



Friday Notes from MSSTATE Poultry Science

Friday Notes - to keep you informed about noteworthy news from Poultry Science at Mississippi State....and let us hear from you as well!

Faculty and Staff Travel and Activities:

- **Dr. Sharma** participated in the annual meeting of S-1056 Multistate Research Project, "Enhancing Food Safety by Risk analysis," in San Juan, Puerto Rico, Oct. 6-8.
- **Mrs. Wells** is in Jackson, MS, with undergrad **Holli Nutt**, to set up the 4-H/FFA Poultry Chain competition to be held Saturday at the State Fair, Oct. 9-10.
- **Dr. Tabler's** article, "Chickens do not receive growth hormones: So why all the confusion," has been #2 on The Poultry Site's Most Read Articles for several months; <http://www.thepoultrysite.com/articles/2812/chickens-do-not-receive-growth-hormones-so-why-all-the-confusion>

Recent Publication

- **Tom Tabler**, Yi Liang, Jonathan R. Moyle, F. Dustan Clark, **Morgan Farnell**, and **Jessica Wells**, "Managing heat and minimum ventilation systems in the broiler house," <http://msucares.com/pubs/publications/p2854.pdf>

Congratulations and Kudos to one of our Alums!

- **Jason Armstrong**, a 1997 graduate of Poultry Science, was named Humanities Teacher of the Year at East Central Community College, where he teaches English and literature. Jason credits several of his PS professors (**Drs. Morgan, Smith, Chamblee and others**) with great preparation for his future studies and career. <http://www.eccc.edu/news-stories/armstrong-to-present-eccc-humanities-program-october-27>

*****4-H Poultry Chain Funding Needs*****

This fall we have 65 youth showing chickens at the State Fair. We still need industry sponsors or individuals to bid on these birds at the auction on October 11, beginning at 5:00pm. There is no obligation to take the birds that will likely sell for ~\$150-\$300 per lot.

Thank you to those of you who have already responded!

Running Cumulative List of Scientific and Extension Publications, 2014

- **Tom Tabler**, F. Dustan Clark, Jonathan R. Moyle, Yi Liang, **Jessica Wells**, and **Morgan Farnell**, “Windrow Composting Broiler Litter between Flocks,” <http://msucares.com/pubs/publications/p2818.pdf>.
- C.L. Williams, **G.T. Tabler** and S.E. Watkins, 2013. Comparison of broiler flock daily water consumption and water-to-feed ratios for flocks grown in 1991, 2000-2001, and 2010-2011. J Appl Poultry Research, 22:934-941. <http://dx.doi.org/10.3382/japr.2013-00767>
- Abstracts from the 2014 IPSF: <http://www.ippexpo.org/ipsf/docs/2014%20IPSF%20Abstracts.pdf>
 - M6 Detection of parthenogenesis in mated quail hens and its impact on fertilization
Priscila Santa Rosa*, **Holly Parker**, **Aaron Kiess**, **Chris McDaniel**
 - M9 Physiological responses of broiler hatchlings to commercial in ovo coccidiosis vaccine administered on days 18.5 and 19.0 of incubation
Adebayo Sokale*, **E. David Peebles**, **Wei Zhai**, Timothy S. Cummings, Christopher J. Williams
 - M24 Apparent ileal amino acid digestibility (AIAAD) of various animal by-product blends (ABB) in broilers aged 21 and 42 d of age
Cameron Cardenas*, Elizabeth Kim, Bob Hill, **Kelley Wamsley**
 - M36 Effects of limestone particle size in pullet diets on hen performance, bone mineral density and keel bone deformities in aviaries or conventional cages
Pamela Eusebio-Balcazar*, **Mary Beck**, Sheila Purdum
 - M48 Antimicrobial activity of carvacrol against Salmonella on turkey breast cutlets packaged under modified atmosphere
Divek V. T. Nair*, **Chander Shekhar Sharma**
 - M66 Effects of diet type and nutrient density from day 8 to 21 on bone morphology, breaking strength, and mineral density in male broilers
Xi Wang*, **E. David Peebles**, Mark Bricka, **Wei Zhai**
 - T137 Effects of dietary lysine and methionine supplementation on growth performance and meat yield of male broilers
Wei Zhai*, **E. David Peebles**, Wes Schilling, Yves Mercier
 - P205 Effects of the in ovo injection of 25-hydroxylcholecalciferol on the yolk characteristics of embryonated broiler hatching eggs
Nayara Pelici*, **Wei Zhai**, **Sharon Womack**, **E. David Peebles**
 - P206 Effects of the in ovo injection of 25-hydroxylcholecalciferol on serum calcium and phosphorous concentrations in broiler embryos
Midian Nascimento*, **Wei Zhai**, **Sharon Womack**, **E. David Peebles**
 - P211 Effects of the raising model on semen quality and fertility of male Sichuan White Geese
Anfang Liu*, Mingjun Chen, Jing Zhang, Wang Xi, Jie Liu, Xia Qiu, Hongpeng Ma, Wei Zhai
 - P212 Effects of single nucleotide polymorphism of H-FABP gene on carcass traits in Sichuan White Geese
Anfang Liu*, Shukai Yuan, Jing Zhang, Jie Liu, Xia Qiu, Hongpeng Ma
 - P235 The effect of varying the inclusion of two different anticoccidials into a commercial diet on D0-49 Ross 708 bird performance
Rosana Hirai*, Timothy Cummings, **Kelley Wamsley**
 - P241 Dietary Alterations with Live Coccidiosis Vaccine (LCV) Response and D0-46 Ross 708 Broiler Performance
Robert Sellers*, **Wei Zhai**, Carla Price, Phil Stayer, **Tom Tabler**, **Kelley Wamsley**.
- **Tom Tabler**, **Morgan Farnell**, **Jessica Wells**, **Haitham Yakout**, and Yi Liang, “Controlling Rodents on the Poultry Farm,” <http://msucares.com/pubs/publications/p2824.pdf>
- **Tom Tabler**, news release on litter sampling:

- **Tom Tabler**, F. Dustan Clark, Jonathan R. Moyle, **Morgan Farnell**, and **Jessica Wells**, “Managing Manure from the Backyard Flock,” <http://msucares.com/pubs/infosheets/is1973.pdf>
- **H. M. Parker**, **A. S. Kiess**, **P. Santa Rosa**, and **C. D. McDaniel**, 2014. Selection for the parthenogenetic trait in Chinese Painted Quail (*Coturnix chinensis*) affects hatchability parameters. Poultry Science 93(3): 664-672 <http://dx.doi.org/10.3382/ps.2013-03527>
- **Tom Tabler**, Dustan Clark, Jonathan R. Moyle, **Jessica Wells**, and **Morgan Farnell**, “Composting Manure from Small Poultry Flocks,” <http://msucares.com/pubs/infosheets/is1975.pdf>
- **News Release - Tabler and Farnell:** <http://www.wcbi.com/wordpress/okolona-poultry-farmer-learns-from-msu>
- **Tom Tabler**, F. Dustan Clark, Jonathan R. Moyle, **Morgan Farnell**, and **Jessica Wells**, “Deep Pectoral Myopathy (Green Muscle Disease) in Broilers,” <http://msucares.com/pubs/infosheets/is1976.pdf.3>
- Liu, X., J.A. Byrd, **M. Farnell**, and C.A. Ruiz-Feria, 2014. Arginine and vitamin E improve the immune response after a Salmonella challenge in broiler chicks, Poultry Sci. 93:882-890. <http://dx.doi.org/10.3382/ps.2013-03723>.
- **Tom Tabler**, **Morgan Farnell** and **Jessica Wells**, “Poultry Water Line Sanitation,” <http://msucares.com/pubs/publications/p2839.pdf>.
- Jonathan Moyle, Jennifer Rhodes, Brigid McCrea, **Tom Tabler**, and Dustan Clark, “Rodent Control on Small Poultry Farms,” www.poultry.msstate.edu/pdf/extension/rodents.pdf.
- Y. Liang, **G.T. Tabler**, T.A. Costello, I.L. Berry, S.E. Watkins, Y.V. Thaxton, 2014. Cooling broiler chickens by surface wetting: Indoor thermal environment, water usage, and bird performance. ASABE, Vol 30(2): 249-258. <http://dx.doi.org/10.13031/aea.30.10103> (for the abstract only); for a copy of the full manuscript, please contact **Dr. Tabler** (ttabler@poultry.msstate.edu)
- **Poultry Science Abstracts 2014:** <http://m.poultryscience.org/Search.aspx> and then search by author name:
 - # 357P The effects of different enzyme complexes on nutrient digestibility, performance, and processing yield in male broilers. L. V. Teixeira¹, **T. F. B. Oliveira**^{*1,2}, **D. E. Peebles**², A. G. Bertechini¹, ¹Universidade federal de Lavras, Brazil, ²Mississippi State University
 - # 358P The effects of different enzyme complexes on nutrient digestibility and performance in female broilers. **T. F. B. Oliveira**^{*1,2}, L. V. Teixeira¹, **D. E. Peebles**², A. G. Bertechini¹, ¹Universidade federal de Lavras, Brazil, ²Mississippi State University
 - # 482P Effects of dietary lysine and methionine supplementation on serum metabolites, hormones, and their relationship with the growth performance of male broilers. **W. Zhai**^{*1}, **E. D. Peebles**¹, **X. Wang**¹, Y. Mercier², ¹Mississippi State University, ²Adisseo France
 - # 131 Effects of dietary lysine and methionine supplementation on the breast meat quality of male broilers. **W. Zhai**^{*1}, M. W. Schilling¹, **E. D. Peebles**¹, Y. Mercier², ¹Mississippi State University, ²Adisseo France
 - # 132 Cost effectiveness of supplemental dietary lysine and methionine for meat yield in male broilers. **W. Zhai**^{*1}, **E. D. Peebles**¹, Y. Mercier², ¹Mississippi State University, ²Adisseo France
 - # 179 Comparative effects of in ovo versus subcutaneous vaccination and pre-placement holding time on early post-hatch broiler chick quality. **E. D. Peebles**^{*1}, T. M. Barbosa², T. S. Cummings², J. Dickson², **S. K. Womack**¹, ¹Department of Poultry Science, Mississippi State University, ²Zoetis, Research Triangle Park, NC.

- # 49 Effects of commercially available antibiotic alternatives on 0- to 41-d-old male broiler chicken growth performance. **X. Wang^{*1}, K. Wamsley¹, A. Kiess¹, W. Zhai¹**, ¹Mississippi State University
- # 52 Effects of various antibiotics, anticoccidials, and antibiotic alternative products on gut characteristics and performance using broilers given a 10x live coccidiosis vaccine.
C. Cardenas^{*1}, W. Zhai¹, K. Wamsley¹, ¹Mississippi State University
- # 286P Effects of the raising model on carcass traits and muscle nutrition composition in Landaise geese. **A. Liu^{*1,2}**, J. Zhang¹, J. Liu¹, W. Xi¹, X. Qiu¹, H. Ma¹, **W. Zhai²**, ¹Southwest University, Chongqing, China, ²Mississippi State University
- # 386P Evaluating the impact of dietary mannan-oligosaccharides (MOS) on broiler performance and intestinal microflora. R. A. Silva^{*1}, H. M. Yakout¹, **W. Zhai¹, M. B. Farnell¹, C. S. Sharma¹, C. D. McDaniel¹, A. S. Kiess¹**, ¹Mississippi State University
- # 482P Effects of dietary lysine and methionine supplementation on serum metabolites, hormones, and their relationship with the growth performance of male broilers. **W. Zhai^{*1}, E. D. Peebles¹, X. Wang¹**, Y. Mercier², ¹Mississippi State University, ²Adisseo France
- # 67 Feed form and liquid application method effects on feed augering segregation. **R. B. Sellers^{*1}**, J. Boney², **C. McDaniel¹**, J. S. Moritz², **K. G. S. Wamsley¹**, ¹Mississippi State University, ²West Virginia University
- # 83 Evaluating the effect of de Man, Rogosa, Sharpe medium and byproducts of *Lactobacillus acidophilus* on rooster sperm quality. **M. D. Triplett^{*1}, C. D. McDaniel¹, A. S. Kiess¹**, ¹Mississippi State University
- # 295P Use of a compressed air foam system to rapidly clean and disinfect a broiler hatchery. V. S. Godoy^{*1}, C. H. Chisholm¹, **A. S. Kiess¹, Y. Z. Farnell¹, G. T. Tabler¹, C. D. McDaniel¹, M. B. Farnell¹**, ¹Mississippi State University
- # 97 Evaluation of compatibility of *Salmonella* lytic bacteriophage with different antimicrobials and their combinations on reduction of *Salmonella* in vitro and on chicken breast fillets. **A. T. Sukumaran^{*1}, C. S. Sharma¹**, ¹Mississippi State University
- # 99 Antimicrobial efficacy of carvacrol against *Salmonella*, *Campylobacter*, and lactic acid bacteria on turkey breast cutlets stored under modified-atmosphere packaging.
D. V. T. Nair^{*1}, C. S. Sharma¹, ¹Mississippi State University
- # 264 Prevalence, serotypes, and antibiotic-resistant phenotypes of *Salmonella enterica* isolates in retail poultry products. **C. S. Sharma^{*1}, A. Ates¹**, ¹Mississippi State University
- **Tom Tabler**, F. Dustan Clark, Jonathan R. Moyle, **Jessica Wells, Morgan Farnell**, “Feather Pecking and Cannibalism in the Backyard Flock,” <http://msucares.com/pubs/publications/p2848.pdf>
- **Mary M. Beck**, Three agricultural research priorities to feed the planet: Critical focus areas for future agriculture research are food security, “one health,” and stewardship. <http://www.wattpoultryusa-digital.com/#&pageSet=13>.
- **Tom Tabler, Jessica Wells, and Morgan Farnell**, “Potential Contract Growers Face Important Decisions.” <http://msucares.com/pubs/publications/p2850.pdf>
- **Tom Tabler**, Jonathan Moyle, F. Dustan Clark, Yi Liang, **Jessica Wells, and Morgan Farnell**, “Protect Backyard Birds from Predators,” <http://msucares.com/pubs/publications/p2853.pdf>
- **Divek Nair**, Rama Nannapaneni, **Aaron Kiess**, Barakat Mahmoud, and **Chander Shekhar Sharma**, 2014. Antimicrobial efficacy of lauric arginate against *Campylobacter jejuni* and spoilage organisms on chicken breast fillets, *Poultry Sci* 93:10:2636-2640. Doi:10.3382/ps2014-04123
 - **This article was selected as an Editor’s Choice for October 2014.**
 - <http://ps.oxfordjournals.org/content/by/tag/choice>

