



WHERE YOUR MILK CHECK-OFF DOLLARS GO

Mary Beth Hall

I was making farm visits last week and was asked several times whether the Milk Check-Off monies paid for what I do. First answer: Your tax dollars pay for the extension work that UF faculty and field staff do. Second answer: The part of your Check-Off dollars that go to research pay to get us the information we use to help you when we visit your dairies or work with the consultants, veterinarians, and industry people who work with you.

Your money supports getting information that dairies need that otherwise would not be funded and would not happen. For instance, the Check-Off has given



the Southeast information on mastitis, cow comfort, carbohydrate feeding, mineral feeding, improved forages, rumen acidosis, working with our by-product feeds, timed AI, heat stress, and more. It is

research that applies where you live. There is no flag or sticker attached to the information that your money has supported, but it is very much a part of what you receive as we and your other advisors work with you.

IMPROVING FORAGE QUALITY WITH FIBER-DEGRADING ENZYMES

Adegbola Adesogan

Milk Check-Off dollars funded an investigation that examined the effect of fibrolytic enzyme treatment on the fermentation of bermudagrass harvested for silage.

Four commercial enzyme products (**Promote**® Agribrand, Canada, **Biocellulase X-20**® LodeStar, IL, USA, **Cattle -Ase**® Loveland Industries Inc., Greeley, CO, USA and **Biocellulase A-20**® LodeStar, IL, USA) were compared. Five week regrowths of bermudagrass were harvested, chopped and preserved in mini-silos without treatment or after treatment with each of the enzymes. The enzymes were applied at the rate recommended by the enzyme manufacturer or at half or twice the recommended rates.

Preliminary analysis of the data indicates that two of the enzyme products seem promising for improving the

fermentation of bermudagrass. As the rate of application of Promote and Biocellulase A20 increased, there were linear decreases in pH and ammonia nitrogen concentration and linear increases in dry matter recovery.

These results suggest that application of both of these enzymes improved the fermentation and reduced the loss of protein and dry matter during the ensiling process. In addition, application of these enzymes resulted in linear increases in the digestibility of the silages after they were digested for 6 or 48 hours in a laboratory-based simulation of the rumen environment. This suggests that these enzymes will increase the intake and digestibility of bermudagrass silage in dairy cows. These results are probably because the enzymes increased the digestion of the fibrous components in the grass and converted them into sugars. The sugars are required for the growth of lactic acid bacteria and the production of lactic acid which inhibits the growth of undesirable bacteria by lowering the pH.

This work is one of a few independent studies that compare the efficacy of different commercial enzyme complexes. It indicates that some enzyme products are effective for improving bermudagrass silage fermentation while others may not be. In the next few months, we will conduct further analysis to verify the mode of action of the enzymes. This will be followed by a production trial that will determine whether the enzyme mediated improvements in fermentation will also lead to increases in milk production in dairy cows.

YOUTH DAIRY HIGHLIGHTS

James Umphrey and Brent Broaddus

Do you know which compartment of the ruminant stomach is affected by accidentally consumed metal, puncturing the wall and resulting in Hardware disease? Or the more common names for Brucellosis, the viral infection called BVD, Parturient paresis or Acetonemia? I am not going to give you the answers but I bet you could ask any one of the 49 youth that attended the Quiz Bowl Cow Camp and they would know. This is the type of information that 4-Hers from all over the state learned at the summer camp held in Gainesville, FL on the University of Florida campus. Brent Broaddus and others pulled this fun and exciting event together to help youth interested in Quiz Bowl learn about the Dairy Industry. The Quiz Bowl program is not all about

learning in some boring classroom. The youth participate in field trips and sight seeing opportunities as well.

The most prepared 4-Hers are selected to travel as a team to compete in several events. We had a junior team and Holstein Jeopardy team travel to the Holstein convention in Winston-Salem, NC. The Holstein juniors placed 7th out of 16 teams. Austin Pluskott from Okeechobee placed 4th in the Junior Holstein Dairy Jeopardy event.

Another team of eight youth made up a junior and senior team and traveled to Dubuque, IA for the Ayrshire convention. Both teams came in second place.

The teams this year were made up from 4-Hers in Hillsborough and Okeechobee counties. Our members this year were Adam Spann, Hannah Huggins, Lindsey Rucks, Chansé Huggins, Hannah Bishop, Austin Pluskott, Jamie Burnham, Kelly Buchanan, and Rachel Rock. We recently had our State Quiz Bowl event that will be used to select teams for the upcoming year.

If you are interested in the Dairy Quiz Bowl program, please contact Brent Broaddus in the Hillsborough Extension office (813-744-5519) for more details on how your group can get involved. The Dairy Quiz Bowl program is supported through IFAS, the SMI Milk Check-off and numerous industry supporters.

PROBLEM: HIGH INTAKES BUT NO MILK

Mary Beth Hall

What is going on when cows are eating a lot of feed but not producing the milk you think they should for the amount that they are eating? Several things could be happening, but the most common relate to the amount of energy and fiber in the ration.

1) Too Little Fiber. When there is too little fiber in the diet, cows may have high intakes, but you will often see signs of ruminal acidosis: diarrhea, very little cud chewing, and so on. When cows are not eating enough fiber to keep the rumen working properly, they do not digest the diet efficiently, they get less energy out of the feed they eat, and some of it will be spent on dealing with the acidosis. This is why cows can actually lose weight on what looks like a high energy ration. Add enough fiber to the ration in a form the cows will eat to get them ruminating (4 or 5 cows out of 10), and the situation should improve.

2) Too Much Fiber. Our tropical forages are high in fiber that is often slowly digested, and is often relatively low in energy compared to the cows' requirements. As cows try to meet their energy needs on a low energy ration, they may eat more feed. The lower digestibility of the ration means they eat more, but get less out of it to make milk. Rebalance the ration to provide enough energy and other nutrients the cows need in a smaller package, and intake will likely decrease.

3) Late Lactation Cows. They are using the feed for growing a calf and putting on body weight. Not much to be done but get more fresh cows in the herd.

4) Too Many Cottonseed Hulls. Cottonseed hulls are essential to one-shot feeds, but intake tends to go up as you feed more of them. Work with your nutritionist to find the right balance of hulls to keep cows healthy and support production.

SMI'S CALVIN COVINGTON RECOGNIZED AT WORLD DAIRY EXPO

Dan Webb

Calvin Covington received the *Industry Person of the Year Award* presented by World Dairy Expo. The award was presented at the 2003 Dinner With the Stars on October 1 in Madison, Wisconsin. Covington was cited for his efforts on behalf of dairymen for equity pricing of milk based on nutrient composition. Having led the American Jersey Association for 23 years, Calvin traveled the world speaking about milk component pricing in 33 states and 21 countries. He also presented testimony before congressional committees. Currently, the Chief Executive Officer of Southeast Milk, Inc., Mr. Covington has provided leadership to Dairy Shrine, the Council on Dairy Cattle Breeding and Holstein Foundation. Calvin and his wife, Lorraine, live in Ocala. Congratulations to Calvin Covington for his contributions to the dairy industry and for this recognition!

BUSINESS COW COLLEGE

Albert de Vries and Russ Giesy

We often find that the people on our most successful dairies have great cow sense. But it is also clear that they use business principles to make the most profitable decisions.

Maybe you feel your dairy business analysis knowledge and skills could use a boost. We are offering an applied course in the fundamentals of dairy business analysis.

Topics covered include:

- Balance sheet, income statement, equity statement (bankers like these)
- Investment decisions (buying cows, facilities, etc)
- Economics of maintaining the herd
- Capital and partial budgets
- Marginal costs and returns
- Use of spreadsheets
- Business plan
- Buy or lease
- Risk

We will be using plenty of real world examples. We'll also use case studies of profitable dairies.

Let us know if you or anybody you know would be interested in a course on these topics. There is enough material for a three day, full-time, course. Let us know as well if you are interested in just a few topics and

would like a one day course only. We try to tailor to your needs.

Who should attend: anybody who would like to know more about the fundamentals of dairy business analysis and decision making. No prerequisites required. Participation will be limited. First come-first served.

Why attend: Participants will become more familiar with business concepts and understand how dairies can improve business performance.

Where and when: in Gainesville or locations around the state in May 2004, depending on interest.

To sign up or just indicate your interest, contact Albert de Vries (email devries@animal.ufl.edu, phone 352-392-7563) or Russ Giesy (email giesyr@aol.com, phone 352-793-2728).

FLORIDA DAIRY BUSINESS CONFERENCE and P.D.H.G.A. ANNUAL FALL WORKSHOP

When: Wednesday, **October 22**, 9:30 am - 4 pm.
Where: Marion County Extension Service Center, 2232 NE Jacksonville Road, Ocala. Phone: 352-620-3440.
The workshop and conference are sponsored by the Central Florida Dairy Advisory Committee.

Morning: PDHGA Annual Fall Workshop

9:30 **"PDHGA programs that help producers"** Larry Jordan, national PDHGA president. 9:45 **"Producer panel: managing calves"** Francine Hancock (Hancock Farms), Art Studley (Telfair Farm), Candy Williams (Rucks Dairy Farms), Ken Batz (McArthur Farms). 10:15 **Break** provided by our sponsors - thank you! 10:45 **"Monitoring your dairy heifer program"** Greg Bethard, G&R Consulting, Inc., Virginia. 11:30 **"Keeping 'em out of the Rough; Practical Solutions for Reducing Losses from Hemorrhagic Bowel Syndrome in Dairy Cows."** Steve Putenney, Oregon State University. **Lunch** - sponsored by our agribusiness supporters and provided by Sonny's BBQ - thank you! 12:45 Gary Claxton, **"Mouth of the South"** sharing his experiences while growing up on a Georgia farm and anecdotes on trying to raise his family in the rural south.

Afternoon: Florida Dairy Business Conference

1:30 Presentation of **Dairy Community Award** 1:40 **"Herd Replacement practices of Florida dairy farms"** Ben Butler, University of Florida Animal Sciences 2:00 **"Cost of replacing cows and its affect on profitability of Dairy Farms"** Albert De Vries, University of Florida Animal Sciences. 2:30 **Break** sponsored by our sponsors. 2:50 **"Facility management considerations that impact profit"** Greg Bethard. 3:30 **"Best alternatives in manure management"** Roger Nordstedt, University of Florida Agricultural Engineering. 4:00 **Evaluation.** 4:15 **Adjourn.**

GARY CLAXTON, aka "Mouth of the South" will provide some down home on the farm humor.

Does your replacement management make you money? - We'll be honored to have **LARRY JORDAN**, the national president of PDHGA on the agenda to update us on the purpose and progress of PDHGA. We'll be impressed, I am sure, by the knowledge of the folks that will be participating in the panel discussion on calf rearing management. These folks have raised a lot of calves! **FRANCINE HANCOCK** (Hancock Farms), **ART STUDLEY** (Telfair Farm), **CANDY WILLIAMS** (Rucks Dairy Farms), **KEN BATZ** (McArthur Farms).

Improve your cow productivity and profitability - Our own **BEN BUTLER** and **ALBERT DE VRIES** will inform us about an issue of primary importance to Florida dairy producers; i.e. opportunities to reduce our high cost of maintaining our herd and increasing profitability of our cows!

Getting the most profit from your facility? - **GREG BETHARD** of Virginia is a consultant working with large dairies across the US. Greg is an excellent speaker and coming to Ocala to talk about ways you can gear up to make more milk this fall.

Do you have HBS? - Hemorrhagic Bowel Syndrome is an increasing problem. **STEVE PUTENNEY**, of Oregon State University is flying in to help us diagnose, prevent and treat this condition.

Need to update your manure management program? - **ROGER NORDSTEDT** will update us on the newest technology.

Directions:

1. Exit interstate 75 at exit #70 onto route 27. 2. Proceed east into Ocala, 27 becomes Blichton Street, then NW10th Street 3. After 2.5 miles (from 75), turn left (north) onto 301/441 4. After .5 mile, turn right (east) onto route 200A or NE20th street (watch for signs for the Livestock Pavilion. 5. After .5 mile, turn left (north) into the Livestock Pavilion & Extension Complex parking area. The meeting will be in the auditorium located on your right as you enter the facility.

For more information, contact:

Russ Giesy, University of Florida Extension Dairy Science, Bushnell, Fl. 33513-0218. (352) 793-2728
email: giesyr@aol.com

MASTITIS UPDATE

**Dave Bray, Roger Natzke, Jessica Belsito,
Brent Broaddus, and Dan Webb**

There seems to be some confusion about our check-off mastitis project. Previously we have indicated there was to be a "research project" that was to be done in the North Florida area. This project has nothing to do with the check-off project. If it is ever done it will be a company sponsored product testing.

The purpose of the check-off mastitis project is to help dairymen lower their SCC and mastitis levels. This is an educational program along



with troubleshooting at your dairy by us.

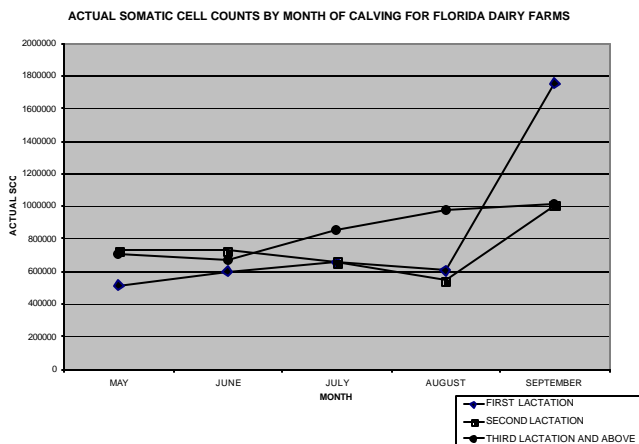
If you remember from our article in the Winter (January) 2003 Dairy Update we outlined how you can reduce your SCC by various means; DHIA cell counting, using bulk tank results, etc.

The DHIA cell counting program is the easiest way to identify high SCC cows, but your mastitis control program should not be just using "hot lists" to treat all the high cows.

In order to help you get mastitis under control, you must have some records such as number of times cows are treated for mastitis, calving dates etc. DHIA records are the easiest to work with because if you fill in health codes we can teach you how to create reports or run the reports we created on your dairy to make informed decisions on culling, treatments, etc. With DHIA records we can make reports that compare your dairy with others on the project on mastitis, reproduction, culling etc. Our reports will not contain the names of dairies.

You do not need to be on the DHIA cell count program or PC-Dart to participate in this project, if you do have some records or if you want us to make up some record systems for you. Our goal is to help you lower your SCC and mastitis losses and give you information on how you can keep yourself from getting into this mess again.

The graph below is a summary of eight DHIA dairies we have started on the project. It indicates the present average SCC of animals who calved by month and by lactation number.



There are two things that this data tells us. For example look at the animals that calved in May. The first calf heifer cell count is now about 500,000. Second and third lactation animals are now at about 750,000. If we look at September calvings, first calf heifers come in at 1,800,000. Second and third lactation animals calve in at 1,000,000. This is not a pretty sight. Second and third lactation animal should calve below 350,000.

It is going to be a hard year when your fresh animals are high at calving. Is this due to poor dry cow programs

or did you dry off chronic mastitis cows hoping that the dry cow therapy will cure the cow you treated fifty times during the lactation? If you would like us to help, let us know. Call any of us. If you have previously contacted us we are getting ready to confirm you are part of the project.

NEW UF/IFAS DAIRY EXTENSION WEBSITE

<http://dairy.ifas.ufl.edu>

Albert de Vries

We have created a new website to serve as easy access to all on-line UF/IFAS dairy extension news, material, and contact information. The website aims to combine dairy extension news and material from both the faculty on campus in Gainesville and county extension agents who do dairy work.

The easy to navigate site gives access to a calendar of dairy events, current and past copies of newsletters, proceedings of conferences, fact sheets, and links of interest for the Florida dairy industry. The fact sheets contain valuable information on 4-H and judging, reproduction, nutrition, health, milking, facilities, and business and management topics, all related to dairying in Florida.

The website now also has the **Proceedings** of the **2002 Florida Dairy Production Conference** on-line.

The address of the website is <http://dairy.ifas.ufl.edu>. Take a look and let us know how we can improve it!

HERB HEAD RETIRED

Dr. Herb Head retired on June 30th of this year from the University of Florida after 40 years of service. Herb Head served in the Departments of Dairy Science, Dairy and Poultry Science, and Animal Sciences. He maintained a successful teaching and research program focusing on the physiology of lactation. Herb Head also served as Director of Graduate Studies before he retired. We wish him the best on his retirement.

WEST FLORIDA DAIRY PRODUCERS CONFERENCE

The West Florida Dairy Producers Conference is held this year on **October 30**. Contact Andy Andreasen, Washington County Extension, (850) 638-6180, for more information.