



# REGULATORY SERVICES NEWS

UNIVERSITY OF KENTUCKY – COLLEGE OF AGRICULTURE

THIRD QUARTER 2001

FEED ♦ FERTILIZER ♦ MILK ♦ SEED ♦ SEED TESTING ♦ SOIL TESTING



## A New Look for Soil Test Reports

When you have soil tested through the University of Kentucky Cooperative Extension Office you will notice a change in how your soil test report looks. The soil-testing laboratory will begin reporting test results and recommendations to Extension offices in two different formats. One format is very similar to the format used now. The other format is a significant change from the old. Extension offices will decide which format is best suited for their county.

The two formats will look different but will contain the same information. Soil test reports contain sample identification, laboratory results, recommendations on the amount of lime and fertilizer to apply for the crop grown, and several comments related to the crop grown.



The laboratory results for nutrients are from a Mehlich III test of the soil. The nutrients tested are phosphorus, potassium, calcium, magnesium, and zinc expressed as pounds of nutrient per acre. The nutrient levels tested are an estimate of how much of the nutrients in soil are available to plants. Nitrogen is not tested because there is not a good soil nitrogen test available. Soil pH and a buffer pH are also tested. The soil pH is a measure of the acidity of your soil. The lower the soil pH the more acidic the soil. The ideal soil pH for most agronomic crops is 6.2. The buffer pH value helps determine how much lime is required to remove the soil acidity.

If crop information is submitted with the sample, the laboratory results will be analyzed and lime and fertilizer recommendations will be made. Since a nitrogen test is not made, nitrogen recommendations are based on field research. Nitrogen, phosphate, and potash recommendations are made in pounds per acre. Lime recommendations are made in tons per acre. Magnesium is rarely recommended because of the abundance of this nutrient in Kentucky soils. Zinc is occasionally recommended for corn if the soil test indicates the soil is too low in zinc.

Comments will appear on the report explaining how to best manage soil fertility to maximize yield for the crop grown. An extension agent signs the reports. A phone number from the extension office is provided on the reports for you to call and ask any questions you may have.

*Frank Sikora – Soil Coordinator*

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Chris Thompson-Milk Coordinator

## Bulk Milk Tank Calibrations

The Kentucky Department of Agriculture, Division of Regulation and Inspection and Regulatory Services has entered into a cooperative agreement relating to bulk milk tank calibrations. The KDA has been involved with tank calibration for a number of years. To meet the needs of Kentucky's dairy industry, they recently purchased a new "state of the art" calibration truck to be used for evaluating the accuracy of bulk milk tank calibrations.

Regulatory Service's staff frequently works and communicates with a wide array of Kentucky's dairy industry representatives. It seemed like a good "fit" for the two agencies to work together in this area. Regulatory Services has agreed to provide the KDA with inquiries concerning calibration requests. KDA will then make a visit to the requested site and evaluate the tank's calibration. If a new chart is needed, KDA will provide the necessary data to Regulatory Services who will then use the data to print a new chart. A laminated copy of the chart will be provided to the dairy producer and a copy of the chart will be provided to the milk handler who issues payment to the producer.



When making a request to have a tank's calibration examined, be sure to provide the following:

- The producer's name, address and phone number;
- The hauling companies' name and phone number;
- The bulk-milk pickup schedule for the producer;
- The length of time the tank is typically empty;
- Whether or not a new chart needs to be constructed;
- Any other information concerning the tank's construction, adjustment, or situation that might be helpful.

Remember, any time a tank is installed, it is required to be accurately adjusted and calibrated. If you would like to request that a tank's calibration be evaluated, you may contact Randy Wise with the Kentucky Department of Agriculture, Division of Regulation and Inspection at (502) 564-4870 or Chris Thompson with Regulatory Services at (859) 257-2785. Dairy producers who have worn or faded conversion charts that are difficult to read can also request charts to be reprinted. Producers who need charts reprinted should contact Regulatory Services at the number listed above.

## New Award Announcement for Kentucky Dairy Producers in 2002

The following article and application appeared in the July 2001 Dairy Products Association of Kentucky Newsletter. At the 2002 Kentucky State Fair, an award will be presented to a dairyman who is judged to be Kentucky's top quality milk producer. Next August seems like a long way off, but now is the time to start thinking about who might be a good candidate for this award. If you know of a producer who you think exemplifies quality milk production, share this article and application with them. It would be a great honor for a producer to be the first annual recipient of the Kentucky Quality Dairy Producer Award.

DPAK Announces the Kentucky Quality Producer Award

The DPAK Executive Board recently voted to give an annual award to the top quality dairy producer in the state. Beginning in 2002, the Kentucky Quality Dairy Producer Award will be given at the Dairy/Honey Recognition Dinner at the Kentucky State Fair. The DPAK Executive Board appointed a committee to develop criteria for the award. The committee consisted of Chris Thompson, UK Division of Regulatory Services, Eunice Schlappi, KY Department of Agriculture, Bill Crist, UK College of Agriculture, and Dale Marcum, KY Cabinet for Health Services, Milk Safety Branch.

Applications for the award are being distributed to the KY Farm Bureau Federation, SUDIA, KY Department of Agriculture, KY Department of Health, dairy processors, producer cooperatives, UK College of Agriculture, UK Division of Regulatory Services and other interested parties.

The purpose of the Kentucky Quality Dairy Producer Award is to recognize the producer who best exemplifies quality milk production in Kentucky. The contest is open to all Kentucky dairy producers. Applications may be submitted by producers themselves or by professionals who serve the dairy industry such as dairy field representatives, veterinarians, dairy extension personnel, milk haulers, inspectors and others. These individuals should work with the dairy producers to complete the application. All applications should be sent to Leon Townsend, DPAK Executive Director, 123 Buena Vista Drive, Frankfort, KY 40601.

Applications should be based on a year's criteria with the yearly period running from May 1, 2001 through April 30, 2002. All nominees are required to have valid permits from the Cabinet for Health Services, Milk Safety Branch, during this period. Applications must be postmarked or delivered to DPAK no later than June 30, 2002.

*Leon Townsend, Executive Director  
Dairy Products Association of Kentucky*

**The Dairy Products Association of Kentucky Nomination form for  
Kentucky Quality Dairy Producer Award**

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**NOMINATOR**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

E-mail address: \_\_\_\_\_ FAX: \_\_\_\_\_

Position: (Check one) \_\_\_\_\_ Veterinarian \_\_\_\_\_ Extension \_\_\_\_\_ Fieldstaff \_\_\_\_\_ Other

If other, please specify: \_\_\_\_\_

**FARM DATA**

Farm Name: \_\_\_\_\_

Owner's Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Barn/Office Phone: \_\_\_\_\_ FAX: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Years dairying in this facility? \_\_\_\_\_ Number of Milk Cows: \_\_\_\_\_

Breed: \_\_\_\_\_ Number of Milkings per Day: \_\_\_\_\_

DHIA member (Y/N) \_\_\_\_\_ Other testing service: \_\_\_\_\_

Current Rolling Herd Average: \_\_\_\_\_ Milk: \_\_\_\_\_ Protein: \_\_\_\_\_ Fat: \_\_\_\_\_

Herd Veterinarian/Clinic: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Herdperson's name: (If Applicable): \_\_\_\_\_

Who does the milking? \_\_\_\_\_

Who is the person on the farm most responsible for milk quality? \_\_\_\_\_

Number of employees: \_\_\_\_\_ Please List: Family Members: \_\_\_\_\_

Others: \_\_\_\_\_

**Milking Management**

Please describe this producer's normal milking procedure: (pre, post dipping, etc.) \_\_\_\_\_  
What's your annual culling rate? \_\_\_\_\_ per Year

**MANAGEMENT PROCEDURES AND STRATEGIES**

Please describe your milking facilities (Check which categories apply.)

Milking Parlor  Parallel  Herringbone  Side Opener  Other

Parlor Size \_\_\_\_\_

Flat Barn (Walk-through type) \_\_\_\_\_ Stall Barn \_\_\_\_\_

Number of milking units \_\_\_\_\_

Please describe your cow housing (check which categories apply)

Tie Stall  Stanchion  Freestall  Bedded Pack  Open Corral

Are there other pertinent details about your housing or milking facility? \_\_\_\_\_

Describe mechanism for recording bulk tank temperatures: \_\_\_\_\_

**CRITERIA SECTION**

To verify the milk quality test results listed below, all applications shall be accompanied with an official summary of the producer's herd test results for the year's period May 1 through April 30, 20\_\_\_. Official results include laboratory reports from certified or licensed laboratories and results listed on the producers pay stubs. No results for this 12 month period should be omitted from these attachments. Additionally, copies of **all** barn inspection sheets for this 12 month period shall accompany this application.

Somatic Cell Count:  
High (Last 12 months) \_\_\_\_\_ Month \_\_\_\_\_

Low (Last 12 months) \_\_\_\_\_ Month \_\_\_\_\_

Average (Last 12 months) \_\_\_\_\_

Average Standard Plate Count (Last 12 months) \_\_\_\_\_

Average P. I. Count (if applicable) (Last 12 months) \_\_\_\_\_

Has this producer had a permit suspension during this 12 month period?

Yes  No

If Yes, reason \_\_\_\_\_

Has this producer been cited for an antibiotic residue in the last 12 months?

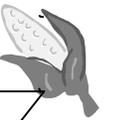
(Y/N) \_\_\_\_\_ When? \_\_\_\_\_

What was the cause of the incident? (If more than one, please list) \_\_\_\_\_

Why do you believe that this operation deserves to be recognized as the best operation in Kentucky for producing quality milk?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that to the best of my knowledge, the information attached to and contained within this application is complete and accurate and I authorize the selection committee permission to examine my records.



5. Store grain mixes in proper storage facilities which protect the grains from moisture. Routine cleaning of storage facilities will decrease the incidence of mold growth or contamination of stored cereal grains. Proper timing of aeration and cooling can reduce both temperature and

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moisture, the two elements associated with mold growth in farm stored grain.

The Food and Drug Administration (FDA) released proposed draft guidance levels for corn, corn by-products and the total ration in various animal species in June 2000 for public comment (Table 2). Comparing the proposed guidance with the old guidance levels, the most striking

change is that the action level for horse diets was lowered from 2.5 ppm (5 ppm in non-roughage portion of the diet based on a 50:50 blend of

concentrate and forage/pasture) to 1 ppm in the total diet. The other most notable change is the action level for fumonisin in dairy rations. Previously, lactating ruminant rations were not addressed. The proposed action levels in these rations limits the fumonisin level at 30 ppm in corn and corn by-products, with the maximum level of corn in the diet being is restricted to 50% of the total ration dry matter. In other words, the maximum level in a complete ration is 15 ppm, assuming the dairy ration is 50% concentrate and 50% forage.

Table 2. Summary of Recommended Levels for Total Fumonisin in Corn, Corn By-products, and the Total Ration in Various Animal Species.

Animal or Class	Recommended Maximum Level of Total Fumonisin in Corn and Corn By-Products (ppm <sup>1</sup> )	Feed Factor <sup>2</sup>	Recommended Maximum Level of Total Fumonisin in the Total Ration (ppm <sup>1</sup> )	
Horse <sup>3</sup>	5	0.2	1	
Rabbit	5	0.2	1	
Catfish	20	0.5	10	
Swine	20	0.5	10	
Ruminants <sup>4</sup>	60	0.5	30	
Mink <sup>5</sup>	60	0.5	30	
Poultry <sup>6</sup>	100	0.5	50	
Ruminant, Poultry & Mink Breeding Stock <sup>7</sup>	30	0.5	15	
All Others <sup>8</sup>	10	0.5	5	

<sup>1</sup>Total fumonisin = FB1 + FB2 + FB3.

<sup>2</sup>Fraction of corn or corn by-product mixed into the total ration.

<sup>3</sup>Includes asses, zebras and onagers.

<sup>4</sup>Cattle, sheep, goats and other ruminants that are > 3 months old and fed for slaughter.

<sup>5</sup>Fed for pelt production.

<sup>6</sup>Turkeys, chickens, ducklings and other poultry fed for slaughter.

<sup>7</sup>Includes laying hens, roosters, lactating dairy cows and bulls.

<sup>8</sup>Includes dogs and cats.

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Researchers at North Carolina State University reported that milk production can decrease at the rate of 1 lb of milk production for every 5 ppm of fumonisin in the ration. These researchers noted that the decrease in milk production was most likely associated with a decrease in ration dry matter intake. At the maximum allowed level of Fumonisin of 15 ppm in the total ration, you can reasonably expect to experience a 3 lb/day decrease in milk production. Therefore, their suggestion is to offer "clean" feed instead of feed that has been found to contain mycotoxins.

It is also important to note that there are interactions of mycotoxins. Thus, it is reasonable to expect that state regulatory officials could lower the upper action levels if a sample contains other mycotoxins or if a firm has a past history of mycotoxin problems.

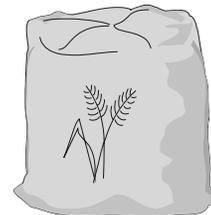
In conclusion, several companies have been traveling the state selling feed additives that have been represented as mycotoxin binders. If the information provided by a company claims a feed additive has been approved as a mycotoxin binder,

they are making a false claim. In such a case, the label would be considered to be false and/or misleading and then would be deemed to be misbranded and subject to regulatory action.

*Steve Traylor – Feed Coordinator*

### **Fall Seed Notes**

It is once again time to check inventories for outdated carry over seed. A seed germination test in Kentucky is good for 9 months, exclusive of the month of test. If you have inventory remaining from your spring stock, it may be outdated before or during the fall season.



If you have seed in your inventory which needs to be tested for germination, you should sample the seed lots and send them to a seed laboratory for testing. Allow plenty of time for the seed to go thru the testing process. You can submit your samples to our laboratory or to other laboratories that are available to you.

Uncertified seed in Kentucky requires a minimum germination of 60 percent. Certified seed must meet the germination standard established by the Kentucky Seed Improvement Association for the seed kind. The labeling on the seed analysis tag must reflect the new test date and germination figure. It is best to acquire new labeling for retested lots, however, the new test date and germination percent can be written on the existing tags.

If you are submitting samples for testing to our laboratory and are using the sample envelopes which we provide, fill out the sample envelope completely. Samples received without complete information on the envelope usually result in delays in testing. Be sure to indicate the seed harvest date information in the space provided. This determines if a pre-chill is needed prior to the germination test. A pre-chill may be necessary to break seed dormancy if the test is being conducted on newly harvested seed. Pre-chills usually take at least 5 days resulting in additional time requirements for recently harvested seed.

Another subject of interest prior to the beginning of fall is how our service samples of new crop wheat are performing in the lab. At this point we have tested about 40 samples of wheat. These samples have tested very well for germination with the majority of germinations falling in the mid-90 percent area. Early samples point toward a high quality Kentucky grown wheat seed crop.

*David Buckingham – Seed Coordinator*

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### **14<sup>th</sup> Feed Quality Assurance Workshop**



From left to right: David Troutman, John Flood, Steve McMurry, Noel Johnston, Terry Prather, Fred Herald, Dewey Coffey, and Brad Johnston. David Mason not in picture.

The Division of Regulatory Services inspection staff attended the 14<sup>th</sup> Feed Quality Assurance Workshop conducted by the National Grain and Feed Association. The Kentucky Feed and Grain Association and Regulatory Services were co-sponsors of the two-day workshop held in Louisville. The workshop had 68 attendees from several states and Canada. A majority of the attendees were feed manufacturers wanting training on Good Manufacturing Practices for medicated feed, the BSE Rule that

prohibits the feeding of ruminant derived proteins to cattle and other ruminants and other quality control procedures for feed manufacturing. Randy Gordon, Bob Broyles, Brad Gottula and David Fairfield presented the program and shared their expertise in feed manufacturing with the group.

*Eli Miller - Director*

Regulatory Services News is published quarterly for the milk, feed, fertilizer and seed regulatory programs and the seed and soil testing program. It is provided free to persons interested in these programs. Editor: Chris Thompson

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