



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!

Poultry Science Department News: Faculty, Staff, and Student Travel and Activities.

- **Dr. Beck** participated in the virtual quarterly meeting of the MS Board of Animal Health, April 7
- **Dr. Tabler** met with Peco personnel to discuss greenhouse gas emissions, April 8
- **Dr. Tabler** visited a Sanderson farm at Tylertown on April 9; a Wayne farm at Rose Hill on April 13; and a Mar-Jac farm at Waynesboro on April 14; to assess various production issues.
- **Dr. Tabler** visited a Mar-Jac farm at Richton, April 19
- **Mrs. Johnson** and **Drs. Beck, Wamsley** and **Zhang** participated in the DAFVM Quarterly Training Zoom meeting, April 20
- **Dr. Wells** conducted the FFA Poultry Judging Competition on campus, April 23.
- **Mrs. Johnson, Mrs. Christensen** and **Dr. Beck** participated in the Webex Foundation Road Show, April 23.

Congratulations to....

- **Lauren Lindsey** and **Ayoub Mousstaaid**, MS grad students with **Dr. Peebles**, on their induction as associate members of the MSU Chapter of Gamma Sigma Delta and receiving \$500 GSD graduate scholarships/awards of merit, April 6.

Recent Publications...

- **Tom Tabler, Yi Liang, Jessica Wells, and Jonathan Moon**, "Broiler Litter Production and Nutrient Content Characteristics," http://extension.msstate.edu/sites/default/files/publications/publications/P3601_web.pdf
- Bonnie Coblentz, "Plan well before starting a backyard chicken flock," Feature Story with **Tom Tabler**: <http://extension.msstate.edu/news/feature-story/2021/plan-well-starting-backyard-chicken-flock>

Cumulative List of Scientific and Extension Publications, 2021

- **Claudia D. Castañeda**, Dana K. Dittoe, **Kelley G.S. Wamsley**, **Christopher D. McDaniel**, Alfred Blanch, Dorthie Sandvang, **Aaron S. Kiess**, “In ovo inoculation of an *Enterococcus faecium*-based product to enhance broiler hatchability, live performance, and intestinal morphology,” *Poultry Sci.*, 2020; Vol. 99:11:6163-6172. <https://doi.org/10.1016/j.psj.2020.08.002>
- Pratik Parajuli, Yang Zhao, **Tom Tabler**, “Evaluating avoidance distance and fleeing speed of broilers exposed to aerial systems,” 2020 *Int. J. Agric & Biol Eng.* Vol 13:6:34 <https://ijabe.org/index.php/ijabe/article/view/5591/pdf>
- Yi Liang and **G. Tom Tabler**, “Litter management for broiler production,” U of Arkansas Extension, <https://www.uaex.edu/publications/pdf/FSA1098.pdf>

Recent Publications and Media...**Abstracts presented at the 2021 Virtual IPSF (abstracts can be found at****https://poultryscience.org/files/galleries/2021_IPSF_Abstracts.pdf**

- **Hudson Thames**^{*GS}, **Courtney Fancher**, **Mary Gates Colvin**, **Mika McAnally**, **Emily Tucker**, **Nikhil Nuthalapati**, **Li Zhang**, **Aaron Kiess**, **Thu Dinh**, **Anuraj Sukumaran**, “Prevalence of *Salmonella*, *Campylobacter*, and spoilage bacteria on broiler meat at different stages of commercial poultry processing,”
- **Courtney Fancher**^{*GS}, **Hudson Thames**, **Mary Gates Colvin**, **Li Zhang**, **Nikhil Nuthalapati**, **Aaron Kiess**, **Anuraj Sukumaran**, “Prevalence of *Clostridium perfringens* in no antibiotics ever broiler farms in Mississippi”
- **Sabin Poudel**^{*IGS}, **Sadie White**², **Tianmin Li**¹, **Xue Zhang**², **Aaron Kiess**¹, **Li Zhang**¹. “Comparison of DNA extraction methods in poultry litter and fecal samples to identify pathogenic bacteria using real-time PCR
- **Jonathan Moon**^{*IGS}, **Jan DuBien**¹, **Reshma Ramachandran**¹, **Yi Liang**², **Tom Tabler**¹. “Effect of sprinkling on water conservation, house environment, and broiler performance
- **Ishab Poudel**^{*GS}, **Aaron Kiess**, **Mary Beck**, **Pratima Adhikari**, “The effects of monochromatic light on the growth, egg production, egg quality, behavior, and hormone concentration of Hy-Line® W-36 laying hens
- **Victoria Williams**^{*IGS}, **Kelley Wamsley**¹, **Kevin Roberson**², **Pratima Adhikari**¹. “Effects of varying protein/amino acid level of diets with or without protease on 30-50 wk layer performance and egg production parameters
- **Ayoub Mousstaaid**^{*IGS}, **William Miller**², **Katie Elliott**¹, **Saman Fatemi**¹, **Abdulmohsen Alqhtani**¹, **E. David Peebles**, “Effects of the in ovo and dietary administration of L-ascorbic acid (L-AA) on the concentrations of L-AA in the eyes and nitric oxide in the serum of Ross 708 broilers
- **Andrew Brown**^{*IGS}, **Jason Lee**², **Kelley Wamsley**, “Determining the optimal digestible isoleucine to lysine ratio in Ross x Ross 708 male broilers from 14 to 28 days of age
- **Sabin Poudel**^{*1}, **Tianmin Li**, **Mark Arick**², **Chuan Hsu**², **Aaron Kiess**¹, **Li Zhang**¹. “Comparative whole-genome analysis of *Campylobacter jejuni* strains isolated from retail Chicken in Mississippi”
- **Saman Fatemi**^{*1}, **Katie Elliott**¹, **April Levy**², **Abdulmohsen Alqhtani**¹, **Ayoub Mousstaaid**¹, **David Peebles**, “Negative impact of a disproportionately high level of dietary 25-hydroxyvitamin D3 on the performance and meat yield of Ross 708 broilers
- **Tianmin Li**^{*IGS}, **Anuraj Theradiyil Sukumaran**¹, **Wen-Hsing Cheng**², **Aaron Kiess**¹, **Li Zhang**, “Phenotypic and genotypic antimicrobial resistance characteristics of avian pathogenic *Escherichia coli* isolated from broilers
- **Reshma Ramachandran**^{*}, **Chuan-Yu Hsu**, **Anuraj Theradiyil Sukumaran**, **Li Zhang**, “Validation of probe-based multiplex real-time PCR assays for the rapid and accurate detection of avian pathogenic *Escherichia coli*
- **Nathaniel Miller**^{*1UG}, **Ayoub Mousstaaid**¹, **Barr Oakes**¹, **Sayed Fatemi**¹, **Abdulmohsen Alqhtani**¹, **Katie Elliott**¹, **William Miller**², **Patrick Gerards**³, **E. Peebles**. “The effects of supplementary in ovo and dietary vitamin C on broiler performance through 2 weeks posthatch”
- **Tom Tabler**, “Cooling Poultry Flocks During Hot Weather,” <https://m.info.boehringer-ingelheim.ca/webApp/TheFeedMar2021#colleague-commentary>
- **Xiao Yang**, **Yang Zhao**, **Hairong Qi**, and **Tom Tabler**, “Characterizing sounds of different sources in a commercial broiler house,” *Animals* 2021, <https://doi.org/10.3390/ani11030916>