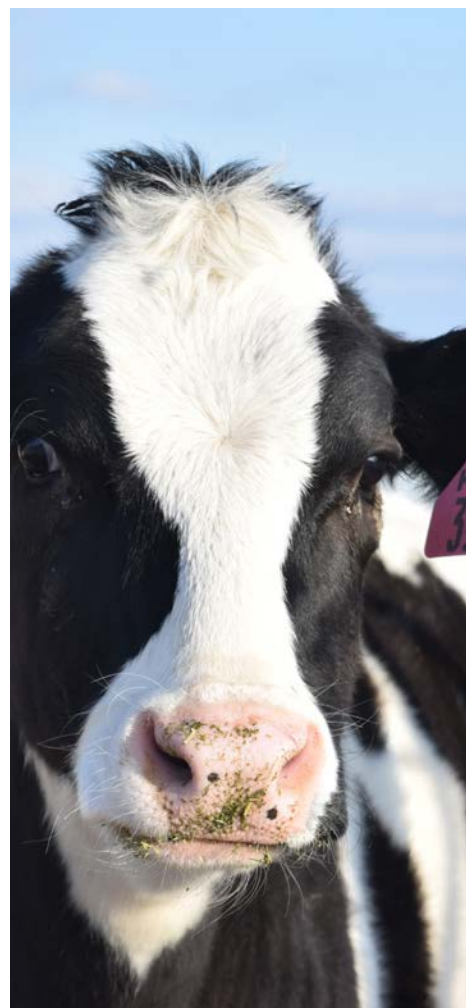
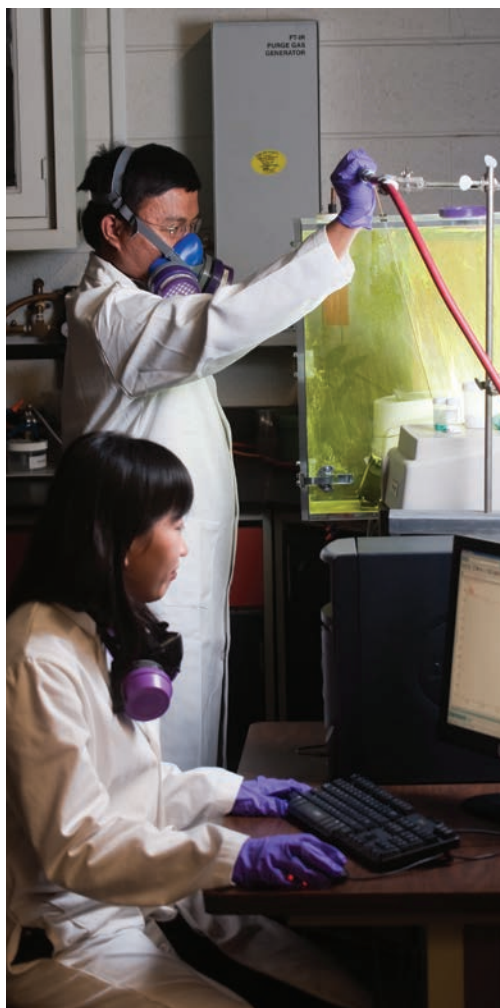




DIRECTOR'S REPORT OF RESEARCH IN KANSAS 2017

JULY 1, 2016–JUNE 30, 2017

K-STATE
Research and Extension

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Letter of Transmittal

Office of the Director

To the Honorable Sam Brownback, Governor of Kansas

It is my pleasure to transmit herewith the report of the Agricultural Experiment Station of the Kansas State University of Agriculture and Applied Science for the fiscal year ending June 30, 2017. This report contains the title, author, and publication information for manuscripts published by station scientists. The report was published only in electronic format.

John D. Floros, Ph.D.
Director, K-State Research and Extension
Dean, College of Agriculture

A Message from the Director

It is a pleasure to provide the 2017 Director's Report of Research in Kansas. The report documents our research programs and some of our accomplishments. K-State Research and Extension provides trusted, practical education to help individuals, businesses and communities solve problems, develop skills, and build a better future.

This report is produced and distributed in electronic format. This reduces printing costs and makes the report accessible to a broader audience.

The 2017 Director's Report of Research in Kansas includes a list of journal articles, station publications, and other published manuscripts from scientists in our departments, research-extension centers, and associated programs.

The Kansas Agricultural Experiment Station was established in 1887 to conduct research vital to the success of Kansas. In 1914, the Kansas Cooperative Extension Service was created to disseminate research-based information to the public. During our strategic planning process, we received input from 5,000 stakeholders to determine five grand challenges facing Kansans — global food systems, water, health, developing tomorrow's leaders, and community vitality. Our research programs provide the latest information through our statewide network to address those challenges.

John D. Floros, Ph.D.
Director, K-State Research and Extension
Dean, College of Agriculture



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A Message from the Associate Director of Research

The Hatch Act established the Kansas Agricultural Experiment Station in 1887 as the food, agriculture, and natural resources research component of Kansas State University, the nation's first operational land-grant university.

Our statewide network of centers and experiment fields allows our faculty to evaluate crop and livestock production systems across a wide range of environmental conditions.

This research helps Kansas farmers contribute to feeding a growing world population. By 2050, there will be an estimated 9.6 billion people globally. Every year, we develop and test nearly 1,000 new wheat breeding lines, tirelessly working to find only the best ones that will grow well in Kansas. In 2016, one of our varieties – Everest – was the top variety planted in Kansas for the fourth straight year.

Great wheat varieties mean great harvests for Kansas farmers, which in turn benefits the local, regional and state economies.

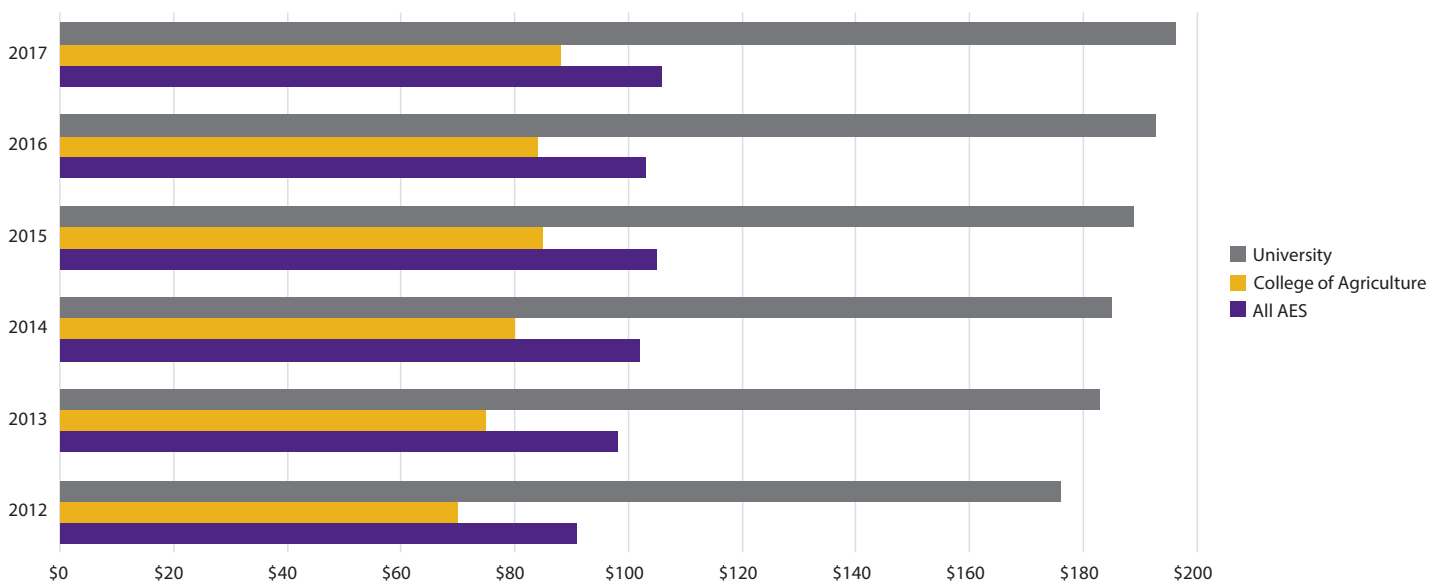
K-State's Agricultural Experiment Station funds research in 20 academic departments across five colleges on two campuses. In addition to long-term research projects on livestock and crop breeding, scientists are looking at new ways to control pests and diseases, emerging technologies to save water and energy, food safety, postharvest storage, weed control, and more. As an example of the value of this work, it is estimated that Kansas' farms would lose \$2.4 billion in crop yield value if weeds are not controlled.

As Kansas' largest employer, agriculture contributes 43 percent of the state's economy. More than 234,000 people are involved in the production, distribution, and transportation of agricultural products. Our research focuses on the agricultural industry and helping it grow in a sustainable manner.

Kansas Agricultural Experiment Station research expenditures — all funds used to produce research outcomes — represent the majority of Kansas State University's total research effort. Funds are usually awarded through a highly competitive federal grant system.

J. Ernest Minton
Associate Director, Research, K-State Research and Extension
Associate Dean, Research and Graduate Programs, College of Agriculture

Agricultural Experiment Station and University Research Expenditures (in millions)



Making a State Impact

Time to Burn: Study examines best season for prescribed burns

As researchers continue exploring the benefits of summer prescribed burning, Kansas land managers may be on the brink of a real opportunity to explore this alternative on their own property.

KC Olson, K-State professor of range beef cattle nutrition and management, has been researching the benefits of moving prescribed burning from spring to late summer.

Olson's research began in 2014. The data from that four-year study shows late-summer burning dramatically reduces the incidence of sericea lespedeza, a noxious weed found in at least one-third of the Flint Hills. The plant is known to out-compete native plants for water and nutrients, and it contains high levels of condensed tannins that make it undesirable for cattle grazing.

"We've started data collection for a six-year trial, which will involve livestock performance as a primary metric," he said. "We're going to test the influences of a traditional spring burn, a summertime burn in the August-September interval, and a fall burn in the September-October interval, to see how those options influence subsequent livestock performance."

Olson hopes to make a significant contribution to the growing pile of data, confirming the benefits of summer burning.

Poor weather conditions this past April prompted some land-owners to postpone pasture burning. Many worried that the moisture was inadequate to fuel the lush regrowth, which is the impetus for burning. Olson hopes pasture managers try summer burning.

Spring versus summer

Like a spring burn, you're still applying fire to plant material. "I recommend people hang their old fire management paradigms on a hook and look at it with fresh eyes, because this is a different animal," Olson said.

"Expect it to move at about one quarter of the surface wind speed. For example, if the surface wind speed is 10 miles an hour, expect that fire to move at about 2½ miles an hour. You can walk and keep up with these things."

In summer, green and growing foliage contains more water. For the people working the fire, as well as neighbors, the experience is less irritating.

"As the fire makes contact, that water flash boils," Olson said. "The smoke cloud looks dense, more intimidating, but that's because of all the steam."

To reduce walking in extreme heat, Olson modified his prescribed fire team. "We're using more small vehicles – think all-terrain vehicles – to work that fire line. If possible, no one walks more than a few feet to spare our people unnecessary exertion in extremely hot temperatures."

Olson added that his summer burn teams generally employ fewer people than his spring burn teams.

"The aftermath of a spring fire usually looks like a pool table – slick, black, and little residual material," Olson observed. "In the summer, fire intensity is much lower. Chances are most of the above ground vegetation is not going to go away completely. You will see standing green material immediately after the fire passes, and it looks like the fire didn't have any effect at all. But maybe 48 hours after the fire, what was standing green material the day of the fire is now brown, dead, and top-killed. You've just caused the whole plant community to reboot itself."

While those are the major differences between spring and summer burns, all the rules and ordinances apply. You still have to contact your county government for a burn permit. You still have to advise local emergency management teams of your fire, both before you light it and after it's out.



Professor KC Olson, left, initiates a summer pasture burn to reduce the incidence of sericea lespedeza, a noxious weed found in at least one-third of the Flint Hills.

Research Components of the Kansas Agricultural Experiment Station

(see map, next page)

Academic Departments

College of Agriculture

Agricultural Economics
Agronomy
Animal Sciences and Industry
Communications and Agricultural Education
Entomology
Grain Science and Industry
Horticulture and Natural Resources
Plant Pathology

College of Arts and Sciences

Biochemistry and Molecular Biophysics
Division of Biology
Sociology, Anthropology, and Social Work
Statistics

College of Engineering

Biological and Agricultural Engineering

College of Human Ecology

Apparel, Textiles, and Interior Design
Hospitality Management
Family Studies and Human Services
Food, Nutrition, Dietetics and Health

College of Veterinary Medicine

Anatomy and Physiology
Clinical Sciences
Diagnostic Medicine/Pathobiology

Research Centers

Agricultural Research Center
(Hays, HB Ranch, and Saline Experimental Range)
K-State Research and Extension Center
for Horticultural Crops (Olathe)
Northwest Research-Extension Center (Colby)
Southeast Research and Extension Center
(Parsons, Columbus, Mound Valley)
Southwest Research Center (Tribune)
Southwest Research-Extension Center (Garden City)

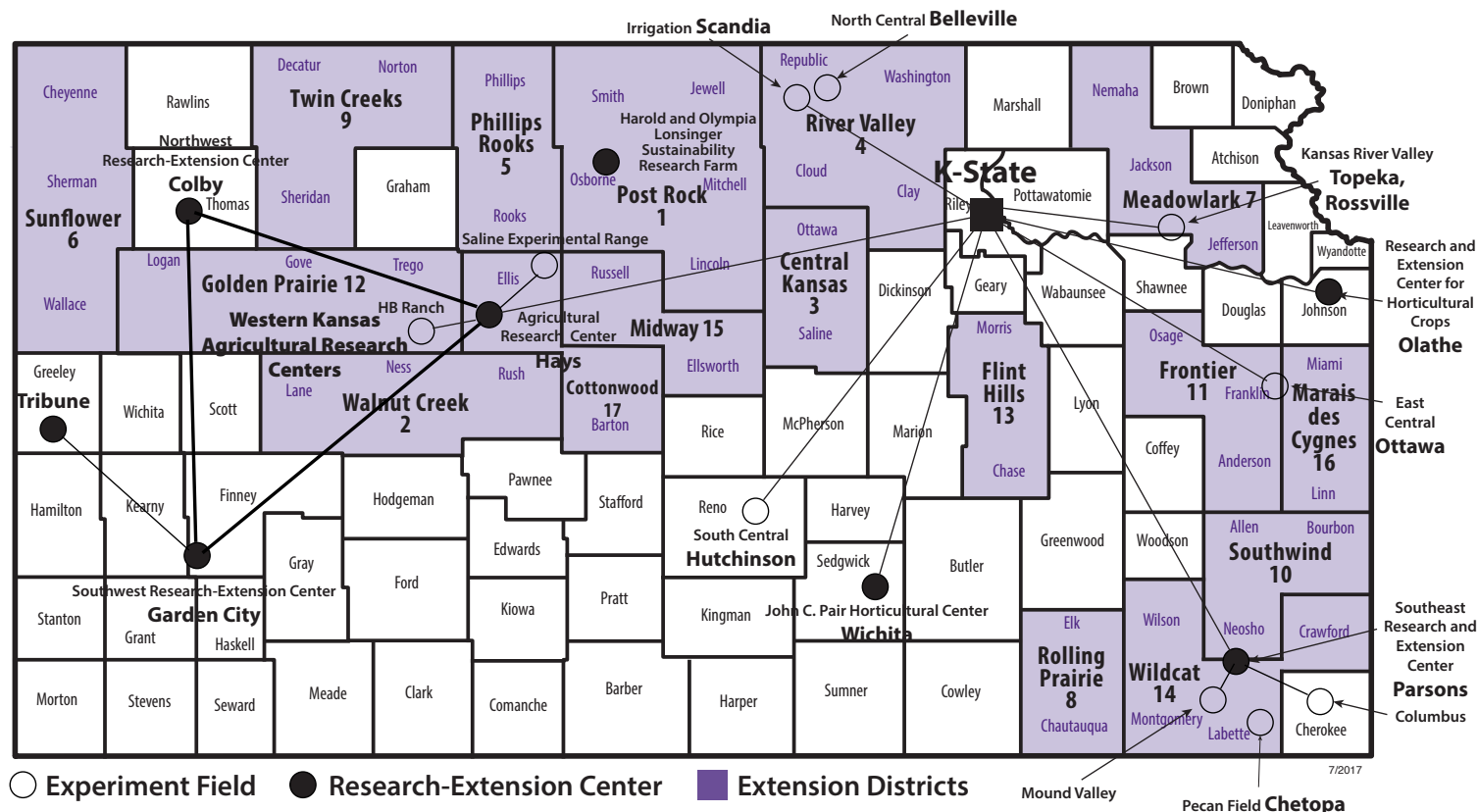
Experiment Fields

East Central (Ottawa)
John C. Pair Horticultural Center (Haysville)
Kansas River Valley (Rossville, Topeka)
North Central and Irrigation (Belleville, Scandia)
Pecan Field (Chetopa)
South Central (Hutchinson)

USAID Feed the Future Innovation Labs

Applied Wheat Genomics
Reduction of Post-Harvest Loss
Sorghum and Millet
Sustainable Intensification

Kansas State University Agricultural Research Locations



Associated Programs

AgManager.info
 Beef Cattle Research Center
 Beef Stocker Unit
 Bio Materials and Technology Lab
 Bioprocessing and Industrial Value-Added Products
 Biosecurity Research Institute
 Cargill Feed Safety Research Center
 Center for Bio-based Products by Design
 Center for Risk Management Education and Research
 Center for Rural Enterprise Engagement
 Center for Sorghum Improvement
 Center for Sustainable Energy
 Environmental Health and Safety Office
 Food Science Institute
 Fungal Genetics Stock Center
 Grain-Feed Microbiology and Toxicology Laboratory
 Great Plains Diagnostic Network
 International Grains Program Institute
 Insect Zoo
 Hal Ross Flour Mill
 Horse Unit
 K-State Global Food Systems
 K-State Libraries
 K-State Meat Lab (cooking, sensory, color, chemistry, microbiology, customized)
 K-State Pet Food Program

K-State Radio Network
 K-State Rapid Response Center
 Kansas Agriculture and Rural Leadership
 Kansas Center for Agricultural Resources and the Environment
 Kansas Center for Sustainable Agriculture and Alternative Crops
 Kansas Cooperative Extension Service
 Kansas FFA
 Kansas Wheat Innovation Center
 Kansas Youth Institute
 Kansas Value-Added Foods Lab
 Kansas Water Resources Institute
 Konza Prairie Biological Station
 KSRE News and Media Services
 National Science Foundation Industry/University Cooperative
 Research for Wheat Genetics
 O. H. Kruse Feed Technology Innovation Center
 Plant Biotechnology Center
 Sheep and Meat Goat Center
 Soil Carbon Center
 Tom Avery Poultry and Game Bird Research Unit
 University Gardens
 Veterinary Diagnostic Laboratory
 Weather Data Library
 Wheat Genetics Resource Center
 Wheat Quality Lab

Station Publications

Reports of Progress

SRP 1128	2016 Kansas Performance Tests with Winter Wheat Varieties
SRP 1129	2016 Kansas Performance Tests with Corn Hybrids
SRP 1130	2016 Kansas Performance Tests with Soybean Varieties
SRP 1131	2016 Kansas Performance Tests with Grain Sorghum Hybrids
SRP 1133	2016 Kansas Performance Tests with Sunflower Hybrids
SRP 1132	2017 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland *Cattlemen's Day 2017 2017 Agricultural Research, Southeast Agricultural Research Center K-State Turfgrass Research 2017 Kansas Field Research 2017 Kansas Fertilizer Research 2017 Field Day 2017, Southwest Research-Extension Center Swine Day 2017 Dairy Research 2017

Special Publications

DRR16	Director's Report of Research in Kansas 2016
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Understanding Contribution Numbers

Contribution numbers have three parts:

- The first two digits denote the year (state fiscal) of assignment.
- The second set of digits identifies the manuscript (numbered consecutively throughout the year).
- The suffix letter identifies the type of publication.

A	Proceedings of meeting or symposium
B	Book or book chapter
C	Computer program
D	Department report
J	Journal manuscript
S	Station publication (Report of Progress, Keeping up with Research, Special Publication, or Bulletin)
T	Trade publication

Categories are based on information received before manuscripts are published. Type of publication sometimes changes later.

Station publications are available at:

<http://newprairiepress.org/kaesrr/>

<http://www.bookstore.ksre.ksu.edu/>

Department reports are available only from the appropriate department office. Copies of journal articles or other external publications must be obtained from authors, journals, or a library. Some citations include a digital object identifier (doi) for use in retrieving manuscripts online. To locate an object using its doi, simply paste the doi into your browser or visit <http://dx.doi.org/>.

*As of March 2015, Kansas Agricultural Experiment Station reports are posted at <http://newprairiepress.org/kaesrr/>. These reports no longer have "SRP" numbers. They are now listed by volume and issue (2015 Cattlemen's Day Research, Volume 1, Issue 1; <http://newprairiepress.org/kaesrr/vol1/iss1/>). Recommended citations and doi numbers are listed with each report.

Recommended Citation

Vesco, A. C.; Sexten, A. K.; Weibert, C. S.; Oleen, B. E.; Hollenbeck, W. R.; Grimes, L. C.; and Blasi, Dale (2015) "Evaluation of the Productivity of a Single Subcutaneous Injection of LongRange in Stocker Calves Compared With a Positive (Dectomax) and a Negative (Saline) Control," Kansas Agricultural Experiment Station Research Reports: Vol. 1: Iss. 1. <http://dx.doi.org/10.4148/2378-5977.1018>

Agricultural Economics

- 15-454-J Quantifying the agronomic and economic performance of hybrid and conventional rice varieties
L. Nalley, J. Tack, A. Barkley, K. Jagadish, K. Brye
Agronomy Journal
February 2016
Vol. 108
10.2134/agronj2015.0526
- 16-063-J Using network flow modeling to determine pig flow in a commercial production system
K.F. Coble, J.S. Bergtold, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, J.C. Woodworth
Journal of Computers and Electronics in Agriculture
December 2018
Vol. 155
doi.org/10.1016/j.compag.2018.10.022
- 16-131-J Johnsonville Sausage LLC: finding new opportunities beyond the pork commodity markets
K. Harris
The CASE Journal
March 2019
Vol. 15, No. 3
doi.org/10.1108/TCJ-11-2017-0106
- 16-146-J Cooperating to compete: turning toward a community of practice
K.D. Harris, H.S. James Jr., A. Harris
Journal of Business Strategy
2017
Vol. 38, Issue 4
doi.org/10.1108/JBS-03-2016-0035
- 16-173-J Women's empowerment in agriculture and household-level health in northern Ghana: A capability approach
Y.A. Zereyesus
Journal of International Development
August 2017
Vol. 29, Issue 7
doi.org/10.1002/jid.3307
- 16-338-J Trends in the use of new-media marketing in U.S. ornamental horticulture industries
H.H. Peterson, C.R. Boyer, L.M. Baker, B.H. Yao
Horticulturae
2018
Vol. 4, Issue 4
doi.org/10.3390/horticulturae4040032
- 17-037-J Spatio-temporal evaluation of plant height in corn via unmanned aerial systems
S. Varela, Y. Assefa, P.V.V. Prasad, N.R. Peralta, T.W. Griffin, A. Sharda, A. Ferguson, I.A. Ciampitti
Journal of Applied Remote Sensing
August 2017
Vol. 11, Issue 3
doi.org/10.1117/1.JRS.11.036013
- 17-114-J The production of food and fiber: An adaptation of CoP features for sustainable water use in agribusiness
K.D. Harris, H.S. James
Journal of Sustainability
2016
Vol. 8
doi.org/10.3390/su8111189
- 17-120-J Factors affecting risk-rating migration
A.M. Featherstone, C.A. Wilson, L.M. Zollinger
Agricultural Finance Review
2017
Vol. 77, Issue 1
doi.org/10.1108/AFR-05-2016-0044
- 17-198-J Relationship marketing: A qualitative case study of new-media marketing use by Kansas garden centers
S. Stebner, C.R. Beyer, L.M. Baker, H.H. Peterson
Horticulturae
2017
Vol. 3, Issue 1
10.3390/horticulturae3010026

17-199-J Marketing with more: An in-depth look at relationship marketing with new media in the green industry
S. Stebner, C.R. Boyer, L.M. Baker, H.H. Peterson
Journal of Agricultural Communications
2017
Vol. 101, Issue 2
doi.org/10.4148/1051-0834.1001

17-250-J Online opportunities: A qualitative content analysis benchmark study of online retail plant sales
L.M. Baker, C.R. Boyer, H.H. Peterson, A.E.H. King
HortTechnology
2018
Vol. 28, Issue 4
doi.org/10.21273/HORTTECH03901-17

17-346-J Evaluation of Teaching in Departments of Agricultural Economics
B.K. Coffey, A. Barkley
NACTA
March 2018
Vol. 62, Issue 1

Agricultural Research Center - Hays

16-267-J Reduced absorption of glyphosate and decreased translocation of dicamba contribute to poor control of kochia (*Kochia scoparia*) at high temperature
J. Ou, P.W. Stahlman, M. Jugulam
Journal of Pest Management Science
May 2018
Vol. 74, Issue 5, 1134-1142
doi.org/10.1002/ps.4463

16-360-B The biology and control of sorghum diseases. Chapter in book: Sorghum: State of the art and future perspectives
C.R. Little, R. Perumal
Agron. Monogr. 58. ASA and CSSA, Madison, WI
2018
ISBN: 978-0-89118-628-1
doi:10.2134/ agronmonogr58.2015.0073

16-363-B Genetic changes in sorghum. Chapter in book: Sorghum: State of the art and future perspectives
R. Perumal, P. Rajendrakumar, F. Maulana, T. Tesso, C.R. Little
Agron. Monogr. 58. ASA and CSSA, Madison, WI
2017
ISBN: 978-0-89118-628-1
DOI: 10.2134/agronmonogr58.2014.0053

17-009-J Nitrogen fertilizer application effects on switchgrass herbage mass, nutritive value and nutrient removal
A.K. Obour, K. Harmony, J.D. Holman
Crop Science
June 2017
Vol. 57, No. 3
doi:10.2135/cropsci2016.07.0582

17-022-S 2016 Southwest Research-Extension Center field day report
B. Gillen and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 7
<https://newprairiepress.org/kaesrr/vol2/iss7/>

17-026-J An isolate of wheat streak mosaic virus from foxtail overcomes Wsm2 resistance in wheat
T.T. Kumssa, J.S. Rupp, M.C. Fellers, J.P. Fellers, G. Zhang
Plant Pathology
May 2019
Vol. 68, Issue 4
doi.org/10.1111/ppa.12989

17-065-J Phenotypic plasticity of winter wheat heading date and grain yield across the US Great Plains
S.M. Grogan, J. Anderson, P.S. Baenziger, K. Frels, M.J. Guttieri, S.D. Haley, K. Kim, S. Liu, G.S. McMaster, M. Newell, P.V.V. Prasad, S.D. Reid, K.J. Shroyer, G. Zhang, E. Akhunov, P.F. Byrne
Crop Science
May 2016
Vol. 56, No. 5
doi.org/10.2135/cropsci2015.06.0357

- 17-079-J Homoeologous recombination-based transfer and molecular cytogenetic mapping of a wheat streak mosaic virus and Triticum mosaic virus resistance gene Wsm3 from *Thinopyrum intermedium* to wheat
T.V. Danilova, G. Zhang, W. Liu, B. Friebe, B.S. Gill
Theoretical Applied Genetics
March 2017
Vol. 130, Issue 3
doi.org/10.1007/s00122-016-2834-8
- 17-080-J Resilience of pollen and post-flowering response in diverse sorghum genotypes exposed to heat stress under field conditions
V.S.J. Sunoj, I.M. Somayanda, A. Chiluwal, R. Perumal, P.V.V. Prasad, S.V.K. Jagadish
Crop Physiology & Metabolism
June 2017
Vol. 57, No. 3
doi.org/10.2135/cropsci2016.08.0706
- 17-105-J *Camelina sativa* as a fallow replacement crop in wheat-based crop production systems in the US Great Plains
A.K. Obour, C. Chen, H.Y. Sintim, K. McVay, P. Lamb, E. Obeng, Y.A. Mohammed, Q. Khan, R.K. Afshar, V.D. Zheljazkov
Industrial Crops and Products
January 2018
Vol. 111
doi.org/10.1016/j.indcrop.2017.10.001
- 17-156-J Changes in soil surface chemistry after fifty years of tillage and nitrogen fertilization
A.K. Obour, M.M. Maysoon, J.D. Holman, P.W. Stahlman
Geoderma
December 2017
Vol. 308
doi.org/10.1016/j.geoderma.2017.08.020
- 17-158-J Population genomics of pearl millet (*Pennisetum glaucum* (L.) R. Br.): Comparative analysis of global accessions and Senegalese landraces
Z. Hu, B. Mbacké, R. Perumal, M.C. Guèye, O. Sy, S. Bouchet, P.V.V. Prasad, G.P. Morris
BMC Genomics
2015
Vol. 16
doi.org/10.1186/s12864-015-2255-0
- 17-163-J Genomic tools in pearl millet breeding for drought tolerance: Status and prospects
D.D. Serba, R.S. Yadav
Frontiers in Plant Science
November 2016
doi.org/10.3389/fpls.2016.01724
- 17-187-J Status of global pearl millet breeding programs and the way forward
D.D. Serba, R. Perumal, T.T. Tesso, D. Min
Crop Science
2017
Vol. 57, No. 6
doi:10.2135/cropsci2016.11.0936
- 17-197-J Quantifying pearl millet response to high temperature stress: Thresholds, sensitive stages, genetic variability and relative sensitivity of pollen and pistil
M. Djanaguiraman, R. Perumal, I.A. Ciampitti, S.K. Gupta, P.V.V. Prasad
Plant, Cell and Environment
May 2018
Vol. 41, Issue 5
doi.org/10.1111/pce.12931
- 17-206-J A new ending to an old classical stocking rate study
K. Harmony
Great Plains Research
2017
Vol. 27, No. 2
10.1353/gpr.2017.0020
- 17-229-J Transcriptome analysis in switchgrass discloses ecotype difference in photosynthetic efficiency
D.D. Serba, S.R. Uppalapati, N. Krom, S. Mukherjee, Y. Tang, K.S. Mysore, M.C. Saha
BMC Genomics
December 2016
Vol. 17
doi.org/10.1186/s12864-016-3377-8

- 17-261-J Differences in flight activity of *Coleomegilla maculata* and *Hippodamia convergens* (Coleoptera: Coccinellidae) following emergence, mating, and reproduction
A.H. Abdel-Wahab, J.P. Michaud, M.H. Bayoumy, S.S. Awadallah, M. El-Gendy
Environmental Entomology
December 2017
Vol. 46, Issue 6
doi.org/10.1093/ee/nvx136
- 17-267-J Sensitivity of sorghum pollen and pistil to high-temperature stress
M. Djanaguiraman, R. Perumal, S.V.K. Jagadish, I.A. Ciampitti, R. Welti, P.V.V. Prasad
Plant, Cell and Environment
May 2018
Vol. 41, Issue 5
doi.org/10.1111/pce.13089
- 17-280-J Increased power to dissect adaptive traits in global sorghum diversity using a nested association mapping population
S. Bouchet, M.O. Olatoye, S.R. Marla, R. Perumal, T. Tesso, J. Yu, M. Tuinstra, G.P. Morris
Genetics
2017
Vol. 206, Issue 2
doi.org/10.1534/genetics.116.198499
- 17-300-B Book chapter: Sorghum breeding for biotic stress tolerance
R. Perumal, C.W. Magill, L.K. Prom, G.C. Peterson, E.M. Bashir, T.T. Tesso, D.D. Serba, C. Little
Achieving Sustainable Cultivation in Sorghum: Genetics, Breeding, and Production Techniques (Rooney, W.L., ed.)
2018
Vol. 1
ISBN: 9781786761200
- 17-309-J Registration of 'Tatanka' hard red winter wheat
G. Zhang, T.J. Martin, A.K. Fritz, R. Miller, G. Bai, M.S. Chen, R.L. Bowden
Journal of Plant Registrations: Cultivar
January 2017
Vol. 12, Issue 1
DOI: 10.3198/jpr2017.04.0019crc
- 17-311-J No nutritional benefits of egg cannibalism for *Coleomegilla maculata* (Coleoptera: Coccinellidae) on a high-quality diet
A. Abdelwahab, J.P. Michaud, M.H. Bayoumy, S.S. Awadalla, M. El-Gendy
Bulletin of Entomological Research
June 2018
Vol.108, Issue 3
doi.org/10.1017/S0007485317000827
- 17-353-J Can cover or forage crops replace fallow in the semiarid central Great Plains?
J.D. Holman, K. Arnet, J.A. Dille, I. Kisekka, S. Maxwell, A. Obour, T. Roberts, K.L. Roozeboom, A. Schlegel
Crop Science
2018
Vol. 58, No. 2
doi:10.2135/cropsci2017.05.0324
- 17-355-J Two split-time artificial insemination programs in suckled beef cows
J.S. Stevenson, S.L. Hill, D.M. Grieger, K.C. Olson, J.R. Jaeger, J. Ahola, G.E. Seidel, R.K. Kasimanickam
Journal of Animal Science
November 2017
Vol. 95, Issue 11
doi.org/10.2527/jas2017.1805
- 17-385-J Limb ablation and regeneration in *Harmonia axyridis*: Costs for regenerators, but benefits for their progeny
A. Abdelwahab, J.P. Michaud, M.H. Bayoumy, S.S. Awadalla, M. El-Gendy
Entomologia Experimentalis et Applicata
February 2018
Vol. 166, Issue 2
doi.org/10.1111/eea.12649

Agronomy

- 15-347-J Evaluation of brown midrib sorghum mutants for 2,3-butanediol production
Y.N. Guragain, R.P. Srinivasa, P.V.V. Prasad, P.V. Vadlani
Appl Biochem Biotechnol.
April 2017
Vol. 183, Issue 3
DOI: 10.1007/s12010-017-2486-4
- 15-428-J Wheat leaf lipids during heat stress: I. High day and night temperatures result in major lipid alterations
S. Narayanan, P. Tamura, M.R. Roth, P.V.V. Prasad, R. Welti
Plant Physiology
October 5, 2015
Vol. 39, Issue 4
DOI: 10.1111/pce.12649
- 15-454-J Quantifying the agronomic and economic performance of hybrid and conventional rice varieties
L. Nalley, J. Tack, A. Barkley, K. Jagadish, K. Brye
Agronomy Journal
February 2016
Vol. 108
10.2134/agronj2015.0526
- 16-161-J Evaluating optimum limited irrigation management strategies for corn production in the Ogallala Aquifer Region
A. Araya, I. Kisekka, P. V. Vara Prasad, P. H. Gowda
Journal of Irrigation and Drainage Engineering
October 2017
Vol. 134, Issue 10
doi.org/10.1061/(ASCE)
IR.1943-4774.0001228
- 16-267-J Reduced absorption of glyphosate and decreased translocation of dicamba contribute to poor control of kochia (*Kochia scoparia*) at high temperature
J. Ou, P. W. Stahlman, M. Jugulam
Journal of Pest Management Science
May 2018
Vol. 74, Issue 5, 1134-1142
doi.org/10.1002/ps.4463
- 16-282-J Yield responses to planting density for U.S. modern corn hybrids: A synthesis-analysis
Y. Assefa, P.V.V. Prasad, P. Carter, M. Hinds, G. Bhalla, R. Schon, M. Jeschke, S. Paszkiewicz, I.A. Ciampitti
Journal of Crop Science
2016
Vol. 56, Issue 5
doi.org/10.2135/cropsci2016.04.0215
- 16-283-J Nutrient partitioning and stoichiometry in unburnt sugarcane ratoon at varying yield levels
J.M. Leite, I.A. Ciampitti, E. Mariano, M.X. Vieira-Megda, P.C.O. Trivelin
Frontiers in Plant Science
April 2016
doi.org/10.3389/fpls.2016.00466
- 16-284-J Measurements of methane emissions from a beef cattle feedlot using the eddy covariance technique
P. Prajapati, E.A. Santos
Agricultural and Forest Meteorology
January 2017
Vol. 232
doi.org/10.1016/j.agrformet.2016.09.001
- 16-309-J Assessing wheat yield, biomass, and water productivity responses to growth stage based irrigation water allocation
A. Araya, I. Kisekka, P.V.V. Prasad, J. Holman, A.J. Foster, R. Lollato
Transactions of the ASABE
2017
Vol. 60, Issue 1, 107-121
doi:10.13031/trans.11883
- 16-328-J Stalk rot diseases impact sweet sorghum biofuel traits
Y.M.A.Y. Bandara, D.K. Weerasooriya, T.T. Tesso, C.R. Little
BioEnergy Research
March 2017
Vol. 10, Issue 1
doi.org/10.1007/s12155-016-9775-6
- 16-344-J Winter wheat yield gaps and patterns in China
S. Sun, X. Yang, X. Lin, G.F. Sassenrath, K. Li
Agronomy Journal
January 2018
Vol. 110, Issue 1
doi: 10.2134/agronj2017.07.0417

- 16-345-J Physiological and molecular characterization of hydroxyphenylpyruvate dioxygenase (HPPD)-inhibitor resistance in Palmer amaranth (*Amaranthus palmeri* S. Wats.) S. Nakka, A.S. Godar, P.S. Wani, C.R. Thompson, D.E. Peterson, J. Roelofs, M. Jugulam
Frontiers in Plant Science
April 2017
Vol. 11, Issue 8
doi.org/10.3389/fpls.2017.00555
- 16-354-J Morphology, provenance, and decomposition of a 19th century hybrid dugout and sod house in Nicodemus, Kansas
D.R. Presley, F.T. Bugarin
Transactions of the Kansas Academy of Science
September 2016
Vol. 119
doi.org/10.1660/062.119.0401
- 16-360-B The biology and control of sorghum diseases. Chapter in book: Sorghum: State of the art and future perspectives
C.R. Little, R. Perumal
Agron. Monogr. 58. ASA and CSSA, Madison, WI
2018
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2015.0073
- 16-363-B Genetic changes in sorghum. Chapter in book: Sorghum: State of the art and future perspectives
R. Perumal, P. Rajendrakumar, F. Maulana, T. Tesso, C.R. Little
Agron. Monogr. 58. ASA and CSSA, Madison, WI
2017
ISBN: 978-0-89118-628-1
DOI: 10.2134/agronmonogr58.2014.0053
- 16-367-J Mid-season high-resolution satellite imagery for forecasting site-specific corn yield
N.R. Peralta, Y. Assefa, J. Du, C.J. Barden, I.A. Ciampitti
Remote Sensing
2016
Vol. 8, Issue 10
doi.org/10.3390/rs8100848
- 16-370-J Expression profiles of psbA, ALS, EPSPS, and other chloroplastic genes in response to PSII-, ALS-, and EPSPS-inhibitor treatments in *Kochia scoparia*
V.K. Varanasi, S. Bayramov, V.V. Prasad, M. Jugulam
American Journal of Plant Sciences
February 2017
Vol. 8, Issue 3
doi.org/10.4236/ajps.2017.83031
- 17-008-J Multi-site evaluation of apex for water quality: II regional parameterization
N.O. Nelson, C. Baffaut, J.A. Lory, A. Senaviratne, A. Bhandari, R. Udawatta, D.W. Sweeney, M.J. Helmers, M.W. Van Liew, A.P. Mallarino, C.S. Wortmann
Journal of Environmental Quality
November 2017
Vol. 46, Issue 4
DOI: 10.2134/jeq2016.07.0254
- 17-009-J Nitrogen fertilizer application effects on switch-grass herbage mass, nutritive value and nutrient removal
A.K. Obour, K. Harmoney, J.D. Holman
Crop Science
June 2017
Vol. 57, No. 3
doi:10.2135/cropsci2016.07.0582
- 17-012-B Chapter: Rehabilitation of an abandoned mine site with biosolids
A. Alghamdi, M.B. Kirkham, D.R. Presley, G. Hettiarachchi, L. Murray
Book. Soil to Soil: Mine site rehabilitation and revegetation
2017
Pg. 241-258
ISBN 9781498767613
- 17-015-J Physical mapping of amplified copies of the 5-enolpyruvylshikimate-3-phosphate synthase gene in glyphosate-resistant *Amaranthus tuberculatus*
A. Dillon, V.K. Varanasi, T.V. Danilova, D-H. Koo, S. Nakka, D.E. Peterson, P.J. Tranel, B. Friebe, B.S. Gill, M. Jugulam
Plant Physiology
February 2017
Vol. 173, Issue 2
doi.org/10.1104/pp.16.01427

- 17-023-J Rapid detoxification via glutathione S-transferase (GST) conjugation confers a high level of atrazine resistance in Palmer amaranth (*Amaranthus palmeri*)
S. Nakka, A.S. Godar, C.R. Thompson, D.E. Peterson, M. Jugulam
Pest Management Science
November 2017
Vol. 73, Issue 11
doi.org/10.1002/ps.4615
- 17-024-S 2016 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1128
Kansas Agricultural Experiment Station
- 17-037-J Spatio-temporal evaluation of plant height in corn via unmanned aerial systems
S. Varela, Y. Assefa, P.V.V. Prasad, N.R. Peralta, T.W. Griffin, A. Sharda, A. Ferguson, I.A. Ciampitti
Journal of Applied Remote Sensing
August 2017
Vol. 11, Issue 3
doi.org/10.1117/1.JRS.11.036013
- 17-043-J Homologs of CsLOB1 in citrus function as disease susceptibility genes in citrus canker
J. Zhang, J. Huguet, Y. Hu, J. Jones, N. Wang, S. Liu, F.F. White
Molecular Plant Pathology
August 2017
Vol. 18, Issue 6
doi.org/10.1111/mpp.12441
- 17-044-J Massive shift in gene expression during transitions between developmental stages of the gall midge, *Mayetiola destructor*
M-S. Chen, S. Liu, H. Wang, X. Cheng, M. El Bouhssini, R.J. Whitworth
PLOS ONE
May 2016
Vol. 11, Issue 5
doi.org/10.1371/journal.pone.0155616
- 17-065-J Phenotypic plasticity of winter wheat heading date and grain yield across the US Great Plains
S.M. Grogan, J. Anderson, P.S. Baenziger, K. Frels, M.J. Guttieri, S.D. Haley, K. Kim, S. Liu, G.S. McMaster, M. Newell, P.V.V. Prasad, S.D. Reid, K.J. Shroyer, G. Zhang, E. Akhunov, P.F. Byrne
Crop Science
May 2016
Vol. 56, No. 5
doi.org/10.2135/cropsci2015.06.0357
- 17-072-J Unbiased K-mer analysis reveals changes in copy number of highly repetitive sequences during maize domestication and improvement
S. Liu, J. Zheng, P. Migeon, J. Ren, Y. Hu, C. He, H. Liu, J. Fu, F. F. White, C. Toomajian, G. Wang
Scientific Reports
2017
Vol. 7, Issue 42444
doi.org/10.1038/srep42444
- 17-076-B Genotype $\times$ environment $\times$ management interactions: US sorghum cropping systems
I.A. Ciampitti, P.V.V. Prasad, A.J. Schlegel, L. Haag, R. Schnell, B. Arnall, J. Lofton
Sorghum: State of the art and future perspectives
January 2017
ISBN: 978-0-89118-628-1
10.2134/agronmonogr58.2014.0067
- 17-078-J Glyphosate-resistant Palmer amaranth (*Amaranthus palmeri*) in Nebraska: confirmation, EPSPS gene amplification, and response to POST corn and soybean herbicides
P.S. Chahal, V.K. Varanasi, M. Jugulam, A.J. Jhala
Weed Technology
January 2017
Vol. 31, Issue 1
doi.org/10.1614/WT-D-16-00109.1
- 17-080-J Resilience of pollen and post-flowering response in diverse sorghum genotypes exposed to heat stress under field conditions
V.S.J. Sunoj, I.M. Somayanda, A. Chiluwal, R. Perumal, P.V.V. Prasad, S.V.K. Jagadish
Crop Physiology & Metabolism
June 2017
Vol. 57, No. 3
doi.org/10.2135/cropsci2016.08.0706

- 17-094-J Modeling of soybean under present and future climates in Mozambique
M.A.D. Talacuece, F.B. Justino, R.D.A. Rodrigues, M.E.P. Flores, J.G. Nascimento, E.A. Santos
Climate
June 2016
Vol. 4
doi.org/10.3390/cli4020031
- 17-101-J Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2014
D. Jardine, E. Adee, G. Sassenrath
Plant Disease Management Reports
March 2015
Citation: Report No. 9:ST001
doi: 10.1094/PDMR09
- 17-102-J Effects of seed protection chemicals on stand and yield of grain sorghum in Kansas, 2015
D. Jardine, E. Adee, A. Esser
Plant Disease Management Reports
March 2016
Citation: Report No. 10:CF039
doi: 10.1094/PDMR10
- 17-103-J Effects of seed protection chemicals on stand and yield of soybeans at Topeka, Kansas, 2011
D. Jardine, E. Adee
Plant Disease Management Reports
March 2012
Citation: Report No. 6:ST008
doi: 10.1094/PDMR06
- 17-104-J Effect of seed protection chemicals on stand and yield of soybeans at Courtland and Ottawa, Kansas, 2011
D. Jardine, R. Nelson, E. Adee
Plant Disease Management Reports
March 2012
Citation: Report No. 6:ST019
doi: 10.1094/PDMR06
- 17-105-J *Camelina sativa* as a fallow replacement crop in wheat-based crop production systems in the US Great Plains
A.K. Obour, C. Chen, H.Y. Sintim, K. McVay, P. Lamb, E. Obeng, Y.A. Mohammed, Q. Khan, R.K. Afshar, V.D. Zheljazkov
Industrial Crops and Products
January 2018
Vol. 111
doi.org/10.1016/j.indcrop.2017.10.001
- 17-106-B Irrigation of grain sorghum
D.H. Rogers, A.J. Schlegel, J.D. Holman, J.P. Aguilar, I. Kisekka
Sorghum: State of the art and future perspectives
July 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0072
- 17-109-J Nitrate, total ammonia, and total suspended sediments modeling for the Mobile River Watershed
V.J. Alarcon, G.F. Sassenrath
International Journal of Agricultural and Environmental Information Systems
2017
Vol. 8, Issue 2
doi: 10.4018/IJAEIS
- 17-115-J Perspectives on potential soybean yield losses from weeds in North America
N. Soltani, J.A. Dille, I.C. Burke, W.J. Everman, M.J. VanGessel, V.M. Davis, P.H. Sikkema
Weed Technology
January 2017
Vol. 31, Issue 1
doi.org/10.1017/wet.2016.2
- 17-126-J Nutrient partitioning and stoichiometry in soybean: A synthesis-analysis
S. Tamagno, G.R. Balboa, Y. Assefa, P. Kovács, S.N. Casteel, F. Salvagiotti, F.O. García, W.M. Stewart, I.A. Ciampitti
Field Crops Research
January 2017
Vol. 200
doi.org/10.1016/j.fcr.2016.09.019
- 17-129-J A deletion mutation in TaHRC confers Fhb1 resistance to Fusarium head blight in wheat
Z. Su, A. Bernardo, B. Tian, S. Wang, H. Ma, S. Cai, D. Liu, D. Zhang, T. Li, H. Trick, P. St. Amand, J. Yu, Z. Zhang, G. Bai
Nature Genetics
2019
Vol. 51, 1099-1105
doi.org/10.1038/s41588-019-0425-8

- 17-132-J Temporal small RNA expression profiling under drought reveals a potential regulatory role of small nucleolar RNAs in the drought responses of maize
J. Zheng, E. Zeng, Y. Du, C. He, Y. Hu, Z. Jiao, K. Wang, W. Li, M. Ludens, J. Fu, H. Wang, F.F. White, G. Wang, S. Liu
The Plant Genome
February 2019
Vol. 12, Issue 1
doi: 10.3835/plantgenome2018.08.0058
- 17-133-J Site-specific erodibility in claypan soils: Dependence on subsoil characteristics
S.E. Tucker-Kulesza, G.F. Sassenrath, T. Tran, W. Koehn, L. Erickson
Applied Engineering in Agriculture
2017
Vol. 35, Issue 5
doi.org/10.13031/aea.12120
- 17-134-J Estimating parametric phenotypes that determine anthesis date in *Zea mays*: Challenges in combining ecophysiological models with genetics
A. Lamsal, S.M. Welch, J.W. White, K.R. Thorp, N.M. Bello
PLOS ONE
April 2018
Vol. 13, Issue 4
doi.org/10.1371/journal.pone.0195841
- 17-141-J Calibration of the APEX model to simulate management practice effects on runoff, sediment, and phosphorus loss
A.B. Bhandari, N.O. Nelson, D.W. Sweeney, C. Baffaut, J.A. Lory, G.M.M.M.A. Senaviratne, G.M. Pierzynski, K.A. Janssen, P.L. Barnes
Journal of Environmental Quality
November 2016
Vol. 46, Issue 6
DOI: 10.2134/jeq2016.07.0272
- 17-142-J Multi-site evaluation of APEX for water quality: I. Best professional judgment parameterization
C. Baffaut, N.O. Nelson, J.A. Lory, G.M.M.M.A. Senaviratne, A.B. Bhandari, R.P. Udawatta, D.W. Sweeney, M.J. Helmers, M.W. Van Liew, A.P. Mallarino, C.S. Wortmann
Journal of Environmental Quality
April 2017
Vol. 46, Issue 6
DOI: 10.2134/jeq2016.06.0226
- 17-143-J Applicability of models to predict phosphorus losses in drained fields: A review
D.E. Radcliffe, D.K. Reid, K. Blombäck, C.H. Bolster, A.S. Collick, Z.M. Easton, W. Francesconi, D.R. Fuka, H. Johnsson, K. King, M. Larsbo, M.A. Youssef, A.S. Mulkey, N.O. Nelson, K. Persson, J.J. Ramirez-Avila, F. Schmieder, D.R. Smith
Journal of Environmental Quality
February 2015
Vol. 44, Issue 2
DOI: 10.2134/jeq2014.05.0220
- 17-145-B Weed competition and management in sorghum
C.R. Thompson, J.A. Dille, D.E. Peterson
Sorghum: State of the Art and Future Perspectives
June 2017
ISBN: 978-0-89118-628-1
DOI: 10.2134/agronmonogr58.2014.0071
- 17-158-J Population genomics of pearl millet (*Pennisetum glaucum* (L.) R. Br.): Comparative analysis of global accessions and Senegalese landraces
Z. Hu, B. Mbacké, R. Perumal, M.C. Guèye, O. Sy, S. Bouchet, P.V.V. Prasad, G.P. Morris
BMC Genomics
2015
Vol. 16
doi.org/10.1186/s12864-015-2255-0
- 17-163-J Genomic tools in pearl millet breeding for drought tolerance: Status and prospects
D.D. Serba, R.S. Yadav
Frontiers in Plant Science
November 2016
doi.org/10.3389/fpls.2016.01724
- 17-167-J Potential benefits of climate change for crop productivity in China
X. Yang, F. Chen, X. Lin, Z. Liu, H. Zhang, J. Zhao, K. Li, Q. Ye, Y. Li, S. Lv, P. Yang, W. Wu, Z. Li, R. Lal, H. Tang
Agricultural and Forest Meteorology
August 2015
Vol. 208
<http://dx.doi.org/10.1016/j.agrformet.2015.04.024>

- 17-168-J Yield gap simulations using ten maize cultivars commonly planted in northeast China during the past five decades
S. Lv, X. Yang, X. Lin, Z. Liu, J. Zhao, K. Li, C. Mu, X. Chen, F. Chen, G. Mi
Agricultural and Forest Meteorology
June 2015
Vol. 205
<http://dx.doi.org/10.1016/j.agrformet.2015.02.008>
- 17-171-J Effects of cutting interval between harvests on dry matter yield and nutritive value in alfalfa
D. Min
American Journal of Plant Science
January 2016
Vol. 7, Issue 8
DOI: 10.4236/ajps.2016.78118
- 17-175-J Potential hotspot areas of nitrous oxide emissions from grazed pastoral dairy farm systems
J. Luo, N. Bolan, M.B. Kirkham
Advances in Agronomy
Vol. 145, Pg. 205-268
<http://dx.doi.org/10.1016/bs.agron.2017.05.006>
- 17-176-S 2016 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1129
Kansas Agricultural Experiment Station
- 17-177-S 2016 Kansas performance tests with grain sorghum
J. Lingenfelser and multiple co-authors
SRP1131
Kansas Agricultural Experiment Station
- 17-178-S 2016 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1130
Kansas Agricultural Experiment Station
- 17-180-J Preemergence application of dicamba to manage dicamba-resistant kochia (*Kochia scoparia*)
J. Ou, C.R. Thompson, P.W. Stahlman, M. Jugulam
Weed Technology
2018
Vol. 32, Issue 3
[doi.org/10.1017/wet.2018.1](http://dx.doi.org/10.1017/wet.2018.1)
- 17-181-J Optimizing preplant irrigation for maize under limited water in the High Plains
I. Kisekka, A. Schlegel, L. Ma, P.H. Gowda, P.V.V. Prasad
Agricultural Water Management
June 2017
Vol. 187
[doi.org/10.1016/j.agwat.2017.03.023](http://dx.doi.org/10.1016/j.agwat.2017.03.023)
- 17-182-J Interaction of arsenic with biochar in soil and water: A critical review
M. Vithanage, I. Herath, S. Joseph, J. Bunduscu, N. Bolan, Y.S. Ok, M.B. Kirkham, J. Rinklebe
Carbon
March 2017
Vol. 113
[doi.org/10.1016/j.carbon.2016.11.032](http://dx.doi.org/10.1016/j.carbon.2016.11.032)
- 17-187-J Status of global pearl millet breeding programs and the way forward
D.D. Serba, R. Perumal, T.T. Tesso, D. Min
Crop Science
2017
Vol. 57, No. 6
[doi:10.2135/cropsci2016.11.0936](http://dx.doi.org/10.2135/cropsci2016.11.0936)
- 17-189-J Fitness outcomes related to glyphosate resistance in kochia (*Kochia scoparia*): What life history stage to examine?
O.A Osipitan, J.A. Dille
Frontiers in Plant Science
2017
Vol. 8, Issue 1090
[doi.org/10.3389/fpls.2017.01090](http://dx.doi.org/10.3389/fpls.2017.01090)
- 17-194-S 2017 Chemical weed control for field crops, pastures, rangeland and noncropland
C.R. Thompson, D.E. Peterson, W.H. Fick, R.S. Currie, V. Kumar, J.W. Slocumbe
SRP1132
Kansas Agricultural Experiment Station

- 17-196-J Genetic variation for tolerance to terminal heat stress in *Dasypyrum villosum*
J. Fu, R.L. Bowden, S.V.K. Jagadish, B.S. Gill
Crop Science
August 2017
Vol. 57, No. 5, p. 2626-2632
doi:10.2135/cropsci2016.12.0978
- 17-197-J Quantifying pearl millet response to high temperature stress: Thresholds, sensitive stages, genetic variability and relative sensitivity of pollen and pistil
M. Djanaguiraman, R. Perumal, I.A. Ciampitti, S.K. Gupta, P.V.V. Prasad
Plant, Cell and Environment
May 2018
Vol. 41, Issue 5
doi.org/10.1111/pce.12931
- 17-213-J Decreased photosynthetic rate under high temperature in wheat is due to lipid desaturation, oxidation, acylation, and damage of organelles
M. Djanaguiraman, D.L. Boyle, R. Welti, P.V.V. Prasad
BMC Plant Biology
April 2018
Vol. 18
doi.org/10.1186/s12870-018-1263-z
- 17-230-J Molecular cytogenetics to characterize mechanisms of gene duplication in pesticide resistance
M. Jugulam, B.S. Gill
Pest Management Science
July 2017
doi.org/10.1002/ps.4665
- 17-231-J Target site-based and non-target site based resistance to ALS inhibitors in Palmer amaranth (*Amaranthus palmeri*)
S. Nakka, C.R. Thompson, D.E. Peterson, M. Jugulam
Weed Science
November 2017
Vol. 65, Issue 6
doi.org/10.1017/wsc.2017.43
- 17-234-J No impact of increased EPSPS gene copy number on growth and fecundity of glyphosate-resistant kochia (*Bassia scoparia*)
O.A. Osipitan, J.A. Dille
Weed Science
January 2019
Vol. 67, Issue 1
doi.org/10.1017/wsc.2018.82
- 17-235-J Potassium fixation by oxidized and reduced forms of different phyllosilicates
A. Florence, M. Ransom, D. Mengel
Soil Mineralogy
October 2017
Vol. 81, No. 5
doi:10.2136/sssaj2016.12.0420
- 17-237-J Genomic distribution of EPSPS copies conferring glyphosate resistance in Palmer amaranth and kochia
M. Jugulam, A.J. Dillon
Indian Journal of Weed Science
2016
Vol. 48, Issue 2
doi.org/10.5958/0974-8164.2016.00034.4
- 17-238-B Biology, physiology and molecular biology of weeds
M. Jugulam
CRC Press
2017
doi.org/10.1201/9781315121031
- 17-239-B Advancement of weed science as an important discipline of agriculture
A. Varanasi, M. Jugulam
CRC Press
2017
doi.org/10.1201/9781315121031
- 17-240-B Gene amplification and herbicide resistance
M. Jugulam, K. Putta, V.K. Varanasi, D-H. Koo
CRC Press
2017
doi.org/10.1201/9781315121031

- 17-241-J An integrated approach to control glyphosate-resistant *Ambrosia trifida* with tillage and herbicides in glyphosate-resistant maize
Z.A. Ganie, J.L. Lindquist, M. Jugulam, G.R. Kruger, D.B. Marx, A.J. Jhala
Weed Research
February 2017
Vol. 57, Issue 2
doi.org/10.1111/wre.12244
- 17-265-J A new insight into corn yield: Trends from 1987 through 2015
Y. Assefa, P.V.V. Prasad, P. Carter, M. Hinds, G. Bhalla, R. Schon, M. Jeschke, S. Paszkiewicz, I.A. Ciampitti
Crop Science
June 2017
Vol. 57, No. 5
doi: 10.2135/cropsci2017.01.0066
- 17-267-J Sensitivity of sorghum pollen and pistil to high-temperature stress
M. Djanaguiraman, R. Perumal, S.V.K. Jagadish, I.A. Ciampitti, R. Welti, P.V.V. Prasad
Plant, Cell and Environment
May 2018
Vol. 41, Issue 5
doi.org/10.1111/pce.13089
- 17-268-J Major management factors determining spring and winter canola yield in North America
Y. Assefa, P.V.V. Prasad, C. Foster, Y. Wright, S. Young, P. Bradley, M. Stamm, I.A. Ciampitti
Crop Science
January 2018
Vol. 58, Issue 1
doi:10.2135/cropsci2017.02.0079
- 17-271-J Evaluating the impact of future climate change on irrigated maize production in Kansas
A. Araya, I. Kisekka, X. Lin, P.V.V. Prasad, P.H. Gowda, C.W. Rice, A. Andales
Climate Risk Management
2017
Vol. 17
doi.org/10.1016/j.crm.2017.08.001
- 17-279-S 2016 Kansas performance test with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1133
Kansas Agricultural Experiment Station
- 17-280-J Increased power to dissect adaptive traits in global sorghum diversity using a nested association mapping population
S. Bouchet, M.O. Olatoye, S.R. Marla, R. Perumal, T. Tesso, J. Yu, M. Tuinstra, G.P. Morris
Genetics
2017
Vol. 206, Issue 2
doi.org/10.1534/genetics.116.198499
- 17-300-B Book chapter: Sorghum breeding for biotic stress tolerance
R. Perumal, C.W. Magill, L.K. Prom, G.C. Peterson, E.M. Bashir, T.T. Tesso, D.D. Serba, C. Little
Achieving Sustainable Cultivation in Sorghum: Genetics, Breeding, and Production Techniques (Rooney, W.L., ed.)
2018
Vol. 1
ISBN: 9781786761200
- 17-309-J Registration of 'Tatanka' hard red winter wheat
G. Zhang, T.J. Martin, A.K. Fritz, R. Miller, G. Bai, M.S. Chen, R.L. Bowden
Journal of Plant Registrations: Cultivar
January 2017
Vol. 12, Issue 1
DOI: 10.3198/jpr2017.04.0019crc
- 17-310-J Estimating methane emissions from beef cattle in a feedlot using the eddy covariance technique and footprint analysis
P. Prajapati, E.A. Santos
Agricultural and Forest Meteorology
August 2018
Vol. 258
doi.org/10.1016/j.agrformet.2017.08.004

- 17-316-J Gene duplication and aneuploidy trigger rapid evolution of herbicide resistance in common waterhemp
D-H. Koo, M. Jugulum, K. Putta, I. Cuvaca, D.E. Peterson, R.S. Currie, B. Friebe, B.S. Gill
Plant Physiology
March 2018
doi.org/10.1104/pp.17.01668
- 17-317-J Influence of plant growth stage and temperature on glyphosate efficacy in common lambsquarters (*Chenopodium album*)
R.D. DeGreeff, A.V. Varanasi, J.A. Dille, D.E. Peterson, M. Jugulam
Weed Technology
August 2018
Vol. 32, Issue 4
doi.org/10.1017/wet.2018.38
- 17-319-J Heat stress during flowering affects time of day of flowering, seed-set, and grain quality in spring wheat
S. Aiqing, I. Somayanda, S.V. Sebastian, K. Singh, K. Gill, P.V.V. Prasad, S.V.K. Jagadish
Crop Science
January 2018
Vol. 58, No. 1
doi:10.2135/cropsci2017.04.0221
- 17-321-S Kansas Field Research
E.A. Adee and multiple co-authors
Kansas Agricultural Experiment Station
Research Reports, Vol. 3, Issue 6. 2017
<https://newprairiepress.org/kaesrr/vol3/iss6/>
- 17-322-S Kansas Fertilizer Research
D.A. Ruiz Diaz and multiple co-authors
Kansas Agricultural Experiment Station
Research Reports, Vol. 3, Issue 3. 2017
<https://newprairiepress.org/kaesrr/vol3/iss3/>
- 17-326-J Climate-smart management can further improve winter wheat yield in China
S. Sun, X. Yang, X. Lin, G. Sassenrath, K. Li
Agricultural Systems
2018
Vol. 162
doi.org/10.1016/j.agsy.2018.01.010
- 17-340-J Metabolism of 2,4-dichlorophenoxyacetic acid contributes to resistance in a common waterhemp (*Amaranthus tuberculatus*) population
M.R.A. Figueiredo, L.J. Leibhart, Z.J. Reicher, P.J. Tranel, S.J. Nissen, P. Westra, M.L. Bernards, G.R. Kruger, T.A. Gaines, M. Jugulam
Pest Management Science
October 2018
Vol. 74, Issue 10
doi.org/10.1002/ps.4811
- 17-352-J Survey of the genomic landscape surrounding the 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS) gene in glyphosate-resistant *Amaranthus palmeri* from geographically distant populations in the USA
W.T. Molin, A.A. Wright, M.J. VanGessel, W.B. McCloskey, M. Jugulam, R.E. Hoagland
Pest Management Science
May 2018
Vol. 74, Issue 5
doi.org/10.1002/ps.4659
- 17-353-J Can cover or forage crops replace fallow in the semiarid central Great Plains?
J.D. Holman, K. Arnet, J.A. Dille, I. Kisekka, S. Maxwell, A. Obour, T. Roberts, K.L. Roozeboom, A. Schlegel
Crop Science
2018
Vol. 58, No. 2
doi:10.2135/cropsci2017.05.0324
- 17-358-J Integrated bioethanol production to boost low-concentrated cellulosic ethanol without sacrificing ethanol yield
Y. Xu, M. Zhang, K. Roozeboom, D. Wang
Bioresource Technology
2018
Vol. 250
doi.org/10.1016/j.biortech.2017.11.056
- 17-360-J Vertical changes of soil microbial properties in claypan soils
C.-J. Hsiao, G.F. Sassenrath, L.H. Zeglin, G.M. Hettiarachchi, C.W. Rice
Soil Biology and Biochemistry
June 2018
Vol. 121
doi.org/10.1016/j.soilbio.2018.03.012

- 17-365-J Trends in plant available soil water on producer fields of western Kansas
F.R. Lamm, D.H. Rogers, A.J. Schlegel, X. Lin, R.M. Aiken, N.L. Klocke, L.R. Stone, L.K. Shaw
Applied Engineering in Agriculture
2017
Vol. 33, Issue 6, 859-868
doi.org/10.13031/aea.12452
- 17-372-J Impacts of fungal stalk rot pathogens on physicochemical properties of sorghum grain
Y.M.A.Y. Bandara, T.T. Tesso, S.R. Bean, F.E. Dowell, C.R. Little
Plant Disease
2017
Vol. 101, No. 12
doi.org/10.1094/PDIS-02-17-0238-RE
- 17-377-J Comparative transcriptome and lipidome analyses reveal molecular chilling responses in chilling-tolerant sorghums
S.R. Marla, S. Shiva, R. Welti, S. Liu, J.J. Burke, G.P. Morris
The Plant Genome
2018
Vol. 10, No. 3
doi:10.3835/plantgenome2017.03.0025
- 17-378-J Shifts in soybean yield, nutrient uptake, and stoichiometry: A historical synthesis-analysis
G.R. Balboa, V.O. Sadras, I.A. Ciampitti
Crop Science
January 2018
Vol. 58, Issue 1
doi:10.2135/cropsci2017.06.0349
- 17-380-J Corn yield response to plant density and nitrogen: Spatial models and yield distribution
R. Schwalbert, T.J.C. Amado, T.A.N. Horbe, L.O. Stefanello, Y. Assefa, P.V.V. Prasad, C.W. Rice, and I.A. Ciampitti
Agronomy Journal
March 2018
Vol. 110, No. 3
doi:10.2134/agronj2017.07.0425
- 17-388-J New insights into soybean biological nitrogen fixation
I.A. Ciampitti, F. Salvagiotti
Agronomy Journal
May 2018
Vol. 110, No. 4
doi:10.2134/agronj2017.06.0348
- 17-391-J An efficient modified method for plant leaf lipid extraction results in improved recovery of phosphatidic acid
S. Shiva, R. Enninful, M.R. Roth, P. Tamura, S. V. K. Jagadish, R. Welti
Plant Methods
February 2018
Vol. 14
http://dx.doi.org/10.1186%2Fs13007-018-0282-y
- 17-397-J Control of roughleaf dogwood with tebuthiuron pellets in Pottawatomie County, Kansas
G. Brunkow, W.H. Fick
Transactions Kansas Academy of Science
October 2017
Vol. 120, Issue 3-4
doi.org/10.1660/062.120.0405
- 17-398-J Crop residue harvest impacts wind erodibility and simulated soil loss in the central Great Plains
Y. He, D.R. Presley, J. Tatarko, H. Blanco-Canqui
Global Change Biology Bioenergy
March 2018
Vol. 10, Issue 3
doi.org/10.1111/gcbb.12483

Anatomy and Physiology

- 16-355-J Porcine Wharton's jelly cells distribute throughout the body after intraperitoneal injection
K. Pachthongsuk, T. Rathbun, D. Troyer, D.L. Davis
Stem Cell Research and Therapy
February 2018
Vol. 9, No. 38
10.1186/s13287-018-0775-7
- 17-236-J Associations between activity of arginase or matrix metalloproteinase-8 (MMP-8) and metritis in periparturient dairy cattle
B.E. Voelz, M. Kalubowilage, S.H. Bossmann, D.L. Troyer, R.C. Chebel, L.G.D. Mendonça
Theriogenology
July 2017
Volume 97
http://dx.doi.org/10.1016/j.theriogenology.2017.04.025

Animal Sciences and Industry

- 15-292-J A survey of dry-processed-corn particle size and fecal starch in midwestern United States feedlots
E.F. Schwandt, C.D. Reinhardt, D.U. Thomson, S.J. Bartle
Professional Animal Scientist
October 2015
Vol. 31, Issue 5
doi.org/10.15232/pas.2015-01392
- 15-299-J Evaluating chemical mitigation of Porcine Epidemic Diarrhea virus (PEDV) in swine feed and ingredients
R.A. Cochrane, S.S. Dritz, J.C. Woodworth, J. Zhang, A.R. Huss, C.R. Stark, R.A. Hesse, M.D. Tokach, J.F. Bai, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1110
- 15-313-J Elevated concentrations of crude glycerin in diets for beef cattle: feedlot performance, carcass traits, and ruminal metabolism
E.H.C.B. Van Cleef, S. Uwituze, C.A. Alvarado-Gilis, K.A. Miller, C.L. Van Bibber-Krueger, C.C. Aperce, J.S. Drouillard
Journal of Animal Science
October 2019
Vol. 97, Issue 10
doi.org/10.1093/jas/skz281
- 15-445-J Finely grinding cereal grains in pelleted diets offers little improvement in nursery pig growth performance
G.E. Bokelman, J.A. De Jong, A.D. Yoder, J.R. Kalivoda, C.R. Stark, J.C. Woodworth, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1122
- 15-446-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
R. Cochrane, S. Dritz, J. Woodworth, A. Huss, R.W. Thompson, A.C. Fahrenholz, J.P. Cano, C. Jones
Journal of Swine Health and Production
December 2015
- 15-447-J Evaluating chemical mitigation of *Salmonella Typhimurium* ATCC 14028 in animal feed ingredients
R.A. Cochrane, A.R. Huss, G.C. Aldrich, C.R. Stark, C.K. Jones
Journal of Food Production
April 2016
Vol. 79, Issue 4
10.4315/0362-028X.JFP-15-320
- 15-448-J Salmonella surrogate mitigation in poultry feed using a dry acid powder
R.A. Cochrane, C.R. Stark, A.R. Huss, C.G. Aldrich, C.J. Knueven, J. Pitts, C.K. Jones
Journal of Animal Science
March 2015
- 15-449-J Evaluation of extreme thermal processing methods to improve nutrient utilization of low energy diets for finishing pigs
G.E. Bokelman, K.F. Coble, C.R. Stark, J.C. Woodworth, M.D. Tokach, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1121
- 16-006-J High-fiber ingredient withdrawal strategy before slaughter in finishing pigs
M.A.D. Goncalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
2017
Vol. 25, Issue 1, 29-33
- 16-063-J Using network flow modeling to determine pig flow in a commercial production system
K.F. Coble, J.S. Bergtold, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, J.C. Woodworth
Journal of Computers and Electronics in Agriculture
December 2018
Vol. 155
doi.org/10.1016/j.compag.2018.10.022

- 16-256-J Effects of limonene on ruminal *Fusobacterium necrophorum* concentrations, fermentation, and lysine degradation in cattle
S.S. Samii, N. Wallace, T.G. Nagaraja, M.A. Engstrom, M.D. Miesner, C.K. Armendariz, E.C. Titgemeyer
Journal of Animal Science
2016
Vol. 94, Issue 8
doi.org/10.2527/jas.2016-0455
- 16-258-J Effects of yeast combined with chromium propionate on growth performance and carcass quality of finishing steers
C.L. Van Bibber-Krueger, J.E. Axman, J.M. Gonzalez, C.I. Vahl, J.S. Drouillard
Journal of Animal Science
July 2016
Vol. 94, Issue 7
doi.org/10.2527/jas.2016-0454
- 16-355-J Porcine Wharton's jelly cells distribute throughout the body after intraperitoneal injection
K. Pachthongsuk, T. Rathbun, D. Troyer, D.L. Davis
Stem Cell Research and Therapy
February 2018
Vol. 9, No. 38
10.1186/s13287-018-0775-7
- 17-007-J Effects of anabolic implants and ractopamine-HCl on muscle fiber morphometrics, collagen solubility, and tenderness of beef longissimus lumborum steaks
S.M. Ebarb, K.J. Phelps, J.S. Drouillard, K.R. Maddock-Carlin, M.A. Vaughn, D.D. Burnett, J.A. Noel, C.L. Van Bibber-Krueger, C.B. Paulk, D.M. Grieger, J.M. Gonzalez
Journal of Animal Science
2017
Vol. 95, Issue 3
doi.org/10.2527/jas.2016.1263
- 17-013-J Assessment of objective measures of beef steak juiciness and their relationships to sensory panel juiciness ratings
L.W. Lucherk, T.G. O'Quinn, J.F. Legako, R.J. Rathmann, J.C. Brooks, M.F. Miller
Journal of Animal Science
June 2017
Vol. 95, Issue 6
doi.org/10.2527/jas.2016.0930
- 17-016-J Effects of feeding nucleotides in diets containing corn germ meal or dried corn distillers grains and solubles on the performance and health of receiving and growing calves
M.L. Schilling, S.P. Montgomery, E.C. Titgemeyer, A.E. Wertz-Lutz, C.I. Vahl, A.T. Schilling, W.R. Hollenbeck, D.A. Blasi
The Professional Animal Scientist
August 2017. Vol. 33, Issue 4
doi.org/10.15232/pas.2016-01567
- 17-018-J Determination of the effect of branding on consumer palatability ratings of beef strip loin steaks
A.K. Wilfong, K.V. Ognoskie, J.M. Gonzalez, T.A. Houser, E.A.E. Boyle, J.A. Unruh, T.G. O'Quinn
Meat Science
February 2016. Vol. 112
doi.org/10.1016/j.meatsci.2015.08.036
- 17-025-J Determination of the effect of brand and product identification on consumer palatability ratings of ground beef patties
A.K. Wilfong, K.V. McKillip, J.M. Gonzalez, T.A. Houser, J.A. Unruh, E.A.E. Boyle, T.G. O'Quinn
Journal of Animal Science
November 2016. Vol. 94, Issue 11
doi.org/10.2527/jas.2016-0894
- 17-118-S Swine Day 2015
R.D. Goodband and multiple co-authors
Kansas Agricultural Experiment Station
Research Reports
Vol. 2, Issue 8
<https://newprairiepress.org/kaesrr/vol2/iss8/>
- 17-207-J Heat stability of radio frequency dielectric heat treated low heat and high heat nonfat dry milk powders
H. Sanchez Alan, L. Wang, K. Schmidt
International Dairy Journal
November 2017. Vol. 74
10.1016/j.idairyj.2017.05.003
- 17-232-J Short communication: Sodium salicylate negatively affects rumen fermentation in vitro and in situ
A.J. Carpenter, C.F. Vargas Rodriguez, J.A.B. Jantz, B.J. Bradford
Journal of Dairy Science
2017. Vol. 100, Issue 3
doi.org/10.3168/jds.2016-11832

- 17-236-J Associations between activity of arginase or matrix metalloproteinase-8 (MMP-8) and metritis in periparturient dairy cattle
B.E. Voelz, M. Kalubowilage, S.H. Bossmann, D.L. Troyer, R.C. Chebel, L.G.D. Mendonça
Theriogenology
July 2017
Volume 97
<http://dx.doi.org/10.1016/j.theriogenology.2017.04.025>
- 17-243-J Evaluation of an intravaginal triptorelin acetate gel for inducing ovulation in mares
C.D. Sinclair, S.K. Webel, T.L. Douthit, L.M. Murray, A.L. Jager, D.M. Grieger, J.M. Kouba
Journal of Animal Science
August 2017
Vol. 95, Issue 8
[doi.org/10.2527/jas.2017.1373](http://dx.doi.org/10.2527/jas.2017.1373)
- 17-260-S Dairy Research 2016
B.J. Bradford and multiple co-authors
Kansas Agricultural Experiment Station
Research Reports
Vol. 2, Issue 9
<https://newprairiepress.org/kaesrr/vol2/iss9/>
- 17-273-J Cattlemen's Day 2017
E.A. Boyle and multiple co-authors
Kansas Agricultural Experiment Station
Research Reports
Vol. 3, Issue 1
<https://newprairiepress.org/kaesrr/vol3/iss1/>
- 17-288-J The use of current events to enhance student learning in agricultural genetics
J.M. Bormann, M.M. Rolf
NACTA Journal
March 2018
Vol. 62, Issue 1
- 17-290-J Technical note: Validation of an automated system for monitoring and restricting water intake in group-housed beef steers
K. Allwardt, C. Ahlberg, A. Broocks, K. Bruno, A. Taylor, S. Place, C. Richards, C. Krehbiel, M. Calvo-Lorenzo, U. DeSilva, D. VanOverbeke, R. Mateescu, C. Goad, M.M. Rolf
Journal of Animal Science
September 2017
Vol. 95, Issue 9
[doi.org/10.2527/jas.2017.1593](http://dx.doi.org/10.2527/jas.2017.1593)
- 17-307-J Effects of early postpartum sodium salicylate treatment on long-term milk, intake, and blood parameters of dairy cows
A.J. Carpenter, C.M. Ylloja, L.K. Mamedova, K.E. Olagaray, B.J. Bradford
Journal of Dairy Science
February 2018
Vol. 101, Issue 2
[doi.org/10.3168/jds.2017-13057](http://dx.doi.org/10.3168/jds.2017-13057)
- 17-337-J Response of lactating dairy cows with or without purulent vaginal discharge to gonadotropin-releasing hormone and prostaglandin F_{2α}
B.E. Voelz, L. Rocha, F. Scortegagna, J.S. Stevenson, L.G.D. Mendonça
Journal of Animal Science
January 2018
Vol. 96, Issue 1
[doi.org/10.1093/jas/skx035](http://dx.doi.org/10.1093/jas/skx035)
- 17-341-J Effects of increasing space allowance by removing a pig or gate adjustment on finishing pig growth performance
C.B. Carpenter, C.J. Holder, F. Wu, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz
Journal of Animal Science
July 2018
Vol. 96, Issue 7
[doi.org/10.1093/jas/sky167](http://dx.doi.org/10.1093/jas/sky167)
- 17-343-J Effects of increasing copper from either copper sulfate or combinations of copper sulfate and a copper-amino acid complex on finishing pig growth performance and carcass characteristics
C.B. Carpenter, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz, F. Wu, Z.J. Rambo
Translational Animal Science
January 2019
Vol. 3, Issue 4
[doi.org/10.1093/tas/txz112](http://dx.doi.org/10.1093/tas/txz112)
- 17-344-J Effects of increasing copper from tri-basic copper chloride or a copper-methionine chelate on growth performance of nursery pigs
C.B. Carpenter, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz, F. Wu, J.L. Usry
Translational Animal Science
January 2019
Vol. 3, Issue 1
[doi.org/10.1093/tas/txy091](http://dx.doi.org/10.1093/tas/txy091)

- 17-347-J Determining the available phosphorus release of Natuphos E 5,000 G phytase for nursery pigs
K.M. Gourley, J.C. Woodworth, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband
Journal of Animal Science
March 2018
Vol. 96, Issue 3
doi.org/10.1093/jas/sky006
- 17-348-J Determining the impact of increasing standardized ileal digestible lysine for primiparous and multiparous sows during lactation
K.M. Gourley, G.E. Nichols, J.A. Sonderman, Z.T. Spencer, J.C. Woodworth, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, S.J. Kitt, E.W. Stephenson
Journal of Animal Science
April 2018
Vol. 96
doi.org/10.1093/jas/sky073.308
- 17-355-J Two split-time artificial insemination programs in suckled beef cows
J.S. Stevenson, S.L. Hill, D.M. Grieger, K.C. Olson, J.R. Jaeger, J. Ahola, G.E. Seidel, R.K. Kasimanickam
Journal of Animal Science
November 2017
Vol. 95, Issue 11
doi.org/10.2527/jas2017.1805
- 17-363-J Interaction between supplemental zinc oxide and zilpaterol hydrochloride on growth performance, carcass traits, and blood metabolites in feedlot steers
C.L. Van Bibber-Krueger, K.A. Miller, R.G. Amachawadi, H.M. Scott, J.M. Gonzalez, J.S. Drouillard
Journal of Animal Science
December 2017
Vol. 95, Issue 12
doi.org/10.2527/jas2017.1761
- 17-364-J Interactive effects of supplemental Zn sulfate and ractopamine hydrochloride on growth performance, carcass traits, and plasma urea nitrogen in feedlot heifers
C.L. Van Bibber-Krueger, R.G. Amachawadi, H.M. Scott, J.M. Gonzalez, J.S. Drouillard
Journal of Animal Science
October 2017
Vol. 95, Issue 10
doi.org/10.2527/jas2017.1764
- 17-366-J Ruminal microbes, microbial products, and systemic inflammation
M. Garcia, B.J. Bradford, and T.G. Nagaraja
The Professional Animal Scientist
December 2017
Vol. 33, Issue 6
doi.org/10.15232/pas.2017-01663
- 17-367-J Effects of TNF receptor blockade on in vitro cell survival and response to negative energy balance in dairy cattle
C.A. Martel, L.K. Mamedova, E.J. Minton, M. Garcia, C. Legallet, B.J. Bradford
Journal of Animal Science and Biotechnology
January 2018
Vol. 9, Article 6
doi.org/10.1186/s40104-017-0224-y
- 17-369-J Relative bioavailability of carnitine delivered by ruminal or abomasal infusion or by encapsulation in dairy cattle
K.E. Olagaray, J.E. Shaffer, C.K. Armendariz, A. Bellamine, S. Jacobs, E. C. Titgemeyer, B.J. Bradford
Journal of Dairy Science
March 2018
Vol. 101, Issue 3
doi.org/10.3168/jds.2017-13656
- 17-370-J Modeling the effects of standardized ileal digestible valine to lysine ratio on growth performance of nursery pigs
A.B. Clark, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.C. Woodworth, K.J. Touchette, N.M. Bello
Translational Animal Science
December 2017
Vol. 1, Issue 4
doi.org/10.2527/tas2017.0049
- 17-371-J Modeling the effects of standardized ileal digestible isoleucine to lysine ratio on growth performance of nursery pigs
A.B. Clark, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.C. Woodworth, K.J. Touchette, N.M. Bello
Translational Animal Science
December 2017
Vol. 1, Issue 4
doi.org/10.2527/tas2017.0048

- 17-375-J Practical female reproductive management
J.S. Stevenson, J.H. Britt
Journal of Dairy Science
December 2017
Vol. 100, Issue 12
doi.org/10.3168/jds.2017-12959
- 17-379-J Effects of space allocation on finishing pig growth performance and carcass characteristics
L.L. Thomas, R.D. Goodband, J.C. Woodworth, M.D. Tokach, J.M. DeRouchey, S.S. Dritz
Journal of Animal Science
September 2017
Vol. 1, Issue 3
doi.org/10.2527/tas2017.0042
- 17-382-J Sensory evaluation of enhanced beef strip loin steaks cooked to 3 degrees of doneness
K.V. McKillip, A.K. Wilfong, J.M. Gonzalez, T.A. Houser, J.A. Unruh, E.A.E. Boyle, T.G. O'Quinn
Meat and Muscle Biology
November 2017
Vol. 1, No. 1
doi.org/10.22175/mmb2017.06.0033
- 17-383-J Repeatability and accuracy of the Pressed Juice Percentage (PJP) method at sorting steaks into juiciness categories
K.V. McKillip, A.K. Wilfong, J.M. Gonzalez, T.A. Houser, J.A. Unruh, E.A.E. Boyle, T.G. O'Quinn
Meat and Muscle Biology
November 2017
Vol. 1, No. 1
doi.org/10.22175/mmb2017.07.0034
- 17-392-J Evaluation of quality parameters in gluten-free bread formulated with breadfruit (*Artocarpus altilis*) flour
E.A. Clark, F.M. Aramouni
Journal of Food Quality
September 2018
doi.org/10.1155/2018/1063502
- 17-399-J Marbling texture's effects on beef palatability
K.R. Vierck, J.M. Gonzalez, T.A. Houser, E.A.E. Boyle, T.G. O'Quinn
Meat and Muscle Biology
May 2018
Vol. 2, No. 1
doi.org/10.22175/mmb2017.10.0052

Apparel, Textiles, and Interior Design

- 17-137-J Sustainable care of textile products and its environmental impact: Tumble-drying and ironing processes
C. Yun, S. Patwary, M.L.A. LeHew, J. Kim
Fibers and Polymers
March 2017
Vol. 18, Issue 3
doi.org/10.1007/s12221-017-6957-6
- 17-195-J Assessment of environmental and economic impacts made by the reduced laundering of self-cleaning fabrics
C. Yun, Md.I. Islam, M. LeHew, J. Kim
Fibers and Polymers
August 2016
Vol. 17, Issue 8
doi.org/10.1007/s12221-016-6320-3

Biochemistry and Molecular Biophysics

- 15-026-J Bioorthogonal click chemistry for fluorescence imaging of choline phospholipids in plants
J.M. Paper, T. Mukherjee, K. Schrick
Plant Methods
2018
Vol. 14, Issue 31
doi.org/10.1186/s13007-018-0299-2
- 16-350-J Progress in quantitative chemical imaging of refined natural products and synthetic mixtures
D.L. Wetzal, M.D. Boatwright
NIR News
August 2016
Vol. 27, Issue 5
doi.org/10.1255/nirn.1623
- 17-004-J The levinthal problem in amyloid aggregation: Sampling of a flat reaction space
Z. Jia, A. Beugelsdijk, J. Chen, J.D. Schmit
The Journal of Physical Chemistry
January 2017
Vol. 121, Issue 7
doi.org/10.1021/acs.jpcc.7b00253

- 17-028-J Solution structure and expression profile of an insect cytokine: *Manduca sexta* stress response peptide-2
L.G. Schrag, X. Cao, A.I. Herrera, Y. Wang, H. Jiang, O. Prakash
Current Protein and Peptide Science
2017
Vol. 24, Issue 1
doi.org/10.2174/0929866524666161121142840
- 17-029-J ¹H, ¹⁵N, and ¹³C resonance assignments of the third domain from the *S. aureus* innate immune evasion protein Eap
A.I. Herrera, N.T. Ploscariu, B.V. Geisbrecht, O. Prakash
Biomolecular NMR Assignments
2018
Vol. 12, Issue 1
https://dx.doi.org/10.1007%2Fs12104-018-9804-9
- 17-081-J Defining the extreme substrate specificity of *Euonymus alatus* diacylglycerol acetyltransferase, an unusual membrane bound O-acyltransferase
S. Bansal, T.P. Durrett
Bioscience Reports
2016
Vol. 36
doi.org/10.1042/BSR20160277
- 17-085-J Protein aggregation in *Ehrlichia chaffeensis* during infection of mammalian cells
D. Kuczynska-Wisnik, C. Cheng, R.R. Ganta, M. Zolkiewski
FEMS Microbiology Letters
March 2017
Vol. 364, Issue 6
doi.org/10.1093/femsle/fnx059
- 17-149-J The immune properties of *Manduca sexta* transferrin
L.M. Brummett, M.R. Kanost, M.J. Gorman
Insect Biochemistry and Molecular Biology
February 2017
Vol. 81
doi.org/10.1016/j.ibmb.2016.12.006
- 17-165-B Structure and function of stress responsive peptides in insects
L.G. Schrag, A.I. Herrera, Y. Wang, O. Prakash, H. Jiang
Peptide-Based Drug Discovery: Challenges and new therapeutics
2017
978-1-78262-732-6
doi.org/10.1039/9781788011532-00438
- 17-191-J Delivery of lethal dsRNAs in insect diets by branched amphiphilic peptide capsules
L.A. Avila, R. Chandrasekar, K.E. Wilkinson, J. Balthazor, M. Herman, J. Bechard, S. Brown, Y. Park, S. Dhar, G.R. Reeck, J.M. Tomich
Journal of Controlled Release
March 2018
Vol. 273
doi.org/10.1016/j.jconrel.2018.01.010
- 17-296-J Metabolic engineering of *Saccharomyces cerevisiae* to produce a reduced viscosity oil from lignocellulose
T.N.T. Tran, R.J. Breuer, R.A. Narasimhan, L.S. Parreiras, Y. Zhang, T.K. Sato, T.P. Durrett
Biotechnology for Biofuels
March 2017
Vol. 10
doi.org/10.1186/s13068-017-0751-y
- 17-323-J Simultaneous targeting of multiple gene homeologues to alter seed oil production in *Camelina sativa*
J.A. Aznar-Moreno, T.P. Durrett
Plant and Cell Physiology
April 2017
Vol. 58
doi.org/10.1093/pcp/pcx058
- 17-329-J Review: Metabolic engineering of unusual lipids in the synthetic biology era
J.A. Aznar-Moreno, T.P. Durrett
Plant Science
October 2017
Vol. 263
doi.org/10.1016/j.plantsci.2017.07.007

17-386-J Membrane topology and identification of key residues of EaDAcT, a plant MBOAT with unusual substrate specificity
T.N.T. Tran, J. Shelton, S. Brown, T.P. Durrett
The Plant Journal
2017
Vol. 92
doi.org/10.1111/tpj.13636

17-394-J Metalloprotease-dependent activation of EGFR modulates the CD44+/CD24- populations in triple negative breast cancer cells through the MEK/ERK pathway
R. Wise, A. Zolkiewska
Breast Cancer Research and Treatment
November 2017
Vol. 166, Issue 2
doi.org/10.1007/s10549-017-4440-0

Biological and Agricultural Engineering

15-312-J Network from dihydrocoumarin via solvent-free metal-mediated pathway: A potential structure for substantial toughness improvement of epoxidized plant oil materials
C. Li, J. Sung, D. Wang; X.S. Sun
ACS Sustainable Chemistry & Engineering
December 2015
Vol. 4
doi.org/10.1021/acssuschemeng.5b01283

16-161-J Evaluating optimum limited irrigation management strategies for corn production in the Ogallala Aquifer Region
A. Araya, I. Kisekka, P. V. Vara Prasad, P. H. Gowda
Journal of Irrigation and Drainage Engineering
October 2017
Vol. 134, Issue 10
doi.org/10.1061/(ASCE)
IR.1943-4774.0001228

16-192-J Evaluating deficit irrigation management strategies for grain sorghum using AquaCrop
A. Araya, I. Kisekka, J. Holman
Journal of Irrigation Science
November 2016
Vol. 34, Issue 6
doi.org/10.1007/s00271-016-0515-7

16-210-J Carbodiimide stabilizes the ultrasound-pre-treated camelina protein structure with improved water resistance
X. Zhu, D. Wang, X.S. Sun
Industrial Crops and Products
March 2017
Vol. 97
doi.org/10.1016/j.indcrop.2016.11.001

16-231-J Anticancer drug Camptothecin test in 3D hydrogel networks with HeLa cells
J. Liang, X.S. Sun, Z. Yang, S. Cao
Scientific Reports
February 2017
Article Number 37626
doi.org/10.1038/srep37626

16-285-J High-solids bio-conversion of maize starch to ethanol
Z. Li, D. Wang, Y.-C. Shi
Starch
January 2019
Vol. 71, Issue 1-2
doi.org/10.1002/star.201800142

16-290-J Substantially reinforcing plant oil-based materials via cycloaliphatic epoxy with double bond-bridged structure
C. Li, T. Li, X. Cai, X.S. Sun
Polymer
December 2016
Vol. 107, 19-28
http://dx.doi.org/10.1016/j.polymer.2016.10.014

16-304-J Evaluation of water-limited cropping systems in a semi-arid climate using DSSAT-CSM
A. Araya, I. Kisekka, P.H. Gowda, P.V. Vara Prasad
Agricultural Systems
January 2017
Vol. 150, p. 86-98
doi.org/10.1016/j.agsy.2016.10.007

16-309-J Assessing wheat yield, biomass, and water productivity responses to growth stage based irrigation water allocation
A. Araya, I. Kisekka, P.V.V. Prasad, J. Holman, A.J. Foster, R. Lollato
Transactions of the ASABE
2017
Vol. 60, Issue 1, 107-121
doi:10.13031/trans.11883

- 17-035-J Adhesion properties of soy protein adhesives enhanced by biomass lignin
S. Pradyawong, G. Qi, N. Li, X.S. Sun, D. Wang
International Journal of Adhesion and Adhesives
2017
Vol. 75
doi.org/10.1016/j.ijadhadh.2017.02.017
- 17-037-J Spatio-temporal evaluation of plant height in corn via unmanned aerial systems
S. Varela, Y. Assefa, P.V.V. Prasad, N.R. Peralta, T.W. Griffin, A. Sharda, A. Ferguson, I.A. Ciampitti
Journal of Applied Remote Sensing
August 2017
Vol. 11, Issue 3
doi.org/10.1117/1.JRS.11.036013
- 17-046-J A review of sweet sorghum as a viable renewable bioenergy crop and its techno-economic analysis
N.B. Appiah-Nkansah, J. Li, W. Rooney, D. Wang
Renewable Energy
2019
Vol. 143
doi.org/10.1016/j.renene.2019.05.066
- 17-052-J High gravity enzymatic hydrolysis of hydro-thermal and ultrasonic pretreated big bluestem with recycling prehydrolysate water
Y. Xu, K. Zhang, D. Wang
Renewable Energy
2017
Vol. 114, Part B
doi.org/10.1016/j.renene.2017.07.045
- 17-074-J Phenotypic diversity of anthocyanins in sorghum accessions with various pericarp pigments
X. Su, D. Rhodes, J. Xu, X. Chen, H. Davis, D. Wang, T.J. Herald, W. Wang
Journal of Nutrition & Food Sciences
2017
Vol. 7, Issue 4
DOI:10.4172/2155-9600.1000610
- 17-106-B Irrigation of grain sorghum
D.H. Rogers, A.J. Schlegel, J.D. Holman, J.P. Aguilar, I. Kisekka
Sorghum: State of the art and future perspectives
July 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0072
- 17-116-J Epoxidized and acrylated epoxidized camelina oils for ultraviolet-curable wood coatings
Y. Li, D. Wang, X.S. Sun
Journal of the American Oil Chemists' Society
October 2018
Vol. 95, Issue 10
doi.org/10.1002/aocs.12123
- 17-141-J Calibration of the APEX model to simulate management practice effects on runoff, sediment, and phosphorus loss
A.B. Bhandari, N.O. Nelson, D.W. Sweeney, C. Baffaut, J.A. Lory, G.M.M.M.A. Senaviratne, G.M. Pierzynski, K.A. Janssen, P.L. Barnes
Journal of Environmental Quality
November 2016
Vol. 46, Issue 6
DOI: 10.2134/jeq2016.07.0272
- 17-147-J Impacts of alternative climate information on hydrologic processes with SWAT: A comparison of NCDC, PRISM and NEXRAD datasets
J. Gao, A.Y. Sheshukov, H. Yen, M. White
CATENA
September 2017
Vol. 156
doi.org/10.1016/j.catena.2017.04.010
- 17-151-J Ethanol production from mixtures of sweet sorghum juice and sorghum starch using very high gravity fermentation with urea supplementation
N.B. Appiah-Nkansah, K. Zhang, W. Rooney, D. Wang
Industrial Crops and Products
2018
Vol. 111
doi.org/10.1016/j.indcrop.2017.10.028

- 17-152-J Integrating starchy substrate into cellulosic ethanol production to boost ethanol titers and yields
Y. Xu, D. Wang
Applied Energy
2017
Vol. 195
doi.org/10.1016/j.apenergy.2017.03.035
- 17-153-J Fatty acid chain combined with cycloaliphatic rings via Amberlyst-15: A promising structure for high biocontent epoxy design
C. Li, X. Cai, J. Sung, H. Wang, S.H. Bossmann, X.S. Sun
Journal of Polymer Science Part A: Polymer Chemistry
March 2017
Vol. 55, Issue 5
doi.org/10.1002/pola.28452
- 17-169-J Revisiting precision mobile drip irrigation under limited water
I. Kisekka, T. Oker, G. Nguyen, J. Aguilar, and D. Rogers
Irrigation Science
November 2017
Vol. 35, Issue 6
doi.org/10.1007/s00271-017-0555-7
- 17-183-J Accuracy of topographic index models at identifying ephemeral gully trajectories on agricultural fields
A.Y. Sheshukov, L. Sekaluvu, S.L. Hutchinson
Geomorphology
April 2018
Vol. 306
doi.org/10.1016/j.geomorph.2018.01.026
- 17-192-J Bio-based wood adhesive from camelina protein (a biodiesel residue) and depolymerized lignin with improved water resistance
X. Zhu, D. Wang, N. Li, X.S. Sun
ACS Omega
November 2017
Vol. 2
doi.org/10.1021/acsomega.7b01093
- 17-223-J Ammonia and methane emission factors from cattle operations expressed as losses of dietary nutrients or energy
Z. Liu, Y. Liu, J.P. Murphy, R. Maghirang
Agriculture
February 2017
Vol. 7, Issue 3
doi.org/10.3390/agriculture7030016
- 17-245-J Estimating ambient ozone effect of Kansas rangeland burning with receptor modeling and regression analysis
Z. Liu, Y. Liu, J.P. Murphy, R. Maghirang
Environments
February 2017
Vol. 4, Issue 1
doi.org/10.3390/environments4010014
- 17-258-J Longevity and performance of a subsurface drip irrigation system
F.R. Lamm, D.H. Rogers
Transactions of the ASABE
Vol. 60, Issue 3
doi.org/10.13031/trans.12237
- 17-292-J Porosity and drag determination of a single-row vegetative barrier (*Maclura pomifera*)
H.B. Gonzales, M.E. Casada, L.J. Hagen, J. Tatarko, R.G. Maghirang, C.J. Barden
Transactions of the American Society of Agricultural and Biological Engineers
2018
Vol. 61, Issue 2
doi.org/10.13031/trans.12338
- 17-304-J Projected climate change impacts on hydrologic flow regimes in the great plains of Kansas
S. Chatterjee, M.D. Daniels, A.Y. Sheshukov, J. Gao
River Research and Applications
2018
Vol. 34
doi.org/10.1002/rra.3249
- 17-333-J Effect of irrigation on physicochemical properties and bioethanol yield of drought tolerant and conventional corn
K. Zhang, B. Peng, I. Kisekka, M. Zhang, D. Rogers, D. Wang
Irrigation Science
2018
Vol. 36, Issue 2
DOI (10.1007/s00271-017-0563-7)

- 17-351-J Evaluating effects of deficit irrigation strategies on grain sorghum attributes and biofuel production
B. Pang, K. Zhang, I. Kisekka, S. Bean, M. Zhang, D. Wang
Journal of Cereal Science
2018
Vol. 79
doi.org/10.1016/j.jcs.2017.09.002
- 17-357-J Hydrologic alterations predicted by seasonally-consistent subset ensembles of general circulation models
A.Y. Sheshukov, K.R. Douglas-Mankin
Climate
June 2017
Vol. 5, Issue 3
doi.org/10.3390/cli5030044
- 17-358-J Integrated bioethanol production to boost low-concentrated cellulosic ethanol without sacrificing ethanol yield
Y. Xu, M. Zhang, K. Roozeboom, D. Wang
Bioresource Technology
2018
Vol. 250
doi.org/10.1016/j.biortech.2017.11.056
- 17-365-J Trends in plant available soil water on producer fields of western Kansas
F.R. Lamm, D.H. Rogers, A.J. Schlegel, X. Lin, R.M. Aiken, N.L. Klocke, L.R. Stone, L.K. Shaw
Applied Engineering in Agriculture
2017
Vol. 33, Issue 6, 859-868
doi.org/10.13031/aea.12452
- 17-374-J Contributions of Kansas rangeland burning to ambient O₃: Analysis of data from 2001 to 2016
Z. Liu, Y. Liu, J.P. Murphy, R. Maghirang
Science of The Total Environment
March 2018
Vol. 618
doi.org/10.1016/j.scitotenv.2017.09.075

Division of Biology

- 15-026-J Bioorthogonal click chemistry for fluorescence imaging of choline phospholipids in plants
J.M. Paper, T. Mukherjee, K. Schrick
Plant Methods
2018
Vol. 14, Issue 31
doi.org/10.1186/s13007-018-0299-2
- 15-189-J Functional characterization of hesp018, a baculovirus-encoded serpin gene
D.M.P. Ardisson-Araujo, G.F. Rohrmann, B.M. Ribeiro, R.J. Clem
Journal of General Virology
May 2015
doi: 10.1099/vir.0.000041
- 15-428-J Wheat leaf lipids during heat stress: I. High day and night temperatures result in major lipid alterations
S. Narayanan, P. Tamura, M.R. Roth, P.V.V. Prasad, R. Welti
Plant Physiology
October 5, 2015
Vol. 39, Issue 4
DOI: 10.1111/pce.12649
- 16-196-J Changes in soil properties, microbial biomass, and fluxes of C and N in soil following post-agricultural grassland restoration
S.T. Rosenzweig, M.A. Carson, S.G. Baer, J.M. Blair
Applied Soil Ecology
April 2016
Vol. 100, p. 186-194
dx.doi.org/10.1016/j.apsoil.2016.01.001
- 16-209-J Increasing fish taxonomic and functional richness affects ecosystem properties of small headwater prairie streams
E. Martin, K. Gido, N. Bello, W. Dodds, A. Veach
Freshwater Biology
April 2016
Vol. 61, 887-898
doi.org/10.1111/fwb.12752

- 16-231-J Anticancer drug Camptothecin test in 3D hydrogel networks with HeLa cells
J. Liang, X.S. Sun, Z. Yang, S. Cao
Scientific Reports
February 2017
Article Number 37626
doi.org/10.1038/srep37626
- 16-345-J Physiological and molecular characterization of hydroxyphenylpyruvate dioxygenase (HPPD)-inhibitor resistance in Palmer amaranth (*Amaranthus palmeri* S. Wats.)
S. Nakka, A.S. Godar, P.S. Wani, C.R. Thompson, D.E. Peterson, J. Roelofs M. Jugulam
Frontiers in Plant Science
April 2017
Vol. 11, issue 8
doi.org/10.3389/fpls.2017.00555
- 16-353-J Foraging decisions underlying restricted space-use: Effects of fire and forage maturation on large herbivore nutrient uptake
E.J. Raynor, A. Joern, J.B. Nippert, J.M. Briggs
Ecology and Evolution
August 2016
Vol. 6, Issue 16, p. 5843-5853
https://dx.doi.org/10.1002%2Fecce.3.2304
- 17-061-J First record of the woodchuck in Osborne County, Kansas
D.W. Kaufman, R.A. Kaufman, G.A. Kaufman
Transactions of the Kansas Academy of Science
September 2016
Vol. 119
doi.org/10.1660/062.119.0416
- 17-062-J Spatial and successional dynamics of microbial biofilm communities in a grassland stream ecosystem
A.M. Veach, J.C. Stegen, S.P. Brown, W.K. Dodds, A. Jumpponen
Molecular Ecology
September 2016
Vol. 25
doi.org/10.1111/mec.13784
- 17-119-J 1.45 Å resolution structure of SRPN18 from the malaria vector *Anopheles gambiae*
D.A. Meekins, X. Zhang, K.P. Battaile, S. Lovell, K. Michel
Acta Crystallographica
December 2016
Vol. 72
doi.org/10.1107/S2053230X16017854
- 17-123-J Patterns and correlates of within-season breeding dispersal: A common strategy in a declining grassland songbird
E.J. Williams, W.A. Boyle
The Auk
2017
Vol. 135
DOI: 10.1642/AUK-17-69.1
- 17-124-B Chapter 19 - Irruptive migrations: Owls, raptors and waterfowl
W.A. Boyle
The Migration Ecology of Birds
ISBN 978-0-12-517367-4
doi.org/10.1016/B978-0-12-517367-4.X5000-1
- 17-139-J Altitudinal bird migration in North America
W.A. Boyle
Auk: Ornithological Advances
April 2017
Vol. 134
doi.org/10.1642/AUK-16-228.1
- 17-157-J The root of the problem: direct influence of riparian vegetation on estimation of whole stream metabolic rates
W.K. Dodds, F. Tromboni, W.A. Saltarelli, D.G.F. Cunha
Limnology and Oceanography Letters
2017
Vol. 2, Issue 1
doi.org/10.1002/lol2.10032
- 17-159-J Validation of a field-ready handheld meter for plasma β -hydroxybutyrate analysis
A.S. Sommers, W.A. Boyle, L.P. McGuire
Journal of Field Ornithology
December 2017
Vol. 88, Issue 4
doi.org/10.1111/jof.12233
- 17-191-J Delivery of lethal dsRNAs in insect diets by branched amphiphilic peptide capsules
L.A. Avila, R. Chandrasekar, K.E. Wilkinson, J. Balthazor, M. Herman, J. Bechard, S. Brown, Y. Park, S. Dhar, G.R. Reeck, J.M. Tomich
Journal of Controlled Release
March 2018
Vol. 273
doi.org/10.1016/j.jconrel.2018.01.010

- 17-208-J Testing metabolic cold adaptation as a driver of warm-water fish species replacement along the river continuum
M.J. Troia, K.B. Gido
Environmental Biology of Fishes
March 2017
Vol. 100
doi.org/10.1007/s10641-017-0577-2
- 17-213-J Decreased photosynthetic rate under high temperature in wheat is due to lipid desaturation, oxidation, acylation, and damage of organelles
M. Djanaguiraman, D.L. Boyle, R. Welti, P.V.V. Prasad
BMC Plant Biology
April 2018
Vol. 18
doi.org/10.1186/s12870-018-1263-z
- 17-217-J Genomic abundance and transcriptional activity of diverse gypsy and copia long terminal repeat retrotransposons in three wild sunflower species
F. Qiu, M.C. Ungerer
BMC Plant Biology
January 2018
Vol. 18
doi.org/10.1186/s12870-017-1223-z
- 17-252-J Probing whole-stream metabolism: influence of spatial heterogeneity on rate estimates
A.C. Siders, D.M. Larson, J. Rüegg, W.K. Dodds
Freshwater Biology
January 2017
Vol. 62, Issue 4
doi.org/10.1111/fwb.12896
- 17-254-J Complex variation in habitat selection strategies among individuals driven by extrinsic factors
E.J. Raynor, H.L. Beyer, J.M. Briggs, A. Joern
Ecology and Evolution
February 2017
Vol. 7, Issue 6
doi.org/10.1002/ece3.2764
- 17-256-J Temporal variability in large grazer space use in an experimental landscape
E.J. Raynor, A. Joern, A. Skibbe, M. Sowers, J.M. Briggs, A.N. Laws, and D. Goodin
Ecosphere
January 2017
Vol. 8, Issue 1
doi.org/10.1002/ecs2.1674
- 17-267-J Sensitivity of sorghum pollen and pistil to high-temperature stress
M. Djanaguiraman, R. Perumal, S.V.K. Jagadish, I.A. Ciampitti, R. Welti, P.V.V. Prasad
Plant, Cell and Environment
May 2018
Vol. 41, Issue 5
doi.org/10.1111/pce.13089
- 17-282-J The transcriptome of the lone star tick, *Amblyomma americanum*, reveals molecular changes in response to infection with the pathogen, *Ehrlichia chaffeensis*
D. Kim, D.C. Jaworski, C. Cheng, A.D.S. Nair, R.R. Ganta, N. Herndon, S. Brown, Y. Park
Journal of Asia-Pacific Entomology
September 2018
Vol. 21, Issue 3
doi.org/10.1016/j.aspen.2018.05.009
- 17-289-J Landscape context drives breeding habitat selection by an enigmatic grassland songbird
M.R. Herse, M.E. Estey, P.J. Moore, B.K. Sandercock, W.A. Boyle
Landscape Ecology
December 2017
Vol. 32
doi.org/10.1007/s10980-017-0574-z
- 17-360-J Vertical changes of soil microbial properties in claypan soils
C.-J. Hsiao, G.F. Sassenrath, L.H. Zeglin, G.M. Hettiarachchi, C.W. Rice
Soil Biology and Biochemistry
June 2018
Vol. 121
doi.org/10.1016/j.soilbio.2018.03.012
- 17-377-J Comparative transcriptome and lipidome analyses reveal molecular chilling responses in chilling-tolerant sorghums
S.R. Marla, S. Shiva, R. Welti, S. Liu, J.J. Burke, G.P. Morris
The Plant Genome
2018
Vol. 10, No. 3
doi:10.3835/plantgenome2017.03.0025

- 17-386-J Membrane topology and identification of key residues of EaDAcT, a plant MBOAT with unusual substrate specificity
T.N.T. Tran, J. Shelton, S. Brown, T.P. Durrett
The Plant Journal
2017
Vol. 92
doi.org/10.1111/tpj.13636
- 17-391-J An efficient modified method for plant leaf lipid extraction results in improved recovery of phosphatidic acid
S. Shiva, R. Enniful, M.R. Roth, P. Tamura, S. V. K. Jagadish, R. Welti
Plant Methods
February 2018
Vol. 14
https://dx.doi.org/10.1186%2Fs13007-018-0282-y
- 17-393-J Dynamics of epizootic hemorrhagic disease virus infection within the vector, *Culicoides sonorensis* (Diptera: Ceratopogonidae)
M.K. Mills, M.G. Ruder, D. Nayduch, K. Michel, B.S. Drolet
PLOS ONE
November 2017
doi.org/10.1371/journal.pone.0188865

Clinical Sciences

- 16-006-J High-fiber ingredient withdrawal strategy before slaughter in finishing pigs
M.A.D. Goncalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
2017
Vol. 25, Issue 1, 29-33
- 16-256-J Effects of limonene on ruminal *Fusobacterium necrophorum* concentrations, fermentation, and lysine degradation in cattle
S.S. Samii, N. Wallace, T.G. Nagaraja, M.A. Engstrom, M.D. Miesner, C.K. Armendariz, E.C. Titgemeyer
Journal of Animal Science
2016
Vol. 94, Issue 8
doi.org/10.2527/jas.2016-0455

- 17-363-J Interaction between supplemental zinc oxide and zilpaterol hydrochloride on growth performance, carcass traits, and blood metabolites in feedlot steers
C.L. Van Bibber-Krueger, K.A. Miller, R.G. Amachawadi, H.M. Scott, J.M. Gonzalez, J.S. Drouillard
Journal of Animal Science
December 2017
Vol. 95, Issue 12
doi.org/10.2527/jas2017.1761
- 17-364-J Interactive effects of supplemental Zn sulfate and ractopamine hydrochloride on growth performance, carcass traits, and plasma urea nitrogen in feedlot heifers
C.L. Van Bibber-Krueger, R.G. Amachawadi, H.M. Scott, J.M. Gonzalez, J.S. Drouillard
Journal of Animal Science
October 2017
Vol. 95, Issue 10
doi.org/10.2527/jas2017.1764

Communications and Agricultural Education

- 16-338-J Trends in the use of new-media marketing in U.S. ornamental horticulture industries
H.H. Peterson, C.R. Boyer, L.M. Baker, B.H. Yao
Horticulturae
2018
Vol. 4, Issue 4
doi.org/10.3390/horticulturae4040032
- 17-198-J Relationship marketing: A qualitative case study of new-media marketing use by Kansas garden centers
S. Stebner, C.R. Beyer, L.M. Baker, H.H. Peterson
Horticulturae
2017
Vol. 3, Issue 1
10.3390/horticulturae3010026

- 17-199-J Marketing with more: An in-depth look at relationship marketing with new media in the green industry
S. Stebner, C.R. Boyer, L.M. Baker, H.H. Peterson
Journal of Agricultural Communications
2017
Vol. 101, Issue. 2
doi.org/10.4148/1051-0834.1001
- 17-250-J Online opportunities: A qualitative content analysis benchmark study of online retail plant sales
L.M. Baker, C.R. Boyer, H.H. Peterson, A.E.H. King
HortTechnology
2018
Vol. 28, Issue 4
doi.org/10.21273/HORTTECH03901-17

Diagnostic Medicine/Pathobiology

- 15-292-J A survey of dry-processed-corn particle size and fecal starch in midwestern United States feedlots
E.F. Schwandt, C.D. Reinhardt, D.U. Thomson, S.J. Bartle
Professional Animal Scientist
October 2015
Vol. 31, Issue 5
doi.org/10.15232/pas.2015-01392
- 15-299-J Evaluating chemical mitigation of Porcine Epidemic Diarrhea virus (PEDV) in swine feed and ingredients
R.A. Cochrane, S.S. Dritz, J.C. Woodworth, J. Zhang, A.R. Huss, C.R. Stark, R.A. Hesse, M.D. Tokach, J.F. Bai, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1110
- 15-446-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
R. Cochrane, S. Dritz, J. Woodworth, A. Huss, R.W. Thompson, A.C. Fahrenholz, J.P. Cano, C. Jones
Journal of Swine Health and Production
December 2015

- 16-006-J High-fiber ingredient withdrawal strategy before slaughter in finishing pigs
M.A.D. Goncalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
2017
Vol. 25, Issue 1, 29-33
- 16-063-J Using network flow modeling to determine pig flow in a commercial production system
K.F. Coble, J.S. Bergtold, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, J.C. Woodworth
Journal of Computers and Electronics in Agriculture
December 2018
Vol. 155
doi.org/10.1016/j.compag.2018.10.022
- 16-183-J Liver abscesses in cattle: A review of incidence in Holsteins and of bacteriology and vaccine approaches to control in feedlot cattle
R.G. Amachawadi, T.G. Nagaraja
Journal of Animal Science
April 2016
Vol. 94, Issue 4
doi.org/10.2527/jas.2015-0261
- 16-193-J Bacterial flora of liver abscesses in crossbred beef cattle and Holstein steers fed finishing diets with or without Tylosin
R.G. Amachawadi, T.J. Purvis, B.V. Lubbers, J.W. Holman, C.L. Maxwell, T.G. Nagaraja
Journal of Animal Science
August 2017
Vol. 95, Issue 8
doi.org/10.2527/jas.2016.1198
- 16-256-J Effects of limonene on ruminal *Fusobacterium necrophorum* concentrations, fermentation, and lysine degradation in cattle
S.S. Samii, N. Wallace, T.G. Nagaraja, M.A. Engstrom, M.D. Miesner, C.K. Armendariz, E.C. Titgemeyer
Journal of Animal Science
2016
Vol. 94, Issue 8
doi.org/10.2527/jas.2016-0455

- 16-339-J Spiral plating method to quantify the six major non-O157 *Escherichia coli* serogroups in cattle feces
P.B. Shridhar, L.W. Noll, C.A. Cull, X. Shi, N. Cernicchiaro, D.G. Renter, J. Bai, T.G. Nagaraja
Journal of Food Protection
May 2017
Vol. 80, No. 5
doi.org/10.4315/0362-028X.JFP-16-360
- 17-017-J The impact of finasteride and dutasteride treatments on proliferation, apoptosis, androgen receptor, 5 α -reductase 1 and 5 α -reductase 2 in TRAMP mouse prostates
A.B. Opoku-Acheampong, J.N. Henningson, B.L. Lindshield
Heliyon
July 2017
Vol. 3, Issue 7
doi.org/10.1016/j.heliyon.2017.e00360
- 17-085-J Protein aggregation in *Ehrlichia chaffeensis* during infection of mammalian cells
D. Kuczyńska-Wisnik, C. Cheng, R.R. Ganta, M. Zolkiewski
FEMS Microbiology Letters
March 2017
Vol. 364, Issue 6
doi.org/10.1093/femsle/fnx059
- 17-186-J A randomized trial to assess the effect of fluoroquinolone metaphylaxis on the fecal prevalence and quinolone susceptibilities of *Salmonella* and *Campylobacter* in feedlot cattle
A.B. Smith, D.G. Renter, N. Cernicchiaro, J.S. Nickell, D.J. Keil, X. Shi, T.G. Nagaraja
Foodborne Pathogens and Disease
October 2017
Vol. 14, Issue 10
doi.org/10.1089/fpd.2017.2282
- 17-242-J Comparative genomics reveals differences in mobile virulence genes of *Escherichia coli* O103 pathotypes of bovine fecal origin
L.W. Noll, J.N. Worley, X. Yang, P.B. Shridhar, J.B. Ludwig, X. Shi, J. Bai, D. Caragea, J. Meng, T.G. Nagaraja
PLOS ONE
February 2018
13(2)
doi.org/10.1371/journal.pone.0191362
- 17-244-J Draft genome sequences of enterohemorrhagic *Escherichia coli* O103:H2 strains isolated from feces of feedlot cattle
L.W. Noll, J.N. Worley, X. Yang, P.B. Shridhar, J. Bai, J. Meng, D. Caragea, T.G. Nagaraja
Genome Announcements
May 2017
5 (19)
doi.org/10.1128/genomeA.00094-17
- 17-259-J Shiga toxin subtypes of Non-O157 *Escherichia coli* serogroups isolated from cattle
P.B. Shridhar, C. Siepker, L.W. Noll, X. Shi, T.G. Nagaraja, J. Bai
Frontiers in Cellular and Infection Microbiology
April 2017
doi.org/10.3389/fcimb.2017.00121
- 17-264-J Draft genome sequences of enteropathogenic *Escherichia coli* O103 strains isolated from feces of feedlot cattle
L.W. Noll, J.N. Worley, X. Yang, P.B. Shridhar, J. Bai, J. Meng, D. Caragea, T.G. Nagaraja
Genome Announcements
May 2017
5 (21)
doi.org/10.1128/genomeA.00387-17
- 17-276-J DNA microarray-based assessment of virulence potential of Shiga toxin gene-carrying *Escherichia coli* O104:H7 isolated from feedlot cattle feces
P.B. Shridhar, I.R. Patel, J. Gangiredla, L.W. Noll, X. Shi, J. Bai, C.A. Elkins, N. Strockbine, T.G. Nagaraja
PLOS ONE
April 2018
13(4)
doi.org/10.1371/journal.pone.0196490
- 17-282-J The transcriptome of the lone star tick, *Amblyomma americanum*, reveals molecular changes in response to infection with the pathogen, *Ehrlichia chaffeensis*
D. Kim, D.C. Jaworski, C. Cheng, A.D.S. Nair, R.R. Ganta, N. Herndon, S. Brown, Y. Park
Journal of Asia-Pacific Entomology
September 2018
Vol. 21, Issue 3
doi.org/10.1016/j.aspen.2018.05.009

- 17-306-J Draft genome sequences of *Escherichia coli* O104 strains of bovine and human origin
P.B. Shridhar, I.R. Patel, J. Gangiredla, M.K. Mammel, L. Noll, X. Shi, J. Bai, C.A. Elkins, N. Strockbine, T.G. Nagaraja
Genome Announcements
August 2017
5 (33)
doi.org/10.1128/genomeA.00630-17
- 17-341-J Effects of increasing space allowance by removing a pig or gate adjustment on finishing pig growth performance
C.B. Carpenter, C.J. Holder, F. Wu, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz
Journal of Animal Science
July 2018
Vol. 96, Issue 7
doi.org/10.1093/jas/sky167
- 17-343-J Effects of increasing copper from either copper sulfate or combinations of copper sulfate and a copper-amino acid complex on finishing pig growth performance and carcass characteristics
C.B. Carpenter, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz, F. Wu, Z.J. Rambo
Translational Animal Science
January 2019
Vol. 3, Issue 4
doi.org/10.1093/tas/txz112
- 17-344-J Effects of increasing copper from tri-basic copper chloride or a copper-methionine chelate on growth performance of nursery pigs
C.B. Carpenter, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz, F. Wu, J.L. Usry
Translational Animal Science
January 2019
Vol. 3, Issue 1
doi.org/10.1093/tas/txy091
- 17-347-J Determining the available phosphorus release of Natuphos E 5,000 G phytase for nursery pigs
K.M. Gourley, J.C. Woodworth, J.M. DeRouchey, S.S. Dritz, M.D. Tokach, R.D. Goodband
Journal of Animal Science
March 2018
Vol. 96, Issue 3
doi.org/10.1093/jas/sky006
- 17-348-J Determining the impact of increasing standardized ileal digestible lysine for primiparous and multiparous sows during lactation
K.M. Gourley, G.E. Nichols, J.A. Sonderman, Z.T. Spencer, J.C. Woodworth, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, S.J. Kitt, E.W. Stephenson
Journal of Animal Science
April 2018
Vol. 96
doi.org/10.1093/jas/sky073.308
- 17-366-J Ruminal microbes, microbial products, and systemic inflammation
M. Garcia, B.J. Bradford, T.G. Nagaraja
The Professional Animal Scientist
December 2017
Vol. 33, Issue 6
doi.org/10.15232/pas.2017-01663
- 17-370-J Modeling the effects of standardized ileal digestible valine to lysine ratio on growth performance of nursery pigs
A.B. Clark, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.C. Woodworth, K.J. Touchette, N.M. Bello
Translational Animal Science
December 2017
Vol. 1, Issue 4
doi.org/10.2527/tas2017.0049
- 17-371-J Modeling the effects of standardized ileal digestible isoleucine to lysine ratio on growth performance of nursery pigs
A.B. Clark, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.C. Woodworth, K.J. Touchette, N.M. Bello
Translational Animal Science
December 2017
Vol.1, Issue 4
doi.org/10.2527/tas2017.0048
- 17-379-J Effects of space allocation on finishing pig growth performance and carcass characteristics
L.L. Thomas, R.D. Goodband, J.C. Woodworth, M.D. Tokach, J.M. DeRouchey, S.S. Dritz
Journal of Animal Science
September 2017
Vol. 1, Issue 3
doi.org/10.2527/tas2017.0042

Entomology

- 15-432-J Indigenous aphid predators show high levels of preadaptation to a novel prey, *Melanaphis sacchari* (Hemiptera: Aphididae)
F. Colares, J.P. Michaud, C.L. Bain, J.B. Torres
Journal of Economic Entomology
December 2015
Vol.108, Issue 6
doi: 10.1093/jee/tov235
- 16-336-J Susceptibility of *Trogoderma granarium* Everts and *Trogoderma inclusum* LeConte (Coleoptera: Dermestidae) to residual contact insecticides
M.N. Ghimire, S.W. Myers, F.H. Arthur, T.W. Phillips
Journal of Stored Products Research
May 2017
Vol. 72
doi.org/10.1016/j.jspr.2017.02.006
- 17-005-J Efficacy of controlled atmosphere treatments to manage arthropod pests of dry-cured hams
M.M. Hasan, M.J. Aikins, W. Schilling T.W. Phillips
Insects
September 2016
7(3)
doi.org/10.3390/insects7030044
- 17-014-J Populations of stored product mite *Tyrophagus putrescentiae* differ in their bacterial communities
T. Erban, P.B. Klimov, J. Smrz, T.W. Phillips, M. Nesvorna, J. Kopecky, J. Hubert
Frontiers in Microbiology
July 2016
doi.org/10.3389/fmicb.2016.01046
- 17-024-S 2016 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1128
Kansas Agricultural Experiment Station
- 17-044-J Massive shift in gene expression during transitions between developmental stages of the gall midge, *Mayetiola destructor*
M-S. Chen, S. Liu, H. Wang, X. Cheng, M. El Bouhssini, R.J. Whitworth
PLOS ONE
May 2016
Vol. 11, Issue 5
doi.org/10.1371/journal.pone.0155616
- 17-048-J Molecular biology of insect sodium channels and pyrethroid resistance
K. Dong, Y. Du, F.D. Rinkevich, Y. Nomura, P. Xu, L. Wang, K. Silver, B.S. Zhorov
Insect Biochemistry and Molecular Biology
2014
Vol. 50
DOI: 10.1016/j.ibmb.2014.03.012
- 17-049-J Inhibition of Kv channel expression by NSAIDs depolarizes membrane potential and inhibits cell migration by disrupting calpain signaling
K. Silver, A. Littlejohn, L. Thomas, E. Marsh, J.D. Lillich
Biochemical Pharmacology
December 2015
Vol. 98, Issue 4
doi.org/10.1016/j.bcp.2015.10.017
- 17-050-B Voltage-gated sodium channels as insecticide targets
K.S. Silver, Y. Du, Y. Nomura, E.E. Oliveira, V.L. Salgado, B.S. Zhorov, K. Dong
Advances in Insect Physiology
2014
Vol. 46, p. 389-433. ISSN 0065-2806
DOI: 10.1016/B978-0-12-417010-0.00005-7
- 17-056-J RNA interference of cytochrome P450 CYP6F subfamily genes affects susceptibility to different insecticides in *Locusta migratoria*
Y. Guo, H. Wu, X. Zhang, E. Ma, Y. Guo, K.Y. Zhu, J. Zhang
Pest Management Science
February 2016
Vol. 72, Issue 11
doi.org/10.1002/ps.4248

- 17-057-J Identification and characterization of two CYP9A genes associated with pyrethroid detoxification in *Locusta migratoria*
W. Zhu, R. Yu, H. Wu, X. Zhang, Y. Liu, K.Y. Zhu, J. Zhang, E. Ma
Pesticide Biochemistry and Physiology
September 2016
Vol. 132
doi.org/10.1016/j.pestbp.2016.01.001
- 17-058-J LmCYP4G102: An oenocyte-specific cytochrome P450 gene required for cuticular waterproofing in the migratory locust, *Locusta migratoria*
Z. Yu, X. Zhang, Y. Wang, B. Moussian, K.Y. Zhu, S. Li, E. Ma, J. Zhang
Scientific Reports
2016
Article Number 29980
doi.org/10.1038/srep29980
- 17-059-J Transcriptional response of two metallothionein genes (OcMT1 and OcMT2) and histological changes in *Oxya chinensis* (Orthoptera: Acridoidea) exposed to three trace metals
Y. Liu, H. Wu, Z. Yu, Y. Guo, J. Zhang, K.Y. Zhu, E. Ma
Chemosphere
November 2015
Vol. 139
doi.org/10.1016/j.chemosphere.2015.06.043
- 17-060-J Preface to the special issue: Insecticide toxicology in China
K.Y. Zhu
Pesticide Biochemistry and Physiology
September 2016
Vol. 132
doi.org/10.1016/j.pestbp.2016.07.008
- 17-136-J Feeding by *Melanaphis sacchari* (Hemiptera: Aphididae) facilitates use of sorghum by *Rhopalosiphum padi* (Hemiptera: Aphididae), but reciprocal effects are negative
J.P. Michaud, Y. Zhang, C. Bain
Environmental Entomology
April 2017
Vol. 46, Issue 2
doi.org/10.1093/ee/nvw167
- 17-190-J Comparisons of transcriptional profiles of gut genes between Cry1Ab-resistant and susceptible strains of *Ostrinia nubilalis* revealed genes possibly related to the adaptation of resistant larvae to transgenic Cry1Ab corn
J. Yao, Y.-C. Zhu, N. Lu, L.L. Buschman, K.Y. Zhu
International Journal of Molecular Sciences
2017
Vol. 18, Issue 2
https://dx.doi.org/10.3390%2Fijms18020301
- 17-191-J Delivery of lethal dsRNAs in insect diets by branched amphiphilic peptide capsules
L.A. Avila, R. Chandrasekar, K.E. Wilkinson, J. Balthazor, M. Herman, J. Bechard, S. Brown, Y. Park, S. Dhar, G.R. Reeck, J.M. Tomich
Journal of Controlled Release
March 2018
Vol. 273
doi.org/10.1016/j.jconrel.2018.01.010
- 17-223-J Ammonia and methane emission factors from cattle operations expressed as losses of dietary nutrients or energy
Z. Liu, Y. Liu, J.P. Murphy, R. Maghirang
Agriculture
February 2017
Vol. 7, Issue 3
doi.org/10.3390/agriculture7030016
- 17-261-J Differences in flight activity of *Coleomegilla maculata* and *Hippodamia convergens* (Coleoptera: Coccinellidae) following emergence, mating, and reproduction
A.H. Abdel-Wahab, J.P. Michaud, M.H. Bayoumy, S.S. Awadallah, M. El-Gendy
Environmental Entomology
December 2017
Vol. 46, Issue 6
doi.org/10.1093/ee/nvx136
- 17-262-J Physical factors influencing orientation of *Tyrophagus putrescentiae* (Schränk) (Sarcoptiformes: Acaridae) to food-baited traps
B. Amoah, M.W. Schilling, T.W. Phillips
Journal of Insect Behavior
September 2017
Vol. 30, Issue 5
http://dx.doi.org/10.1007/s10905-017-9639-8

- 17-277-J Incorporating biological control into IPM decision making
K.L. Giles, B.P. McCornack, T.A. Royer, N.C. Elliott
Current Opinion in Insect Science
2017
Vol. 20
doi.org/10.1016/j.cois.2017.03.009
- 17-281-J Geographic variation in phosphine resistance among North American populations of the red flour beetle (Coleoptera: Tenebrionidae)
A.J. Cato, B. Elliott, M.K. Nayak, T.W. Phillips
Journal of Economic Entomology
June 2017
Vol. 110, Issue 3
doi.org/10.1093/jee/tox091
- 17-282-J The transcriptome of the lone star tick, *Amblyomma americanum*, reveals molecular changes in response to infection with the pathogen, *Ehrlichia chaffeensis*
D. Kim, D.C. Jaworski, C. Cheng, A.D.S. Nair, R.R. Ganta, N. Herndon, S. Brown, Y. Park
Journal of Asia-Pacific Entomology
September 2018
Vol. 21, Issue 3
doi.org/10.1016/j.aspen.2018.05.009
- 17-284-J Larval development of *Culicoides sonorensis* (Diptera: Ceratopogonidae) in mud supplemented with manure of various farm animals
D. Erram, L. Zurek
Journal of Medical Entomology
2018
Vol. 55, Issue 1
doi.org/10.1093/jme/tjx197
- 17-298-J Resistance of select winter wheat (*Triticum aestivum*) cultivars to *Rhopalosiphum padi* (Homoptera: Aphididae)
J. Girvin, R.J. Whitworth, L.M. Aguirre Rojas, C.M. Smith
Journal of Economic Entomology
July 2017
Vol. 110, Issue 4
doi.org/10.1093/jee/tox164
- 17-299-J Mite control and sensory evaluations of dry-cured hams with food-grade coatings
Y.L. Campbell, Y. Zhao, X. Zhang, S. Abbar, T.W. Phillips, M.W. Schilling
Meat and Muscle Biology
August 2017
Vol. 1, No. 1
doi.org/10.22175/mmb2017.06.0031
- 17-311-J No nutritional benefits of egg cannibalism for *Coleomegilla maculata* (Coleoptera: Coccinellidae) on a high-quality diet
A. Abdelwahab, J.P. Michaud, M.H. Bayoumy, S.S. Awadalla, M. El-Gendy
Bulletin of Entomological Research
June 2018
Vol. 108, Issue 3
doi.org/10.1017/S0007485317000827
- 17-324-J Efficacy of combining sulfuryl fluoride fumigation with heat to control the ham mite, *Tyrophagus putrescentiae* (Schränk) (Sarcoptiformes: Acaridae)
S. Abbar, Ö. Saglam, M.W. Schilling T.W. Phillips
Journal of Stored Products Research
March 2018
Vol. 76
doi.org/10.1016/j.jspr.2017.11.008
- 17-334-J Hessian fly (Diptera: Cecidomyiidae) attraction to different wavelengths and intensities of light-emitting diodes in the laboratory
R.B. Schmid, D. Snyder, L.W. Cohnstaedt, B.P. McCornack
Economic Entomology
2017
Vol. 46, Issue 4
doi.org/10.1093/ee/nvx099
- 17-336-J Cytochrome P450 genes from the aquatic midge *Chironomus tentans*: Atrazine-induced up-regulation of CtCYP6EX3 enhanced the toxicity of chlorpyrifos
G. Tang, J. Yao, D. Li, Y. He, Y.-C. Zhu, X. Zhang, K.Y. Zhu
Chemosphere
November 2017
Vol. 186
doi.org/10.1016/j.chemosphere.2017.07.137

- 17-385-J Limb ablation and regeneration in *Harmonia axyridis*: Costs for regenerators, but benefits for their progeny
A. Abdelwahab, J.P. Michaud, M.H. Bayoumy, S.S. Awadalla, M. El-Gendy
Entomologia Experimentalis et Applicata
February 2018
Vol. 166, Issue 2
doi.org/10.1111/eea.12649
- 17-390-J Use of nets treated with food-grade coatings on dry-cured ham to control *Tyrophagus putrescentiae* infestations without impacting sensory properties
Y.L. Campbell, X. Zhang, J.B. Williams, T. Kim, J. Goddard, S. Abbar, T.W. Phillips, M.W. Schilling
Journal of Stored Products Research
March 2018
Vol. 76
doi.org/10.1016/j.jspr.2017.12.003
- 17-395-J Phosphine resistance in North American field populations of the lesser grain borer, *Rhyzopertha dominica* (Coleoptera: Bostrichidae)
E. Afful, B. Elliot, M.K. Nayak, and T.W. Phillips
Journal of Economic Entomology
February 2018
Vol. 111, Issue 1
doi.org/10.1093/jee/tox284
- 17-396-J Predators and alate immigration influence the season-long dynamics of soybean aphid (Hemiptera: Aphididae)
J.A. Bannerman, B.P. McCornack, D.W. Ragsdale, N. Koper, A.C. Costamagna
Biological Control
2018
Vol. 117
doi.org/10.1016/j.biocontrol.2017.10.011

Food, Nutrition, Dietetics and Health

- 17-017-J The impact of finasteride and dutasteride treatments on proliferation, apoptosis, androgen receptor, 5 α -reductase 1 and 5 α -reductase 2 in TRAMP mouse prostates
A.B. Opoku-Acheampong, J.N. Henningson, B.L. Lindshield
Heliyon
July 2017
Vol. 3, Issue 7
doi.org/10.1016/j.heliyon.2017.e00360
- 17-019-J Bioavailable iron and vitamin A in newly formulated, extruded corn, soybean, sorghum, and cowpea fortified-blended foods in the in vitro digestion/caco-2 cell model
K. Penugonda, N.M. Fiorentino, S. Alavi, B.L. Lindshield
Current Developments in Nutrition
July 2018
Vol. 2, Issue 7
doi.org/10.1093/cdn/nzy021
- 17-073-J The pigments of sorghum pericarp are associated with the contents of carotenoids and pro-vitamin A
Y. Shen, X. Su, D. Rhodes, T. Herald, J. Xu, X. Chen, J.S. Smith, W. Wang
International Journal of Food and Nutritional Science
2017
Vol. 6, Issue 3
- 17-074-J Phenotypic diversity of anthocyanins in sorghum accessions with various pericarp pigments
X. Su, D. Rhodes, J. Xu, X. Chen, H. Davis, D. Wang, T.J. Herald, W. Wang
Journal of Nutrition & Food Sciences
2017
Vol. 7, Issue 4
DOI:10.4172/2155-9600.1000610
- 17-130-J Salivary proline-rich protein may reduce tannin-iron chelation: A systematic narrative review
N.M. Delimont, S.K. Rosenkranz, M.D. Haub, B.L. Lindshield
Nutrition & Metabolism
July 2017
doi.org/10.1186/s12986-017-0197-z

- 17-131-J The impact of tannin consumption on iron bioavailability and status: A narrative review
N.M. Delimont, M.D. Haub, B.L. Lindshield
Current Developments in Nutrition
February 2017
Volume 1, Issue 2
doi.org/10.3945/cdn.116.000042
- 17-376-J Sensory profile and quality of chemically leavened gluten-free sorghum bread containing different starches and hydrocolloids
P.A. Akin, R.A. Miller, T. Jaffe, K. Koppel, L. Ehmke
Journal of the Science of Food and Agriculture
July 2019
Vol. 99, Issue 9
doi.org/10.1002/jsfa.9673

Grain Science and Industry

- 15-032-J Degradation of phytic acid and soy protein in soy meal via co-fermentation of *Aspergillus oryzae* and *Aspergillus ficuum*
L. Chen, P.V. Vadlani, R.L. Madl, W. Gibbons
Journal of the American Oil Chemists's Society
January 2016
Vol. 93, Issue 1
doi.org/10.1007/s11746-015-2754-9
- 15-170-J Determination of volatile compounds in heat-treated straight-grade flours from normal and waxy wheats
J. Xu, W. Zhang, K. Adhikari, Y.C. Shi
Journal of Cereal Science
May 2017
Vol. 75
doi.org/10.1016/j.jcs.2017.03.018
- 15-299-J Evaluating chemical mitigation of Porcine Epidemic Diarrhea virus (PEDV) in swine feed and ingredients
R.A. Cochrane, S.S. Dritz, J.C. Woodworth, J. Zhang, A.R. Huss, C.R. Stark, R.A. Hesse, M.D. Tokach, J.F. Bai, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1110
- 15-312-J Network from dihydrocoumarin via solvent-free metal-mediated pathway: A potential structure for substantial toughness improvement of epoxidized plant oil materials
C. Li, J. Sung, D. Wang, X.S. Sun
ACS Sustainable Chemistry & Engineering
December 2015
Vol. 4
doi.org/10.1021/acssuschemeng.5b01283
- 15-347-J Evaluation of brown midrib sorghum mutants for 2,3-butanediol production
Y.N. Guragain, R.P. Srinivasa, P.V.V. Prasad, P.V. Vadlani
Appl Biochem Biotechnol.
April 2017
Vol. 183, Issue 3
DOI: 10.1007/s12010-017-2486-4
- 15-423-J Salicylic acid-mediated synthetic elicitors of systemic acquired resistance administered to wheat plants at jointing stage induced phenolics in mature grains
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
October 2017
Vol. 57
DOI: 10.2135/cropsci2015.11.0697
- 15-445-J Finely grinding cereal grains in pelleted diets offers little improvement in nursery pig growth performance
G.E. Bokelman, J.A. De Jong, A.D. Yoder, J.R. Kalivoda, C.R. Stark, J.C. Woodworth, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1122
- 15-446-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
R. Cochrane, S. Dritz, J. Woodworth, A. Huss, R.W. Thompson, A.C. Fahrenholz, J.P. Cano, C. Jones
Journal of Swine Health and Production
December 2015

- 15-447-J Evaluating chemical mitigation of *Salmonella Typhimurium* ATCC 14028 in animal feed ingredients
R.A. Cochrane, A.R. Huss, G.C. Aldrich, C.R. Stark, C.K. Jones
Journal of Food Production
April 2016
Vol. 79, Issue 4
10.4315/0362-028X.JFP-15-320
- 15-448-J Salmonella surrogate mitigation in poultry feed using a dry acid powder
R.A. Cochrane, C.R. Stark, A.R. Huss, C.G. Aldrich, C.J. Knueven, J. Pitts, C.K. Jones
Journal of Animal Science
March 2015
- 15-449-J Evaluation of extreme thermal processing methods to improve nutrient utilization of low energy diets for finishing pigs
G.E. Bokelman, K.F. Coble, C.R. Stark, J.C. Woodworth, M.D. Tokach, C.K. Jones
Journal of Animal Science
November 2015
10.4148/2378-5977.1121
- 15-456-J Single cell oil production by *Lipomyces starkeyi*: Biphasic fed-batch fermentation strategy providing glucose for growth and xylose for oil production
K.V. Probst, P.V. Vadlani
Biochemical Engineering Journal
May 2017
Vol. 121, Pg. 49-58
doi.org/10.1016/j.bej.2017.01.015
- 15-461-J Appropriate biorefining strategies for multiple feedstocks: Critical evaluation for pretreatment methods, and hydrolysis with high solids loading
Y.N. Guragain, P.V. Vadlani, D. Wang
Renewable Energy
October 2016
Vol. 96, Part A, Pg. 832-842
doi.org/10.1016/j.renene.2016.04.099
- 16-125-J Innovative zein extraction from distillers' grains with solubles: Process development and product characterization studies
J. Gupta, P.V. Vadlani, C.-S. Lau, R.L. Madl, Y.C. Shi
Environmental Progress and Sustainable Energy
July/August 2019
Vol. 38, Issue 4
doi.org/10.1002/ep.13093
- 16-140-J Influence of temperature and application rate on efficacy of a diatomaceous earth formulation against *Tribolium castaneum* adults
J.L. Frederick, B. Subramanyam, H. Dogan
Journal of Stored Products Research
October 2016
Vol. 69, p. 86-90
http://dx.doi.org/10.1016/j.jspr.2016.06.009
- 16-145-J Soy-oil-based waterborne polyurethane improved wet strength of soy protein adhesives on wood
H. Liu, C. Li, X.S. Sun
International Journal of Adhesions and Adhesives
March 2017
Vol. 73
doi.org/10.1016/j.ijadhadh.2016.09.006
- 16-154-J Tandem MS characterization of endosperm lipid profile in isogenic waxy wheat versus wildtype parent cultivars
L.R. Brewer, D.L. Wetzel
Journal of the American Oil Chemists' Society
June 2016
Vol. 93, Issue 6
doi.org/10.1007/s11746-016-2823-8
- 16-181-J Metabolic flux analysis of carbon balance in *Lactobacilli* strains
Y. Zhang, F. Zeng, K. Hohn, P.V. Vadlani
Biotechnology Progress
December 2016
Vol. 32, Issue 6
doi.org/10.1002/btpr.2361
- 16-185-J Optimization of soybean oil based pressure-sensitive adhesives using a full factorial design
Y. Li, S.-H. Chou, W. Qian, S.I. Chang, X.S. Sun
Journal of the American Oil Chemists Society
March 2017
Vol. 94, No. 5
http://dx.doi.org/10.1007/s11746-017-2966-2
- 16-202-J Evaluation of standards and interfering compounds in the determination of phenolics by Folin-Ciocalteu assay method for effective bioprocessing of biomass
K.P. Bastola, Y.N. Guragain, V. Bhadriraju, P.V. Vadlani
American Journal of Analytical Chemistry
June 2017
Vol. 8, No. 6
doi.org/10.4236/ajac.2017.86032

- 16-210-J Carbodiimide stabilizes the ultrasound-pre-treated camelina protein structure with improved water resistance
X. Zhu, D. Wang, X.S. Sun
Industrial Crops and Products
March 2017
Vol. 97
doi.org/10.1016/j.indcrop.2016.11.001
- 16-231-J Anticancer drug Camptothecin test in 3D hydrogel networks with HeLa cells
J. Liang, X.S. Sun, Z. Yang, S. Cao
Scientific Reports
February 2017
Article Number 37626
doi.org/10.1038/srep37626
- 16-254-J Structure of pyrodextrin in relation to its retrogradation properties
X. Han, J. Kang, Y. Bai, M. Xue, Y.C. Shi
Food Chemistry
March 2018
Vol. 242, p. 169-173
doi.org/10.1016/j.foodchem.2017.09.015
- 16-265-J Mesoporous hybrids of reduced graphene oxide and vanadium pentoxide for enhanced performance in lithium-ion batteries and electrochemical capacitors
G.P. Pandey, T. Liu, E. Brown, Y. Yang, Y. Li, X.S. Sun, Y. Fang, J. Li
American Chemical Society Applied Materials and Interfaces
March 2016
doi.org/10.1021/acsami.6b02372
- 16-275-J Evaluating penetration ability of *Plodia interpunctella* (Hübner) (Lepidoptera: Pyralidae) larvae into multilayer polypropylene packages
D. Scheff, B. Sehgal, B. Subramanyam
Insects
April 2018
Vol. 9, Issue 42
doi.org/10.3390/insects9020042
- 16-285-J High-solids bio-conversion of maize starch to ethanol
Z. Li, D. Wang, Y.-C. Shi
Starch
January 2019
Vol. 71, Issue 1-2
doi.org/10.1002/star.201800142
- 16-288-J Thermostable gel polymer electrolyte based on succinonitrile and ionic liquid for high-performance solid-state supercapacitors
G.P. Pandey, T. Liu, C. Hancock, Y. Li, X.S. Sun, J. Li
Journal of Power Sources
October 2016
Vol. 328
doi.org/10.1016/j.jpowsour.2016.08.032
- 16-290-J Substantially reinforcing plant oil-based materials via cycloaliphatic epoxy with double bond-bridged structure
C. Li, T. Li, X. Cai, X.S. Sun
Polymer
December 2016
Vol. 107, 19-28
http://dx.doi.org/10.1016/j.polymer.2016.10.014
- 16-299-J Effect of methoprene treated polymer packaging on fecundity, egg hatchability, and egg-to-adult emergence of *Tribolium castaneum* and *Trogoderma variabile*
D.S. Scheff, B. Subramanyam, F.H. Arthur
Journal of Stored Products Research
October 2016
Vol. 69, p. 227-234
http://dx.doi.org/10.1016/j.jspr.2016.07.003
- 16-343-J 2,3-Butanediol production using *Klebsiella oxytoca* ATCC 8724: Evaluation of biomass derived sugars and fed-batch fermentation process
Y.N. Guragain, P.V. Vadlani
Process Biochemistry
July 2017
Vol. 58, P. 25-34
doi.org/10.1016/j.procbio.2017.05.001
- 16-350-J Progress in quantitative chemical imaging of refined natural products and synthetic mixtures
D.L. Wetzell, M.D. Boatwright
NIR News
August 2016
Vol. 27, Issue 5
doi.org/10.1255/nirn.1623

- 17-010-B Analysis for extraneous matter
H. Dogan, B. Subramanyam
Nielsen S. (eds) Food Analysis. Food Science
Text Series. Springer, Cham
January 2017
978-3-319-45774-1
doi.org/10.1007/978-3-319-45776-5_34
- 17-019-J Bioavailable iron and vitamin A in newly formulated, extruded corn, soybean, sorghum, and cowpea fortified-blended foods in the in vitro digestion/caco-2 cell model
K. Penugonda, N.M. Fiorentino, S. Alavi, and B.L. Lindshield
Current Developments in Nutrition
July 2018
Vol. 2, Issue 7
doi.org/10.1093/cdn/nzy021
- 17-035-J Adhesion properties of soy protein adhesives enhanced by biomass lignin
S. Pradyawong, G. Qi, N. Li, X.S. Sun, D. Wang
International Journal of Adhesion and Adhesives
2017
Vol. 75
doi.org/10.1016/j.ijadhadh.2017.02.017
- 17-082-J Efficacy of ozone against *Rhizopertha dominica* adults in wheat
B. Subramanyam, E. Xinyi, S. Savoldelli, B. Sehgal
Journal of Stored Products Research
January 2017
Vol. 70
http://dx.doi.org/10.1016/j.jspr.2016.12.002
- 17-083-J Insecticidal potential of a synthetic zeolite against the cowpea weevil, *Callosobruchus maculatus* (Fabricius) (Coleoptera: Bruchidae)
J. Lü, B. Sehgal, B. Subramanyam
Journal of Stored Products Research
May 2017
Vol. 72
10.1016/j.jspr.2017.03.001
- 17-084-J Development and validation of a model for predicting survival of young larvae of *Tribolium castaneum* exposed to elevated temperatures during heat treatment of grain-processing facilities
A.C. Bingham, B. Subramanyam, R. Mahroof, S. Alavi
Journal of Stored Products Research
May 2017
Vol. 72
http://dx.doi.org/10.1016/j.jspr.2017.04.008
- 17-107-J Innovative methods to generate clean sugar stream from biomass feedstocks for efficient fermentation
J-E. Lee, Y.N. Guragain, K.P. Bastola, P.V. Vadlani
Bioprocess and Biosystems Engineering
April 2017
Vol. 40, Issue 4, 633-641
doi.org/10.1007/s00449-016-1727-1
- 17-116-J Epoxidized and acrylated epoxidized camelina oils for ultraviolet-curable wood coatings
Y. Li, D. Wang, X.S. Sun
Journal of the American Oil Chemists' Society
October 2018
Vol. 95, Issue 10
doi.org/10.1002/aocs.12123
- 17-153-J Fatty acid chain combined with cycloaliphatic rings via Amberlyst-15: A promising structure for high biocontent epoxy design
C. Li, X. Cai, J. Sung, H. Wang, S.H. Bossmann, X.S. Sun
Journal of Polymer Science Part A: Polymer Chemistry
March 2017
Vol. 55, Issue 5
doi.org/10.1002/pola.28452
- 17-155-J Appropriate lignocellulosic biomass processing strategies for efficient 2,3-butanediol production from biomass-derived sugars using *Bacillus licheniformis* DSM 8785
Y.N. Guragain, D. Chitta, M. Karanjikar, P.V. Vadlani
Food and Bioproducts Processing
July 2017
Vol. 104
https://dx.doi.org/10.1016/j.fbp.2017.05.010

- 17-185-J In vivo digestibility of cross-linked phosphorylated (RS4) wheat starch in ileostomy subjects
M. Iacovou, J. Lim, C.C. Maningat, A. Bogotayrev, E. Ly, S. Dhital, M.J. Gidley, Y.C. Shi, J. Muir, P.A. Seib
Bioactive Carbohydrates and Dietary Fibre
October 2017
Vol. 12
<http://dx.doi.org/10.1016/j.bcdf.2017.08.002>
- 17-192-J Bio-based wood adhesive from camelina protein (a biodiesel residue) and depolymerized lignin with improved water resistance
X. Zhu, D. Wang, N. Li, X.S. Sun
ACS Omega
November 2017
Vol. 2
doi.org/10.1021/acsomega.7b01093
- 17-222-J Responses of phosphine susceptible and resistant strains of five stored-product insect species to chlorine dioxide
E. Xinyi, S. Bhadriraju, L. Beibei
Journal of Stored Products Research
May 2017
Vol. 72
doi.org/10.1016/j.jspr.2017.03.002
- 17-269-J Camelina protein adhesives enhanced by polyelectrolyte interaction for plywood applications
H. Liu, S. Bean, X.S. Sun
Instructional Crops and Products
November 2018
Vol. 124
doi.org/10.1016/j.indcrop.2018.07.068
- 17-278-J Hybrid network via instantaneous photoradiation: High efficient design of 100% bio-based thermosets with remoldable and recyclable capabilities after UV curing
C. Li, J. Liu, Y. Chen, J. Sung, X. Cai, X.S. Sun
Advanced Materials
March 2018
Vol. 336
doi.org/10.1016/j.cej.2017.11.055
- 17-291-J Susceptibility of *Tribolium castaneum* and *Trogoderma variabile* larvae and adults exposed to methoprene-treated woven packaging material
D.S. Scheff, B. Subramanyam, F.H. Arthur
Journal of Stored Products Research
September 2017
Vol. 73
<http://dx.doi.org/10.1016/j.jspr.2017.08.002>
- 17-302-J Equilibrium moisture content of Kabuli, chickpea, black sesame, and white sesame seeds
P.R. Armstrong, E.B. Maghirang, B. Subramanyam, S.G. McNeill
Applied Engineering in Agriculture
2017
Vol. 33
- 17-305-J Efficacy of ozone gas against phosphine susceptible and resistant strains of four stored-product insect species
E. Xinyi, S. Bhadriraju, B. Li
Insects
2017
8(2)
[doi.10.3390/insects8020042](https://doi.org/10.3390/insects8020042)
- 17-309-J Registration of 'Tatanka' hard red winter wheat
G. Zhang, T.J. Martin, A.K. Fritz, R. Miller, G. Bai, M.S. Chen, R.L. Bowden
Journal of Plant Registrations: Cultivar
January 2017
Vol. 12, Issue 1
DOI: 10.3198/jpr2017.04.0019crc
- 17-315-J Starch-hydrocolloid interaction in chemically leavened gluten-free sorghum bread
P.A. Akin, R.A. Miller
Cereal Chemistry
2017
Vol. 94, Issue 5
doi.org/10.1094/CCHEM-05-17-0094-R
- 17-376-J Sensory profile and quality of chemically leavened gluten-free sorghum bread containing different starches and hydrocolloids
P.A. Akin, R.A. Miller, T. Jaffe, K. Koppel, L. Ehmke
Journal of the Science of Food and Agriculture
July 2019
Vol. 99, Issue 9
doi.org/10.1002/jsfa.9673

Horticulture and Natural Resources

- 16-266-J Promoting red elm (*Ulmus rubra* Muhl.) germination with gibberellic acid
C.J. Barden, C. R. Boyer, B.M. Morales, L. Fisher
Journal of Forestry
November 2016
Vol. 115, Issue 5
doi.org/10.5849/jof.16-045
- 16-338-J Trends in the use of new-media marketing in U.S. ornamental horticulture industries
H.H. Peterson, C.R. Boyer, L.M. Baker, B.H. Yao
Horticulturae
2018
Vol. 4, Issue 4
doi.org/10.3390/horticulturae4040032
- 16-367-J Mid-season high-resolution satellite imagery for forecasting site-specific corn yield
N.R. Peralta, Y. Assefa, J. Du, C.J. Barden, I.A. Ciampitti
Remote Sensing
2016
Vol. 8, Issue 10
doi.org/10.3390/rs8100848
- 17-034-T Become a certified horticulture professional as part of your professional brand
C. Miller
Greenhouse Product News: Management
May 2016
- 17-086-B Light quality effects on intumescence (oedema) on plant leaves
K. A. Williams, C.T. Miller, J.K. Craver
LED Lighting for Urban Agriculture Springer, Singapore
November 2016
978-981-10-1846-6
doi.org/10.1007/978-981-10-1848-0_20
- 17-090-T Teaching millennials to carry on our outdoor traditions
A.A. Ahlers
North American Gamebird Association News: Focus on Education
2016
- 17-091-T Mentoring the next generation of outdoor entrepreneurs
A.A. Ahlers
North American Gamebird Association News: Focus on Education
2016
- 17-095-J Economic influences on trapper participation and per capita harvest of muskrats
A.A. Ahlers, E.J. Heske, C.A. Miller
Wildlife Society Bulletin
September 2016
Vol. 30, Issue 3
doi.org/10.1002/wsb.696
- 17-096-J Physical and biochemical changes in broccoli that may assist in decision-making related to international marine transport in air or CA/MA
E.D. Pliakoni, A.I. Deltsidis, D.J. Huber, S.A. Sargent, J.K. Brecht
Acta Horticulturae
2015
Vol. 1071
doi.org/10.17660/ActaHortic.2015.1071.86
- 17-097-J Tomato flavor changes at chilling and non-chilling temperatures as influenced by controlled atmospheres
A.I. Deltsidis, E.D. Pliakoni, E.A. Baldwin, J. Bai, A. Plotto, J.K. Brecht
Acta Horticulturae
2015
Vol. 1071
doi.org/10.17660/ActaHortic.2015.1071.93
- 17-098-J Student use and perceptions of virtual plant walk maps as a study tool in plant identification courses
M.S. Wilson, C.T. Miller, N.R. Bloedow
HortTechnology
2017
Vol. 27, Issue 1
doi.org/10.21273/HORTTECH03567-16
- 17-099-A Effects of planting depth and mulching on perennialization on several small geophyte species
C.T. Miller, J.J. Griffin, W.B. Miller
Acta Horticulturae
2017
Vol. 1171
doi.org/10.17660/ActaHortic.2017.1171.52

- 17-100-A Effects of pre-plant bulb soaks of flurprimidol and paclobutrazol and pre-plant bulb water soaks with basal root cutting on growth of three amaryllis (*Hippeastrum*) cultivars
C.T. Miller, L. Fleuridor, W.B. Miller
Acta Horticulturae
2017
Vol. 1171
doi.org/10.17660/ActaHortic.2017.1171.51
- 17-138-J Factors influencing the adoption of riparian forest buffers in the Tuttle Creek Reservoir watershed of Kansas, USA
T.K. Rhodes, F.X. Aguilar, S. Jose, M. Gold
Agroforestry Systems
November 2016
Vol. 92, Issue 3
doi.org/10.1007/s10457-016-0045-6
- 17-172-J Buffalograss divot recovery as affected by nitrogen source and rate
E.J. Alderman, J.A. Hoyle, S.J. Keeley, J.D. Fry
Crop, Forage and Turfgrass Management - Applied Turfgrass Science
February 2017
Vol. 3, No. 1
doi.org/10.2134/cftm2016.06.0044
- 17-198-J Relationship marketing: A qualitative case study of new-media marketing use by Kansas garden centers
S. Stebner, C.R. Beyer, L.M. Baker, H.H. Peterson
Horticulturae
2017
Vol. 3, Issue 1
10.3390/horticulturae3010026
- 17-199-J Marketing with more: An in-depth look at relationship marketing with new media in the green industry
S. Stebner, C.R. Boyer, L.M. Baker, H.H. Peterson
Journal of Agricultural Communications
2017
Vol. 101, Issue 2
doi.org/10.4148/1051-0834.1001
- 17-218-J Effect of colorant and glyphosate application timing on annual bluegrass and tall fescue control in dormant 'Meyer' zoysiagrass
J.A. Hoyle, J.A. Reeves
International Turfgrass Society Research Journal - Weed Science
2017
Vol. 13, Issue 1
doi.org/10.2134/itsrj2016.09.0828
- 17-250-J Online opportunities: A qualitative content analysis benchmark study of online retail plant sales
L.M. Baker, C.R. Boyer, H.H. Peterson, A. E.H. King
HortTechnology
2018
Vol. 28, Issue 4
doi.org/10.21273/HORTTECH03901-17
- 17-283-J Single and sequential colorant applicant effects on buffalograss and zoysiagrass color during dormancy
R.C. Braun, J.D. Fry, M.M. Kennelly, D.J. Bremer, J.J. Griffin
HortTechnology
2017
Vol. 27, Issue 3
doi.org/10.21273/HORTTECH03690-17
- 17-292-J Porosity and drag determination of a single-row vegetative barrier (*Maclura pomifera*)
H.B. Gonzales, M.E. Casada, L.J. Hagen, J. Tatarko, R.G. Maghirang, C.J. Barden
Transactions of the American Society of Agricultural and Biological Engineers
2018
Vol. 61, Issue 2
doi.org/10.13031/trans.12338
- 17-312-J Evaluation of the brown bear viewing experience at Katmai National Park and preserve: implications for management
J.C. Skibins, R.L. Sharp
Human Dimensions of Wildlife
June 2017
Vol. 22, Issue 5
doi.org/10.1080/10871209.2017.1336584

Northwest Research-Extension Center

- 17-144-J Compensation of corn yield components to late-season stand reductions in the Central and Northern Great Plains
L.A. Haag, J.D. Holman, J. Ransom, T. Roberts, S. Maxwell, M. Zarnstorff, L. Murray
Agronomy Journal
2017
Vol. 109, No. 2
doi.org/10.2134/agronj2015.0523
- 17-258-J Longevity and performance of a subsurface drip irrigation system
F.R. Lamm, D.H. Rogers
Transactions of the ASABE
Vol. 60, Issue 3
doi.org/10.13031/trans.12237
- 17-365-J Trends in plant available soil water on producer fields of western Kansas
F.R. Lamm, D.H. Rogers, A.J. Schlegel, X. Lin, R.M. Aiken, N.L. Klocke, L.R. Stone, L.K. Shaw
Applied Engineering in Agriculture
2017
Vol. 33, Issue 6, 859-868
doi.org/10.13031/aea.12452

Plant Pathology

- 15-046-J Stalk rot fungi affect leaf greenness (SPAD) of grain sorghum in a genotype- and growth-stage-specific manner
Y.M.A.Y. Bandara, D.K. Weerasooriya, T.T. Tesso, C.R. Little
American Phytopathological Society- Plant Disease
August 2016
Vol. 100, Issue 10
10.1094/PDIS-02-16-0171-RE
- 15-332-J Cropping system diversification for food production in Mindanao rubber plantations: A rice cultivar mixture and rice intercropped with mungbean
R.F. Hondradea, E. Hondradea, L. Zheng, F.A. Elazegui, L. Murray, J.L.E. Duque, C.C. Mundt, C.M. Vera Cruz, K.A. Garrett
PeerJ Plant Biology
February 2017
10.7717/peerj.2975

- 16-066-B Annual wheat newsletter
W.J. Raupp, Jr.
September 2015
Volume 61
- 16-147-J Wheat Fhb1 encodes a chimeric lectin with agglutinin domains and a pore-forming toxin-like domain conferring resistance to Fusarium head blight
N. Rawat, M.O. Pumphrey, S. Liu, X. Zhang, V.K. Tiwari, K. Ando, H.N. Trick, W.W. Bockus, E. Akhunov, J.A. Anderson, B.S. Gill
Nature Genetics
2016
Vol. 48, 1576-1580
doi.org/10.1038/ng.3706
- 16-186-J Homoeologous recombination in the presence of Ph1 gene in wheat
D.-H. Koo, W. Liu, B. Friebe, B.S. Gill
Chromosoma
August 2017
Vol. 126, Issue 4
doi.org/10.1007/s00412-016-0622-5
- 16-242-B Genome mapping
V.K. Tiwari, J.D. Faris, B. Friebe, B.S. Gill
Encyclopedia of Food Grains, 2nd Edition
2016
ISBN 978-0-12-394786-4. p. 365-375
doi.org/10.1016/B978-0-12-394437-5.09987-3
- 16-328-J Stalk rot diseases impact sweet sorghum biofuel traits
Y.M.A.Y. Bandara, D.K. Weerasooriya, T.T. Tesso, C.R. Little
BioEnergy Research
March 2017
Vol. 10, Issue 1
doi.org/10.1007/s12155-016-9775-6
- 16-360-B The biology and control of sorghum diseases. Chapter in book: Sorghum: State of the art and future perspectives
C.R. Little, R. Perumal
Agron. Monogr. 58. ASA and CSSA, Madison, WI
2018
ISBN: 978-0-89118-628-1
doi:10.2134/ agronmonogr58.2015.0073

- 16-363-B Genetic changes in sorghum. Chapter in book: Sorghum: State of the art and future perspectives R. Perumal, P. Rajendrakumar, F. Maulana, T. Tesso, C.R. Little
Agron. Monogr. 58. ASA and CSSA, Madison, WI
2017
ISBN: 978-0-89118-628-1
DOI: 10.2134/agronmonogr58.2014.0053
- 17-011-J Comparative genomics reveals high biological diversity and specific adaptations in the industrially and medically important fungal genus *Aspergillus*
R.P. de Vries, R. Riley, A. Wiebenga, G. Aguilar-Osorio, S. Amillis, C. Akemi Uchima, G. Anderluh, M. Asadollahi, M. Askin, K. Barry, et. al.
Genome Biology
February 2017
Vol. 18, Issue 1
doi.org/10.1186/s13059-017-1151-0
- 17-015-J Physical mapping of amplified copies of the 5-enolpyruvylshikimate-3-phosphate synthase gene in glyphosate-resistant *Amaranthus tuberculatus*
A. Dillon, V.K. Varanasi, T.V. Danilova, D-H. Koo, S. Nakka, D.E. Peterson, P.J. Tranel, B. Friebe, B.S. Gill, M. Jugulam
Plant Physiology
February 2017
Vol. 173, Issue 2
doi.org/10.1104/pp.16.01427
- 17-024-S 2016 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1128
Kansas Agricultural Experiment Station
- 17-026-J An isolate of wheat streak mosaic virus from foxtail overcomes Wsm2 resistance in wheat
T.T. Kumssa, J.S. Rupp, M.C. Fellers, J.P. Fellers, G. Zhang
Plant Pathology
May 2019
Vol. 68, Issue 4
doi.org/10.1111/ppa.12989
- 17-040-B Chromosome engineering techniques for targeted introgression of rust resistance from wild wheat relatives
P. Zhang, I.S. Dundas, S.S. Xu, B. Friebe, R.A. McIntosh, W.J. Raupp
Wheat Rust Diseases. Methods in Molecular Biology
August 2017
Vol. 1659
doi.org/10.1007/978-1-4939-7249-4_14
- 17-043-J Homologs of CsLOB1 in citrus function as disease susceptibility genes in citrus canker
J. Zhang, J. Huguet, Y. Hu, J. Jones, N. Wang, S. Liu, F.F. White
Molecular Plant Pathology
August 2017
Vol. 18, Issue 6
doi.org/10.1111/mpp.12441
- 17-044-J Massive shift in gene expression during transitions between developmental stages of the gall midge, *Mayetiola destructor*
M-S. Chen, S. Liu, H. Wang, X. Cheng, M. El Bouhssini, R.J. Whitworth
PLOS ONE
May 2016
Vol. 11, Issue 5
doi.org/10.1371/journal.pone.0155616
- 17-047-J A standardized inoculation protocol to test wheat cultivars for reaction to head blast caused by *Magnaporthe oryzae* (*Triticum* pathotype)
C.C. Cruz, W.W. Bockus, J.P. Stack, B. Valent, J.N. Maciel, G.L. Peterson
Plant Health Progress
July 2018
Vol. 17, No. 3
http://dx.doi.org/10.1094/PHP-BR-16-0041
- 17-063-J Markers linked to wheat stem rust resistance gene Sr11 effective to *Puccinia graminis* f. sp. *tritici* race TKTTF
J. Nirmala, S. Chao, P. Olivera, E.M. Babiker, B. Abeyo, Z. Tadesse, M. Imtiaz, L. Talbert, N.K. Blake, E. Akhunov, M.O. Pumphrey, Y. Jin, M.N. Rouse
Phytopathology
November 2016
Vol. 106, No. 11
doi.org/10.1094/PHYTO-04-16-0165-R

- 17-064-J Development and genetic characterization of an advanced Backcross-Nested Association Mapping (AB-NAM) population of wild-cultivated barley
L.M. Nice, B.J. Steffenson, G.L. Brown-Guedira, E.D. Akhunov, C. Liu, T.J. Kono, P.L. Morrell, T.K. Blake, R.D. Horsley, K.P. Smith, G.J. Muehlbauer
Genetics
July 2016
Vol. 203, No. 3
10.1534/genetics.116.190736
- 17-065-J Phenotypic plasticity of winter wheat heading date and grain yield across the US Great Plains
S.M. Grogan, J. Anderson, P.S. Baenziger, K. Frels, M.J. Guttieri, S.D. Haley, K. Kim, S. Liu, G.S. McMaster, M. Newell, P.V.V. Prasad, S.D. Reid, K.J. Shroyer, G. Zhang, E. Akhunov, P.F. Byrne
Crop Science
May 2016
Vol. 56, No. 5
doi.org/10.2135/cropsci2015.06.0357
- 17-067-J Optimizing multiplex CRISPR/Cas9-based genome editing for wheat
W. Wang, A. Akhunova, S. Chao, E. Akhunov
BioRxiv
March 2016
doi.org/10.1101/051342
- 17-068-J Examining the transcriptional response in wheat Fhb1 near-isogenic lines to *Fusarium graminearum* infection and deoxynivalenol treatment
A.N. Hofstad, T. Nussbaumer, E. Akhunov, S. Shin, K. G. Kugler, H.C. Kistler, K.F. Mayer, G.J. Muehlbauer
Plant Genome
January 2016
Vol. 9, Issue 1
doi.org/10.3835/plantgenome2015.05.0032
- 17-069-J A whole-genome, radiation hybrid mapping resource of hexaploid wheat
V.K. Tiwari, A. Heesacker, O. Riera-Lizarazu, H. Gunn, S. Wang, Y. Wang, Y.Q. Gu, E. Paux, D.H. Koo, A. Kumar, M.C. Luo, G. Lazo, R. Zemetra, E. Akhunov, B. Friebe, J. Poland, B.S. Gill, S. Kianian, J.M. Leonard
The Plant Journal
March 2016
Vol. 86, Issue 2
doi.org/10.1111/tpj.13153
- 17-070-J Identification of the VERNALIZATION 4 gene reveals the origin of spring growth habit in ancient wheats from South Asia
N. Kippes, J.M. Debernardi, H.A. Vasquez-Grossa, B.A. Akpinar, H. Budak, K. Kato, S. Chao, E. Akhunov, J. Dubcovsky
Proceedings of the National Academy of Sciences
August 2015
Vol. 112, Issue 39
doi.org/10.1073/pnas.1514883112
- 17-072-J Unbiased K-mer analysis reveals changes in copy number of highly repetitive sequences during maize domestication and improvement
S. Liu, J. Zheng, P. Migeon, J. Ren, Y. Hu, C. He, H. Liu, J. Fu, F. F. White, C. Toomajian, G. Wang
Scientific Reports
2017
Vol. 7, Issue 42444
doi.org/10.1038/srep42444
- 17-077-J Homoeologous recombination-based transfer and molecular cytogenetic mapping of powdery mildew-resistant gene Pm57 from *Aegilops searsii* into wheat
W. Liu, D.-H. Koo, Q. Xia, C. Li, F. Bai, Y. Song, B. Friebe, B. Gill
Theoretical and Applied Genetics
April 2017
Vol. 130, Issue 4
doi.org/10.1007/s00122-017-2855-y
- 17-079-J Homoeologous recombination-based transfer and molecular cytogenetic mapping of a wheat streak mosaic virus and Triticum mosaic virus resistance gene Wsm3 from *Thinopyrum intermedium* to wheat
T.V. Danilova, G. Zhang, W. Liu, B. Friebe, B.S. Gill
Theoretical Applied Genetics
March 2017
Vol. 130, Issue 3
doi.org/10.1007/s00122-016-2834-8
- 17-089-B Annual wheat newsletter
W.J. Raupp, Jr.
September 2016
Vol. 62

- 17-101-J Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2014
D. Jardine, E. Adee, G. Sassenrath
Plant Disease Management Reports
March 2015
Citation: Report No. 9:ST001
doi: 10.1094/PDMR09
- 17-102-J Effects of seed protection chemicals on stand and yield of grain sorghum in Kansas, 2015
D. Jardine, E. Adee, A. Esser
Plant Disease Management Reports
March 2016
Citation: Report No. 10:CF039
doi: 10.1094/PDMR10
- 17-103-J Effects of seed protection chemicals on stand and yield of soybeans at Topeka, Kansas, 2011
D. Jardine, E. Adee
Plant Disease Management Reports
March 2012
Citation: Report No. 6:ST008
doi: 10.1094/PDMR06
- 17-104-J Effect of seed protection chemicals on stand and yield of soybeans at Courtland and Ottawa, Kansas, 2011
D. Jardine, R. Nelson, E. Adee
Plant Disease Management Reports
March 2012
Citation: Report No. 6:ST019
doi: 10.1094/PDMR06
- 17-121-J Major structural genomic alterations are associated with hybrid speciation in *Aegilops markgrafii* (Triticeae)
T.V. Danilova, A.R. Akhunova, E.D. Akhunov, B. Friebe, B.S. Gill
The Plant Journal
October 2017
Vol. 92, Issue 2
doi.org/10.1111/tpj.13657
- 17-127-J *Fusarium verticillioides* inoculum potential influences soybean seed quality
R. Pedrozo, C.R. Little
European Journal of Plant Pathology
July 2017
Volume 148, Issue 3
doi.org/10.1007/s10658-016-1127-z
- 17-128-J Host-derived artificial microRNA as an alternative method to improve the soybean resistance to soybean cyst nematode
B. Tian, J. Li, T.R. Oakley, T.C. Todd, H.N. Trick
Genes
2016
Vol. 7, Issue 122
doi.org/10.3390/genes7120122
- 17-129-J A deletion mutation in TaHRC confers Fhb1 resistance to Fusarium head blight in wheat
Z. Su, A. Bernardo, B. Tian, S. Wang, H. Ma, S. Cai, D. Liu, D. Zhang, T. Li, H. Trick, P. St. Amand, J. Yu, Z. Zhang, G. Bai
Nature Genetics
2019
Vol. 51, 1099-1105
doi.org/10.1038/s41588-019-0425-8
- 17-132-J Temporal small RNA expression profiling under drought reveals a potential regulatory role of small nucleolar RNAs in the drought responses of maize
J. Zheng, E. Zeng, Y. Du, C. He, Y. Hu, Z. Jiao, K. Wang, W. Li, M. Ludens, J. Fu, H. Wang, F.F. White, G. Wang, S. Liu
The Plant Genome
February 2019
Vol. 12, Issue 1
doi.org/10.3835/plantgenome2018.08.0058
- 17-140-J Thrips developmental stage-specific transcriptome response to tomato spotted wilt virus during the virus infection cycle in *Frankliniella occidentalis*, the primary vector
D.J. Schneweis, A.E. Whitfield, D. Rotenberg
Virology
January 2017
Vol. 500
doi.org/10.1016/j.virol.2016.10.009
- 17-188-J Enniatins and beauvericin biosynthesis in *Fusarium* species: Production profiles and structural determinant prediction
V.C. Liuzzi, V. Mirabelli, T. Cimmarusti, M. Haidukowski, J.F. Leslie, A.F. Logrieco, R. Caliendo, F. Fanelli, G. Mulè
Toxins
February 2017
Vol. 9, Section 2
doi.org/10.3390/toxins9020045

- 17-196-J Genetic variation for tolerance to terminal heat stress in *Dasypyrum villosum*
J. Fu, R.L. Bowden, S.V.K. Jagadish, B.S. Gill
Crop Science
August 2017
Vol. 57, No. 5, p. 2626-2632
doi:10.2135/cropsci2016.12.0978
- 17-200-B Nematodes of broadleaf trees
T.C. Todd, J.A. Appel
Diseases of Trees in the Great Plains
2016
U.S. Department of Agriculture, Forest Service,
Rocky Mountain Research Station
- 17-201-B Pine wilt
T.C. Todd, M.O. Harrell
Diseases of Trees in the Great Plains
2016
U.S. Department of Agriculture, Forest Service,
Rocky Mountain Research Station
- 17-202-B Root parasitic nematodes in junipers and pines
T.C. Todd, J.A. Appel
Diseases of Trees in the Great Plains
2016
U.S. Department of Agriculture, Forest Service,
Rocky Mountain Research Station
- 17-203-B Diseases caused by nematodes
T.C. Todd, G.L. Windham, D.I. Edwards
Compendium of Corn Diseases
2016
p. 117
ISBN: 978-0-89054-494-5
- 17-211-B Mycosphaerella leaf spot of ash
J. O'Mara, M. Kennelly
Diseases of Trees in the Great Plains
2016
U.S. Department of Agriculture, Forest Service,
Rocky Mountain Research Station
- 17-212-J Demonstration of an integrated pest management program for wheat in Tajikistan
D.A. Landis, N. Saidov, A. Jaliov, M. El Bouhsini, M. Kennelly, C. Bahlai, J. N. Landis, K. Maredia
Journal of Integrated Pest Management
January 2016
Vol. 7, Issue 1
doi.org/10.1093/jipm/pmw010
- 17-219-B Fire blight of apple, pear, and other ornamental rosaceous shrubs and trees
M.M. Kennelly, M.L. Gleason
Diseases of Trees in the Great Plains
2016
Chapter 26, p. 94-6
U.S. Department of Agriculture, Forest Service,
Rocky Mountain Research Station
- 17-220-B Taphrina diseases of shade and fruit trees
M.L. Gleason, H.M. Nelson, M.M. Kennelly
Diseases of Trees in the Great Plains
Chapter 7, Pages 35-37
U.S. Department of Agriculture, Forest Service,
Rocky Mountain Research Station
- 17-221-B Ecologically based Integrated Pest Management programs for food security crops in Central Asia
K. Maredia, G. Bird, D. Landis, F. Zalom, J. Landis, M. Kennelly, M. El-Bouhssini, N. Saidov, M. Aitmatov
Environmental Crises in Central Asia: From steppes to seas, from deserts to glaciers
2015
Chapter 13, p. 154-172
doi.org/10.4324/9781315824840
- 17-274-J Analysis of Extreme Phenotype Bulk Copy Number Variation (XP-CNV) identified the association of *rp1* with resistance to Goss's wilt of maize
Y. Hu, J. Ren, Z. Peng, A.A. Umana, H. Le, T. Danilova, J. Fu, H. Wang, A. Robertson, S.H. Hulbert, F.F. White, S. Liu
Frontiers in Plant Science
February 2018
Vol. 9, Issue 110
doi.org/10.3389/fpls.2018.00110
- 17-283-J Single and sequential colorant applicant effects on buffalograss and zoysiagrass color during dormancy
R.C. Braun, J.D. Fry, M.M. Kennelly, D.J. Bremer, J.J. Griffin
HortTechnology
2017
Vol. 27, Issue 3
doi.org/10.21273/HORTTECH03690-17

- 17-300-B Book chapter: Sorghum breeding for biotic stress tolerance
R. Perumal, C.W. Magill, L.K. Prom, G.C. Peterson, E.M. Bashir, T.T. Tesso, D.D. Serba, C. Little
Achieving Sustainable Cultivation in Sorghum: Genetics, Breeding, and Production Techniques (Rooney, W.L., ed.)
2018
Vol. 1
ISBN: 9781786761200
- 17-316-J Gene duplication and aneuploidy trigger rapid evolution of herbicide resistance in common waterhemp
D-H. Koo, M. Jugulum, K. Putta, I. Cuvaca, D.E. Peterson, R.S. Currie, B. Friebe, B.S. Gill
Plant Physiology
March 2018
doi.org/10.1104/pp.17.01668
- 17-331-J Genome-wide identification of soybean microRNA responsive to soybean cyst nematodes infection by deep sequencing
B. Tian, S. Wang, T.C. Todd, C.D. Johnson, G. Tang, H.N. Trick
BMC Genomics
August 2017
18, 572
doi.org/10.1186/s12864-017-3963-4
- 17-338-J Transcriptomic response of the insect vector, *Peregrinus maidis*, to maize mosaic rhabdovirus and identification of conserved responses to propagative viruses in hopper vectors.
K.M. Martin, K. Barandoc-Alviar, D.J. Schne-
weis, C.L. Stewart, D. Rotenberg, A.E. Whitfield
Virology
September 2017
Vol. 509
doi.org/10.1016/j.virol.2017.05.019
- 17-362-J A risk assessment framework for seed degeneration: informing an integrated seed health strategy for vegetatively-propagated crops
S. Thomas-Sharma, J. Andrade-Piedra, M. Carvajal Yepes, J.F. Hernandez Nopsa, M.J. Jeger, R.A.C. Jones, P. Kromann, J.P. Legg, J. Yuen, G.A. Forbes, K.A. Garrett
Analytical and Theoretical Plant Pathology
July 2017
doi.org/10.1094/PHYTO-09-16-0340-R

- 17-372-J Impacts of fungal stalk rot pathogens on physicochemical properties of sorghum grain
Y.M.A.Y. Bandara, T.T. Tesso, S.R. Bean, F.E. Dowell, C.R. Little
Plant Disease
2017
Vol. 101, No. 12
doi.org/10.1094/PDIS-02-17-0238-RE
- 17-377-J Comparative transcriptome and lipidome analyses reveal molecular chilling responses in chilling-tolerant sorghums
S.R. Marla, S. Shiva, R. Welti, S. Liu, J.J. Burke, G.P. Morris
The Plant Genome
2018
Vol. 10, No. 3
doi:10.3835/plantgenome2017.03.0025

Southeast Research and Extension Center

- 16-344-J Winter wheat yield gaps and patterns in China
S. Sun, X. Yang, X. Lin, G.F. Sassenrath, K. Li
Agronomy Journal
January 2018
Vol. 110, Issue 1
doi: 10.2134/agronj2017.07.0417
- 17-008-J Multi-site evaluation of apex for water quality: II regional parameterization
N.O. Nelson, C. Baffaut, J.A. Lory, A. Senaviratne, A. Bhandari, R. Udawatta, D.W. Sweeney, M.J. Helmers, M.W. Van Liew, A.P. Mallarino, C.S. Wortmann
Journal of Environmental Quality
November 2017
Vol. 46, Issue 4
DOI: 10.2134/jeq2016.07.0254
- 17-051-J Strategic timing of distillers grains supplementation for growing cattle grazing smooth brome-grass pastures
A.K. Watson, S.K. Moore, T.J. Klopfenstein, L.W. Lomas, J.L. Moyer, J.C. Macdonald.
Professional Animal Scientist
2015
Vol. 31, Issue 5
doi.org/10.15232/pas.2015-01398

- 17-088-J Does 20 years of tillage and N fertilization influence claypan soil properties?
D.W. Sweeney
Agricultural & Environmental Letters
September 2017
doi:10.2134/acl2017.08.0025
- 17-101-J Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2014
D. Jardine, E. Adee, G. Sassenrath
Plant Disease Management Reports
March 2015
Citation: Report No. 9:ST001
doi: 10.1094/PDMR09
- 17-109-J Nitrate, total ammonia, and total suspended sediments modeling for the Mobile River Watershed
V.J. Alarcon, G.F. Sassenrath
International Journal of Agricultural and Environmental Information Systems
2017
Vol. 8, Issue 2
doi: 10.4018/IJAEIS
- 17-133-J Site-specific erodibility in claypan soils: Dependence on subsoil characteristics
S.E. Tucker-Kulesza, G.F. Sassenrath, T. Tran, W. Koehn, L. Erickson
Applied Engineering in Agriculture
2017
Vol. 35, Issue 5
doi.org/10.13031/aea.12120
- 17-141-J Calibration of the APEX model to simulate management practice effects on runoff, sediment, and phosphorus loss
A.B. Bhandari, N.O. Nelson, D.W. Sweeney, C. Baffaut, J.A. Lory, G.M.M.M.A. Senaviratne, G.M. Pierzynski, K.A. Janssen, P.L. Barnes
Journal of Environmental Quality
November 2016
Vol. 46, Issue 6
DOI: 10.2134/jeq2016.07.0272
- 17-142-J Multi-site evaluation of APEX for water quality: I. Best professional judgement parameterization
C. Baffaut, N.O. Nelson, J.A. Lory, G.M.M.M.A. Senaviratne, A.B. Bhandari, R.P. Udawatta, D.W. Sweeney, M.J. Helmers, M.W. Van Liew, A.P. Mallarino, C.S. Wortmann
Journal of Environmental Quality
April 2017
Vol. 46, Issue 6
DOI: 10.2134/jeq2016.06.0226
- 17-154-J Twenty years of grain sorghum and soybean response to tillage and N fertilization of a claypan soil
D.W. Sweeney
Crop, Forage & Turfgrass Management
January 2017
doi:10.2134/cftm2016.10.0070
- 17-318-J Nitrogen management for seed production from endophyte-free tall fescue grown on claypan soil
D.W. Sweeney, J.L. Moyer
Crop, Forage and Turfgrass Management
January 2017
doi:10.2134/cftm2017.04.0027
- 17-320-S 2017 Southeast Agricultural Research Center Research Report
L. Lomas and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 3, Issue 2
<https://newprairiepress.org/kaesrr/vol3/iss2/>
- 17-326-J Climate-smart management can further improve winter wheat yield in China
S. Sun, X. Yang, X. Lin, G. Sassenrath, K. Li
Agricultural Systems
2018
Vol. 162
doi.org/10.1016/j.agry.2018.01.010
- 17-360-J Vertical changes of soil microbial properties in claypan soils
C.-J. Hsiao, G.F. Sassenrath, L.H. Zeglin, G.M. Hettiarachchi, C.W. Rice
Soil Biology and Biochemistry
June 2018
Vol. 121
doi.org/10.1016/j.soilbio.2018.03.012

Southwest Research-Extension Center

- 16-161-J Evaluating optimum limited irrigation management strategies for corn production in the Ogallala Aquifer Region
A. Araya, I. Kisekka, P. V. Vara Prasad, P. H. Gowda
Journal of Irrigation and Drainage Engineering
October 2017
Vol. 134, Issue 10
doi.org/10.1061/(ASCE)
IR.1943-4774.0001228
- 16-192-J Evaluating deficit irrigation management strategies for grain sorghum using AquaCrop
A. Araya, I. Kisekka, J. Holman
Journal of Irrigation Science
November 2016
Vol. 34, Issue 6
doi.org/10.1007/s00271-016-0515-7
- 16-304-J Evaluation of water-limited cropping systems in a semi-arid climate using DSSAT-CSM
A. Araya, I. Kisekka, P.H. Gowda, P.V. Vara Prasad
Agricultural Systems
January 2017
Vol. 150, p. 86-98
doi.org/10.1016/j.agry.2016.10.007
- 16-309-J Assessing wheat yield, biomass, and water productivity responses to growth stage based irrigation water allocation
A. Araya, I. Kisekka, P.V.V. Prasad, J. Holman, A.J. Foster, R. Lollato
Transactions of the ASABE
2017
Vol. 60, Issue 1, 107-121
doi:10.13031/trans.11883
- 17-009-J Nitrogen fertilizer application effects on switchgrass herbage mass, nutritive value and nutrient removal
A.K. Obour, K. Harmon, J.D. Holman
Crop Science
June 2017
Vol. 57, No. 3
doi:10.2135/cropsci2016.07.0582
- 17-022-S 2016 Southwest Research-Extension Center field day report
B. Gillen and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 7
https://newprairiepress.org/kaesrr/vol2/iss7/
- 17-106-B Irrigation of grain sorghum
D.H. Rogers, A.J. Schlegel, J.D. Holman, J.P. Aguilar, I. Kisekka
Sorghum: State of the art and future perspectives
July 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0072
- 17-144-J Compensation of corn yield components to late-season stand reductions in the Central and Northern Great Plains
L.A. Haag, J.D. Holman, J. Ransom, T. Roberts, S. Maxwell, M. Zarnstorff, L. Murray
Agronomy Journal
2017
Vol. 109, No. 2
doi.org/10.2134/agronj2015.0523
- 17-156-J Changes in soil surface chemistry after fifty years of tillage and nitrogen fertilization
A.K. Obour, M.M. Maysoon, J.D. Holman, P.W. Stahlman
Geoderma
December 2017
Vol. 308
doi.org/10.1016/j.geoderma.2017.08.020
- 17-169-J Revisiting precision mobile drip irrigation under limited water
I. Kisekka, T. Oker, G. Nguyen, J. Aguilar, D. Rogers
Irrigation Science
Nov 2017
Vol. 35, Issue 6
doi.org/10.1007/s00271-017-0555-7
- 17-181-J Optimizing preplant irrigation for maize under limited water in the High Plains
I. Kisekka, A. Schlegel, L. Ma, P.H. Gowda, P.V.V. Prasad
Agricultural Water Management
June 2017
Vol. 187
doi.org/10.1016/j.agwat.2017.03.023

- 17-271-J Evaluating the impact of future climate change on irrigated maize production in Kansas
A. Araya, I. Kisekka, X. Lin, P.V.V. Prasad, P.H. Gowda, C.W. Rice, A. Andales
Climate Risk Management
2017
Vol. 17
doi.org/10.1016/j.crm.2017.08.001
- 17-316-J Gene duplication and aneuploidy trigger rapid evolution of herbicide resistance in common waterhemp
D-H. Koo, M. Jugulum, K. Putta, I. Cuvaca, D.E. Peterson, R.S. Currie, B. Friebe, B.S. Gill
Plant Physiology
March 2018
doi.org/10.1104/pp.17.01668
- 17-333-J Effect of irrigation on physicochemical properties and bioethanol yield of drought tolerant and conventional corn
K. Zhang, B. Peng, I. Kisekka, M. Zhang, D. Rogers, D. Wang
Irrigation Science
2018
Vol. 36, Issue 2
DOI: 10.1007/s00271-017-0563-7
- 17-351-J Evaluating effects of deficit irrigation strategies on grain sorghum attributes and biofuel production
B. Pang, K. Zhang, I. Kisekka, S. Bean, M. Zhang, D. Wang
Journal of Cereal Science
2018
Vol. 79
doi.org/10.1016/j.jcs.2017.09.002
- 17-353-J Can cover or forage crops replace fallow in the semiarid central Great Plains?
J.D. Holman, K. Arnet, J.A. Dille, I. Kisekka, S. Maxwell, A. Obour, T. Roberts, K.L. Roozeboom, A. Schlegel
Crop Science
2018
Vol. 58, No. 2
doi:10.2135/cropsci2017.05.0324

- 17-365-J Trends in plant available soil water on producer fields of western Kansas
F.R. Lamm, D.H. Rogers, A.J. Schlegel, X. Lin, R.M. Aiken, N.L. Klocke, L.R. Stone, L.K. Shaw
Applied Engineering in Agriculture
2017
Vol. 33, Issue 6, 859-868
doi.org/10.13031/aea.12452

Statistics

- 16-209-J Increasing fish taxonomic and functional richness affects ecosystem properties of small headwater prairie streams
E. Martin, K. Gido, N. Bello, W. Dodds, A. Veach
Freshwater Biology
April 2016
Vol. 61, 887-898
doi.org/10.1111/fwb.12752
- 16-258-J Effects of yeast combined with chromium propionate on growth performance and carcass quality of finishing steers
C.L. Van Bibber-Krueger, J.E. Axman, J.M. Gonzalez, C.I. Vahl, J.S. Drouillard
Journal of Animal Science
July 2016
Vol. 94, Issue 7
doi.org/10.2527/jas.2016-0454
- 16-367-J Mid-season high-resolution satellite imagery for forecasting site-specific corn yield
N.R. Peralta, Y. Assefa, J. Du, C.J. Barden, I.A. Ciampitti
Remote Sensing
2016
Vol. 8, Issue 10
doi.org/10.3390/rs8100848
- 17-016-J Effects of feeding nucleotides in diets containing corn germ meal or dried corn distillers grains and solubles on the performance and health of receiving and growing calves
M.L. Schilling, S.P. Montgomery, E.C. Titgemeyer, A.E. Wertz-Lutz, C.I. Vahl, A.T. Schilling, W.R. Hollenbeck, D.A. Blasi
The Professional Animal Scientist
August 2017
Vol. 33, Issue 4
doi.org/10.15232/pas.2016-01567

- 17-044-J Massive shift in gene expression during transitions between developmental stages of the gall midge, *Mayetiola destructor*
M-S. Chen, S. Liu, H. Wang, X. Cheng, M. El Bouhssini, R.J. Whitworth
PLOS ONE
May 2016
Vol. 11, Issue 5
doi.org/10.1371/journal.pone.0155616
- 17-098-J Student use and perceptions of virtual plant walk maps as a study tool in plant identification courses
M.S. Wilson, C.T. Miller, N.R. Bloedow
HortTechnology
2017
Vol. 27, Issue 1
doi.org/10.21273/HORTTECH03567-16
- 17-132-J Temporal small RNA expression profiling under drought reveals a potential regulatory role of small nucleolar RNAs in the drought responses of maize
J. Zheng, E. Zeng, Y. Du, C. He, Y. Hu, Z. Jiao, K. Wang, W. Li, M. Ludens, J. Fu, H. Wang, F.F. White, G. Wang, S. Liu
The Plant Genome
February 2019
Vol. 12, Issue 1
doi.org/10.3835/plantgenome2018.08.0058
- 17-134-J Estimating parametric phenotypes that determine anthesis date in *Zea mays*: Challenges in combining ecophysiological models with genetics
A. Lamsal, S.M. Welch, J.W. White, K.R. Thorp, N.M. Bello
PLOS ONE
April 2018
Vol. 13, Issue 4
doi.org/10.1371/journal.pone.0195841
- 17-144-J Compensation of corn yield components to late-season stand reductions in the Central and Northern Great Plains
L.A. Haag, J.D. Holman, J. Ransom, T. Roberts, S. Maxwell, M. Zarnstorff, L. Murray
Agronomy Journal
2017
Vol. 109, No. 2
doi.org/10.2134/agronj2015.0523
- 17-274-J Analysis of Extreme Phenotype Bulk Copy Number Variation (XP-CNV) identified the association of *rp1* with resistance to Goss's wilt of maize
Y. Hu, J. Ren, Z. Peng, A.A. Umana, H. Le, T. Danilova, J. Fu, H. Wang, A. Robertson, S.H. Hulbert, F.F. White, S. Liu
Frontiers in Plant Science
February 2018
Vol. 9, Issue 110
doi.org/10.3389/fpls.2018.00110
- 17-370-J Modeling the effects of standardized ileal digestible valine to lysine ratio on growth performance of nursery pigs
A.B. Clark, M.D. Tokach, J.M. DeRouchey, S.S. Dritz, R.D. Goodband, J.C. Woodworth, K.J. Touchette, N.M. Bello
Translational Animal Science
December 2017
Vol. 1, Issue 4
doi.org/10.2527/tas2017.0049
- 17-371-J Modeling the effects of standardized ileal digestible isoleucine to lysine ratio on growth performance of nursery pigs
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