



## 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. Tabler** participated in the MSP Grower Advisory meeting in Forrest, May 17.
- **Dr. Beck** met with USDA personnel to discuss future collaborations, May 17.
- **Dr. Wamsley** met with Magnation Water personnel to discuss research topics, May 18
- **Dr. Tabler** visited Mar-Jac (May 19) and a Sanderson Farms (May 20) growers to discuss management practices.
- **Dr. Tabler** presented Plan of Work training sessions, Forrest Extension Office, May 21.
- **The entire Poultry Science faculty**, joined by Mrs. Christensen, Ms. Shelton and Mr. Moon, participated in a day-long planning retreat at The Poor House venue, Starkville, May 27.
- **Dr. Tabler** participated in a meeting with personnel from Peco and AgEcon to discuss gas emissions from poultry operations, May 28.
- **Mr. Moon** and **Mr. Neal** participated in the MAFES Supervisory Conference held at the North MS R&E Center at Verona, June 1-3.

#### *Welcome to...*

- **Cameron Mangano**, new member of our poultry farm research crew, who started with us June 1.

#### *Farewell and best wishes to...*

- **Dr. Nikhil Nuthalapati**, Research Associate III with **Dr. Kiess**, who has accepted a position at the University of Alabama beginning June 1.

#### *New Publications...*

- **Tom Tabler, Jessica Wells** and **Jonathan Moon**, "Broiler House Lamp and Light Dimmer Basics,"  
[http://extension.msstate.edu/sites/default/files/publications/publications/P3639\\_web.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3639_web.pdf)
- **Tom Tabler, Jessica Wells** and **Jonathan Moon**, "Poultry Industry's Contribution to Greenhouse Gas Emissions,"  
[http://extension.msstate.edu/sites/default/files/publications/publications/P3634\\_web.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3634_web.pdf)

### ***Cumulative List of Scientific and Extension Publications, 2021***

- **Claudia D. Castañeda**, Dana K. Dittoe, **Kelley G.S. Wamsley**, **Christopher D. McDaniel**, Alfred Blanch, Dorthé 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](https://poultryscience.org/files/galleries/2021_IPSF_Abstracts.pdf)***

- **Hudson Thames**<sup>\*GS</sup>, 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**<sup>\*GS</sup>, **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**<sup>\*IGS</sup>, **Sadie White**<sup>2</sup>, **Tianmin Li**<sup>1</sup>, **Xue Zhang**<sup>2</sup>, **Aaron Kiess**<sup>1</sup>, **Li Zhang**<sup>1</sup>. “Comparison of DNA extraction methods in poultry litter and fecal samples to identify pathogenic bacteria using real-time PCR
- **Jonathan Moon**<sup>\*IGS</sup>, **Jan DuBien**<sup>1</sup>, **Reshma Ramachandran**<sup>1</sup>, **Yi Liang**<sup>2</sup>, **Tom Tabler**<sup>1</sup>. “Effect of sprinkling on water conservation, house environment, and broiler performance
- **Ishab Poudel**<sup>\*GS</sup>, **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**<sup>\*IGS</sup>, **Kelley Wamsley**<sup>1</sup>, Kevin Roberson<sup>2</sup>, **Pratima Adhikari**<sup>1</sup>. “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**<sup>\*IGS</sup>, William Miller<sup>2</sup>, Katie Elliott<sup>1</sup>, Saman Fatemi<sup>1</sup>, Abdulmohsen Alqhtani<sup>1</sup>, 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**<sup>\*IGS</sup>, **Jason Lee**<sup>2</sup>, **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**<sup>\*1</sup>, **Tianmin Li**, Mark Arick<sup>2</sup>, Chuan Hsu<sup>2</sup>, **Aaron Kiess**<sup>1</sup>, **Li Zhang**<sup>1</sup>. “Comparative whole-genome analysis of *Campylobacter jejuni* strains isolated from retail Chicken in Mississippi”
- **Saman Fatemi**<sup>\*1</sup>, **Katie Elliott**<sup>1</sup>, April Levy<sup>2</sup>, Abdulmohsen Alqhtani<sup>1</sup>, **Ayoub Mousstaaid**<sup>1</sup>, **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**<sup>\*IGS</sup>, **Anuraj Theradiyil Sukumaran**<sup>1</sup>, Wen-Hsing Cheng<sup>2</sup>, **Aaron Kiess**<sup>1</sup>, **Li Zhang**, “Phenotypic and genotypic antimicrobial resistance characteristics of avian pathogenic *Escherichia coli* isolated from broilers
- **Reshma Ramachandran**<sup>\*</sup>, 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**<sup>\*IUG</sup>, **Ayoub Mousstaaid**<sup>1</sup>, **Barr Oakes**<sup>1</sup>, **Seyed Fatemi**<sup>1</sup>, Abdulmohsen Alqhtani<sup>1</sup>, **Katie Elliott**<sup>1</sup>, William Miller<sup>2</sup>, Patrick Gerards<sup>3</sup>, **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>
- **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](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>
- **Claudia D. Castañeda, Josie N. Gamble, Kelley G.S. Wamsley, Christopher D. McDaniel** and **Aaron S. Kiess**, “In ovo administration of *Bacillus subtilis* serotypes affect hatchability, 21-day performance, and intestinal microflora,” Poultry Sci. 100:6: <https://doi.org/10.1016/j.psj.2021.101125>
- **Tom Tabler, Wei Zhai, Jessica Wells, and Jonathan Moon**, “Antibiotic Resistance, Alternatives, and the U.S. Poultry Industry,” [http://extension.msstate.edu/sites/default/files/publications/publications/P3605\\_web.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3605_web.pdf)
- **Tom Tabler**, Jonathan Moyle, Jennifer Rhodes, Shawna L. Weimer, **Jessica Wells**, and **Jonathan Moon**, “Poultry Beginnings: Raise Your Own Backyard Chickens,” [http://extension.msstate.edu/sites/default/files/publications/publications/P3624\\_web.pdf](http://extension.msstate.edu/sites/default/files/publications/publications/P3624_web.pdf)