

CONTENTS

Review Articles

- Sustainable Fish and Invertebrate Meals for Methionine and Protein Feeds in Organic Poultry Production**
 A. C. Fanatico, K. Arsi, I. Upadhyaya, J. Morales Ramos, D. Donoghue, and A. M. Donoghue 437
- Evaluation of the Presence and Level of Enramycin in Broiler Tissues Following In-Feed Administration at Therapeutic Dose**
 Maureen Ngoh, Christopher Wrzesinski, Yuhui Yang, Eva Zschiesche, Timothy Madsen, Cheryl Stephenson, Linnea Newman, and Lawrence Deetz 449
- Effect of a Yeast Cell Wall Preparation on Cecal and Ovarian Colonization With *Salmonella enteritidis* in Commercial Layers**
 Charles L. Hofacre, Roy D. Berghaus, Sangita Jalukar, Greg F. Mathis, and John A. Smith 453

Research Reports

- Detoxification of Aflatoxin-Contaminated Poultry Feeds by 3 Adsorbents, Bentonite, Activated Charcoal, and Fuller's Earth**
 Anthony C. Mgbеahuruіke, Tochukwu E. Ejioffor, Obasi C. Christian, Vincent C. Shoyinka, Magnus Karlsson, and Erik Nordkvist 461
- The effects of steam conditioning and antimicrobial inclusion on feed manufacturing and inactivation of *Enterococcus faecium*, a *Salmonella* surrogate**
 J. W. Boney, J. Jaczynski, J. L. Weidhaas, A. N. Bergeron, and J. S. Moritz 472
- Shredded sponge or paper as a cloacal plug to limit broiler carcass *Campylobacter* contamination during automated defeathering**
 M. E. Berrang, R. J. Meinersmann, and E. S. Adams 483
- The Impact of Dietary Yeast Fermentation Product Derived from *Saccharomyces cerevisiae* on Semen Quality and Semen Microbiota of Aged White Leghorn roosters**
 M. N. dos Santos, R. Ramachandran, A. S. Kiess, K. G. S. Wamsley, and C. D. McDaniel 488
- The Effect of Corn-Expressed Carbohydrase on Performance and Digesta Viscosity of Broilers Fed a High Non-Starch Polysaccharide Diet**
 V. Ayres, H. L. Baldwin, X. Li, H. Xu, R. M. Raab, J. W. Boney, J. N. Broomhead, and J. S. Moritz 499
- Effects of Environment, Feed Form, and Caloric Density on Energy Partitioning, Subsequent Performance and immune response**
 B. G. Glover, J. M. Hadfield, J. W. Boney, K. L. Foltz, I Holáskova, K. J. Ryan, and J. S. Moritz 507
- Impact of Scalding Duration and Scalding Water Temperature on Broiler Processing Wastewater Loadings**
 C. E. Harris, K. A. Gottilla, D. V. Bourassa, L. N. Bartenfeld, B. H. Kiepper, and R. J. Buhr 522

Effect of High Dose of Bile Acids Supplementation in Broiler Feed on Growth Performance, Clinical Blood Metabolites, and Organ Development Wenqing Lai, Aizhi Cao, Juntao Li, Wenjuan Zhang, and Liying Zhang	532
The Effects of Diet Formulation and Thermal Processes Associated With Pelleting on 18-day Broiler Performance and Digestible Amino Acid Concentration A. N. Bergeron, J. W. Boney, and J. S. Moritz	540
Impact of Extended Heat Treatment on the Amino Acid Digestibility and TMEn Content of a Formaldehyde-Treated Diet M. K. Jones, K. E. Richardson, C. W. Starkey, N. M. Dale, and A. J. Davis	550
Evaluation of Ventilation Shutdown in a Multi-level Caged System Krista N. Eberle-Krish, Michael P. Martin, Ramon D. Malheiros, Sanjay B. Shah, Kimberly A. Livingston, and Kenneth E. Anderson	555
The Effect of Grape Seed Extract and Yeast Culture on Both Cholesterol Content of Egg Yolk and Performance of Laying Hens Peipei Sun, Yao Lu, Huaifen Cheng, and Daijun Song	564
Effect of Light Intensity Adjusted for Species-Specific Spectral Sensitivity on Live Performance and Processing Yield of Male Broiler Chickens J. L. Purswell, H. A. Olanrewaju, and J. E. Linhoss	570
Comparison of multiple methods for induction of necrotic enteritis in broilers. I K. M. Wilson, K. M. Chasser, A. F. Duff, W. N. Briggs, J. D. Latorre, J. R. Barta, and L. R. Bielke	577
Fermented Broccoli Residue Reduced Harmful Bacterial Loads and Improved Meat Antioxidation of Free-Range Broilers N. Liu, X. J. Deng, C. Y. Liang, and H. Y. Cai	590
Microbiological Status of Broiler Respiratory Tracts Before and During Catching for Transport to the Processing Plant D. V. Bourassa, K. M. Wilson, B. D. Fairchild, M. Czarick, and R. J. Buhr	597
Effects of feeding original XPC™ to laying hens on egg production, component yield and composition J. C. Suarez Martinez, R. L. Blount, J. Park, D. R. McIntyre, H. O. Pavlidis, and J. B. Carey	603
Effects of Dietary Supplementation With Earthworm Powder on Production Performance, Blood Characteristics, and Heavy Metal Residues of Broiler Pullets Yi Tian Zang, Shan Bing, Yong Zhen Zhang, Xiao Wei Sheng, and Deng Qun Shu	609
Field Reports	
Practical aspects of the suitability of different sampling methods for detecting <i>Salmonella</i> infection in duck flocks Doris Mueller-Doblies, Ian Mawhinney, Francesca Martelli, Rebecca Gosling, André Rabie, and Robert H. Davies	616
Antimicrobial Resistance in Enterobacteriaceae Isolated from Liver of Commercial Broilers and Backyard Chickens Asghar A. Kamboh, Muhammad Shoaib, Shahid H. Abro, Muhammd A. Khan, Kanwar K. Malhi, and Shengqing Yu	627