFFICIAL BUSINESS

RETURN SERVICE REQUESTED

Fulton County Extension Office
P.O. Box 308
118 West Locust Street – Ste 107
Salem, AR 72576

A handwritten signature in black ink, appearing to read 'C. Tyler'.

Cory Tyler
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