ACC for Beef Annual Report

Your State Checkoff Dollars Working For You!



2016 Annual Report

Here are samples of just three of the 17 research projects funded in 2016.

Determining Economic Methods of Managing the Bermuda Grass Stem Maggot // Dr. Dennis Hancock

Since the bermudagrass stem maggot first showed up in Georgia, it has infested and damaged forage bermudagrass throughout the southeastern United States. The adult form of this new, invasive species

is a small, muscid fly. However, it is the larvae that does the damage. The degree to which the BSM overwinters in the SE USA remains unclear. We have

observed that populations increase progressively from south to north, with high populations developing as early as mid-June in Central Florida, early July in South Georgia, mid-July in Central Georgia, and late July in North Georgia and points further north. We expect that damaging populations will develop toward the middle stages of the second cutting for most producers in Georgia. We expect this to be an annual occurrence. It is likely impossible to



fully eradicate *Atherigona* populations through mechanical and/or chemical means. However, the use of mechanical and/or chemical controls may suppress the population and keep it from causing economic damage. Much remains unanswered about the BSM. Our work to date has only just begun to evaluate this issue, and much more work is being planned. (For full article see the May 2016 issue of the *Georgia Cattleman*.)



Prevalence of Resistance to Avermectin/Milbemycin Dewormers on Beef Cattle Farms in Georgia: Basis for Management of Parasite Drug Resistance // Dr. Ray Kaplan

These initial results suggest that resistance to ivermectin-type dewormers is common on beef cattle farms in Georgia. However, it is important that we test more farms, as this will provide a more complete picture of the situation. Nevertheless, these results indicate that farms should not assume their dewormers are working as expected, and that approaches to parasite control should be re-evaluated. This study will allow us to make evidence-based recommendations on how to improve parasite control in Georgia beef cattle; and in phase 2 of this study, we will be holding several outreach programs throughout the state to communicate these recommendations. (For full article see the January 2017 issue of the *Georgia Cattleman*.)

Antimicrobial Resistance in Bacteria Isolated From the Respiratory Tract of Stocker Cattle //Brent Credille, DVM We believe that a large proportion of calves will have antibiotic-resistant strains of bacteria in the respiratory tract on

2016 Financial S Income Assessments received Interest earned	tatement \$478,091 \$1,158	Georgia Beer
Total Income	\$479,249	
Expenses Committ	¢0,000	
GA Farm Bureau Farm Monitor		\$8,000
GA Grown Exhibit at GA National Fair		\$0,000
University of Georgia Research Projects		\$308,376
GA Beet Board Beet Promotion and Education Projects		\$100,500
Georgia Young Farmers State Summer Tour		\$250
Georgia AgriBusiness Council Beef Showcase		\$249
Total Commitments for 20	\$423,375	

*Georgia cattle producers are always welcome to attend meetings of the Beef Commodity Commission and can request a copy of complete financials with a full listing and details of all funded projects. *

arrival at stocker facilities, and that the proportion of calves with resistant bacteria in the respiratory tract will increase after administration of antibiotics to prevent BRD in stocker cattle. With these beliefs in mind, we have the following objectives: 1.Determine what bacteria can be commonly isolated from the respiratory tract of stocker cattle at the time of arrival to stocker facilities in Georgia. 2. Determine the prevalence of antibiotic resistance in bacteria commonly isolated from the respiratory tract of stocker cattle at the time of arrival to stocker facilities in Georgia. 3. Determine how the use of antibiotics to prevent BRD impacts the development of antibiotic resistance in bacteria commonly isolated from the respiratory tract of stocker cattle after arrival to stocker facilities in Georgia. (For full article see the July 2016 issue of the Georgia Cattleman.)

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"The very fact that the Georgia Beef Commission provides funds to an effort shows that our producers 'have skin in the game,' and this is a powerful statement when it comes to leveraging other state and federal funding." — Dr. Dennis Hancock, UGA Forage Extension Specialist

"Much of the research supported by governmental agencies has very little practical relevance to the average cattle producer in Georgia. The money provided by the Georgia Beef Check Off has been instrumental in allowing us to focus on issues that are important to cattlemen in Georgia."

- Dr. Brent Credille, DVM, DACVIM, UGA College of Veterinary Medicine

"If we are not willing to help fund research for our own commodity then we shouldn't ask anyone else to do it for us. We have to learn to help ourselves and be self-sufficient first."

- Kurt Childers, Bar C Cattle, Barney, Georgia

"As a veterinarian and dairy owner, I feel the checkoff program allows the beef and dairy producers in Georgia to have input in the type of research conducted. The result is real-time, in-state benefits that are applicable to our Georgia producers."

- Dr. Paul Johnson, Providence Farms, Climax, Georgia

"Any industry or business that relies on technology for success needs to constantly invest in research and training in order to stay profitable."

- Dr. J. Keith Bertrand, UGA Animal & Dairy Science Department Head

Research Projects Funded in 2016	Researcher
Using the Dystocia Simulator in Beef Cow Education Programs	Dr. Lee Jones
Utilization of summer annual forages in Georgia for beef finishing systems on meat quality and shelf life characteristics	Dr. Alex Stelzleni
Prevalence of resistance to avermectin/milbemycin (ivermectin type) dewormer on beef cattle in Georgia : basis for management of parasite drug resistance	Dr. Ray Kaplan
Horn fly control on pastured beef cattle	Dr. Nancy Hinkle
Antimicrobial resistance in bacteria isolated from respiratory tract of stocker cattle	Dr. Brent Credille
Application of advanced beef herd record keeping for enhanced producer education and research efforts	Jason Duggin
Evaluating Georgia's future cow herd implementation of carcass ultrasound into the Georgia HERD Program	Jason Duggin
The "Annual Ryegrass " for the fall of the year? Using brassicas for raising stockers and replacement heifers in the fall and early winter	Dr. Dennis Hancock
Determining economic methods of managing the Bermuda Grass Stem Maggot year 2	Dr. Dennis Hancock
Evaluating the management and use of Bermuda grass and Bermuda grass/alfalfa mixtures as a high quality baleage feed source for livestock producers	Dr. Dennis Hancock
Using new and novel winter annual forages to build soil organic matter, reduce compaction and increase water holding capacity	Dr. Dennis Hancock
Determining the presence of Bovine Viral Diarrhea persistently infected beef calves in South Georgia background yards	Dr. Lee Jones
Development of novel creep feeding rations for improved animal performance: in vitro and in vivo evaluations	Dr. Lawton Stewart
Investigation of the pathogens contributing to naturally occurring outbreaks of infectious bovine keratoconjunctivitis (pinkeye) using Next Generation Sequencing	Dr. Rebecca Wilkes
The impact of selection using residual average daily gain EPD on reproductive performance, growth performance and carcass traits in Angus cattle	Dr. Dean Pringle
On the road again, Travel support for the UGA Beef Team	Dr. Lawton Stewart
Impact of uterine inflammation on reproductive efficiency in beef cattle	Dr. Brent Credille