

Animal Industry News Update

from the LCES Animal Science Division



Animal Health (Dr. Steven S. Nicholson)

Nitrates in Forages: Drought stressed milo, other sorghums, millet, corn stalks and pigweed may contain too much nitrate

in the stalks to be safely grazed or baled for ruminants. Representative samples for analysis should contain edible stems. The Agricultural Chemistry Laboratory at LSU will provide testing at a nominal cost.

No Evidence of Chronic Wasting Disease: Chronic wasting disease (CWD) of elk and free-roaming deer was not detected in the brains of 262 cull beef cows grazing in the same environment as affected deer and elk. The 1998 study focused on an area of northeast Colorado and southeast Wyoming. CWD is a transmissible spongiform encephalopathy caused by prions. October 22, 2000, AAVLD/USAHA meeting, Birmingham, AL

Louisiana's Brucellosis-Free Status Regained: The efforts of the cattle industry, veterinarians, and State-Federal animal health personnel have been successful in eliminating this costly disease. At one time, bovine abortions, small, weak calves, fistulous withers in horses and undulant fever in producers and veterinarians were significant problems. Calfhood vaccination of heifers was very helpful as was adult cow vaccination in recent years.

Poultry (Dr. Theresia Lavergne)

Poultry Producers are Environmental Stewards: Two-thirds of the U.S. chicken producers are participating in voluntary programs which manage the environmental impact of chicken litter used as fertilizer. These producers are operating under, or have applied for, manure management plans. Integrated chicken producer-processors have voluntarily signed letters committing them to implementing litter/manure management plans for poultry growers. All of these growers will have plans in place by 2008. Furthermore, companies are exploring creative ways of using poultry litter. These include programs to compost litter, transport litter to low-impact areas, and construct litter processing facilities. (*Feedstuffs*, August 28, For more than 30 years, producers have used growth promoting implants to safely stimulate

2000)

A Minnesota power producer is building the first poultry litter-fired power plant in the U.S. This plant will burn poultry litter and then sell the litter back to farmers as a feedstuff or a fertilizer, and electricity will be sold to a power company. This plant is expected to burn as much as 500,000 tons of litter per year. This will be an "environmentally friendly" plant in that it will be emission neutral while producing power. Also, the plant and trucks will be odor tight and sealed to prevent the escape of litter and odor. (*Feedstuffs*, September 18, 2000)

Beef

New Advances in Technology (Dr. Hollis Chapman): The age of technology has brought many new innovations to the cattle industry. Embryo transplant, embryo freezing, and cloning are just some of the more popular techniques. But, probably the oldest topic among producers and companies allied with the cattle industry is sexed semen. This seems to be near fruition now.

In Great Britain semen sexed to a 90% accuracy, has been on sale this fall. It will be interesting to watch the results.

In our country, we have often thought sexed semen would be available soon. After 15 to 20 years we may be approaching that point. In the future, through the use of artificial insemination breeders will be able to produce mostly females or mostly males. This will be expensive at first but, as time goes on, it may become feasible and cost effective.

Producers anticipating the use of sexed semen should perfect their A.I. skills to make sure that the most success will be obtained with expensive semen.

Elite purebred producers who would like to use semen from their own bulls should start inquiring about cost of custom semen collection and semen sexing.

Growth Implants Can Have Added Benefit - Healthier Cattle(Dr. Ron DeVecchio) growth and improve feed efficiency. Now, in addition to added growth, researchers have

discovered that certain growth promoting implants provide another valuable benefit - healthier cattle. In response to disease challenges, implanted cattle experienced milder symptoms and recovered more quickly than non-implanted cattle. For example, when challenged with coccidiosis, implanted steers averaged just two days of fever compared to 5 days for non-implanted cattle. Also, implanted steers had 5 to 6 fewer days of diarrhea, consumed 38 percent more feed, and had a greater number of immune cells in their blood than the non-implanted steers. In other disease challenge trials, similar results were found. While implants won't prevent cattle diseases, the research at Auburn University indicates they can minimize the impact and lead to a quicker recovery. Source: Cattle Today, September 16, 2000.

Sheep (Dr. Terry Dumas)

FY 2001 Agricultural Appropriations includes \$20 million in wool payments for 2000 clip: The fiscal year (FY) 2001 Appropriations for Agriculture bill recently approved by the U.S. Senate and House of Representatives contains many excellent benefits for U.S. sheep producers, including \$20 million for emergency economic loss payments to wool and mohair producers. The wool payments will be made at a rate of 40 cents per pound based on the 2000 clip for both wool and mohair. This much-needed program builds on the important relief gained by the American Sheep Industry Association (ASI) for 1999 wool and mohair production. Sign up for payments for the 2000 clip is expected for this fall/winter at Farm Service Agency (FSA) offices. "All eligible sheep producers are encouraged to take advantage of these wool payment programs," said ASI President and Idaho sheep producer Cindy Siddoway. "Obtaining a second year of wool payments is yet another example of how ASI is working hard on behalf of sheep producers." The bill also provides: an additional \$5 million for the National Sheep Industry Improvement Center; more than \$3 million for USDA Scrapie control; authority to the Secretary to enter contracts for grazing to reduce fuel and fire threats; continued \$300,000 for wool research; additional operations and research funding

Since this is an election year the odds for a Southern Compact this year are slim and

for Wildlife Services of nearly \$10 million; and \$490 million for livestock assistance due to disaster. Of specific importance to the sheep industry is an amendment to the Animal Damage Control Act of 1931 introducing language that will no doubt frustrate animal rights attacks on Wildlife Services Agency programs for livestock protection. The language requires that all authorities of the Wildlife Services program be implemented, preventing individual programs to be singled out. The 2001 Agricultural Appropriations bill has been sent to President Clinton for his anticipated approval.

Dairy (Dr. Charles F. Hutchison)

Dairy Update: The outlook for the rest of the year in the dairy industry is very bleak. August milk production was up 4% over August of last year and July's production was up over 5.4% compared to last year. This is the 25th straight month that monthly production has been higher compared to the same month a year earlier. Not only is the production per cow up but cow numbers continue to increase.

The manufacturing of dairy products is up substantially from a year ago due to milk production increasing in the 3% to 4% range and fluid milk consumption increasing less than 1 percent. The class IV price will set the class I price for the rest of the year and into next year. According to some experts, the class III (cheese price) will be \$8.90 per cwt for December and will remain below \$9.00 for a couple of months. According to University of Georgia Ag Economist, Dr. Bill Thomas, utilization of milk for the Southeast order in 2000 will average: Class I 65%, Class II 10%, Class III 15% and Class IV 10%.

Replacement heifer prices continue to be extremely high in 2000. According to the USDA, Agricultural Marketing Service (AMS) prices reported for September auctions (Blansit, MO and Thomasville, GA) for Springer Heifers were from \$1350 to \$1790 for Supreme, \$1100 to \$1375 for Approved and down to \$500 to \$900 for Common grade animals.

none. Even though a report from the National Dairy Leaders Conference showed strong

support from the state level. Twenty-five state legislatures, on a combined vote of 5,405 to 320, have enacted legislation to allow their states to join pending approval from Congress.

Swine (Dr. Timothy Page)

Feeding Paylean™ To Market Pigs and Show Pigs: Paylean (ractopamine hydrochloride) is a relatively new swine feed additive that received approval from the U.S. Food and Drug Administration's Center for Veterinary Medicine for use in swine production. Paylean was developed and is marketed by Elanco Animal Health, a division of Eli Lilly and Company. It is a feed additive containing ractopamine hydrochloride, a small molecule that repartitions nutrients and energy from fat growth and accretion to increased muscle protein growth (increases muscle fiber diameter) and improved feed efficiency. Ractopamine is a member of a class of compounds called phenethanolamines. Paylean is not a hormone, steroid, or antibiotic.

Paylean has been approved to be fed to swine at levels of 4.5 to 18 grams per ton (5-20 ppm) from 150 pounds to market weight (last 90 pounds of gain prior to slaughter). The majority of feed trials evaluated by the Food and Drug Administration used 18 grams/ton. In these trials, ractopamine increased fat-free lean gain by 34% and empty body protein accretion by 24%. Ractopamine increased growth rate while decreasing feed intake. Tenth rib fat depth was reduced by 13.7% and lean mass increased by 11%. Dressing percent increased from 73.3 to 74.4%. Trials have shown that pigs fed Paylean require up to 41 pounds less feed and up to 4 fewer days to reach market weight.

The magnitude of the improvements in growth and carcass traits is affected by the level of Paylean fed. The optimal use of Paylean including level and duration of use will be dependent on carcass pricing system's ability to detect and reward the pork producer for the extra pounds of lean. Paylean has been shown to have little impact on pork quality.

SHOULD PAYLEAN BE FED TO SHOW PIGS? I know Paylean is being fed to show pigs. If Paylean is used, all label directions must be followed and remember, it is only approved for pigs. **Do Not Use In Other Animals!** The decision to use Paylean should not be taken lightly. How much more muscle

did our champions from 1999 and 2000 need? How much more muscle do our quality show pigs need? They are already loaded with muscle. How will Paylean affect the structural soundness of show pigs? If show pigs are marginally sound, how will increased muscle and growth rate affect soundness? This is very important to remember: If you feed Paylean and then remove it from the diet, growth performance is altered and fat deposition occurs rapidly!

Pig Feed Palatability Demonstration (Charles Johnson, County Agent): Offering newly purchased pigs a feed which is highly palatable will increase their consumption and decrease the length of their stress period. A demonstration was conducted to test several feed additives effects on palatability for growing pigs.

Sugar, powdered milk, fish meal, three sources of fat, and 13 different commercial feed flavors were tested in a free choice trial to determine which additive(s) growing pigs prefer. Then, the most palatable additives were combined to see if they had an additive effect on palatability.

Fat increased the palatability more than any other ingredient. Powdered milk, sugar, and fish meal did not come close to increasing palatability as much as dry fat. Dry fat increased palatability more than peanut oil or a vegetable fat blend. Some of the commercial feed flavors ranked second in increasing palatability. Adding dry fat and the most palatable feed flavor (Special Pig Flavor Sweet) increased palatability additively.

For a complete copy of the demonstration, contact Charles Johnson, County Agent, Natchitoches Parish, at cjohnson@agctr.lsu.edu.