



# News from KSU Animal Sciences

## January, 2007

### WHAT'S NEW >>>>>>

- ☞ **You Asked It** – For the latest tips from the Rapid Response Center, be sure to check the “**You Asked It**” newsletter at <http://www.oznet.ksu.edu/extrapidresponse/youaskedit.htm>. Agents are welcome to use the information for their local newsletters or news stories. Newsletters will be added to the website by the 15<sup>th</sup> of each month. For more information on the newsletter or the Rapid Response Center, contact Karen Blakeslee ([kblakesl@oznet.ksu.edu](mailto:kblakesl@oznet.ksu.edu); 785-532-1673).
- ☞ **New Swine Premix and Base Mix Recommendations** - Kansas State University is updating their swine premix and base mix recommendations. New guidelines will be available on their website ([www.asi.ksu.edu/swine](http://www.asi.ksu.edu/swine)) on January 25. There are several changes to the recommendations with one of the biggest changes being increased levels of phytase to decrease need for phosphorus supplementation to diets. If you have any questions, contact one of the swine extension faculty at 785-532-6131.
- ☞ **Effects of water-soluble and in-feed organic acids on the growth performance of weanling pigs.** A total of 360 weanling pigs (initially 11.5 lb and  $18 \pm 3$  d of age, PIC) were used in a 42-d growth assay to determine the effects of water-soluble antimicrobials and organic acids in feed and/or water on nursery pig growth performance. Pigs were allotted to one of 9 experimental treatments: 1) control (no feed or water antimicrobials or acids); 2) water containing 38 mg/L neomycin sulfate; 3) water containing 0.06% Activate WD; 4) water containing 0.12% Activate WD; 5) feed containing Neo-Terramycin (140 g/ton neomycin sulfate, 140 g/ton oxytetracycline HCl; neo/oxy); 6) feed containing 0.50% Activate DA; 7) feed containing 0.45% Starter L; 8) feed containing 0.45% Multimax L; and 9) feed containing 0.50% Activate DA and 0.10 % Mintrex<sup>3</sup> P. Overall (d 0 to 42 after weaning), pigs provided neo/oxy in the feed had greater ( $P < 0.05$ ) ADG, compared with pigs in all other treatments, except the pigs provided the combination of Activate DA and Mintrex P in the feed. Pigs provided neo/oxy in the feed had greater ADFI ( $P < 0.02$ ) than did pigs provided the control treatment. There were no differences in feed efficiency between any of the treatments. These data demonstrate that pigs provided in-feed antimicrobials had improved growth, whereas those provided organic acids in feed and water did not. More information is available on this experiment and others in the KSU Swine Day Report at [www.asi.k-state.edu/swine](http://www.asi.k-state.edu/swine). (This study conducted by R. O. Gottlob, M. D. Tokach, S. S. Dritz, R. D. Goodband, J. M. DeRouchey, J. L. Nelssen, C. R. Neill, C. N. Groesbeck, J. D. Schneider, and N. Z. Frantz.)
- ☞ **The effects of electron beam and gamma ray irradiation levels in spray-dried animal plasma on nursery pig performance.** A total of 385 pigs were used in a 28-d trial to determine the effects of electron beam and gamma ray irradiation dosage of spray-dried animal plasma (plasma) on nursery pig performance. Pigs were allotted to pen and blocked by weight by using an incomplete block design with either 7 or 8 replications per treatment. Dietary treatments were randomly allotted to pen within block. Ten dietary treatments were fed from d 0 to 14, including: a negative control diet with no added plasma, a positive control diet with added plasma, or one of 8 irradiated plasma diets. The 8 irradiated treatments included plasma irradiated with either electron beam or gamma radiation at increasing dosages of 2, 4, 6, or 10 kGy. All the pigs were fed a common diet from d 14 to 28. Irradiation of the plasma reduced the total bacterial and coliform counts at every dose, regardless of irradiation source. There were no interactions ( $P > 0.05$ ) between irradiation source and dosage for the entire trial. From d 0 to 14, pigs fed the diets containing plasma had increased ( $P < 0.01$ ) ADG and ADFI, compared with those of the pigs fed the negative control diet. Irradiating the plasma did not improve pig performance. There also were no differences ( $P > 0.12$ ) in growth performance between the pigs fed the plasma irradiated by electron beam or by gamma ray, which confirms previous research. But the majority of previous research has shown improvements in growth performance when pigs were fed diets with irradiated plasma, compared with performance of pigs fed diets containing regular plasma. Irradiation of plasma did not improve performance in this study. (This study conducted by C. N. Groesbeck, J. M. DeRouchey, M. D. Tokach, R. D. Goodband, S. S. Dritz, and J. L. Nelssen.)

## UPCOMING EVENTS >>>>>>>>>>

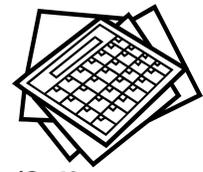
- ✦ It's not too late to register for the upcoming **KSU Swine Profitability Conference** to be held February 6, 2007, at the KSU Student Union. For a copy of the brochure, visit [www.asi.k-state.edu/swine](http://www.asi.k-state.edu/swine). For more information, contact Jim Nelssen ([jnelssen@ksu.edu](mailto:jnelssen@ksu.edu); 785-532-1251).
- ✦ The 2007 **KOMA Beef Conference** will be held at the Fort Scott Sale Barn on February 15. Registration will begin at 2:30 p.m. Presentations for the conference will include: "Market Outlook" by Dr. Jim Mintert; "Managing Grass for Recovery After Drought" by Gary Kilgore; "Age and Source Verification Premise Identification Update" by Bryan Rickard; and "Post-Weaning Calf Wellness Management" by Dr. Brad White. The conference includes a steak dinner and will adjourn at 8:45 p.m.  
Pre-registration fee is \$20 (due by February 9) or \$30 late registration fee. For more information on the conference, contact the Southeast Area Extension Office at 620-431-1530.
- ✦ The **K-State Horse Show Judges Seminar** will be held on February 17, 2007, at Timbercreek Stables in Manhattan, Kansas. Live classes will include halter, showmanship, western pleasure, western horsemanship, hunter under saddle, equitation and trail. This seminar will serve as the Kansas State Horse Show Judges Certification workshop. Total fee for the seminar is \$10.00 per person, which includes a light lunch. Pre-registration is highly suggested by Friday, February 1. For more information, contact Julie Voge (785-532-1264; [jvoge@ksu.edu](mailto:jvoge@ksu.edu)).
- ✦ The **KSU Knowledge Challenge** will be held again this year at Equifest. This Challenge is an educational opportunity for youth and adult Equifest goers! Ten stations will quiz each participant on conformation, equipment, feedstuffs, training, coat colors, plus many more topics! Prizes will be awarded to the top five finishers in the both the youth and adult categories. Questions can be directed to Julie Voge at KSU at [jvoge@ksu.edu](mailto:jvoge@ksu.edu) or 785-532-1264. The KSU Knowledge Challenge will run from 10 am to 2 pm on Saturday, Feb 24, 2007 at the Kansas Coliseum in Wichita, Kansas.
- ✦ Make plans now to attend the **2007 KSU Sheep Schools**. The program will include presentations on "New Marketing and Management Challenges for Sheep Producers" by Rodney Jones; "Feeding Alternatives for Sheep Producers" by Cliff Spaeth; and "Predator Control Update" by Charlie Lee. Dates and locations for the sheep schools are as follows:
  - February 27, 6:00 p.m. - Hodgeman County Fairgrounds 4-H Building, Jetmore
  - February 28, 6:30 p.m. - Valentino's North Room, Seneca
  - March 1, 7:00 p.m. - Woodson County Fairgrounds, Yates CenterFor more information on these schools, contact Cliff Spaeth ([cspaeth@ksu.edu](mailto:cspaeth@ksu.edu); 785-532-1255).
- ✦ **Cattlemen's Day 2007** –The 94<sup>th</sup> annual Cattlemen's Day will be held Friday, March 2, 2007. All events for Cattlemen's Day will be held in Weber Hall this year including the commercial trade show and educational exhibits. The Trade show and educational exhibits will open at 8:00 a.m. Registration for KSU Cattlemen's Day will be \$15 per person in advance or \$25 per person at the door. Morning refreshments and lunch are included with registration. For more information visit [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday) or call 785-532-1267.
- ✦ The **30<sup>th</sup> annual Special "K" Bull and Heifer Sale** will be held on March 2, 2007, at the conclusion of KSU Cattlemen's Day. The sale will begin at 3:00 p.m. at the Purebred Beef Unit. For more information or a sale catalog, contact Ryan Breiner ([rbreiner@ksu.edu](mailto:rbreiner@ksu.edu); 785-532-6127) or Megan McClure ([mcclurem@ksu.edu](mailto:mcclurem@ksu.edu); 785-532-2996).
- ✦ The **Western Dairy Management Conference** is set for March 7-9, 2007 at the John Ascuaga's Nugget in Reno, Nevada. Registration will begin on March 6 at 3:00 p.m. The seminar schedule will be March 7 and 8 from 8:00 a.m. to 5:00 p.m. and March 9 from 8:00 am to noon. For more information, visit the Western Dairy Management website at [www.wdmc.org](http://www.wdmc.org) or call 785-532-2370.

- ☞ The **KSU Sheep Day/Youth Sheep Day** will be held March 10 at Weber Hall, including the 3<sup>rd</sup> Annual Sheep Breeders Showcase. Watch for more details coming on this educational and fun event! For more information, contact Julie Voge (785-532-1264, [jvoge@ksu.edu](mailto:jvoge@ksu.edu)) or Cliff Spaeth (785-532-1255, [cspaeth@ksu.edu](mailto:cspaeth@ksu.edu)).
  
- ☞ The **2007 Equine Reproductive Management Short Courses** will be held March 17-18 or March 23-24, 2007 at the KSU Horse Teaching and Research Unit in Manhattan. This short course provides horse owners the opportunity to gain hands-on experience in the techniques and procedures commonly performed at a breeding operation in order to maximize the success of their own breeding program. This two-day interactive course is targeted towards the horse owner that is interested in starting a breeding program or the novice breeder who would like to improve or expand their existing program.  
 The registration fee is \$275 per person (limited to 8 people/session), or \$150 for those interested in auditing the course (watching but not participating in the hands-on work, limited to 2 people per session). For more information on the short courses, contact Dr. Joann Kouba at 785-532-1240 or visit [www.ksu.edu/DesktopDefault.aspx?tabid=1053](http://www.ksu.edu/DesktopDefault.aspx?tabid=1053).
  
- ☞ On March 25, 2007, KSU will offer for the first time a one-day **Frozen Semen Wet Lab** for horse owners interested in gaining some hands-on experience with freezing stallion semen. The process of freezing, from collection through the post-thaw analysis, will be discussed and demonstrated in a lab setting and participants will have the opportunity to practice all aspects of the procedure.  
 The registration fee is \$150 per person (limited to 6 people) and will be on a first-come basis. For more information, contact Dr. Joann Kouba at 785-532-1240.
  
- ☞ The **2007 Junior Swine Producer Day**, will be held on Saturday March 24th, 2007, in Weber Hall on the KSU campus. This program was last held in 2005, with almost 400 participants from across Kansas. The event this year will be a fun filled day of activities in which youth, parents, swine project leaders, and agents can all increase their knowledge and abilities associated with a swine project. More information and registration forms will be available in January. This event would be great for anyone interested in learning more about swine. The level of information presented will help anyone regardless of his or her level of experience in this area. This event would be a great family activity to help make the swine project a positive experience.
  
- ☞ The National Junior Swine Association will hold its sixth-annual **National Youth Leadership Conference** in Indianapolis on April 19-22, 2007. The theme for this year's conference is "The Race Is On." Youth ages 14-21 will be challenged to make the most of their opportunities in life while broadening their knowledge of important swine industry issues. For more information, visit [www.nationalswine.com](http://www.nationalswine.com).

## CALENDAR OF UPCOMING EVENTS

Date	Event	Location
February 6, 2007	KSU Swine Profitability Conference	Manhattan
February 15, 2007	KOMA Beef Conference	Fort Scott, KS
February 17, 2007	K-State Horse Show Judges & Youth Seminar	Manhattan
February 24, 2007	Equifest	Wichita, KS
March 2, 2007	KSU Cattlemen's Day	Manhattan
March 7-9, 2007	Western Dairy Management Conference	Reno, Nevada
March 10, 2007	KSU Sheep Day and Youth Sheep Day	Manhattan
March 17-28, 2007	Equine Reproductive Management Course	Manhattan
March 23-24, 2007	Equine Reproductive Management Course	Manhattan
March 24, 2007	KSU Junior Swine Producer Day	Manhattan
March 25, 2007	Frozen Semen Lab	Manhattan
March 31, 2007	Wildlife Habitat Evaluation Contest	Manhattan
April 19-22, 2007	NJSA National Youth Leadership Conference	Indianapolis, IN

## WHAT PRODUCERS SHOULD BE THINKING ABOUT IN MARCH.....



### **BEEF -- Cowherd Tips by *Twig Marston, K-State Beef Extension Specialist, Cow/Calf***

- Manage calving pens and pastures to minimize human, cow and calf stress. Stay organized.
- An observation schedule should be implemented for calving first-calf heifers and cows. First-calf heifers should be checked every 2 to 3 hours.
- Sanitation is key to reduce and/or eliminate calf scours. An excellent calving pasture management plan by Dr. David Smith from the University of Nebraska - Lincoln, can be found at <http://beef.unl.edu/beefreports/symp-2003-19-XVIII.pdf>.
- Make sure every calf consumes adequate colostrum during the first 4-12 hours after birth.
- Keep accurate calving records, including cow identification (ID), calf ID, birth date, calving difficulty score and birth weight. Other traits to consider recording are teat and udder scores, calf vigor score, and other pertinent information. This information along with Angus sire information is vital for enrolling cattle into the AngusSource<sup>SM</sup> program.
- Calving books are essential sources of information; make sure you have a backup copy.
- Body condition score (BCS) cows. Thin and young cows will need extra energy to maintain yearly calving interval.
- If cow diets are going to be shifted from low- (poor quality forage or dormant grass) to high-quality forage (lush green grass) programs, begin a grass tetany prevention program at least 3 weeks prior to the forage switch.
- When making genetic selections, use the most recent National Cattle Evaluation (NCE) and herd records judiciously.
- If new bulls are purchased, now is the time to start preparing them for their first breeding season. Bulls need to be properly vaccinated and conditioned to be athletic. Moderate body condition with abundant exercise is ideal.
- After calving and before breeding, vaccinate cows as recommended by your veterinarian.
- Plan to attend beef production meetings.

## WHAT SWINE PRODUCERS SHOULD BE THINKING ABOUT .....

- Check Diet Particle Size – the target is 700 microns with an acceptable range of 650 to 750 microns and if outside that, evaluate maintenance needs of your roller mill or hammer mill to get within the acceptable range.

We need your input! If you have any suggestions or comments on ***News from KSU Animal Sciences***, please let us know by e-mail to [lschrein@ksu.edu](mailto:lschrein@ksu.edu), or phone 785-532-1267.