



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.

- **PO Faculty and Staff** continue meeting weekly via Zoom to discuss ongoing departmental strategies and events.
- **Mrs. Christensen** attended and participated in an Extension Program Planning webinar, May 6.
- **Dr. Tabler** assessed a farm at Philadelphia for BankPlus, May 7.
- **Dr. Beck** attended a webex university update meeting with Dr. Keenum and other university administrators, May 8.
- **Dr. Beck** participated in the CALS/CFR Department Heads meeting, May 8.

Recent Publications and Media:

- Abdelhamed H, **Ramachandran R**, Narayanan L, Ozdemir O, Cooper A, Olivier AK, Karsi A, Lawrence ML. "[Contributions of a LysR transcriptional regulator to Listeria monocytogenes virulence and identification of its regulons](#)" 2020 Apr 27;202(10). DOI: 10.1128/JB.00087-20 .
- **Drs. Wells and Tabler** posted a YouTube video, "What to consider before purchasing a backyard flock," May 6 :
https://www.youtube.com/channel/UChdrpk7h2meKontdypmRniQ?view_as=subscriber
- **Tom Tabler**, "Prepare now for summer heat, humidity,"
https://poultryhealthtoday.com/prepare-now-for-summer-heat-humidity/?utm_source=Poultry+Health+Today+Newsletter&utm_campaign=fe6116322d-AAAP_antimicrobial_stewardship_PHT_1_8_2018_COPY_0&utm_medium=email&utm_term=0_5ac605299a-fe6116322d-315441937
- **Tom Tabler**, "Cooling chickens with sprinklers has multiple benefits,"
<https://poultryhealthtoday.com/cooling-chickens-with-sprinklers-has-multiple-benefits/>
- **Tom Tabler**, "Proper water pressure, volume essential to good flock performance,"
<https://poultryhealthtoday.com/proper-water-pressure-volume-essential-to-good-flock-performance/>

We were saddened this week by the death of Becky Duncan Beard, long-time friend and long-time administrative assistant for the Mississippi Poultry Association; she was its heart and soul and will be greatly missed.

Cumulative List of Scientific and Extension Publications, 2020

- **Abstracts of Presentations at the IPSF, Atlanta, January 27-28, 2020; these can be accessed at www.ippexpo.org/ispf:**
- **MSSTATE Poultry Science Presentations** were as follows; actual journal citations will be available later in the spring:
 - **Tomi Obe**, Rmam Nannapaneni, Wes Schilling, **Li Zhang**, **Aaron Kiess**, “Mode of persistence and antibiotic resistance of Salmonella isolates from poultry processing equipment.”
 - **Ishab Poudel**, **Christopher McDaniel**, M. Schilling, **Pratima Adhikari**, “Effects of split feeding limestone particle size ratios on egg production, egg quality, and eggshell strength of White Leghorn W-36 hens in the late production phase.”
 - **Bo Zhang**, **Sabin Poudel**, **Linan Jia**, **Wei Zhai**, “Effects of dietary amino acid and metabolizable energy reduction on growth performance and economic return of Ross 708 broilers.”
 - **Andrew Brown**, Jason Lee, **Kelley Wamsley**, “Determining the digestible isoleucine requirement of Ross x Ross 708 male broilers from 0 to 18 days of age.”
 - **Linan Jia**, **Sabin Poudel**, **Wei Zhai**, “Eimeria challenge and feed additives affected broiler woody breast incidence.”
 - **Courtney Ennis**, Curran Gehring, Mike Bedford, Craig Wyatt, **Kelley Wamsley**, “Response of Ross x Ross 708 male broilers fed varying phytase enzyme and activity during d 0-14.”
 - **Saman Fatemi**, **Katie Elliott**, **Abdulmohsen Alqhtani**, **Ayoub Amousstaaid**, Abiodun Bello, April Levy, **David Peebles**, “Improvement in the performance and inflammatory responses of Ross 708 broilers when injected in ovo with various forms of vitamin D₃.”
 - **NOTE: This presentation received a Certificate of Excellence for scientific merit and quality of presentation.**
 - **Tianmin Li**, **Sadie White**, **Nikhil Nuthalapati**, **Anura Sukumaran**, **Aaron Kiess**, **Li Zhang**, “The prevalence and antimicrobial resistance properties of Campylobacter in Mississippi poultry.”
 - **Sadie White**, **Tianmin Li**, **Sabin Poudel**, **Aaron Kiess**, **Li Zhang**, “Comparison of four bacterial DNA extraction methods in poultry litter and fecal sample.”
 - **NOTE: This presentation received an Undergraduate Certificate of Participation.**
 - **Courtney Fancher**, **Hudson Thames**, **Alyssa Easterling**, **Alexis Dillender**, **Nikhil Nuthalapati**, **Li Zhang**, **Aaron Kiess**, Thu Dinh, **Anuraj Sukumaran**, “Influence of season and age of flock on the virulence gene profiles of Escherichia coli isolates from “no antibiotics ever” commercial broiler farms and their antibiotic susceptibility.
 - **Milan Sharma**, Dima White, Woo Kim, **Pratima Adhikari**, “Effects of housing environment and laying hen strain on tibia and femur bone properties.”
 - **NOTE: This presentation received a Certificate of Excellence for scientific merit and quality of presentation.**
 - **Milan Sharma**, **Li Zhang**, **Aaron Kiess**, **Pratima Adhikari**, “Housing environment and laying hen strain impacts on cloacal microbiology and incidence of avian pathogenic Escherichia coli (APEC) in the late phase of production.”

- **Courtney Ennis**, Curran Gehring, Mike Bedford, Craig Wyatt, **Kelley Wamsley**, “Effects of varying phytase enzyme and total activity on phytate degradation and nutrient digestibility of young male Ross x Ross 708 broilers.”
- **Abdulmohsen Alqhtani**, **Saman Fatemi**, **Katie Elliott**, **Ayoub Mousstaaid**, Abiodun Bello, Apri Levy, **David Peebles**, “Increased breast meat yield of Ross 709 broilers in response to the in ovo injection of various forms of vitamin D₃.”
- **Sabin Poudel**, **Wei Zhai**, “Effects of riboflavin and *Bacillus subtilis* on blood components of male broiler with or without coccidial challenge.”
- **Carley Rhoads**, **Courtney Ennis**, **Andrew Brown**, **Pratima Adhikari**, **Tom Tabler**, A. Elzind, **Kelley Wamsley**, “Assessment of novel water treatment equipment (H₂Oelite) on broiler performance, tibia ash and mineral digestibility.”
 - **NOTE: This presentation received an Undergraduate Certificate of Participation.**
- **Jonathan Moon**, Jan DuBien, **Andrew Brown**, Yi Liang, **Tom Tabler**, “Water conservation and production benefits of sprinkling broilers.”
- **Tom Tabler**, Jonathan R. Moyle, Shawna Weimer, **Jonathan Moon**, and **Jessica Wells**, “Poultry Farm Insurers Expect Proper Earth Grounding,”
http://extension.msstate.edu/sites/default/files/publications/publications/P3427_web.pdf
- **Tom Tabler**, “Sprinklers Cooling Benefits in Poultry Houses,”
https://en.engormix.com/MA-poultry-industry/videos/sprinklers-cooling-benefits-poultry-houses-t58106.htm?utm_source=notification&utm_medium=email&utm_campaign=2-1-0&smld=dc221e1c14965e8739bf705a7104cfc5&src_ga=1
- **Tom Tabler**, “Gangrenous Dermatitis in Broilers,” https://en.engormix.com/MA-poultry-industry/videos/gangrenous-dermatitis-broilers-t58317.htm?utm_source=notification&utm_medium=email&utm_campaign=2-1-0&smld=60481b605de89fd22c3d267a97b6d174&src_ga=1
- **Tom Tabler**, “Rotary Drum Composting of Poultry Mortalities,”
https://en.engormix.com/MA-poultry-industry/videos/rotary-drum-composting-poultry-mortalities-t58318.htm?utm_source=notification&utm_medium=email&utm_campaign=2-1-0&smld=609cb340ff134465ff7d309e5b1ee7cf&src_ga=1
- **Tom Tabler**, Yi Liang, **Jonathan Moon**, and **Jessica Wells**, “NAE Production Challenges Poultry Industry on Several Fronts,”
http://extension.msstate.edu/sites/default/files/publications/publications/P3428_web.pdf
- **Tom Tabler**, Helping growers navigate the NAE maze;
<https://www.dpicken.org/media/docs/TIMELY-TOPICS-March-2020.pdf>
- **Drs. Wells** and **Tabler**, Mississippi State Chicken Chat;
https://www.youtube.com/channel/UCHdrpk7h2meKontdypmRniQ?view_as=subscriber
- **Tom Tabler**, Yi Liang, Jonathan R. Moyle, Shawna L. Weimer, **Jonathan Moon**, and **Jessica Wells**, “Characteristics of Successful Poultry Growers,”
http://extension.msstate.edu/sites/default/files/publications/publications/P3446_web.pdf
- Jonathan Moyle, Maegan Perdue, **Dr. Tom Tabler**, Dr. Shawna Weimer, Jennifer Rhodes, “Hatching Eggs at Home,” <https://extension.umd.edu/learn/publications/hatching-eggs-home>

- **Tom Tabler**, Jonathan R. Moyle, Shawna L. Weimer, **Jonathan Moon**, and **Jessica Wells**, “Backyard Chickens and COVID-19,” http://extension.msstate.edu/sites/default/files/publications/publications/P3447_web.pdf
- **News Release on Easter Tornadoes from MSU Extension**, <https://www.wattagnet.com/articles/40055-tornadoes-hit-least-90-mississippi-poultry-houses>
- **Tom Tabler**, Natalie Armour, **Jonathan Moon**, and **Jessica Wells**, “Infectious Bronchitis in Commercial Chickens,” http://extension.msstate.edu/sites/default/files/publications/publications/P3449_web.pdf