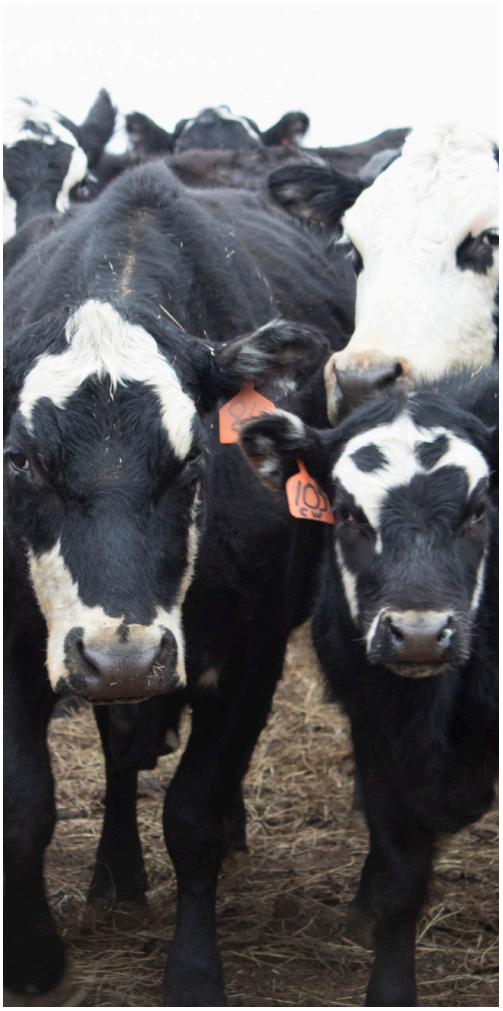

Director's Report of Research in Kansas 2016

July 1, 2015–June 30, 2016

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, 2016. 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 2016 Director's Report of Research in Kansas. The report documents our current 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 2016 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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PDF Search Tips

To find publications by a particular author, type the surname in the "find" search box in the Acrobat toolbar in this document. Use "Find Next" until all relevant publications are found.

To minimize irrelevant items when searching for common names such as Smith, go to the page for the author's unit (or use the unit bookmark) to start your search.

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 state's only 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. Southeast Kansas is approximately 2,000 feet lower in elevation, receives almost 25 inches more precipitation per year, and the temperature averages about six degrees warmer than northwest Kansas. To be successful, producers must have access to crop varieties and management strategies developed for their local climate and soil conditions. Researchers work closely with farmers and ranchers to ensure that projects directly relate to local needs.

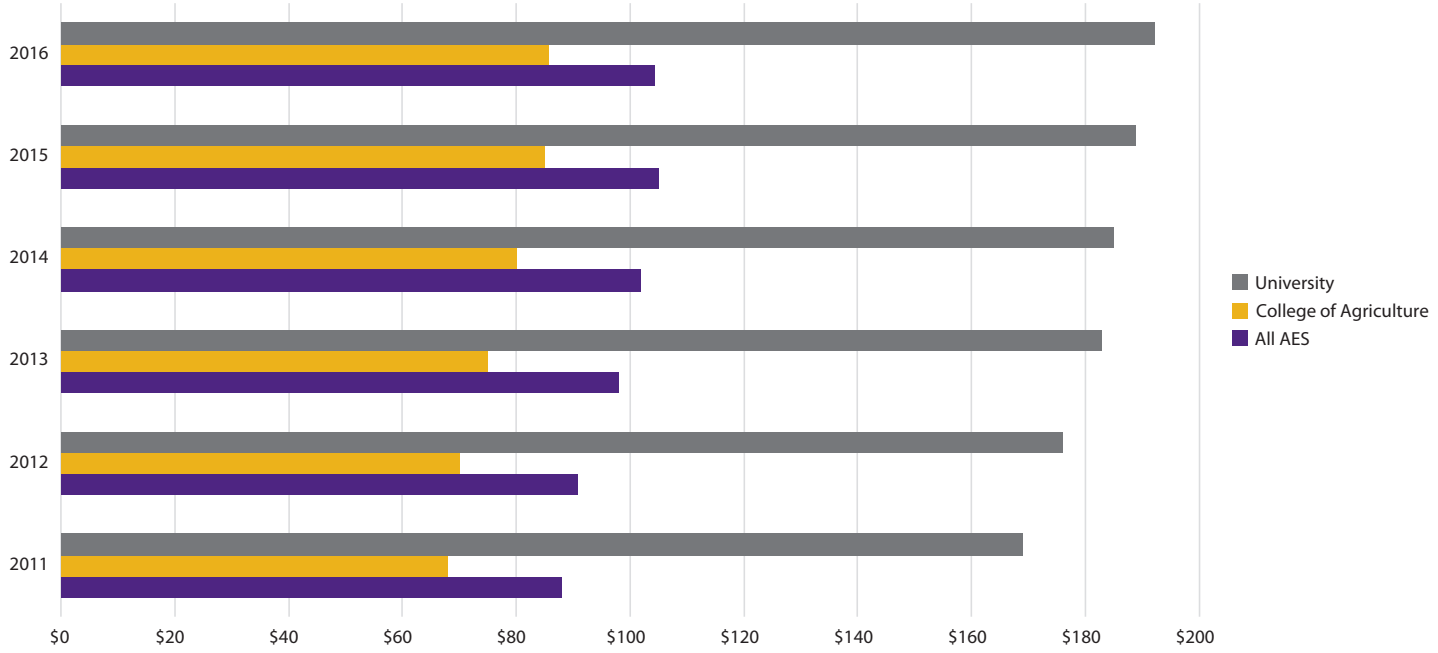
K-State's Agricultural Experiment Station funds research in 20 academic departments across five colleges on two campuses. In addition to long-term research projects on livestock and crop breeding, scientists are looking at new ways to control pests and diseases, emerging technologies to save water and energy, food safety, postharvest storage, weed control, and more.

As 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

Wheat-breeding expertise assures quality year after year

"With a name befitting its place at the summit of Kansas agriculture, the K-State-produced wheat variety called Everest just completed its fourth year as the top variety planted across the state — and the fifth time out of the last six years that a K-State variety has held the top spot. Everest was first released in 2009, and to have so many years of successful use is almost unheard of," according to Gary Pierzynski, head of the agronomy department.

"Wheat varieties don't last that long as their resistance to disease breaks down, and they have to be replaced continually," Pierzynski said. "We wouldn't expect Everest to remain the top variety for an extended period, but we're confident what we've released recently will be tops in a couple years' time."

In fact, Pierzynski says two new varieties of hard red winter wheat released in 2016, Larry and Zenda, have the potential to replace Everest.

K-State partners with the Kansas Wheat Alliance to continually ensure producers have access to seed that gives them the best yields and quality while keeping resources and research capacity within the state.

The long continuum of successful wheat breeding comes from K-State's decades of commitment to research and development. Guarong Zhang, wheat breeder at the K-State Agricultural Research Center in Hays, says each successful variety is released to the public only after years of proving its quality.

"Every year we develop and test about 1,000 new breeding lines," Zhang said. "Before releasing a line, it would have been tested for about 6 to 7 years. A breeding cycle, from start to end, takes 10 to 12 years."

Larry and Zenda are not the only varieties likely to win favor among producers over the next few years. Zhang expects the new hard red variety, Tatanka, to take the place of Joe, which won the 2016 wheat yield competition in western Kansas and set a record for state yield completion. Zenda is a descendant of Everest.

Tatanka and Larry are derived from Jagger, one of the most successful wheat breeds in the state's history. Though it is not seen much in Kansas fields anymore, Jagger marked 22 years of productivity in 2016.

The Kansas Wheat Alliance noted that at one point, Jagger was planted on virtually every acre in south-central Kansas and has gone on to be productive in 12 countries. Meanwhile, Jagger continues to have an impact as new varieties are developed from it.

Larry and Joe were named for longtime members of the K-State breeding team Larry Patton and T. Joe Martin. Everest was developed by Martin and Allan Fritz, a K-State alumnus who leads the wheat breeding team.

With a system of experts that spans the state, the breeding team carries forward the legacy of developing the right combinations of yield, drought tolerance, disease resistance and processing qualities.

10 *years average wheat breeding cycle*

622,530

seeds in Wheat Genetics Resource Center

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
Biology
Sociology, Anthropology, and Social Work
Statistics

College of Engineering

Biological and Agricultural Engineering
Chemical Engineering

College of Human Ecology

Apparel, Textiles, and Interior Design
Hospitality Management
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)
John C. Pair Horticultural Center (Haysville)
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-Extension Center (Garden City)
Southwest Research-Extension Center (Tribune)

Experiment Fields

East Central – Ottawa
Kansas River Valley – Rossville, Topeka
North Central and Irrigation – Belleville, Scandia
Pecan Field – Chetopa
South Central – Hutchinson

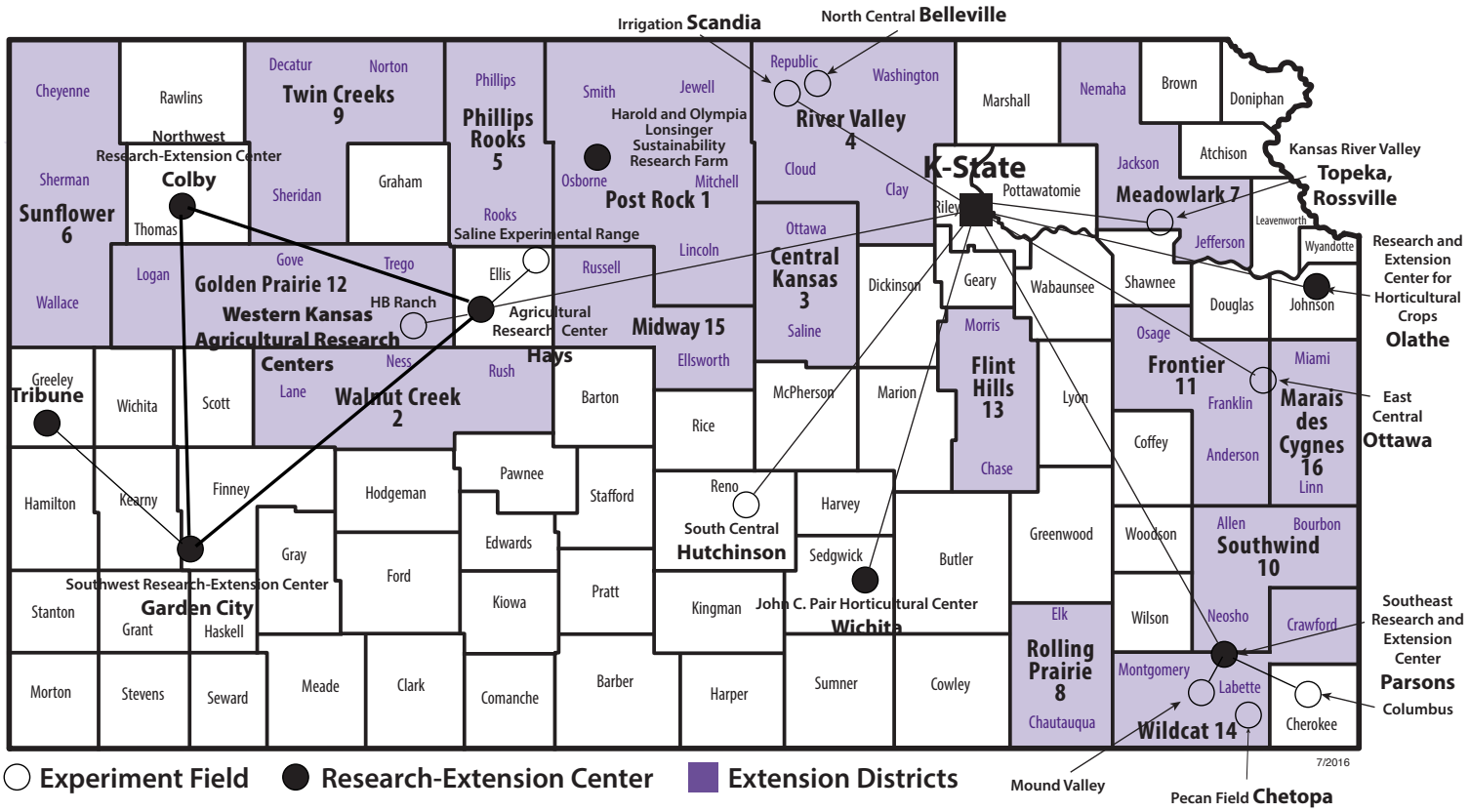
Associated Programs

Bioprocessing and Industrial Value Added Products Innovation Center
Center for Biobased Products by Design
Center for Sorghum Improvement
Center for Sustainable Energy
Food Science Institute
Fungal Genetics Stock Center
Great Plains Diagnostic Network
IGP Institute
K-State Libraries
Kansas Agriculture and Rural Leadership
Kansas Center for Agricultural Resources and the Environment
Kansas Center for Sustainable Agriculture and Alternative Crops
Kansas Water Resources Institute
Konza Prairie Biological Station
Large Animal Research Center
National Science Foundation Industry/University Cooperative Research for Wheat Genetics
Plant Biotechnology Center
Veterinary Diagnostic Laboratory
Weather Data Library
Wheat Genetics Resource Center

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



Station Publications

Reports of Progress

SRP 1119	2015 Kansas Performance Tests with Winter Wheat Varieties
SRP 1120	2015 Kansas Performance Tests with Corn Hybrids
SRP 1121	2015 Kansas Performance Tests with Soybean Varieties
SRP 1122	2015 Kansas Performance Tests with Grain Sorghum Hybrids
SRP 1123	2015 Kansas Performance Tests with Sunflower Hybrids
SRP 1125	2015 National Winter Canola Variety Trial
SRP 1126	2016 Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland
	*Cattlemen's Day 2016
	Roundup 2016, Agricultural Research Center–Hays
	2016 Agricultural Research, Southeast Agricultural Research Center
	K-State Turfgrass Research 2016
	Kansas Field Research 2016
	Kansas Fertilizer Research 2016
	Field Day 2016, Southwest Research-Extension Center
	Swine Day 2016
	Dairy Research 2016

Special Publications

DRR15	Director's Report of Research in Kansas 2015

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

16-016-J Costs of using unmanned aircraft on crop farms
N. Ireland-Otto, I. Ciampitti, M.T. Blanks, R.O. Burton, Jr., T. Balthazor
Journal of the American Society of Farm Managers and Rural Appraisers
2016:130-148

16-028-J Quantifying variety-specific heat resistance and the potential for adaptation to climate change
J.B. Tack, J.A. Barkley, T.W. Rife, J.A. Poland, L.L. Nalley
Global Change Biology
22(August 2016)8:2904-2912

16-069-J Factors affecting methane emissions from rice production in the Lower Mississippi river valley, USA
K.R. Brye, L.L. Nalley, J.B. Tack, B.L. Dixon, A.P. Barkley, C.W. Rogers, A.D. Smartt, R.J. Norman, K.S.V. Jagadish
Geoderma Regional
June 2016
Vol. 7, Issue 2, 223-229
https://doi.org/10.1016/j.geodrs.2016.04.005

16-132-J Red Arrow products smokin' into the future: Facing changing diets and new challenges in the food industry - Teaching Notes
K. Harris
International Food and Agribusiness Management Review
2015
18(2015)4:223-237

16-182-J Implications of non-farm work to vulnerability to food poverty-recent evidence from northern Ghana
Y.A. Zereyesus, W.T. Embaya, F. Tsiboe, and V. Amanor-Boadu
World Development
March 2017
Volume 91, p. 113–124
http://dx.doi.org/10.1016/j.worlddev.2016.10.015

16-211-D Staff, programs, and publications in agricultural economics, Kansas State University, 2015
D. Foster
Department Staff Paper 16-01
2015
SP16-01(2015):1-65

16-225-A Longevity: An important aspect in SDI success
F.R. Lamm, D.H. Rogers, I. Kisekka, J. Aguilar
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
2016
February 23-24, 2016. p. 19-28

16-226-A Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O'Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
February 23-24, 2016. p. 29-37
https://www.ksre.k-state.edu/irrigate/oow/p16/LammUsingCPSDI16.pdf

16-240-D 2015 Fence material and construction cost survey in Kansas
L. Tsoodle and X. Li
Department Staff Paper 16-02
February 2016
SP16-02(Feb 2016):1-4

16-245-J Evaluation of climatic variables as yield-limiting factors for maize yield in Kansas
Q. Ye, X. Lin, E. Adee, D. Min, Y. Assefa, D. O'Brien, I.A. Ciampitti
International Journal of Climatology
March 2017
doi: 10.1002/joc.5015

16-295-J A case for business continuity: Product movement during a highly pathogenic avian influenza outbreak
J.M. Thomson and D.L. Pendell
Choices Magazine
2016
Quarter 2
www.choicesmagazine.org/choices-magazine/theme-articles/economic-consequences-of-highly-pathogenic-avian-influenza/proactive-risk-assessments-to-improve-business-continuity

Agricultural Research Center - Hays

15-084-J Long-term residual effects of feedlot manure application on crop yield and soil surface chemistry
A. Obour, P.W. Stahlman, C.A. Thompson
Journal of Plant Nutrition
January 2017
Vol. 40, Issue 3
https://doi.org/10.1080/01904167.2016.1245323

15-126-J Natural variation and genome-wide association study of antioxidants in a diverse sorghum collection
D. Rhodes, P. Gadgil, R. Perumal, T. Tesso, T.J. Herald
Cereal Chemistry
April 2017
Vol. 94, Issue 2, p. 190-198
https://doi.org/10.1094/CCHEM-03-16-0075-R

16-014-J Comparative life histories of greenbugs and sugarcane aphids (Hemiptera: Aphididae) co-infesting susceptible and resistant sorghums
M.H. Bayoumy, R. Perumal, J.P. Michaud
Journal of Economic Entomology
February 2016
Vol. 109, Issue 1, p. 385-391
https://doi.org/10.1093/jee/tov271

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-025-S 2015 Kansas performance tests with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1123
Kansas Agricultural Experiment Station

16-054-J Impact of high temperature stress on floret fertility and individual grain weight of grain sorghum: sensitive stages and thresholds for temperature and duration
P.V. Vara Prasad, M. Djanaguiraman, R. Perumal, I.A. Ciampitti
Frontiers in Plant Science
2015
6:820
doi: 10.3389/fpls.2015.00820

16-059-J Effect of fence-line or drylot weaning on the health and performance of beef calves during weaning, receiving, and finishing
E.A. Bailey, J.R. Jaeger, J.W. Waggoner, G.W. Preedy, L.A. Pacheco, KC Olson
The Professional Animal Scientist
2016
32 (2016):220–228
http://dx.doi.org/10.15232/pas.2015-01456

16-072-J Effects of number of viral respiratory disease vaccinations during preconditioning on health, performance, and carcass merit of ranch-direct beef calves during receiving and finishing
E.A. Bailey, J.R. Jaeger, T.B. Schmidt, J.W. Waggoner, L.A. Pacheco, D.U. Thomson, KC Olson
The Professional Animal Scientist
2016
32 (2016):271-278
http://dx.doi.org/10.15232/pas.2015-01461

16-093-J Evaluation and association mapping of resistance to tan spot and Stagonospora nodorum blotch in adapted winter wheat germplasm
Z. Liu, I. El-Basyoni, G. Kariyawasam, G. Zhang, A. Fritz, J. Hansen, F. Marais, A. Friskop, S. Chao, E. Akhunov, P.S. Baenzier
Plant Disease
October 2015
99:1333-1341
https://doi.org/10.1094/PDIS-11-14-1131-RE

16-129-J Controlling honey locust (*Gleditsia triacanthos*) with cut stump- and basal bark-applied herbicides for grazed pasture
K. Harmoney and multiple co-authors
Weed Technology
September 2016
Vol. 30, Issue 3, 30:801-806
https://doi.org/10.1614/WT-D-15-00154.1

16-142-J Broadleaf weed control in sunflower (*Helianthus annuus*) with preemergence-applied pyroxasulfone with and without sulfentrazone.
P.W. Stahlman, S.S. Reddy, P.W Geier
Agricultural Sciences
November 2015
Vol. 6, Issue 11
10.4236/as.2015611125

16-166-J 2,4-D past, present, and future: A review of one of the world's most widely used herbicides
P.W. Stahlman, M.A. Peterson, S.A. McMasters, D. Reichers, J. Skelton
Weed Technology
November 2015
Vol. 30, Issue 2
10.1614WT-D-15-00131.1

16-244-J Species composition changes in Conservation Reserve Program (CRP) grassland when managed for biomass feedstock production
K.R. Harmoney, D.K. Lee, R.L. Kallenbach, E.Z. Aberle
BioEnergy Research
December 2016
Vol. 9, Issue 4, p 1180-1188
https://doi.org/10.1007/s12155-016-9764-9

16-287-J Kochia (*Kochia scoparia*) emergence profiles and seed persistence across the Central Great Plains
J.A. Dille, W. Stahlman, J. Du, P.W. Geier, J.D. Riffel, R.S. Currie, R.G. Wilson, G.M. Sbatella, P. Westra, A.R. Kniss, M.J. Moechnig, R.M. Cole
Weed Science
September 2017
Vol. 65:6
doi: 10.1017/wsc.2017.18

16-293-S Roundup 2016
K. Harmoney and multiple co-authors
KAES Research Reports Roundup
2016
Vol. 2, Issue 2
http://newprairiepress.org/kaesrr/vol2/iss2/

16-322-J Camelina seed yield and fatty acid composition as influenced by genotype and environment in the U.S. Great Plains
A.K. Obour, E. Obeng, Y. Mohammed, I.A. Ciampitti, T.P. Durrett, J.A. Moreno, C. Chen
Agronomy Journal
2017
Vol. 109, Issue 3,p. 947–956
doi:10.2134/agronj2016.05.0256

Agronomy

14-028-J Intraspecific variation of a dominant grass and local adaptation in reciprocal garden communities along a US Great Plains' precipitation gradient: Implications for grassland restoration with climate change
L.C. Johnson, J.T. Olsen, H. Tetreault, A. DeLaCruz, J. Bryant, T.J. Morgan, M. Knapp, N.M. Bello, S.G. Baer, B.R. Maricle
Evolutionary Applications
July 2015
8, p. 705-723
doi:10.1111/eva.12281

14-053-A Assessment of long-term monthly and seasonal trends of warm (cold), wet (dry) spells in Kansas, USA
H. Dokoohaki and A. Amandhi
American Geophysical Union fall 2013 meeting
December 2013
http://abstractsearch.agu.org/meetings/2013/FM/GC53A-1023.html

14-067-J Pollen dispersal by catapult: Experiments of Lyman J. Briggs on the flower of Mountain Laurel
J.R. Nimmo, P.M. Hermann, M.B. Kirkham, E.R. Landa
Physics in Perspectives
September 2014
Volume 16, Issue 3
https://doi.org/10.1007/s00016-014-0141-9

14-084-J Foreword
N. Bolan, S. Saggar, M.B. Kirkham, D.B. Culleres
Science of The Total Environment
November 2018
Vol. 465
https://doi.org/10.1016/j.scitotenv.2013.03.062

14-153-J Health and environmental impacts of smoke from vegetation fires: A review
Z.F. Liu, D.J. Murphy, R. Maghirang, D. Devlin
Journal of Environmental Protection
November 2016
Vol. 7, No. 12, p. 1860-1885
http://dx.doi.org/10.4236/jep.2016.712148

14-225-J Effects of seed protection chemicals on stand and yield of grain sorghum at Ottawa, Kansas, 2013
D.J. Jardine and E. Adee
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/PDMR/volume8/abstracts/ST009.asp

14-236-J Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2013
D.J. Jardine, E. Adee, K. Kusel
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume8/abstracts/st007.asp

14-372-J Changes in spatial and temporal trends in wet, dry, warm and cold spell length or duration indices in Kansas, USA
A. Anandhi, S. Hutchinson, J. Harrington, V. Rahmani, M.B. Kirkham, C.W. Rice
International Journal of Climatology
February 2016
36: 4085-4101
https://doi.org/10.1002/joc.4619

15-023-A Pattern scaling for developing change scenarios in water supply studies
A. Anandhi, D. Pierson, A. Frie
American Geophysical Union
December 2014
Fall Meeting 2014, abstract #GC51C-0434
http://abstractsearch.agu.org/meetings/2014/FM/GC51C-0434.html

15-030-J Independent mis-splicing mutations in TaPHS1 causing loss of preharvest sprouting (PHS) resistance during wheat domestication
S. Liu, S.K. Sehgal, M. Lin, J. Li, H.N. Trick, B.S. Gill, G. Bai
New Phytologist
November 2015
208: 928-935
https://doi.org/10.1111/nph.13489

15-036-J Predicting soybean relative maturity and seed yield using canopy reflectance
B.S. Christenson, W.T. Schapaugh Jr., N. An, K.P. Price, V. Prasad, A.K. Fritz
Crop Science
January 2016
Vol. 56, No. 2, p. 625-643
doi:10.2135/cropsci2015.04.0237

15-038-J Modeling the impact of global warming on the sorghum sowing window in distinct climates in Brazil
M.C. Grossi, F. Justino, C.L.T. Andrade, E.A. Santos, R.A. Rodrigues, L.C. Costa
European Journal of Agronomy
November 2013
Vol. 51, p. 53-64
https://doi.org/10.1016/j.eja.2013.07.002

15-067-J Assessing future drought impacts on yields based on historical irrigation reaction to drought for four major crops in Kansas
T. Zhang and X. Lin
Science of the Total Environment
April 2016
550:851-860
doi: 10.1016/j.scitotenv.2016.01.181

15-083-J PM2.5 and PM10 emissions from agricultural soils by wind erosion
H. Li, J. Tatarko, M. Kucharski, Z. Dong
Aeolian Research
December 2015
Vol. 19, Part B, p. 171-182, ISSN 1875-9637
https://doi.org/10.1016/j.aeolia.2015.02.003

15-084-J Long-term residual effects of feedlot manure application on crop yield and soil surface chemistry
A. Obour, P.W. Stahlman, C.A. Thompson
Journal of Plant Nutrition
January 2017
Vol. 40, Issue 3
https://doi.org/10.1080/01904167.2016.1245323

15-119-J Lead speciation and in vitro bioaccessibility of compost-amended urban garden soils
C.P. Attanayake, G.M. Hettiarachchi, Q. Ma, G.M. Pierzynski, M.D. Ransom
Journal of Environmental Quality
September 2017
Vol. 46, No. 6, p. 1215-1224
doi: 10.2134/jeq2017.02.0065

15-126-J Natural variation and genome-wide association study of antioxidants in a diverse sorghum collection
D. Rhodes, P. Gadgil, R. Perumal, T. Tesso, T.J. Herald
Cereal Chemistry
April 2017
Vol. 94, Issue 2, p. 190-198
https://doi.org/10.1094/CCHEM-03-16-0075-R

15-143-J Synchrotron-based X-Ray spectroscopy studies for redox-based remediation of lead, zinc, and cadmium in mine waste materials
R.R. Karna, G.M. Hettiarachchi, M. Newville, C.J. Sun, Q. Ma
Journal of Environmental Quality
October 2016
Vol. 45, No. 6
10.2134/jeq2015.12.0616

15-188-J Genetic diversity and population structure among sorghum (*Sorghum bicolor*, L.) germplasm collections from Western Ethiopia
D.K. Weerasooriya, F.R. Maulana, A.Y. Bandara, A. Tirfessa, A. Ayana, G. Mengistu, K. Noah, T.T. Tesso
African Journal of Biotechnology
June 2016
Vol.15(23), p. 1147-1158
https://doi.org/5897/AJB2015.14604

15-193-J Simplified computational approach for dual-probe heat-pulse method
J.H. Knight and G.J. Kluitenberg
Soil Science Society of America Journal
February 2015
Vol. 79, No. 2, p. 495-498
doi:10.2136/sssaj2004.4470

15-199-J Genotyping-by-sequencing (GBS) identified SNP tightly linked to QTL for pre-harvest sprouting resistance
M. Lin, S. Cai, S. Wang, S. Liu, G. Zhang, G. Bai
Theoretical and Applied Genetics
July 2015
Vol. 128, Issue 7, p. 1385-1395
https://doi.org/10.1007/s0012

15-344-J Cover crops, fertilizer nitrogen rates, and economic return of grain sorghum
G.Y. Mahama, P.V.V. Prasad, K.L. Roozeboom, J.B. Nippert, C.W. Rice
Agronomy Journal
January 2016
Vol. 108, No. 1, p. 1-16
doi:10.2134/agronj15.0135

15-345-J Response of maize to cover crops, fertilizer nitrogen rates, and economic return
G.Y. Mahama, P.V.V. Prasad, K.L. Roozeboom, J.B. Nippert, C.W. Rice
Agronomy Journal
January 2016
Vol. 108, No. 1, p. 17-31
doi:10.2134/agronj15.0136

15-377-J Effect of insect feeding, pathogen infection, and heat stress on antioxidant properties of wheat bran
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
July 2017
Vol. 57, No. 5, p. 2662-2670
doi:10.2135/cropsci2015.06.0363

15-406-J Comparison of corn, grain sorghum, soybean, and sunflower under limited irrigation
A.J. Schlegel, Y. Assefa, D. O'Brien, F.R. Lamm, L.A. Haag, L.R. Stone
Agronomy Journal
January 2016
Vol. 108, No. 2, p. 670-679
doi:10.2134/agronj2015.0332

15-422-J Liquid N and S fertilizer solutions effects on the mass, chemical, and shear strength properties of winter wheat (*Triticum aestivum*) residue
Y. He, D.R. Presley, J. Tatarko
Transactions of the American Society of Agricultural and Biological Engineers
February 2017
60(3): 671-682
doi: 10.13031/trans.11961

15-429-J Wheat leaf lipids during heat stress: II. Lipids experiencing coordinated metabolism are detected by analysis of lipid co-occurrence
S. Narayanan, P.V.V. Prasad, R. Welti
Plant, Cell & Environment
March 2016
Vol. 39, Issue 3
https://doi.org/10.1111/pce.12648

15-436-J A safety vs efficiency trade-off identified in the hydraulic pathway of grass leaves is decoupled from photosynthesis, stomatal conductance and precipitation
T.W. Ocheltree, J.B. Nippert, P.V.V. Prasad
New Phytologist
April 2016
Vol. 210, Issue 1
https://doi.org/10.1111/nph.13781

15-450-J Bird-cherry oat aphid (*Rhopalosiphum padi*) feeding stress induces enhanced levels of phenolics in mature wheat grains
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
January 2017
Vol. 57
10.2135/cropsci2015.08.0476.v

15-457-J Root iron plaque on wetland plants as a dynamic pool of nutrients and contaminants
N. Khan, B. Seshadri, N. Bolan, C.P. Saint, M.B. Kirkham, S. Chowdhury, N. Yamaguchi, D.Y. Lee, G.Li, A. Kunhikrishnan, F. Qi, R. Karunanithi, R. Qiu, Y.-G. Zhu, C.H. Syu
Advances in Agronomy
2016
Vol. 138, p. 1-96
https://doi.org/10.1016/bs.agron.2016.04.002

16-014-J Comparative life histories of greenbugs and sugarcane aphids (Hemiptera: Aphididae) co-infesting susceptible and resistant sorghums
M.H. Bayoumy, R. Perumal, J.P. Michaud
Journal of Economic Entomology
February 2016
Vol. 109, Issue 1, p. 385-391
https://doi.org/10.1093/jee/tov271

16-016-J Costs of using unmanned aircraft on crop farms
N. Ireland-Otto, I. Ciampitti, M.T. Blanks, R.O. Burton, Jr., T. Balthazor
Journal of the American Society of Farm Managers and Rural Appraisers
JASFMRA 2016:130-148

16-019-B Soil water cycle
M.B. Kirkham, G.M. Hettiarachchi, multiple co-authors
Task Force: Soil Matters
2015
p. 11-16
US ISBN 1-59326-268-X

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-023-S 2015 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1121
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-025-S 2015 Kansas performance tests with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1123
Kansas Agricultural Experiment Station

16-027-S 2015 National winter canola variety trial
Coordinating authors M. Stamm and S. Dooley, multiple co-authors
SRP1125
Kansas Agricultural Experiment Station

16-029-S 2016 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. Slocombe
SRP1126
Kansas Agricultural Experiment Station

16-036-J Lead in urban soils: a real or perceived concern for urban agriculture?
S. Brown, R.L. Chaney, G.M. Hettiarachchi
Journal of Environmental Quality
December 2015
Vol. 45, No. 1, p. 26-36
doi:10.2134/jeq2015.07.0376

16-037-J Genomic selection for processing and end-use quality traits in the CIMMYT spring bread wheat breeding program
S.D. Battenfield, C. Guzmán, R.C. Gaynor, R.P. Singh, R.J. Peña, S. Dreisigacker, A.K. Fritz, J.A. Poland
The Plant Genome
July 2016, 9(2)
doi:10.3835/plantgenome2016.01.0005

16-038-B Herbicide-resistant Palmer amaranth (*Amaranthus palmeri* S. Wats.) in the United States: Mechanisms of resistance, impact, and management
P.S. Chahal, J.S. Aulakh, M. Jugulam, A.J. Jhala / A. Price, J. Kelton, L. Sarunaite (editors)
Herbicides, Agronomic Crops, and Weed Biology
November 2015, p. 1-40.
In Tech Scientific Publisher, NY.
ISBN 978-953-51-2218-0.
doi: 10.5772/61512

16-039-J A multi-state study of the association between glyphosate resistance and EPSPS gene amplification in waterhemp (*Amaranthus tuberculatus*)
L.A. Chatham, K.W. Bradley, G.R. Kruger, J.R. Martin, J.R. Micheal, D.K. Owen, D.E. Peterson, M. Jugulam, P.J. Tranel
Weed Science
September 2015
63: 569-577
https://doi.org/10.1614/WS-D-14-00149.1

16-040-J Integrated management of glyphosate-resistant giant ragweed (*Ambrosia trifida*) with tillage and herbicides in soybean
Z.A. Gains, L. Lindquist, G.R. Kruger, M. Jugulam, D.B. Marx, A.J. Jhala
Weed Science Society of America, Weed Technology
January 2017
January-March, Vol. 30, No. 1, p. 45-56,
doi: 10.1614/WT-D-15-00089.1

16-041-J Target-site point mutation in henbit (*Lamium amplexicaule* L.) conferring high level resistance to ALS-inhibitors
A. Varanasi, A.S. Godar, D. Shoup, D.E. Peterson, M. Jugulam
Weed Science
April 2016: Vol. 64, p. 231-239

16-054-J Impact of high temperature stress on floret fertility and individual grain weight of grain sorghum: sensitive stages and thresholds for temperature and duration
P.V. Vara Prasad, M. Djanaguiraman, R. Perumal, I.A. Ciampitti
Frontiers in Plant Science
October 2015
6:820
doi: 10.3389/fpls.2015.00820

16-056-J Limited irrigation for sweet corn planted at different dates on claypan soil
D.W. Sweeney, M.B. Kirkham, C.W. Marr
Crop, Forage and Turfgrass Management
August 2016, Vol. 2
doi:10.2134/cftm2015.0216

16-061-J RNAi mediated, stable resistance to Triticum mosaic virus in wheat
J.L. Shoup, L.F. Cruz, H.N. Trick, J.P. Fellers
Crop Science
April 2016
56: 4: 1602-1610
doi:10.2135/cropsci2015.09.0577

16-062-J Utilization of biowaste for mine spoil rehabilitation
H. Wijesekara, N.S. Bolan, M. Vithanage, Y. Xu, S. Mandal, S.L. Brown, G.M. Hettiarachchi, G.M. Pierzynski, L.Huang, Y.S. Ok, M.B. Kirkham, C. Saint, A. Surapaneni
Advances in Agronomy
2016
Vol.138, Chapter 2, p. 97-173, ISBN: 978-0-12-804774-3

16-069-J Factors affecting methane emissions from rice production in the Lower Mississippi river valley, USA
K.R. Brye, L.L. Nalley, J.B. Tack, B.L. Dixon, A.P. Barkley, C.W. Rogers, A.D. Smartt, R.J. Norman, K.S.V. Jagadish
Geoderma Regional
June 2016
Vol. 7, Issue 2, p. 223-229
https://doi.org/10.1016/j.geodrs.2016.04.005

16-081-J Ammonia volatilization from exposed soil and Tanzania grass pasture fertilized with urea and zeolite mixture
Mariana Campana, Ana Carolina Alves, Patrícia Perondi Anchão de Oliveira, Alberto Carlos de Campos Bernardi, Eduardo Alvarez Santos, Valdo Rodrigues Herling, Jozivaldo Prudêncio Gomes de Morais, Waldomiro Barioni Júnior
Communications in Soil Science and Plant Analysis
April 2015
Vol. 46, Issue 8, p. 1024-1033
https://doi.org/10.1080/00103624.2015.1019080

16-083-J Assessing a faculty development program for the adoption of brain-based learning strategies
C.C. Lavis, K.A. Williams, J. Fallin, P.K. Barnes, S.J. Fishback, S. Thien
Journal of Faculty Development
January 2016
30(1):57-69

16-093-J Evaluation and association mapping of resistance to tan spot and Stagonospora nodorum blotch in adapted winter wheat germplasm
Z. Liu, I. El-Basyoni, G. Kariyawasam, G. Zhang, A. Fritz, J. Hansen, F. Marais, A. Friskop, S. Chao, E. Akhunov, P.S. Baenzier
Plant Disease
October 2015
99:1333-1341
https://doi.org/10.1094/PDIS-11-14-1131-RE

16-098-J Multiplexed, trait-linked marker set for rapid genotyping in wheat using next generation sequencing
A. Bernardo, S. Wang, P. St. Amand, G. Bai
PLOS ONE
December 2015
10(12): e0143890
https://doi.org/10.1371/journal.pone.0143890

16-099-J Biomass and nutrient content by sugarcane as affected by fertilizer nitrogen sources
E. Mariano, J.M. Leite, M.X. Vieira-Megda, I.A. Ciampitti, A.C. Vitti, C.E. Faroni, H.C.J. Franco, P.C.O. Trivelin
Crop Science Journal
March 2016
56:1234-1244
doi: 10.2135/cropsci2015.06.0349

16-105-J Genotypic diversity effects on biomass production in native perennial bioenergy cropping systems
Z. Hu, P.P. Grabowski, J.O. Borevitz, M.-A. de Graaff, R.M. Miller, J.D. Jastrow
GCB Bioenergy
October 2015
Vol. 8, Issue 5, p. 1000-1014
doi:10.1111/gcbb.12309

16-120-J Historical synthesis-analysis of changes in grain nitrogen dynamics in sorghum
I.A. Ciampitti and P.V.V. Prasad
Frontiers in Plant Science
March 2016
Vol. 7, p. 275
https://doi.org/10.3389/fpls.2016.00275

16-167-J Designing advanced biochar products for maximizing greenhouse gas mitigation potential
M.B. Kirkham, S. Mandal, B. Sarkar, N. Bolan, J. Novak, Y. Sik Ok, L. Van Zwieten, B. Pal Singh, G. Choppula, K. Spokas, R. Naidu
Critical Reviews in Environmental Science and Technology
September 2016
Vol. 46, Issue 17
https://doi.org/10.1080/10643389.2016.1239975

16-168-J Functional relationships of soil acidification, liming, and greenhouse gas flux
M.B. Kirkham, A. Kunhikrishnan, R. Thangarajan, N.S. Bolan, Y. Xu, S. Mandal, D.B. Gleeson, B. Seshadri, M. Zaman, L. Barton, C. Tang, J. Luo, R. Dalal, W. Ding, R. Naidu
Advances in Agronomy
2016
Vol. 139, p. 1-71
https://doi.org/10.1016/bs.agron.2016.05.001

16-180-J Diurnal temperature amplitude alters physiological and growth response of maize (*Zea mays* L.) during the vegetative stage
V.S.J. Sunoj, K.J. Shroyer, S.V.K. Jagadish, P.V.V. Prasad
Environmental and Experimental Botany
October 2016
130, 113-121
https://doi.org/10.1016/j.envexpbot.2016.04.007

16-187-J Field crops and the fear of heat stress – opportunities, challenges, and future directions
P.V.V. Prasad and S.V.K. Jagadish
Field Crops Research
January 2017
200:114-121
https://doi.org/10.1016/j.fcr.2016.09.024

16-194-J Exploring agricultural production systems and their fundamental components with system dynamics modelling
J.P. Walters, D.W. Archer, G.F. Sassenrath, J.R. Hendrickson, J.D. Hanson, J.M. Halloran, P. Vadas
Ecological Modelling
August 2016
333:51-65
http://dx.doi.org/10.1016/j.ecolmodel.2016.04.015

16-195-J Effect of soil-test phosphorus and phosphorus fertilization on the severity of soybean sudden death syndrome
D.R. Diaz, E. Adee, C.R. Little
Crop, Forage and Turfgrass Movement
December 2016
Vol. 2, Issue 1
10.2134/cftm2015.0193

16-213-J Estimate contributions of Kansas pasture burning to ambient PM2.5 through source apportionment using Unmix Receptor Model
Z. Liu, R. Maghirang, D. Devlin, C. Blocksome
Transactions of American Society of Agricultural and Biological Engineers
2016
59(5): 1267-1275
doi:10.13031/trans.59.11612

16-230-J Limited irrigation of corn-based no-till crop rotations in west central Great Plains
A.J. Schlegel, Y. Assefa, T.J. Dumler, L.A. Haag, L.R. Stone, A.D. Halvorson, C.R. Thompson
Agronomy Journal
April 2016
108:1132-1141
doi:10.2134agronj2015.0536

16-239-J Climate change challenges for extension educators: technical capacity and cultural attitudes
T.A. Becerra, G. Middendorf, A. Campbell, P. Tomlinson
Journal of Extension
December 2016
Vol. 54, No. 6, Feature, 6FEA2
https://joe.org/joe/2016december/pdf/JOE_v54_6a2.pdf

16-243-J Registration of 'Joe' hard white winter wheat
G. Zhang, T.J. Martin, A.K. Fritz, R. Miller, M.S. Chen, R.L. Bowden, G. Bai
Journal of Plant Registrations
July 2016
Vol. 10, Issue 3
10.3198/jpr2016.02.0007crc

16-245-J Evaluation of climatic variables as yield-limiting factors for maize yield in Kansas
Q. Ye, X. Lin, E. Adee, D. Min, Y. Assefa, D. O'Brien, I.A. Ciampitti
International Journal of Climatology
March 2017
doi: 10.1002/joc.5015

16-271-J Timing of strobilurin fungicide for control of top dieback in corn
E.A. Adee and S. Duncan
Plant Health Progress
May 2017
doi:10.1094/PHP-03-17-0020-RS

16-287-J Kochia *(Kochia scoparia)* emergence profiles and seed persistence across the Central Great Plains
J.A. Dille, W. Stahlman, J. Du, P.W. Geier, J.D. Riffel, R.S. Currie, R.G. Wilson, G.M. Sbatella, P. Westra, A.R. Kniss, M.J. Moechnig, R.M. Cole
Weed Science
September 2017
Vol. 65:6
doi: 10.1017/wsc.2017.18

16-289-J Transport and transformation of selenium and other constituents of flue-gas desulfurization wastewater in water-saturated soil materials
G. Hettiaracchi, M.B. Galkaduwa, G.J. Kluitenberg, S.L. Hutchinson, L. Davis, L.E. Erickson
Journal of Environmental Quality Abstract
March 2017
Vol. 46, No. 2
10.2134/jeq2016.09.0335

16-292-J Corn response as affected by planting distance from the center of strip-till fertilized rows
E.A. Adee, F.D. Hansel, D.A. Ruiz Diaz, K. Janssen
Frontiers Plant Science
August 2016
https://doi.org/10.3389/fpls.2016.01232

16-300-J Virtual nitrogen as a tool for assessment of nitrogen management at the field scale: A crop rotation approach
W. Grzebisz, R. Lukowiak, G.F. Sassenrath
Field Crops Research
April 2018
218:182-194
https://doi.org/10.1016/j.fcr.2018.01.009

16-301-A Modeling and simulating nutrient management practices for the Mobile River Watershed
V.J. Alarcon and G.F. Sassenrath
The 16th International Conference on Computational Science and Its Applications (ICCSA 2016)
July 2016
p. 33-43
doi: 10.1007/978-3-319-42111-7_4

16-315-S 2016 Southeast Agricultural Research Center Research Report
L. Lomas and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 3
http://newprairiepress.org/kaesrr/vol2/iss3/

16-317-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
Plant Disease
October 2016
Vol. 100, No. 10, p. 2062-2068
https://doi.org/10.1094/PDIS-02-16-0171-RE

16-318-J Yield and soil water in three dryland wheat and grain sorghum rotations
A.J. Schlegel, Y. Assefa, L.A. Haag, C.R. Thompson, J.D. Holman, L.R. Stone
Agronomy Journal
January 2017
109:227-238
doi:10.2134/agronj2016.07.0387

16-319-J Drought-tolerant corn hybrids yield more in drought-stressed environments with no penalty in non-stressed environments
E. Adee, K. Roozeboom, G. Balboa, A. Schlegel, I.A. Ciampitti
Frontiers in Plant Science
October 2016
Vol. 7
doi: 10.3389/fpls.2016.01534

16-322-J Camelina seed yield and fatty acids as influenced by genotype and environment
A.K. Obour, E. Obeng, Y. Mohammed, I.A. Ciampitti, T.P. Durrett, J.A. Moreno, C. Chen
Agronomy Journal
May 2017
Vol. 109, Issue 3, p. 947-956
doi:10.2134/agronj2016.05.0256

16-329-J Resistance to wheat streak mosaic virus and triticum mosaic virus in wheat lines carrying Wsm1 and Wsm3
G. Zhang, T.T. Kumssa, D. Zhao, G. Bai
European Journal of Plant Pathology
August 2016
Vol. 147, Issue 3
10.1007/s10658-016-1021-8.

16-332-J Potential corn yield losses due to 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
February 2017
30(4):979-984
doi: 10.1614/WT-D-16-00046.1.

16-357-A Mine site rehabilitation with biosolids for sustainable development
A. Alghamdi, M.B. Kirkham, D.R. Presley, G. Hettiarachchi, L. Murray
American Society of Agricultural and Biological Engineers
2016
10.13031/aim.20162463072

16-380-J Transcriptome analysis reveals potential mechanisms for inhibition of intumescence development by UV radiation in tomato
Q. Wu, S. Park, M.B. Kirkham, K.A. Williams
Environmental and Experimental Botany
February 2017
Vol. 134, p. 130-140
http://dx.doi.org/10.1016/j.envexpbot.2016.11.006

Anatomy and Physiology

15-440-J Hot topic: Early postpartum treatment of commercial dairy cows with nonsteroidal antiinflammatory drugs increases whole-lactation milk yield
A.J. Carpenter, C.M. Ylioja, C.F. Vargas, L.K. Mamedova, L.G. Mendonça, J.F. Coetzee, L.C. Hollis, R. Gehring, B.J. Bradford
Journal of Dairy Science
January 2016
Vol. 99, Issue 1, p. 672-679
http://dx.doi.org/10.3168/jds.2015-10048

16-215-J Expansion of amphibian intronless interferons revises the paradigm for interferon evolution and functional diversity
F. Belcha, Y. Sang, Q. Liu, J. Lee, W. Ma, D.S. McVey
Scientific Reports
June 2016
Article Number: 29072
https://doi.org/10.1038/srep29072

16-223-J A randomized field study comparing differences in core body temperature, health, and performance in crossbred beef heifers administered 2 antimicrobial products given upon arrival at a stocker facility
G.A. Hanzlicek, D.A. Blasi, B.E. Oleen, G.A. Anderson
The Professional Animal Scientist
August 2016
Vol. 32, Issue 4
https://doi.org/10.15232/pas.2015-01486

16-335-J Porcine Wharton's jelly cells distribute throughout the body after intraperitoneal injection
K. Packthongsuk, T. Rathbun, D. Troyer, D.L. Davis
Stem Cell Research and Therapy
February 2018
Vol. 9, Issue 1
10.1186/s13287-018-0775-7

Animal Sciences and Industry

14-004-J Effect of subprimal type, quality grade, and aging on sensory properties of ground beef patties
C.M. Garner, J.A. Unruh, M.C. Hunt, E.A.E. Boyle, T.A. Houser
Meat Science
January 2014
Vol. 96, Issue 1, p. 467
https://doi.org/10.1016/j.meatsci.2013.07.096

14-005-J Effects of in-feed copper, chlortetracycline, and tylosin on the prevalence of transferable copper resistance gene, tcrB, among fecal enterococci of weaned piglets
R.G. Amachawadi, H.M. Scott, J. Vinasco, M.D. Tokach, S.S. Dritz, J.L. Nelssen, T.G. Nagaraja
Foodborne Pathogens and Disease
August 2015
12(8): 670-678
https://doi.org/10.1089/fpd.2015.1961

14-007-J The effects of diet blending and feed budgeting on finishing pig growth performance, carcass characteristics, and economic return
H.L. Frobose, R.C. Sulabo, J.M. DeRouchey, D. Ryder, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.L. Nelssen
The Professional Animal Scientist
August 2014
Vol. 30, Issue 4, p. 375-392
https://doi.org/10.15232/pas.2013-01297

14-048-J Follicular expression of follicle stimulating hormone receptor variants in the ewe
R.R. Sullivan, B.R. Faris, D. Eborn, D.M. Grieger, A.G. Cino-Ozuna, T.G. Rozell
Reproductive Biology and Endocrinology
December 2013
0.536805556
https://doi.org/10.1186/1477-7827-11-113

14-341-J Effects of pelleting conditioner retention time on nursery pig growth performance
L.L. Lewis, C.R. Stark, A.C. Fahrenholz, M.A.D. Gonçalves, J.M. Derouchey, C.K. Jones
Journal of Animal Science
March 2015
Vol. 93, No. 3, p. 1098-1102
https://doi.org/10.2527/jas.2014-8072

14-342-J Effects of menthol supplementation in feedlot cattle diets on the fecal prevalence of antimicrobial-resistant *Escherichia coli*
C.C. Aperce, R. Amachawadi, C.L. Van Bibber-Krueger, T.G. Nagaraja, H.M. Scott, J. Vinasco-Torre, J.S. Drouillard
PLOS ONE
December 2016
11(12): e0168983
https://doi.org/10.1371/journal.pone.0168983

14-353-J Yeast product supplementation modulated feeding behavior and metabolism in transition dairy cows
K. Yuan, T. Liang, M.B. Muckey, L.G.D. Mendonça, L.E. Hulbert, C.C. Elrod, B.J. Bradford
Journal of Dairy Science
January 2015
Vol. 98, Issue 1, p. 532–540
doi: http://dx.doi.org/10.3168/jds.2014-8468

14-354-J Yeast product supplementation modulated humoral and mucosal immunity and uterine inflammatory signals in transition dairy cows
K. Yuan, L.G.D. Mendonça, L.E. Hulbert, L.K. Mamedova, M.B. Muckey, Y. Shen, C.C. Elrod, B.J. Bradford
Journal of Dairy Science
May 2015
Vol. 98, Issue 5, p. 3236-3246
doi: http://dx.doi.org/10.3168/jds.2014-8469

15-048-J Student blogs and journals as assessment tools for faculty-led study abroad trips
T.L. Douthit, S.L. Schaake, M.R. Hay McCammant, D.M. Grieger, J.M. Bormann
North American Colleges and Teachers of Agriculture Journal
September 2015
Vol. 59, Issue 3

15-075-J Effects of zilpaterol hydrochloride on growth performance, blood metabolites, and fatty acid profiles of plasma and adipose tissue in finishing steers
C.L. Van Bibber-Krueger, K.A. Miller, G.L. Parsons, L.K. Thompson, J.S. Drouillard
Journal of Animal Science
May 2015
Vol. 93, Issue 5, p. 2419-2427
https://doi.org/10.2527/jas.2014-8771

15-263-J Sanitizing in dry-processing environments using isopropyl alcohol quaternary ammonium formula
D.M. Kane, K.J.K Getty, B. Mayer, A. Mazzotta
Journal of Food Protection
January 2016
Vol. 79, Issue 1
https://doi.org/10.4315/0362-028X.JFP-15-257

15-342-J Evaluation of ammoniated wheat straw during a receiving and growing period for beef cattle
E.R. Schlegel, S.P. Montgomery, J.W. Waggoner, C.I. Vahl, E.C. Titgemeyer, W.R. Hollenbeck, D.A. Blasi
The Professional Animal Scientist
June 2016
Vol. 32, Issue 3, p. 295-301
http://dx.doi.org/10.15232/pas.2015-01448

15-413-J Shelf life of fresh meat products under LED or fluorescent lighting
K.S. Steele, M.J. Weber, E.A.E. Boyle, M.C. Hunt, A.S. Lobaton-Sulabo, C. Cundith, Y.H. Hiebert, K.A. Abrolat, J.M. Attey, S.D. Clark, D.E. Johnson, T.L. Roenbaugh
Meat Science
July 2016
Vol. 117, p. 75-84, ISSN 0309-1740
https://doi.org/10.1016/j.meatsci.2016.02.032

15-421-J Value addition of Greek yogurt whey using magnetic fluid and sepiolite treatments
C.R. Kyle and J.K. Amamcharla
Food and Bioprocess Technology
April 2016
Vol. 9, Issue 4, p. 553-563
https://doi.org/10.1007/s11947-015-1653-2

15-433-J Feedback effects of estradiol and progesterone on ovulation and fertility after gonadotropin-releasing hormone-induced release of luteinizing hormone
J.S. Stevenson and S.L. Pulley
Journal of Dairy Science
April 2016
Vol. 99, Issue 4
https://doi.org/10.3168/jds.2015-10091

15-440-J Hot topic: Early postpartum treatment of commercial dairy cows with nonsteroidal antiinflammatory drugs increases whole-lactation milk yield
A.J. Carpenter, C.M. Ylioja, C.F. Vargas, L.K. Mamedova, L.G. Mendonça, J.F. Coetzee, L.C. Hollis, R. Gehring, B.J. Bradford
Journal of Dairy Science
January 2016
Vol. 99, Issue 1, p. 672-679
http://dx.doi.org/10.3168/jds.2015-10048

16-007-J Impact of increased feed intake during late gestation on reproductive performance of gilts and sows
M.A.D. Gonçalves, S.S. Dritz, M.D. Tokach, J.H. Piva, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
2016;24(5):264–266

16-008-J Considerations regarding marketing heavy weight pigs
M.A.D. Gonçalves, J.M. DeRouchey, R.D. Goodband, M.D. Tokach, J.C. Woodworth, S.S. Dritz
Journal of Swine Health and Production
2017;25(1):29-33

16-010-J Feed efficiency adjustments to compare group closeouts in finishing pigs
M.A.D. Gonçalves, J.M. DeRouchey, R.D. Goodband, M.D. Tokach, J.C. Woodworth, S.S. Dritz
Journal of Swine Health and Production
February 2016
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p73.pdf

16-013-J Comparison of *Mannheimia haemolytica* isolates from an outbreak of bovine respiratory disease
S. Rainbolt, D.K. Pillai, B.V. Lubbers, M. Moore, R. Davis, D. Amrine, D. Mosier
Veterinary Microbiology
January 2016
Vol. 182, p. 82-86
https://doi.org/10.1016/j.vetmic.2015.10.020

16-015-J Feedback effects of estradiol and progesterone on ovulation and fertility of dairy cows after gonadotropin-releasing hormone-induced release of luteinizing hormone
J.S. Stevenson and S.L. Pulley
Journal of Dairy Science
February 2016
99(4):3003-3015
http://dx.doi.org/10.3168/jds.2015-10091

16-017-J Influence of dietary fat source and feeding duration on finishing pig growth performance, carcass composition, and fat quality
E.W. Stephenson, M.A. Vaughn, D.D. Burnett, C.B. Paulk, M.D. Tokach, S.S. Dritz, J.M. DeRouchey, R.D. Goodband, J.C. Woodworth, J.M. Gonzalez
July 2016
94(7):2851-66
https://doi.org/10.2527/jas.2015-9521

16-020-J Effects of diet form and corn particle size on growth performance and carcass characteristics of finishing pigs
J.E. Nemecheck, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.C. Woodworth
Animal Feed Science and Technology
April 2016
214, p. 136-141
https://doi.org/10.1016/j.anifeedsci.2016.02.002

16-047-J Comparing different phytase sources for pigs
M.A.D. Gonçalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
January 2016
Vol. 24, No. 2
https://www.aasv.org/shap/issues/v24n2/v24n2p97.pdf

16-048-J Feed efficiency adjustments to compare group close-outs in finishing pigs
M.A.D. Gonçalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
March 2017
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p73.pdf

16-049-J Ingredient database management: Part I. Overview and sampling procedures
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
January 2016
Vol. 24, No. 4
https://www.aasv.org/shap/issues/v24n4/v24n4p216.pdf

16-050-J Ingredient database management: Part II. Energy
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
April 2016
Vol. 24, No. 4
https://www.aasv.org/shap/issues/v24n4/v24n4p216.pdf

16-052-J Fact sheet – Ingredient database management for swine: phosphorus
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
July 2015
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p76.pdf

16-059-J Effect of fence-line or drylot weaning on the health and performance of beef calves during weaning, receiving, and finishing
E.A. Bailey, J.R. Jaeger, J.W. Waggoner, G.W. Preedy, L.A. Pacheco, KC Olson
The Professional Animal Scientist
April 2016
32 (2016):220-228
http://dx.doi.org/10.15232/pas.2015-01456

16-064-J Consumer and trained panel evaluation of beef strip steaks of varying marbling and enhancement levels cooked to three degrees of doneness
L.W. Lucherk, T.G. O'Quinn, J.F. Legako, R.J. Rathmann, J.C. Brooks, M.F. Miller
Meat Science
December 2016
Vol. 122
https://doi.org/10.1016/j.meatsci.2016.08.005

16-072-J Effects of number of viral respiratory disease vaccinations during preconditioning on health, performance, and carcass merit of ranch-direct beef calves during receiving and finishing
E.A. Bailey, J.R. Jaeger, T.B. Schmidt, J.W. Waggoner, L.A. Pacheco, D.U. Thomson, KC Olson
The Professional Animal Scientist
June 2016
32 (2016):271-278
http://dx.doi.org/10.15232/pas.2015-01461

16-077-J Efficiency of lysine utilization by growing steers
E.D. Batista, A.H. Hussein, E. Detmann, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
February 2016
94:648-655
https://doi.org/10.2527/jas.2015-9716

16-078-J Effect of ruminal ammonia supply on lysine utilization by growing steers
A.H. Hussein, E.D. Batista, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
February 2016
94:656-664
doi:10.2527/ja

16-079-J Managing complexity: Dealing with systemic crosstalk in bovine physiology
B.J. Bradford, K. Yuan, C. Ylioja
Journal of Dairy Science
June 2016
Vol. 99, Issue 6, p. 4983-4996
https://doi.org/10.3168/jds.2015-10271

16-087-J Ovarian characteristics and timed artificial insemination pregnancy risk after presynchronization with gonadotropin-releasing hormone 7 days before $PGF_{2\alpha}$ in dairy cows
J.S. Stevenson
Theriogenology
April 2016
85(6):1139-1146
https://doi.org/10.1016/j.theriogenology.2015.11.028

16-088-J Focused beam reflectance measurement (FBRM) as a tool for in situ monitoring of lactose crystallization process
K. Pandalaneni and J.K. Amamcharla
Journal of Dairy Science
July 2016
Vol. 99, Issue 7, p. 5244-5253
doi: https://doi.org/10.3168/jds.2015-10643

16-094-J Evaluating the efficacy of three U.S. Department of Agriculture–approved antimicrobial sprays for reducing Shiga toxin–producing *Escherichia coli* surrogate populations on bob veal carcasses
N.J. Sevart, N. Baumann, H. Thippareddi, T.A. Houser, J.B. Luchansky, A.C.S. Porto-Fett, D.B. Marx, G.R. Acuff, R.K. Phebus
Journal of Food Protection
June 2016
79(6):956-62
doi: 10.4315/0362-028X.JFP-15-435

16-107-J Effect of extended postmortem aging and steak location on myofibrillar protein degradation and Warner-Bratzler shear force of beef M. semitendinosus steaks
K.J. Phelps, J.S. Drouillard, M.B. Silva, L.D.F. Miranda, S.M. Ebarb, C.L. Van Bibber-Krueger, T.G. O'Quinn, J.M. Gonzalez
Journal of Animal Science
January 2016
94(1):412-23
doi: 10.2527/jas.2015-9862

16-110-A Metrics to assess reproductive efficiency in dairy herds
L.G.D. Mendonça
Dairy Cattle Reproduction Council
October 2016

16-111-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
R.A. Cochrane, S.S. Dritz, J.C. Woodworth, C.R. Stark, A.R. Huss, J.P. Cano, R.W. Thompson, A.C. Fahrenholz, C. Jones
Journal of Swine Health and Production
2016
24(3):154-164
https://www.aasv.org/shap/issues/v24n3/v24n3p154.html

16-115-J Investigation into the efficacy of *Bdellovibrio bacteriovorus* as a novel pre-harvest intervention to control *Escherichia coli* O157:H7 and *Salmonella* spp. in cattle using an in vitro model
J. Page, B. Lubbers, J. Maher, L. Ritsch, S. Gragg
Journal of Food Protection
September 2015
Vol. 78, No. 9, p. 1745-1749
doi: 10.4315/0362-028X.JFP-15-016

16-121-J Effect of growth-promoting technologies on Longissimus lumborum muscle fiber morphometrics, collagen solubility, and cooked meat tenderness
S.M. Ebarb, J.S. Drouillard, K.R. Maddock-Carlin, K.J. Phelps, M.A. Vaughn, D.D. Burnett, C.L. Van Bibber-Krueger, C.B. Paulk, D.M. Grieger, J.M. Gonzalez
Journal of Animal Science
February 2016
Vol. 94, Issue 2, p. 869-881
https://doi.org/10.2527/jas.2015-9888

16-126-J Novel methods to study the effect of protein content and dissolution temperature on the solubility of milk protein concentrate: Focused beam reflectance and ultrasonic flaw detector-based methods
J.K. Amamcharla and M. Hauser
Journal of Dairy Science
April 2016
Vol. 99, Issue 5
https://doi.org/10.3168/jds.2015-10541

16-136-J Effects of amino acids and energy intake during late gestation of high-performing gilts and sows on piglet birth weight and reproductive performance under commercial conditions
R.D. Goodband, M.A.D. Gonçalves, K.M. Gourley, S.S. Dritz, M.D. Tokach, N.M. Bello, J.M. DeRouchey, J.C. Woodworth
Journal of Animal Science
May 2016
Vol. 94, Issue 5
https://doi.org/10.2527/jas.2015-0087

16-149-J Standardized ileal digestable valine:lysine dose response effects in 25- to 45-kg pigs under commercial conditions
S. Dritz, M.A.D. Gonçalves, M.D. Tokach, N.M. Bello, K.J. Touchette, R.D. Goodband, J.M. DeRouchey, J.C. Woodworth
Journal of Animal Science
March 2018
Vol. 96, Issue 2
10.1093/jas/skx059

16-150-J Dose-response evaluation of the standardized ileal digestible tryptophan:lysine ratio to maximize growth performance of growing-finishing gilts under commercial conditions
S. Dritz, M.A.D. Gonçalves, M.D. Tokach, N.M. Bello, K.J. Touchette, R.D. Goodband, J.M. DeRouchey, J.C. Woodworth
Animal
July 2018
Vol. 12, Issue 7
https://doi.org/10.1017/S1751731117002968

16-152-J An update on modeling dose-response relationships: Accounting for correlated data structure and heterogeneous error variance in linear and nonlinear mixed models
S. Dritz, M.A.D. Gonçalves, N.M. Bello, M.B. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Animal Science
May 2016
Vol. 94, Issue 5
https://doi.org/10.2527/jas.2015-0106

16-153-J Evaluation of the minimum infectious dose of porcine epidemic diarrhea virus in virus-inoculated feed
S. Dritz, L.L. Schumacher, J.C. Woodworth, C.K. Jones, Q. Chen, J. Zhang, P.C. Gauger, C.R. Stark, R.G. Main, R.A. Hesse, M.D. Tokach
American Journal of Veterinary Research
October 2016
Vol. 77, No. 10
https://doi.org/10.2460/ajvr.77.10.1108

16-158-J A review of solute encapsulating nanoparticles used as delivery systems with emphasis on branched amphipathic peptide capsules
S. de M. Barros, S.K. Whitaker, P. Sukthankar, S. Gudlur, M. Warner, E.I.C. Beltrão, J.M. Tomich
Archives Biochemistry Biophysics
April 2016
596:22-42
doi: 10.1016/j.abb.2016.02.027

16-170-J Treatment of lactating dairy cows with gonadotropin releasing hormone before first insemination during summer heat stress
B.E. Boelz, L. Rocha, F. Scortegagna, J.S. Stevenson, L.G.D. Mendonça
Journal of Dairy Science
September 2016
Vol. 99, Issue 9, p. 7612-7623
http://dx.doi.org/10.3168/jds.2016-10970

16-175-J Fertility of lactating dairy cows treated with gonadotropin-releasing hormone at estrus, 5 days after AI, or both, during summer heat stress
L.G.D. Mendonça, F.M. Mantelo, J.S. Stevenson
Theriogenology
March 2017
Volume 91, 9 - 16
http://dx.doi.org/10.1016/j.theriogenology.2016.11.032

16-200-S Swine Day 2015
Coordinating author R.D. Goodband and multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 1, Issue 7
http://newprairiepress.org/kaesrr/vol1/iss7/

16-201-S Dairy Research 2015
Coordinating author B.J. Bradford and multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 1, Issue 8
http://newprairiepress.org/kaesrr/vol1/iss8/

16-205-J Effects of wheat source and particle size in meal and pelleted diets on finishing pig growth performance, carcass characteristics, and nutrient digestibility
J.M. DeRouchey, J.A. De Jong, M.D. Tokach, S.S. Dritz, R.D. Goodband, C.B. Paulk, J.C. Woodworth, C.K. Jones, C.R. Stark
Journal of Animal Science
August 2016
Vol. 94, Issue 8
https://doi.org/10.2527/jas.2016-0370

16-207-J Evaluating pellet and meal feeding regimens on finishing pig performance, stomach morphology, and carcass characteristics
J.M. DeRouchey, J.A. De Jong, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.C. Woodworth, M.W. Allerson
Jounal of Animal Science
November 2016
Vol. 94, Issue 11
https://doi.org/10.2527/jas.2016-0461

16-208-J Stability of four commercial phytase products under increasing thermal conditioning temperatures
J.M. DeRouchey, J.A. De Jong, J.C. Woodworth, R.D. Goodband, M.D. Tokach, S.S. Dritz, C.R. Stark, C.K. Jones
Translational Animal Science
September 2017
Vol. 1, Issue 3
https://doi.org/10.2527/tas2017.0030

16-212-J Effects of dietary copper, zinc, and ractopamine-HCl on finishing pig growth performance, carcass characteristics, and antimicrobial susceptibility of enteric bacteria
R.D. Goodband, J.A. Feldpausch, R.G. Amachawadi, M.D. Tokach, H.M. Scott, T.G. Nagaraja, S.S. Dritz, J.C. Woodworth, J.M. DeRouchey
Journal of Animal Science
August 2016
Vol. 94, Issue 8
https://doi.org/10.2527/jas.2016-0340

16-216-J Effects of dietary chlortetracycline, *Origanum* essential oil, and pharmacological Cu and Zn on growth performance of nursery pigs
R.D. Goodband, J.A. Feldpausch, R.G. Amachawadi, M.D. Tokach, H.M. Scott, S.S. Dritz, J.C. Woodworth, J.M. DeRouchey
Translational Animal Science
March 2018
Vol. 2, Issue 1
https://doi.org/10.1093/tas/txx004

16-218-J Evaluating the removal of pigs from a group and subsequent floor space allowance on the growth performance of heavy-weight finishing pigs
S. Dritz, J.R. Flohr, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Animal Science
October 2016
Vol. 94, Issue 10
https://doi.org/10.2527/jas.2016-0407

16-219-J A survey of current feeding regimens for vitamins and trace minerals in the US swine industry
S. Dritz, J.R. Flohr, J.M. DeRouchey, J.C. Woodworth, M.D. Tokach, R.D. Goodband
Journal of Swine Health and Production
November 2016
Vol. 24, No. 6
https://www.aasv.org/shap/issues/v24n6/v24n6p290.pdf

16-220-J Development of equations to predict the influence of floor space on average daily gain, average daily feed intake and gain:feed ratio of finishing pigs
J.R. Flohr, S.S. Dritz, M.D. Tokach, J.C. Woodworth, J.M. DeRouchey, R.D. Goodband
Animal
October 2017, Vol. 12, Issue 5
https://doi.org/10.1017/S1751731117002440

16-223-J A randomized field study comparing differences in core body temperature, health, and performance in crossbred beef heifers administered 2 antimicrobial products given upon arrival at a stocker facility
G.A. Hanzlicek, D.A. Blasi, B.E. Oleen, G.A. Anderson
The Professional Animal Scientist
August 2016, Vol. 32, Issue 4
https://doi.org/10.15232/pas.2015-01486

16-228-J Evaluating the impact of maternal vitamin D supplementation on sow performance: I Serum vitamin metabolites and neonatal muscle characteristics
R.D. Goodband, J.R. Flohr, J.C. Woodworth, J.R. Bergstrom, M.D. Tokach, S.S. Dritz, J.M. DeRouchey
Journal of Animal Science
November 2016
Vol. 94, Issue 11
https://doi.org/10.2527/jas.2016-0409

16-229-J Evaluating the impact of maternal vitamin D supplementation on sow performance: II Subsequent growth performance and carcass characteristics of growing pigs
R.D. Goodband, J.R. Flohr, J.C. Woodworth, J.R. Bergstrom, M.D. Tokach, S.S. Dritz, J.M. DeRouchey
Journal of Animal Science
November 2016
Vol. 94, Issue 11
https://doi.org/10.2527/jas.2016-0410

16-232-J The effects of copper source and concentration on growth performance, carcass characteristics, and pen cleanliness in finishing pigs
J.M. DeRouchey, K.F. Coble, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.C. Woodworth, J.L. Usry
Journal of Animal Science
September 2017
Vol. 95, Issue 9
https://doi.org/10.2527/jas2017.1624

16-234-J Effects of distillers dried grains with solubles and added fat fed immediately before slaughter on growth performance and carcass characteristics of finishing pigs
J.M. DeRouchey, K.F. Coble, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.C. Woodworth
Journal of Animal Science
January 2017
Vol. 95, Issue 1
https://doi.org/10.2527/jas.2016.0679

16-236-J Effects of withdrawing high-fiber ingredients before marketing on finishing pig growth performance, carcass characteristics, and intestinal weights
J.M. DeRouchey, K.F. Coble, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.C. Woodworth
Journal of Animal Science
February 2018
Vol. 96, Issue 1
https://doi.org/10.1093/jas/skx048

16-241-S Cattlemen's Day 2016
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 2, Issue 1
http://newprairiepress.org/kaesrr/vol2/iss1/

16-247-J Using estrus-detection patches to optimally time insemination improved pregnancy risk in suckled beef cows in a fixed-time artificial insemination program
S.L. Hill, D.M. Grieger, KC Olson, J.R. Jaeger, C. Dahlen, G.A. Bridges, F. Dantas, J.E. Larson, A.M. Muth-Spurlock, J. Ahola, M.C. Fischer, G.A. Perry, E.L. Larimore, T.L. Steckler, W.D. Whittier, J.F. Currin, J.S. Stevenson
Journal of Animal Science
September 2016
94:3703-3710
doi:10.2527/jas.2016-0469

16-253-J Use of electromyography to detect muscle exhaustion in finishing barrows fed ractopamine-HCl
J.A. Noel, R.M. Broxterman, G.M. McCoy, J.C. Craig, K.J. Phelps, D.D. Burnett, M.A. Vaughn, T.J. Barstow, T.G. O'Quinn, J.C. Woodworth, J.M. DeRouchey, J.M. Gonzalez
Journal of Animal Science
June 2016
94:2344-2356
doi:10.2527/jas.2016-0398

16-276-J Feeding microalgae meal (All-G Rich™, *Schizochytrium limacinum* CCAP 4087/2) to beef heifers I: Effects on fresh meat quality
K.J. Phelps, J.S. Drouillard, T.G. O'Quinn, D.D. Burnett, T.L. Blackmon, J. Axtman, C.L. Van Bibber-Krueger, J.M. Gonzalez
Journal of Animal Science
September 2016
94:4016-4029
doi:10.2527/jas.2016-0487

16-277-J Feeding microalgae meal (All-G Rich™, *Schizochytrium limacinum* CCAP 4087/2) to beef heifers II: Effects on ground beef palatability and color
K.J. Phelps, J.S. Drouillard, T.G. O'Quinn, D.D. Burnett, T.L. Blackmon, J.E. Axtman, C.L. Van Bibber-Krueger, J.M. Gonzalez
Journal of Animal Science
September 2016
94:4030-4039
doi:10.2527/jas.2016-0488

16-286-J Physiological predictors of ovulation and pregnancy risk in a fixed-time artificial insemination program
J.S. Stevenson
Journal of Dairy Science
2016
Vol. 99, Issue 12, 10077-10092
doi: http://dx.doi.org/10.3168/jds.2016-11247

16-303-J GnRH increased pregnancy risk in suckled beef cows not detected in estrus and subjected to a split-time artificial insemination program
S.L. Hill, D.M. Grieger, KC Olson, J.R. Jaeger, C.R. Dahlen, M.R. Crosswhite, N. Negrin Pereira, S.R. Underdahl, B.W. Neville, J. Ahola, M.C. Fischer, G.E. Seidel, J.S. Stevenson
Journal of Animal Science
July 2016
94:3722-3728
doi:10.2527/jas.2016-0582

16-306-J Kansas dairy producers' needs survey: Reproductive management of Kansas dairy farms
B.E. Voelz, C. Payne, L. Hulbert, J.S. Stevenson, M. Brouk, L.G.D. Mendonça
Journal of Extension
August 2017
Vol. 55, No. 4, Research in Brief, 4RIB6

16-316-J Validation of baking as a kill-step for controlling *Salmonella* in muffins
M. Michael, L.H. Channaiah, J.C. Acuff, R.K. Phebus, H. Thippareddi, M. Olewnik, G. Milliken
International Journal of Food Microbiology
June 2017
Vol. 250, 2017, p. 1-6, ISSN 0168-1605
http://dx.doi.org/10.1016/j.ijfoodmicro.2017.03.007

16-331-J Increasing estrus expression in the lactating dairy cow
J.A. Sauls, B.E. Voelz, S.L. Hill, L.G.D. Mendonça, J.S. Stevenson
Journal of Dairy Science
January 2017
Vol. 100, Issue 1, p. 807-820
http://dx.doi.org/10.3168/jds.2016-11519

16-335-J Porcine Wharton's jelly cells distribute throughout the body after intraperitoneal injection
K. Packthongsuk, T. Rathbun, D. Troyer, D.L. Davis
Stem Cell Research and Therapy
February 2018
Vol. 9, Issue 1
10.1186/s13287-018-0775-7

16-340-J Effects of potential detoxifying agents on growth performance and deoxynivalenol (DON) urinary balance characteristics of nursery pigs fed DON-contaminated wheat
R.D. Goodband, H.L. Frobose, E.W. Stephenson, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, S.S. Dritz
Journal of Animal Science
January 2017
Vol. 95, Issue 1
https://doi.org/10.2527/jas.2016.0664

16-358-J Formation of pellet fines during the feed manufacturing process, transportation and feed line delivery, and their nutrient composition
J.A. De Jong, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, J.C. Woodworth, S.S. Dritz, C.R. Stark, C.K. Jones, H.E. Williams, J. Erceg, B. Harberl, L.J. McKinney, G. Smith, D. Van Otterloo, C.B. Paulk
American Society of Agricultural and Biological Engineers
2017
Vol. 33, Issue 6
10.13031/aea.12304

16-359-J The progression of deoxynivalenol-induced growth suppression in nursery pigs and the potential of an algae-modified montmorillonite clay to mitigate these effects
R.D. Goodband, H.L. Frobose, J.A. Erceg, S.Q. Fowler, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, S.S. Dritz
Journal of Animal Science
September 2016
Vol. 94, Issue 9
https://doi.org/10.2527/jas.2016-0663

16-376-J Branched amphipathic peptide capsules: Different ratios of the two constituent peptides direct distinct bilayer structures and sizes
S.M. Barros, L.A. Avila, S.K. Whitaker, P. Sukthankar, E.I.C. Beltrão, and J.M. Tomich
Langmuir
June 2017
33(28):7096-7104
doi:10.1021/acs.langmuir.7b00912

Apparel, Textiles, and Interior Design

16-291-J Black walnut, Osage orange and eastern redcedar sawmill waste as natural dyes: Effect of aluminum mordant on color parameters
S. Haar, K. Doty, J. Kim
Fashion and Textiles
2016
Vol. 3, Issue 22
10.1186/s40691-016-0074-9

Biochemistry and Molecular Biophysics

14-165-J Branched amphiphilic cationic oligopeptides form peptiplexes with DNA: A study of their biophysical properties and transfection efficiency
L.A. Avila, L.R.M.M. Aps, P. Sukthankar, N. Ploscariu, S. Gudlur, L. Šimo, R. Szoszkiewicz, Y. Park, S.Y. Lee, T. Iwamoto, L.C.S. Ferreira, J.M. Tomich
Molecular Pharmaceutics
February 2015
12 (3), 706-715
doi: 10.1021/mp500524s

14-370-J A multicopper oxidase-related protein is essential for insect viability, longevity and ovary development
Z. Peng, P.G. Green, Y. Arakane, M.R. Kanost, M.J. Gorman
PLOS ONE
October 2014
9(10):e111344
doi:10.1371/journal.pone.0111344

15-105-J Intracellular complexes of the early-onset torsion dystonia-associated AAA+ ATPase TorsinA
H. Li, H.-C. Wu, Z. Liu, L.F. Zacchi, J.L. Brodsky, M. Zolkiewski
SpringerPlus
December 2014
2014 3:743
https://doi.org/10.1186/2193-1801-3-743

15-329-J Identification and quantification of anthocyanins in transgenic purple tomato
X. Su, J. Xu, D. Rhodes, Y. Shen, W. Song, B. Katz, J. Tomich, W. Wang
Food Chemistry
July 2016
Vol. 202, p. 184-188
https://doi.org/10.1016/j.foodchem.2016.01.128

15-403-J Gene delivery and immunomodulatory effects of plasmid DNA associated with branched amphiphilic peptide capsules.
L.A. Avila, L.R.M.M. Aps, N. Ploscariu, P. Sukthankar, R. Guo, K.E. Wilkinson, P. Games, R. Szoszkiewicz, R.P.S. Alves, M.O. Diniz, Y. Fang, L.C.S. Ferreira, J.M. Tomich
Journal of Controlled Release
November 2018
Vol. 241, p. 15-24
https://doi.org/10.1016/j.jconrel.2016.08.042

16-004-J Initiating protease with modular domains interacts with glucan recognition protein to trigger innate immune response in insects
D. Takahashi, B.L. Garcia, M.R. Kanost
National Academy of Sciences
November 2015
112 (45) 13856-13861
https://doi.org/10.1073/pnas.1517236112

16-005-J Differential proteins expression in the midgut of *Culex quinquefasciatus* induced by Temephos insecticide
P.D. Games, S.N. Alves, B.B. Katz, J.M. Tomich, J.E. Serrão
Journal Insect Biochemistry and Molecular Biology
September 2016
30(37):253-263
https://doi.org/10.1111/mve.12172

16-035-J Clip-domain serine proteases as immune factors in insect hemolymph
M.R. Kanost and H. Jiang
Current Opinion in Insect Science
October 2015
11:47-55

16-057-J Necessity of high-resolution for coarse-grained modeling of flexible proteins
Z. Jia and J. Chen
Journal of Computational Chemistry
July 2016
5;37(18):1725-33
doi:10.1002/jcc.24391

16-143-J Electrospray ionization mass spectrometry based quantification of acetyl-triacylglycerols
S. Bansal and T.P. Durrett
Lipids
September 2016
Vol. 5, Issue 9, p. 1093-1102
doi: 10.1007/s11745-016-4179-0

16-158-J A review of solute encapsulating nanoparticles used as delivery systems with emphasis on branched amphipathic peptide capsules
S. de M. Barros, S.K. Whitaker, P. Sukthankar, S. Gudlur, M. Warner, E.I.C. Beltrão, J.M. Tomich
Archives Biochemistry Biophysics
April 2016
596:22-42
doi: 10.1016/j.abb.2016.02.027

16-268-J Serpins in arthropod biology
D.A. Meekins, M.R. Kanost, K. Michel
Seminars in Cell and Developmental Biology
February 2017
Vol. 62, p. 105-119
https://doi.org/10.1016/j.semcdb.2016.09.001

16-322-J Camelina seed yield and fatty acid composition as influenced by genotype and environment
A.K. Obour, E. Obeng, Y. Mohammed, I.A. Ciampitti, T.P. Durrett, J.A. Aznar-Moreno, C. Chen
Agronomy Journal
May 5, 2017
Vol. 109, Issue 3, p. 947-956
doi:10.2134/agronj2016.05.0256

16-371-J Metalloprotease-disintegrin ADAM12 actively promotes the stem cell-like phenotype in claudin-low breast cancer
S. Duhachek-Muggy, Y. Qi, R. Wise, L. Alyahya, H. Li, J. Hodge, A. Zolkiewska
Molecular Cancer
February 2017
16:32
https://doi.org/10.1186/s12943-017-0599-6

16-376-J Branched amphipathic peptide capsules: Different ratios of the two constituent peptides direct distinct bilayer structures and sizes
S.M. Barros, L.A. Avila, S.K. Whitaker, P. Sukthankar, E.I.C. Beltrão, J.M. Tomich
Langmuir
June 2017
33(28):7096-7104
doi:10.1021/acs.langmuir.7b00912

Biological and Agricultural Engineering

14-010-J Torrefaction of conservation reserve program biomass: A techno-economic evaluation
F. Xu, K. Linnebur, D. Wang
Industrial Crops and Products
November 2014
Vol. 61, p. 382-387
doi.org/10.1016/j.indcrop.2014.07.030

14-105-B Analysis of lignocellulosic biomass using infrared methodology
F. Xu and D. Wang
Pretreatment of Biomass Processes and Technologies
December 2015
Chapter 2, p. 7-25
https://doi.org/10.1016/B978-0-12-800080-9.00002-5

14-153-J Health and environmental impacts of smoke from vegetation fires: A review
Z.F. Liu, D.J. Murphy, R. Maghirang, D. Devlin
Journal of Environmental Protection
November 2016
Vol. 7, No. 12, p. 1860-1885
http://dx.doi.org/10.4236/jep.2016.712148

14-167-J Effects of nitrogen source on ethanol production in very high gravity fermentation of corn starch
L. Zhaofeng, D. Wang, Y.-C. Shi
Journal of the Taiwan Institute of Chemical Engineers
January 2017
Vol. 70, p. 229-235
https://doi.org/10.1016/j.jtice.2016.10.055

14-257-J Rapid determination of both structural polysaccharides and soluble sugars in sorghum biomass using near-infrared spectroscopy
F. Xu, L. Zhou, K. Zhang, J. Yu, D. Wang
BioEnergy Research
March 2015
Vol. 8, Issue 1, p. 130-136
doi: 10.1007/s12155-014-9511-z

14-328-J Final report: Validating the kinematic wave approach for rapid soil erosion assessment and improved BMP site selection to enhance training land sustainability
S.L. Hutchinson and J.M.S. Hutchinson
Environmental Security Technology Certification Program (ESTCP)
February 2014
ESTCP Project RC-200820
http://www.dtic.mil/get-tr-doc/pdf?AD=ADA602246

14-372-J Changes in spatial and temporal trends in wet, dry, warm and cold spell length or duration indices in Kansas, USA
A. Anandhi, S. Hutchinson, J. Harrington, V. Rahmani, M.B. Kirkham, C.W. Rice
International Journal of Climatology
February 2016
36: 4085-4101
https://doi.org/10.1002/joc.4619

15-109-J Sand transport and abrasion within simulated standing vegetation
H.B. Gonzales, M.E. Casada, L.J. Hagen, J. Tatarko, R.G. Maghirang
Transactions of the American Society of Agricultural and Biological Engineers
2017
60(3): 791-802
doi: 10.13031/trans.11878

15-146-J Fast analysis of high heating value and elemental compositions of sorghum biomass using near-infrared spectroscopy
K. Zhang, L. Zhou, M. Brady, F. Xu, J. Yu, D. Wang
Energy
January 2017
Vol. 118, p. 1353-1360
https://doi.org/10.1016/j.energy.2016.11.015

15-194-B Overview of sorghum industrial utilization
G. Qi, N. Li, X.S. Sun, D. Wang
Book: Sorghum: State of the Art and Future Perspectives, Agronomy Monographs 58, 2016
May 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0070

15-387-J Near-infrared spectroscopic evaluation of single-kernel deoxynivalenol accumulation and fusarium head blight resistance components in wheat
K.H.S. Peiris, W.W. Bockus, F.E. Dowell
Cereal Chemistry
June 2015
Vol. 93, Issue 1
https://doi.org/10.1094/CCHEM-03-15-0057-R

15-405-J Correlating bulk density (with dockage) and test weight (without dockage) for wheat samples
R. Bhadra, M.E. Casada, J.M. Boac, A.P. Turner, S.A. Thompson, M.D. Montross, R.G. Maghirang, S.G. McNeill
Applied Engineering in Agriculture
September 2016
Vol. 32(6): 925-930
doi: 10.13031/aea.32.11692

15-414-J Field-observed angles of repose for stored grain in the United States
R. Bhadra, M.E. Casada, S.A. Thompson, J.M. Boac, R.G. Maghirang, M.D. Montross, A.P. Turner, S.G. McNeill
Applied Engineering in Agriculture
2017
Vol. 33(1): 131-137, ISSN 0883-8542
doi: 10.13031/aea.11894

16-029-S 2016 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. Slocombe
SRP1126
Kansas Agricultural Experiment Station

16-073-J Physico-chemical properties of camelina protein altered by sodium bisulfite and guanidine-HCl
X. Zhu, D. Wang, X.S. Sun
Industrial Crops and Products
May 2016
Vol. 83, p. 453-461
https://doi.org/10.1016/j.indcrop.2015.12.085

16-097-J A generalized model for bacterial disinfection: Stochastic approach
A. Argoti, R. Maghirang, A. Barrios, S.T. Chou, L.T. Fan
Biochemical Engineering Journal
October 2016
114: 218-225
https://doi.org/10.1016/j.bej.2016.06.024

16-124-J Optimization and modeling of flow characteristics of low-oil DDGS using RSM and PLS regression techniques
R. Bhadra, R.P.A. Kingsly, M.E. Casada, S. Simsek, S. Kaliramesh
Transactions of American Society of Agricultural and Biological Engineers
2017
Vol. 60(1): 249-258
doi: 10.13031/trans.1 1928

16-213-J Estimate contributions of Kansas pasture burning to ambient PM2.5 through source apportionment using Unmix Receptor Model
Z. Liu, R. Maghirang, D. Devlin, C. Blocksome
Transactions of American Society of Agricultural and Biological Engineers
2016
59(5): 1267-1275
doi:10.13031/trans.59.11612

16-214-J Enteric methane conversion factor for dairy and beef cattle: Effects of feed digestibility and intake level
Z. Liu, Y. Liu, X. Shi, J. Wang, J.P. Murphy, R. Maghirang
Transactions of American Society of Agricultural and Biological Engineers
2017
(60)2 459-464
doi: 10.13031/trans.11744

16-225-A Longevity: An important aspect in SDI success
F.R. Lamm, D.H. Rogers, I. Kisekka, J. Aguilar
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
February 2016
p. 19-28

16-226-A Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O'Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
February 2016
p. 29-37

16-255-J Variations of ammonia emissions from cattle operations: Effects of air temperature and dietary crude protein content
Z. Liu, Y. Liu, X. Shi, J.P. Murphy, R. Maghirang
Transactions of the American Society of Agricultural and Biological Engineers
2017
60(1): 215-227
doi: 10.13031/trans.11797

16-289-J Transport and transformation of selenium and other constituents of flue-gas desulfurization wastewater in water-saturated soil materials
G. Hettiaracchi, M.B. Galkaduwa, G.J. Kluitenberg, S.L. Hutchinson, L. Davis, L.E. Erickson
Journal of Environmental Quality Abstract
March 2017
Vol. 46, No. 2
10.2134/jeq2016.09.0335

16-315-S 2016 Southeast Agricultural Research Center Research Report
L. Lomas and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 3
http://newprairiepress.org/kaesrr/vol2/iss3/

16-327-J Annual baseflow variations as influenced by climate variability and agricultural land use change in the Missouri River Basin
L. Ahiablame, A.Y. Sheshukov, V. Rahmani, D. Moriasi
Water Resources Research
August 2017
551: 188-202
https://doi.org/10.1016/j.jhydrol.2017.05.055

Division of Biology

14-028-J Intraspecific variation of a dominant grass and local adaptation in reciprocal garden communities along a US Great Plains' precipitation gradient: implications for grassland restoration with climate change
L.C. Johnson, J.T. Olsen, H. Tetreault, A. DeLaCruz, J. Bryant, T.J. Morgan, M. Knapp, N.M. Bello, S.G. Baer, B.R. Maricle
Evolutionary Applications
July 2015
8, p. 705-723
doi:10.1111/eva.12281

14-156-B The ecology of musical performance: Towards a robust methodology
W.A. Boyle and E. Waterman
2016
711 Third Ave, New York, NY 10017, Routledge, ISBN: 978-1-138-80458-6, p. 25-41

14-161-J HD-Zip proteins GL2 and HDG11 have redundant functions in arabidopsis trichomes, and GL2 activates a positive feedback loop via MYB23
A. Khosla, J.M. Paper, A.P. Boehler, A.M. Bradley, T.R. Neumann, K. Schrick
The Plant Cell
May 2014
26 (5) 2184-2200
doi: 10.1105/tpc.113.120360

15-186-J Expression of the *Cydia pomonella* granulovirus matrix metalloprotease enhances *Autographa californica* multiple nucleopolyhedrovirus virulence and can partially substitute for viral cathepsin
E. Ishimwe, J.J. Hodgson, A.L. Passarelli
Virology
July 2015
Vol. 481, Issue 1
doi: 10.1016/j.virol.2015.02.022

15-226-J CLIPB8 is part of the prophenoloxidase activation system in *Anopheles gambiae* mosquitoes
X. Zhang, C. An, KJ. Sprigg, K. Michel
Insect Biochemistry and Molecular Biology
April 2016
Vol. 71, p. 106-115
https://doi.org/10.1016/j.ibmb.2016.02.008

15-267-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
7:37626
doi:10.1038/srep37626

15-350-J Enhanced D-lactic acid production from renewable resources using engineered *Lactobacillus plantarum*
Y. Zhang, P.V. Vadlani, A. Kumar, P.R. Hardwidge, R. Govind, T. Tanaka, A. Kondo
Applied Microbiology Biotechnology
January 2016
Vol. 100, Issue 1, p. 279-288
doi:10.1007/s00253-015-7016-0

15-351-J *Phlox solivagus* (Polemoniaceae), a new species from the Blue Mountains in southeastern Washington
C.J. Ferguson, M.E. Darrach, M.H. Mayfield
Phytoneuron
April 2015
2015-25: 1-12
ISSN 2153 733X

15-429-J Wheat leaf lipids during heat stress: II. Lipids experiencing coordinated metabolism are detected by analysis of lipid co-occurrence
S. Narayanan, P.V.V. Prasad, R. Welti
Plant, Cell & Environment
March 2016
Vol. 39, Issue 3
https://doi.org/10.1111/pce.12648

16-001-J A portable, modular, self-contained recirculating chamber to measure benthic processes under controlled water velocity
J. Rüegg, J.D. Brant, D.M. Larson, M.T. Trentman, W.K. Dodds
Freshwater Science
September 2015
Vol. 34, Issue 3, p. 831-844

16-009-J Ord's kangaroo rats in north-central Kansas: Habitat associations and unexpected locations
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
2015
118:237-247
https://doi.org/10.1660/062.118.0311

16-033-J Ord's kangaroo rats in north-central Kansas: Patterns of body size and reproduction
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
September 2015
118(3-4):251-264
doi.org/10.1660/062.118.03115

16-055-J The first to arrive and the last to leave: colonisation and extinction dynamics of common and rare fishes in intermittent prairie streams
J.E. Whitney, K.B. Gido, E.C. Martin, K.J. Hase
Freshwater Biology
September 2015
Vol. 61, Issue 8
https://doi.org/10.1111/fwb.12668

16-086-J Temperature-dependent performance as a driver of warmwater fish species replacement along the river continuum
M.J. Troia, M.A. Denk, K.B. Gido
Canadian Journal of Fisheries and Aquatic Sciences
September 2015
3:394-405
dx.doi.org/10.1139/cjfas-2015-0094

16-104-J Dissolved organic carbon concentration and flux in a grassland stream: Spatial and temporal patterns and processes from long-term data
J.J. Rüegg, J.J. Eichmiller, N. Mladenov, W.K. Dodds
Biogeochemistry
September 2015
125: 393
https://doi.org/10.1007/s10533-015-0134-z

16-117-J Importance of vegetation structure to the assembly of an aerial-web-building spider community in North American open grassland
J.E. Gomez, J. Lohmiller, A. Joern
Journal of Arachnology
April 2016
Vol. 44, Issue 1, p. 28-35
http://www.bioone.org/doi/full/10.1636/P14-58.1

16-118-J Woody plant encroachment, and its removal, impact bacterial and fungal communities across stream and terrestrial habitats in a tallgrass prairie ecosystem
A.M. Veach, W.K. Dodds, A. Jumpponen
Federation of European Microbiology Societies, Microbiology Ecology
October 2015
Vol. 91, Issue 10, fiv109
https://doi.org/10.1093/femsec/fiv109

16-128-J *Anopheles gambiae* hemocytes exhibit transient states of activation
W.B. Bryant and K. Michel
Developmental and Comparative Immunology
February 2016
Vol. 55, p. 119-29
https://doi.org/10.1016/j.dci.2015.10.020

16-134-J Baseflow physical stream characteristics differ at multiple spatial scales in stream networks across diverse biomes
J. Rüegg, W.K. Dodds, M.D. Daniels, K.R. Sheehan, C.L. Baker, W.B. Bowden, K.J. Farrell, M.B. Flinn, T.K. Harms, J.B. Jones, L.E. Koenig, J.S. Kominoski, W.H. McDowell, S.P. Parker, A.D. Rosemond, M.T. Trentman, M. Whiles, W.M. Wollheim
Landscape Ecology
January 2016
Vol. 31, Issue 1, p. 119-136

16-144-J Least shrews in north-central Kansas: Habitat and individual characteristics
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
April 2016
119:2 129-135

16-164-J Assessing the potential for transitions from tallgrass prairie to woodlands: Are we operating beyond critical fire thresholds?
J. Briggs, Z. Ratajczak, D.G. Goodin, R.L. Mohler, J.B. Nippert, B. Obermeyer
Rangeland Ecology & Management
July 2016
Vol. 69, Issue 4
https://doi.org/10.1016/j.rama.2016.03.004

16-179-J Efficacy of selected food-safe compounds to prevent infestation of the ham mite, *Tyrophagus putrescentiae* (Schrank) (Acarina: Acaridae), on southern dry cured hams
S. Abbar, B. Amoah, M.W. Schilling, T.W. Phillips
Pest Management Science
November 2015
72: 1604-1612
doi:10.1002/ps.4196

16-204-J Multiple functions of Na/K-ATPase in dopamine-induced salivation of the blacklegged tick, *ixodes scapularis*
D. Kim, J. Urban, D.L. Boyle, and Y. Park
Scientific Reports
February 2016
Vol. 6
http://dx.doi.org/10.1038/srep21047

16-257-J The southern bog lemming in north-central Kansas: Unusual habitats
D.W. Kaufman and G.A. Kaufman
Transactions of the Kansas Academy of Science
April 2016
119:136-140
https://doi.org/10.1660/062.119.0203

16-268-J Serpins in arthropod biology
D.A. Meekins, M.R. Kanost, K. Michel
Seminars in Cell and Developmental Biology
February 2017
Vol. 62, 105-119
https://doi.org/10.1016/j.semcdb.2016.09.001

16-308-J Ecohydrological and climate change studies at the Konza Prairie Biological Station
J. Briggs, J.M. Blair, E.A. Horne
Transactions of the Kansas Academy of Science
January 2016
Vol. 119, Issue 1
https://doi.org/10.1660/062.119.0103

16-310-J A before-and-after assessment of patch-burn grazing and riparian fencing along headwater streams
D.M. Larson, W.K. Dodds, M.R. Whiles, J.N. Fulgoni, T.R. Thompson
Journal of Applied Ecology
May 2016
53:5 1543-1553
doi: 10.1111/1365-2664.12692

16-311-J The role of polyploidy in shaping morphological diversity in natural populations of *Phlox amabilis* (Polemoniaceae)
M.T. Chansler, C.J. Ferguson, S.D. Fehlberg, L.A. Prather
American Journal of Botany
September 2016
103(9): 1546-1558
https://doi.org/10.3732/ajb.1600183

16-312-J Functional validation of apoptosis genes IAP1 and DRONC in midgut tissue of the biting midge *Culicoides sonorensis* (Diptera: Ceratopogonidae) by RNAi
M.K. Mills, D. Nayduch, D.S. McVey, K. Michel
Journal of Medical Entomology
May 2017
54(3):559-567
https://doi.org/10.1093/jme/tjw225

16-330-J Long terminal repeat retrotransposon content in eight diploid sunflower species inferred from next-generation sequence data
M. Ungerer and H. Tetreault
G3: Genes, Genomes, Genetics
May 2016
Vol. 6
10.1534/g3.116.029082

16-361-J Fires of differing intensities rapidly select distinct soil fungal communities in a northwest US ponderosa pine forest ecosystem
C. Reazin, S. Morris, J.E. Smith, A.D. Cowan, A. Jumpponen
Forest Ecology and Management
2016
377: 118-127
https://doi.org/10.1016/j.foreco.2016.07.002

16-379-J The effect of temperature and host plant resistance on population growth of the soybean aphid biotype 1 (Hemiptera: Aphididae)
A.R. Hough, J.R. Nechols, B.P. McCornack, D.C. Margolies, B.K. Sandercock, D.Yan, L. Murray
Environmental Entomology
February 2017
Vol. 46, Issue 1, p. 58-67
https://doi.org/10.1093/ee/nvw160

Chemical Engineering

16-097-J A generalized model for bacterial disinfection: Stochastic approach
A. Argoti, R. Maghirang, A. Barrios, S.T. Chou, L.T. Fan
Biochemical Engineering Journal
October 2016
114: 218-225
https://doi.org/10.1016/j.bej.2016.06.024

Clinical Sciences

16-077-J Efficiency of lysine utilization by growing steers
E.D. Batista, A.H. Hussein, E. Detmann, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
2016
94:648-655
doi:10.2527/jas2015-9716

16-078-J Effect of ruminal ammonia supply on lysine utilization by growing steers
A.H. Hussein, E.D. Batista, M.D. Miesner, E.C. Titgemeyer
Journal of Animal Science
February 2016
94:656-664
doi:10.2527/ja

Diagnostic Medicine/Pathobiology

14-005-J Effects of in-feed copper, chlortetracycline, and tylosin on the prevalence of transferable copper resistance gene, tcrB, among fecal enterococci of weaned piglets
R.G. Amachawadi, H.M. Scott, J. Vinasco, T.G. Nagaraja, M.D. Tokach, S.S. Dritz, J.L. Nelssen, T.G. Nagaraja
Foodborne Pathogens and Disease
August 2015
12(8): 670-678
https://doi.org/10.1089/fpd.2015.1961

14-048-J Follicular expression of follicle stimulating hormone receptor variants in the ewe
R.R. Sullivan, B.R. Faris, D. Eborn, D.M. Grieger, A.G. Cino-Ozuna, T.G. Rozell
Reproductive Biology and Endocrinology
December 2013
0.536805556
https://doi.org/10.1186/1477-7827-11-113

14-342-J Effects of menthol supplementation in feedlot cattle diets on the fecal prevalence of antimicrobial-resistant *Escherichia coli*
C.C. Aperce, R. Amachawadi, C.L. Van Bibber-Krueger, T.G. Nagaraja, H.M. Scott, J. Vinasco-Torre, J.S. Drouillard
PLOS ONE
December 2016
11(12): e0168983
https://doi.org/10.1371/journal.pone.0168983

15-173-J A comparison of culture- and PCR-based methods to detect six major non-O157 serogroups of shiga toxin-producing *Escherichia coli* in cattle feces
L.W. Noll, P.B. Shridhar, D.M. Dewsbury, X. Shi, N. Cernicchiaro, D.G. Renter, T.G. Nagaraja
PLOS ONE
August 2015
10(8): e0135446
https://doi.org/10.1371/journal.pone.0135446

15-350-J Enhanced D-lactic acid production from renewable resources using engineered *Lactobacillus plantarum*
Y. Zhang, P.V. Vadlani, A. Kumar, P.R. Hardwidge, R. Govind, T. Tanaka, A. Kondo
Applied Microbiology Biotechnology
January 2016
Vol. 100, Issue 1, p. 279-288
doi: 10.1007/s00253-015-7016-0

15-403-J Gene delivery and immunomodulatory effects of plasmid DNA associated with branched amphiphilic peptide capsules.
L.A. Avila, L.R.M.M. Aps, N. Ploscariu, P. Sukthankar, R. Guo, K.E. Wilkinson, P. Games, R. Szoszkiewicz, R.P.S. Alves, M.O. Diniz, Y. Fang, L.C.S. Ferreira, J.M. Tomich
Journal of Controlled Release
November 2016
Vol. 241, p. 15-24
https://doi.org/10.1016/j.jconrel.2016.08.042

15-409-J First report of anaerobic isolation of *Salmonella enterica* from liver abscesses of feedlot cattle
R.G. Amachawadi and T.G. Nagaraja
Journal of Clinical Microbiology
June 2015
Vol. 53, No. 9, p. 3100-3101
doi: 10.1128/JCM.01111-15

16-003-J Comparative experimental infection study in dogs with Ehrlichia canis, *E. chaffeensis, Anaplasma platys* and *A. phagocytophilum*
A.D.S. Nair, C. Cheng, C.K. Ganta, M.W. Sanderson, A.R. Alleman, U.G. Munderloh, R.R. Ganta
PLOS ONE
February 2016
11(2): e0148239
doi.org/10.1371/journal.pone.0148239

16-007-J Impact of increased feed intake during late gestation on reproductive performance of gilts and sows
M.A.D. Gonçalves, S.S. Dritz, M.D. Tokach, J.H. Piva, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
2016;24(5):264-266

16-008-J Considerations regarding marketing heavy weight pigs
M.A.D. Gonçalves, J.M. DeRouchey, R.D. Goodband, M.D. Tokach, J.C. Woodworth, S.S. Dritz
Journal of Swine Health and Production
2017;25(1):29–33

16-010-J Feed efficiency adjustments to compare group closeouts in finishing pigs
M.A.D. Gonçalves, J.M. DeRouchey, R.D. Goodband, M.D. Tokach, J.C. Woodworth, S.S. Dritz
Journal of Swine Health and Production
February 2016
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p73.pdf

16-013-J Comparison of *Mannheimia haemolytica* isolates from an outbreak of bovine respiratory disease
S. Rainbolt, D.K. Pillai, B.V. Lubbers, M. Moore, R. Davis, D. Amrine, D. Mosier
Veterinary Microbiology
January 2016
Vol. 182, p. 82-86
https://doi.org/10.1016/j.vetmic.2015.10.020

16-017-J Influence of dietary fat source and feeding duration on finishing pig growth performance, carcass composition, and fat quality
E.W. Stephenson, M.A. Vaughn, D.D. Burnett, C.B. Paulk, M.D. Tokach, S.S. Dritz, J.M. DeRouchey, R.D. Goodband, J.C. Woodworth, J.M. Gonzalez
July 2016
94(7):2851-66
https://doi.org/10.2527/jas.2015-9521

16-020-J Effects of diet form and corn particle size on growth performance and carcass characteristics of finishing pigs
J.E. Nemecheck, M.D. Tokach, S.S. Dritz, R.D. Goodband, J.M. DeRouchey, J.C. Woodworth
Animal Feed Science and Technology
April 2016
Vol. 214, p. 136-141
https://doi.org/10.1016/j.anifeedsci.2016.02.002

16-047-J Comparing different phytase sources for pigs
M.A.D. Gonçalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
January 2016
Vol. 24, No. 2
https://www.aasv.org/shap/issues/v24n2/v24n2p97.pdf

16-048-J Feed efficiency adjustments to compare group close-outs in finishing pigs
M.A.D. Gonçalves, S.S. Dritz, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
March 2017
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p73.pdf

16-049-J Ingredient database management: Part I. Overview and sampling procedures
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
January 2016
Vol. 24, No. 4
https://www.aasv.org/shap/issues/v24n4/v24n4p216.pdf

16-050-J Ingredient database management: Part II. Energy
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
April 2016
Vol. 24, No. 4
https://www.aasv.org/shap/issues/v24n4/v24n4p216.pdf

16-052-J Fact sheet – Ingredient database management for swine: phosphorus
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
July 2015
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p76.pdf

16-100-J Stable flies (*Stomoxys calcitrans* L.) from confined beef cattle do not carry Shiga-toxigenic *Escherichia coli* (STEC) in the digestive tract
R. Puri-Giri, A. Ghosh, L. Zurek
Foodborne Pathogens and Disease
February 2016
Vol. 13, No. 2
https://doi.org/10.1089/fpd.2015.2056

16-101-J *Amblyomma americanum* ticks infected with in vitro cultured wild-type and mutants of *Ehrlichia chaffeensis* are competent to produce infection in naïve deer and dogs
D.C. Jaworski, C. Cheng, A.D.S. Nair, R.R. Ganta
Ticks and Tick Borne Diseases
January 2017
8(1): 60-64
doi: 10.1016/j.ttbdis.2016.09.017

16-102-J Vaccination with an attenuated mutant of *Ehrlichia chaffeensis* induces pathogen-specific CD4 T cell immunity and protection from tick-transmitted wild-type challenge in a canine host
J.L. McGill, A.D.S. Nair, C. Cheng, R.A. Rusk, D. Jaworski, R.R. Ganta
PLOS ONE
February 2016
11(2):e0148229
doi: 10.1371/journal.pone.0148229

16-111-J Feed mill biosecurity plans: A systematic approach to prevent biological pathogens in swine feed
R.A. Cochrane, S.S. Dritz, J.C. Woodworth, C.R. Stark, A.R. Huss, J.P. Cano, R.W. Thompson, A.C. Fahrenholz, C. Jones
Journal of Swine Health and Production
2016
24(3):154-164
https://www.aasv.org/shap/issues/v24n3/v24n3p154.html

16-149-J Standardized ileal digestable valine:lysine dose response effects in 25- to 45-kg pigs under commercial conditions
S. Dritz, M.A.D. Gonçalves, M.D. Tokach, N.M. Bello, K.J. Touchette, R.D. Goodband, J.M. DeRouchey, J.C. Woodworth
Journal of Animal Science
March 2018
Vol. 96, Issue 2
10.1093/jas/skx059

16-150-J Dose-response evaluation of the standardized ileal digestible tryptophan:lysine ratio to maximize growth performance of growing-finishing gilts under commercial conditions
S. Dritz, M.A.D. Gonçalves, M.D. Tokach, N.M. Bello, K.J. Touchette, R.D. Goodband, J.M. DeRouchey, J.C. Woodworth
Animal
July 2018
Vol. 12, Issue 7
https://doi.org/10.1017/S1751731117002968

16-152-J An update on modeling dose-response relationships: Accounting for correlated data structure and heterogeneous error variance in linear and nonlinear mixed models
S. Dritz, M.A.D. Gonçalves, N.M. Bello, M.B. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Animal Science
May 2016
Vol. 94, Issue 5
https://doi.org/10.2527/jas.2015-0106

16-153-J Evaluation of the minimum infectious dose of porcine epidemic diarrhea virus in virus-inoculated feed
S. Dritz, L.L. Schumacher, J.C. Woodworth, C.K. Jones, Q. Chen, J. Zhang, P.C. Gauger, C.R. Stark, R.G. Main, R.A. Hesse, M.D. Tokach
American Journal of Veterinary Research
October 2016
Vol. 77, No. 10
https://doi.org/10.2460/ajvr.77.10.1108

16-215-J Expansion of amphibian intronless interferons revises the paradigm for interferon evolution and functional diversity
F. Belcha, Y. Sang, Q. Liu, J. Lee, W. Ma, D.S. McVey
Scientific Reports
June 2016
Article Number: 29072
https://doi.org/10.1038/srep29072

16-218-J Evaluating the removal of pigs from a group and subsequent floor space allowance on the growth performance of heavy-weight finishing pigs
S. Dritz, J.R. Flohr, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Animal Science
October 2016
Vol. 94, Issue 10
https://doi.org/10.2527/jas.2016-0407

16-219-J A survey of current feeding regimens for vitamins and trace minerals in the US swine industry
S. Dritz, J.R. Flohr, J.M. DeRouchey, J.C. Woodworth, M.D. Tokach, R.D. Goodband
Journal of Swine Health and Production
November 2016
Vol. 24, No. 6
https://www.aasv.org/shap/issues/v24n6/v24n6p290.pdf

16-220-J Development of equations to predict the influence of floor space on average daily gain, average daily feed intake and gain:feed ratio of finishing pigs
J.R. Flohr, S.S. Dritz, M.D. Tokach, J.C. Woodworth, J.M. DeRouchey, R.D. Goodband
Animal
October 2017
Vol. 12, Issue 5
https://doi.org/10.1017/S1751731117002440

16-223-J A randomized field study comparing differences in core body temperature, health, and performance in crossbred beef heifers administered 2 antimicrobial products given upon arrival at a stocker facility
G.A. Hanzlicek, D.A. Blasi, B.E. Oleen, G.A. Anderson
The Professional Animal Scientist
August 2016
Vol. 32, Issue 4
https://doi.org/10.15232/pas.2015-01486

16-227-J Heterogeneous associations of ecological attributes with tick-borne rickettsial pathogens in a peri-urban landscape
R.K. Ragavan, D.G. Goodin, M.W. Dryden, A. Hroobi, D. Gordon, C. Cheng, A.D. Nair, G.A. Hanzlicek, G.A. Anderson, R.R. Ganta
Vector-Borne and Zoonotic Diseases
September 2016
Vol. 16, Issue 9
https://doi.org/10.1089/vbz.2016.1975

16-241-S Cattlemen's Day 2016
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 2, Issue 1
http://newprairiepress.org/kaesrr/vol2/iss1/

Entomology

14-110-J Temporal changes in stored-product insect populations associated with boot, pit, and load-out areas of grain elevators and feed mills
D.R. Tilley, M.E. Casada, B. Subramanyam, F.H. Arthur
Journal of Stored Products Research
September 2017
Vol. 73, p. 62-73
https://doi.org/10.1016/j.jspr.2017.07.002

14-165-J Branched amphiphilic cationic oligopeptides form peptiplexes with DNA: A study of their biophysical properties and transfection efficiency
L.A. Avila, L.R.M.M. Aps, P. Sukthankar, N. Ploscariu, S. Gudlur, L. Šimo, R. Szoszkiewicz, Y. Park, S.Y. Lee, T. Iwamoto, L.C.S. Ferreira, J.M. Tomich
Molecular Pharmaceutics
February 2015
12 (3), 706-715
doi: 10.1021/mp500524s

15-110-J Analysis of courtship flash behaviour in two *Photuris* fireflies (Coleoptera: Lampyridae) with field validation and rearing notes
L.L. Buschman
Lampyrid Journal
2017
Vol. 4, 1-19
https://gumroad.com/l/yXCOm

15-111-J Flash and predatory behavior in the firefly *Photuris versicolor quadrifulgens* (Coleoptera: Lampyridae): field and laboratory oberservations
L.L. Buschman
Lampyrid Journal
2017
Vol. 4, 40-54
https://gumroad.com/l/FvTKc

15-132-J Attract-and-kill and other pheromone-based methods to suppress populations of the Indianmeal moth (Lepidoptera: Pyralidae)
M. Campos and T.W. Phillips
Journal of Economic Entomology
February 2014
107(1):473-480
https://doi.org/10.1603/EC13451

15-147-J Effect of mouse antisera targeting the *Phlebotomus papatasi* midgut chitinase PpChit1 on sandfly physiology and fitness
M. Robles-Murguia, N. Bloedow, L. Murray, M. Ramalho-Ortigao
Memorias Institute Oswaldo Cruz
December 2014
Vol. 109(8): 1064-1069
doi: 10.1590/0074-0276140382

15-280-J Bacterial infection and immune responses in *Lutzomyia longipalpis* sand fly larvae midgut
M. Heerman, J-L. Weng, I. Hurwitz, R. Durvasula, M. Ramalho-Ortigao
PLOS Neglected Tropical Diseases
July 2015
9(7): e0003923
https://doi.org/10.1371/journal.pntd.0003923

15-339-J Preference and performance of *Hippodamia convergens* (Coleoptera: Coccinellidae) and *Chrysoperla carnea* (Neuroptera: Chrysopidae) on *Brevicoryne brassicae*, *Lipaphis erysimi*, and *Myzus persicae* (Hemiptera: Aphididae) from winter-adapted canola
W.P. Jessie, K.L. Giles, E.J. Rebek, M.E. Payton, C.N. Jessie, B.P. McCornack
Environmental Entomology
June 2015
Vol. 44, Issue 3, p. 880-889
https://doi.org/10.1093/ee/nvv068

15-377-J Effect of insect feeding, pathogen infection, and heat stress on antioxidant properties of wheat bran
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
July 2017
Vol. 57, No. 5, p. 2662-2670
doi:10.2135/cropsci2015.06.0363

15-389-J Four new species of *Cymatodera* Gray from central and southern Mexico (Coleoptera, Cleridae, Tillinae)
A.F. Burke, J. Rifkind, G. Zolnerowich
ZooKeys
July 2015
513: 105-121
https://doi.org/10.3897/zookeys.513.9935

15-450-J Bird-cherry oat aphid (*Rhopalosiphum padi*) feeding stress induces enhanced levels of phenolics in mature wheat grains.
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
January 2017
Vol. 57
10.2135/cropsci2015.08.0476.v

16-014-J Comparative life histories of greenbugs and sugarcane aphids (Hemiptera: Aphididae) co-infesting susceptible and resistant sorghums
M.H. Bayoumy, R. Perumal, J.P. Michaud
Journal of Economic Entomology
February 2016
Vol. 109, Issue 1, p. 385-391
https://doi.org/10.1093/jee/tov271

16-018-J Alternatively spliced orcokinin isoforms and their functions in *Tribolium castaneum*
H. Jiang, H.G. Kim, Y. Park
Insect Biochemistry and Molecular Biology
October 2015
65:1-9
https://doi.org/10.1016/j.ibmb.2015.07.009

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-046-J Plant spatial distribution and predator–prey ratio affect biological control of the twospotted spider mite *Tetranychus urticae* (Acari: Tetranychidae) by the predatory mite *Phytoseiulus persimilis* (Acari: Phytoseiidae)
B. Amoah, J. Anderson, D. Erram, J. Gomez, A. Harris, J. Kivett, K. Ruang-Rit, Y. Wang, L. Murray, J. Nechols
Biocontrol Science and Technology
February 2016
Vol. 26, Issue 4, p. 548-561
doi: 10.1080/09583157.2015.1133807

16-058-J Residual efficacy of deltamethrin and ß-cyfluthrin against *Trogoderma variabile* and *Trogoderma inclusum* (Coleoptera: Dermestidae)
M.N. Ghimire, F.H. Arthur, S.W. Myers, T.W. Phillips
Journal of Stored Product Research
March 2016
66:6-11
https://doi.org/10.1016/j.jspr.2015.12.002

16-065-J Movement and orientation decision modeling of *Rhyzopertha dominica* (Coleoptera: Bostrichidae) in the grain mass
E.M.G. Cordeiro, J.F. Campbell, T.W. Phillips
Environmental Entomology
April 2016
Vol. 45, Issue 2, p. 410-419
https://doi.org/10.1093/ee/nvv232

16-100-J Stable flies (*Stomoxys calcitrans* L.) from confined beef cattle do not carry Shiga-toxigenic *Escherichia coli* (STEC) in the digestive tract
R. PuriGiri, A. Ghosh, L. Zurek
Foodborne Pathogens and Disease
February 2016
Vol. 13, No. 2
https://www.liebertpub.com/doi/10.1089/fpd.2015.2056

16-122-J A checklist of the New World species of Tillinae (Coleoptera: Cleridae), with a key to genera and new country records
A.F. Burke, J.M. Leavengood, G. Zolnerowich
Zootaxa
December 2015
Vol. 4059, No. 1
http://dx.doi.org/10.11646/zootaxa.4059.1.1

16-123-J Wheat genotypes with combined resistance to wheat curl mite, wheat streak mosaic virus, wheat mosaic virus, and triticum mosaic virus
Wen-Po Chuang, Lina Maria Aguirre Rojas, Luaay Kahtan Khalaf, Guorong Zhang, Allan K. Fritz, Anna E. Whitfield, C. Michael Smith
Journal of Economic Entomology
April 2017
110(2):711-718
https://doi.org/10.1093/jee/tow255

16-138-J Pheromone trapping to determine Hessian fly (Diptera: Cecidomyiidae) activity in Kansas
H.N. Schwarting, R.J. Whitworth, G. Cramer, M.-S. Chen
Journal of the Kansas Entomological Society
2015
88(4):411-417
https://doi.org/10.2317/0022-8567-88.4.411

16-177-J Monitoring *Tyrophagus putrescentiae* (Schrank) (Acari: Acaridae) with traps in dry-cured ham aging rooms
B. Amoah, M.W. Schilling, T.W. Phillips
Environmental Entomology
August 2016
Volume 45, Issue 4
https://doi.org/10.1093/ee/nvw059

16-178-J Efficacy of selected pesticides against *Tyrophagus putrescentiae* (Schrank): Influence of application rate, application surface, and residual activity
S. Abbar, M.W. Schilling, R.J. Whitworth, T.W. Phillips
Journal of Pest Science
February 2017
Vol. 90, Issue 1, p. 379-387
doi: 10.1007/s10340-016-0766-3

16-179-J Efficacy of selected food-safe compounds to prevent infestation of the ham mite, *Tyrophagus putrescentiae* (Schrank) (Acarina: Acaridae), on southern dry cured hams
S. Abbar, B. Amoah, M.W. Schilling, T.W. Phillips
Pest Management Science
November 2015
72: 1604-1612
doi:10.1002/ps.4196

16-190-J Ligand selectivity in tachykinin and natalisin neuropeptidergic systems of the honey bee parasitic mite *Varroa destructor*
Y. Park, H. Jiang, D. Kim, S. Dobesh, J.D. Evans, R.J. Nachman, K. Kaczmarek, J. Zabrocki
Scientific Reports
January 2016
Vol. 6
http:./dx.doi.org/10.1038/srep19547

16-204-J Multiple functions of Na/K-ATPase in dopamine-induced salivation of the blacklegged tick, *Ixodes scapularis*
D. Kim, J. Urban, D.L. Boyle, Y. Park
Scientific Reports
February 2016
Vol. 6
http://dx.doi.org/10.1038/srep21047

16-238-J Dual resistance to lambda-cyhalothrin and dicrotophos in *Hippodamia convergens* (Coleoptera: Coccinellidae).
J.P. Michaud, P.R.R. Barbosa, A.R.S. Rodrigues, J.B. Torees
Chemosphere
September 2016
Vol. 159, Issue 159
10.1016/j.chemosphere.2016.05.075

16-260-J Impact of Hessian fly (*Mayetiola destructor*) on developmental aspects of hard red winter wheat in Kansas
H.N. Schwarting, R.J. Whitworth, M.-S. Chen, G. Cramer, T. Maxwell
Southwestern Entomologist
2016
Vol. 41(2), p.321-329
http://dx.doi.org/10.3958/059.041.0208

16-279-J Taxonomic revision of the New World genus *Callotillus* Wolcott (Cleridae, Tillinae), with the description of the new genus *Neocallotillus*, and an illustrated key of identification to species
A.F. Burke and G. Zolnerowich
ZooKeys
2016
Vol. 617
https://doi.org/10.3897/zookeys.617.9970

16-294-J Relative toxicity of two aphicides to *Hippodamia convergens* (Coleoptera: Coccinellidae): Implications for integrated management of sugarcane aphid, *Melanaphis sacchari* (Hemiptera: Aphididae).
J.P. Michaud, F. Colares, C.L. Bain, J.B. Torres
Journal of Economic Entomology
February 2017
Vol. 110, Issue 1
https://doi.org/10.1093/jee/tow265

16-313-J Toxicity of three aphicides to the generalist predators *Chrysoperla carnea* (Neuroptera: Chrysopidae) and *Orius insidiosus* (Hemiptera: Anthocoridae)
J.P. Michaud, P.R.R. Barbosa, C.L. Bain, J.B. Torres
Ecotoxicology
March 2017
Vol. 26, Issue 5
10.1007/s10646-017-1792-5

16-320-J Efficacy of selected food-safe compounds to prevent infestation of the ham mite, *Tyrophagus putrescentiae* (Schrank) (Acarina: Acaridae), on southern dry-cured hams
T. Phillips, S. Abbar, B. Amoah, M.W. Schilling
Pest Management Science
November 2015
Vol. 72, Issue 8
https://doi.org/10.1002/ps.4196

16-321-J Oviposition by female *Plodia interpunctella* (Lepidoptera: Pyralidae): Description and time budget analysis of behaviors
K.R. Sambaraju, S.L. Donelson, J. Bozic, T.W. Phillips
Insects
January 2016
7(1), 4

16-333-J Monitoring *Tyrophagus putrescentiae* (Acari: Acaridae) with traps in dry-cured ham aging rooms
T. Philips, B. Amoah, M.W. Schilling
Environmental Entomology
May 2016
Vol. 45, Issue 4
https://doi.org/10.1093/ee/nvw059

16-334-J Sampling methods to detect and estimate populations of *Tyrophagus putrescentiae* (Schrank) (Sarcoptiformes: Acaridae) infesting dry-cured hams
B. Amoah, D. Hagstrum, B. Subramanyam, J.F. Campbell, M.W. Schilling, T.W. Phillips
Journal of Stored Product Research
September 2017
Vol. 73, p. 98-108
https://doi.org/10.1016/j.jspr.2017.07.004

16-364-J Time-mortality relationships to control *Tyrophagus putrescentiae* (Acarina: Acari) exposed to high and low temperatures
S. Abbar, M.W. Schilling, T.W. Phillips
Journal of Economic Entomology
October 2016
Vol. 109, Issue 5, p. 2215–2220
https://doi.org/10.1093/jee/tow159

16-368-J Extending the 'ecology of fear' beyond prey: Reciprocal non-consumptive effects among competing aphid predators.
J.P. Michaud, P.R.R. Barbosa, C.L. Bain, J.B. Torres
Environmental Entomology
September 2016
Vol. 45, Issue 6
https://doi.org/10.1093/ee/nvw133

16-372-J Efficacy of four insecticides against alfalfa weevil with comparison of impacts on beneficial species, 2016
J.P. Michaud and C.L. Bain
Arthropod Management Tests
September 2016
Vol. 41, Issue 1
https://doi.org/10.1093/amt/tsw118

16-379-J The effect of temperature and host plant resistance on population growth of the soybean aphid biotype 1 (Hemiptera: Aphididae)
A.R. Hough, J.R. Nechols, B.P. McCornack, D.C. Margolies, B.K. Sandercock, D.Yan, L. Murray
Environmental Entomology
February 2017
Vol. 46, Issue 1, p. 58-67
https://doi.org/10.1093/ee/nvw160

Food, Nutrition, Dietetics and Health

14-344-J Line spread as a visual clinical tool for thickened liquids
A.M. Lund, J.M. Garcia, E. Chambers
American Journal of Speech-Language Pathology
August 2013, Vol. 22, Issue 3, 566-571
https://pubs.asha.org/doi/10.1044/1058-0360%282013/12-0044%29

15-329-J Identification and quantification of anthocyanins in transgenic purple tomato
X. Su, J. Xu, D. Rhodes, Y. Shen, W. Song, B. Katz, J. Tomich, W. Wang
Food Chemistry
July 2016
Vol. 202, p. 184-188
https://doi.org/10.1016/j.foodchem.2016.01.128

16-114-J University students and faculty have positive perceptions of open/alternative resources and their utilization in a textbook replacement initiative
N. Delimont, E.C. Turtle, A. Bennett, K. Adhikari, B.L. Lindshield
Research in Learning Technology
June 2016
Vol. 24
doi: 10.3402/rlt.v24.29920

16-137-J Effect of saw palmetto supplements on androgen-sensitive LNCaP human prostate cancer cell number and syrian hamster flank organ growth
B. Lindshield, A.B. Opoku-Acheampong, K. Penugonda
Evidence-Based Complementary and Alternative Medicine
April 2016
http://dx.doi.org/10.1155/2016/8135135

16-163-J Exercise activates p53 and negatively regulates IGF01 pathway in epidermis within a skin cancer model
M. Yu, B. King, E. Ewert, X. Su, N. Mardiyati, Z. Zhao, W. Wang
PLOS ONE
August 2016
11(8): e0160939
https://doi.org/10.1371/journal.pone.0160939

Grain Science and Industry

14-110-J Temporal changes in stored-product insect populations associated with boot, pit, and load-out areas of grain elevators and feed mills
D.R. Tilley, M.E. Casada, B. Subramanyam, F.H. Arthur
Journal of Stored Products Research
September 2017
Vol. 73, p. 62-73
https://doi.org/10.1016/j.jspr.2017.07.002

14-167-J Effects of nitrogen source on ethanol production in very high gravity fermentation of corn starch
L. Zhaofeng, D. Wang, Y.-C. Shi
Journal of the Taiwan Institute of Chemical Engineers
January 2017
Vol. 70, January 2017, p. 229-235
https://doi.org/10.1016/j.jtice.2016.10.055

14-168-J Energy and cost for pelleting and transportation of select cellulosic biomass feedstocks for ethanol production
J.M. Wilson, L.J. McKinney, K. Theerarattananoon, T.C. Ballard, D. Wang, S.A. Staggenborg, P.V. Vadlani
Applied Engineering in Agriculture
2014
Volume: 30, Issue 1, p. 77-85
doi: 10.13031/aea.30.9719

14-360-J Changes in protein and starch digestibility in sorghum flour during heat–moisture treatments
T.-H. Vu, S. Bean, C.-F. Hsieh, Y.-C. Shi
Journal of the Science of Food and Agriculture
May 2017
97: 4770-4779
doi:10.1002/jsfa.8346

14-402-J Lactic acid production from biomass-derived sugars via co-fermentation of *Lactobacillus brevis* and *Lactobacillus plantarum*
Y. Zhang and P.V. Vadlani
Journal of Bioscience and Bioengineering
June 2015
Vol. 119, Issue 6, p. 694-699
https://doi.org/10.1016/j.jbiosc.2014.10.027

15-045-J Optimization and modeling of flow characteristics of low-oil DDGS using regression techniques
R. Bhadra, R.P. Kingsly Ambrose, M.E. Casada, S. Simsek, K. Siliveru
Transactions of the American Society of Agricultural and Biological Engineers
2017
60(1): 249-258
doi: 10.13031/trans.11928

15-184-J Effect of chaff on bulk flow properties of wheat
Q. Bian, R.P.K. Ambrose, B. Subramanyam
Journal of Stored Products Research
October 2015
Vol. 64, Part A, p. 21-26
https://doi.org/10.1016/j.jspr.2015.08.004

15-185-J Effects of insect-infested kernels on bulk flow properties of wheat
Q. Bian, R.P.K. Ambrose, B. Subramanyam
Journal of Stored Products Research
July 2015
Volume 63, p. 51-56
https://doi.org/10.1016/j.jspr.2015.06.002

15-194-B Overview of sorghum industrial utilization
G. Qi, N. Li, X.S. Sun, D. Wang
Book: Sorghum: State of the Art and Future Perspectives, Agronomy Monographs 58, 2016
May 2016
ISBN: 978-0-89118-628-1
doi:10.2134/agronmonogr58.2014.0070

15-267-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
7: 37626
doi:10.1038/srep37626

15-350-J Enhanced D-lactic acid production from renewable resources using engineered *Lactobacillus plantarum*
Y. Zhang, P.V. Vadlani, A. Kumar, P.R. Hardwidge, R. Govind, T. Tanaka, A. Kondo
Applied Microbiology Biotechnology
January 2016
Vol. 100, Issue 1, p. 279-288
doi: 10.1007/s00253-015-7016-0

15-377-J Effect of insect feeding, pathogen infection, and heat stress on antioxidant properties of wheat bran
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
July 2017
Vol. 57, No. 5, p. 2662-2670
doi:10.2135/cropsci2015.06.0363

15-401-J Evaluation of structural treatment efficacy against *Tribolium castaneum* and *Tribolium confusum* (Coleoptera: Tenebrionidae) using meta-analysis of multiple studies conducted in food facilities
J.F. Campbell, K.A. Buckman, P.G. Fields, B. Subramanyam
Journal of Economic Entomology
July 2015
Vol. 108, Issue 5, p. 2125-2140
https://doi.org/10.1093/jee/tov215

15-434-J Image analysis approach to understand the differences in flour particle surface and shape characteristics
K. Siliveru, J.W. Kwek, G.M.L. Lau, R.P.K. Ambrose
Cereal Chemistry
March 2016
Vol. 93, Issue 3, p. 234-241
https://doi.org/10.1094/CCHEM-05-15-0108-R

15-450-J Bird-cherry oat aphid (*Rhopalosiphum padi*) feeding stress induces enhanced levels of phenolics in mature wheat grains
O.F. Ramos, C.M. Smith, A.K. Fritz, R.L. Madl
Crop Science
January 2017
Vol. 57
10.2135/cropsci2015.08.0476.v

16-011-J Profiling endosperm purity of commercial mill streams preceded by debranning using quantitative chemical imaging
M.D. Boatwright, E.S. Posner, R. Lopes, D.L. Wetzel
Cereal Foods World
October 2015, Vol. 60, No. 5

16-049-J Ingredient database management: Part I. Overview and sampling procedures
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
January 2016
Vol. 24, No. 4
https://www.aasv.org/shap/issues/v24n4/v24n4p216.pdf

16-050-J Ingredient database management: Part II. Energy
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
April 2016
Vol. 24, No. 4
https://www.aasv.org/shap/issues/v24n4/v24n4p216.pdf

16-052-J Fact sheet – Ingredient database management for swine: phosphorus
M.A.D. Gonçalves, S.S. Dritz, C.K. Jones, M.D. Tokach, J.M. DeRouchey, J.C. Woodworth, R.D. Goodband
Journal of Swine Health and Production
July 2015
Vol. 25, No. 2
https://www.aasv.org/shap/issues/v25n2/v25n2p76.pdf

16-073-J Physico-chemical properties of camelina protein altered by sodium bisulfite and guanidine-HCl
X. Zhu, D. Wang, X.S. Sun
Industrial Crops and Products
May 2016
Vol. 83, p. 453-461
https://doi.org/10.1016/j.indcrop.2015.12.085

16-095-J Production of single cell oil from *Lipomyces starkeyi* ATCC 56304 using biorefinery by-products
K. Probst and P.V. Vadlani
Bioresource Technology
December 2015
98:268-75
doi: 10.1016/j.biortech.2015.09.018

16-106-J Novel biomass pretreatment using alkaline organic solvents: A green approach for biomass fractionation, and 2,3-butanediol production
Y.N. Guragain, K.P. Bastola, R.L. Madl, P.V. Vadlani
Bioenergy Research
June 2016
Vol. 9, Issue 2, p. 643-655
doi: 10.1007/s12155-015-9706-y

16-172-J Sucrose replacement in high ratio white layer cakes
R.A. Miller, O.E. Dann, A.R. Oakley, M.E. Angermayer, K.H. Brackebusch
Journal of the Science of Food and Agriculture
December 2016
Vol. 97, Issue 10
https://doi.org/10.1002/jsfa.8170

16-241-S Cattlemen's Day 2016
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 2, Issue 1
http://newprairiepress.org/kaesrr/vol2/iss1/

16-250-J Effect of RS4 resistant starch on dietary fiber content of white pan bread
R. Miller and E. Bianchi
Cereal Chemistry
July 2016, Vol. 94, Issue 2
https://doi.org/10.1094/CCHEM-03-16-0048-R

16-278-J Significance of composition and particle size on the shear flow properties of wheat flour
K. Siliveru, R.P.K. Ambrose, P.V. Vadlani
Journal of the Science of Food and Agriculture
September 2016
https://doi.org/10.1002/jsfa.8038

16-334-J Sampling methods to detect and estimate populations of *Tyrophagus putrescentiae* (Schrank) (Sarcoptiformes: Acaridae) infesting dry-cured hams
B. Amoah, D. Hagstrum, B. Subramanyam, J.F. Campbell, M.W. Schilling, T.W. Phillips
Journal of Stored Product Research
September 2017
Vol. 73, p. 98-108
https://doi.org/10.1016/j.jspr.2017.07.004

16-342-J Granular bond number model to predict the flow of fine flour powders using particle properties
K. Siliveru, C.G.Jange, J.W.Kwek, R.P.K.Ambrose
Journal of Food Engineering
September 2017
Vol. 208
https://doi.org/10.1016/j.jfoodeng.2017.04.003

16-358-J Formation of pellet fines during the feed manufacturing process, transportation and feed line delivery, and nutrient composition of pellets and fines
R.D. Goodband, J.A. De Jong, J.M. DeRouchey, M.D. Tokach, J.C. Woodworth, S.S. Dritz, C.R. Stark, C.K. Jones, H.E. Williams, J. Erceg, B. Harberl, L.J. McKinney, G. Smith, D. Van Otterloo, C.B. Paulk
American Society of Agricultural and Biological Engineers
Vol. 33, Issue 6
10.13031/aea.12304

Horticulture and Natural Resources

14-116-J Growth responses of *Zoysia* spp. under tree shade in the midwestern United States
K.W. Peterson, J.D. Fry, D.J. Bremer
HortScience
November 2014
Vol. 49, No. 11 1444-1448

14-343-J Applicator and primo effects on the persistence of painted golf course water hazard and out-of-bounds lines on bermudagrass
J.D. Fry and J.K. Kruse
Applied Turfgrass Science
April 2014
Vol. 11, Issue 1
doi:10.2134/ATS-2014-0037-RS

15-262-J Relationship between high school student participation in state-level Future Farmers of America Career Development events and matriculation at the host university: A case study in horticulture at Kansas State University
K.A. Williams, C.T. Miller, W. Upham
HortTechnology
December 2016
Vol. 26, No. 6 862-868
doi: 10.21273/HORTTECH03506-16

15-400-J Assessing impact of online delivery of turfgrass and landscape information
M.M. Kennelly and J.A. Hoyle
Journal of Extension
October 2015
Vol. 53, No. 5
https://www.joe.org/joe/2015october/tt4.php

15-420-J Colorant application volume and color persistence on a 'Chisholm' zoysiagrass lawn
R. Braun, J. Fry, M. Kennelly, D. Bremer, J. Griffin
HortTechnology
June 2016
Vol. 26, No. 3 3341-319

16-031-J Evaluation of selective herbicide combinations and Paclobutrazol on rough bluegrass control
C. Thompson, M. Sousek, Z. Reicher, J. Fry, M. Kennelly
Crop, Forage and Turfgrass Management
July 2016
2:1-3
doi:10.2134/cftm2015.0213

16-032-J Rough bluegrass incidence in a new tall fescue sward as affected by seeding rate and mowing height
C. Thompson, J. Fry, R. Braun, M. Kennelly
Crop, Forage and Turfgrass Management
March 2017
3:2016-11-0074
doi:10.2134/cftm2016.11.0074

16-083-J Assessing a faculty development program for the adoption of brain-based learning strategies
C.C. Lavis, K.A. Williams, J. Fallin, P.K. Barnes, S.J. Fishback, S. Thien
Journal of Faculty Development
January 2016
30(1):57-69

16-084-J Rooting stem cuttings of herbaceous and woody ornamentals in substrates containing eastern redcedar (*Juniperus virginiana*)
J.A. Brock, J.J. Griffin, C.R. Boyer
Journal of Environmental Horticulture
December 2015
33(4):155-159

16-217-J Registration of KSUZ 0802 zoysiagrass
A. Chandra, J.D. Fry, A.D. Genovesi, M. Meeks, M.C. Engelke, Q. Zhang, D. Okeyo, J. Moss, E. Ervin, Xi Xiong, S. Milla-Lewis, J. Brosnan, J. Griffin, L. Parsons
Journal of Plant Registrations
April 2017
11: 2: 100-106
doi:10.3198/jpr2016.03.0010crc

16-262-J Evaluation of spring and fall fungicide applications for large patch management in zoysiagrass
K. Obassa, J. Fry, D. Bremer, M. Kennelly
International Turfgrass Society Research Journal
October 2017
Vol. 13, Issue 1
10.2134/itsrj2016.04.0274

16-272-J Measurement of evapotranspiration in turfgrass: A comparison of techniques
K.W. Peterson, D.J. Bremer, K.B. Shonkwiler, J.M. Ham
Agronomy Journal
June 2017
doi:10.2134/agronj2017.02.0088

16-273-J Effects of soil moisture-based irrigation controllers, mowing height, and trinexapac-ethyl on tall fescue irrigation amounts and mowing requirements
J. Chabon, D.J. Bremer, J.D. Fry, C. Lavis
International Turfgrass Society Research Journal
March 2017
Vol. 91, p. 9-16
http://dx.doi.org/10.1016/j.theriogenology.2016.11.032

16-305-J Estimating transpiration from turfgrass using stomatal conductance values derived from infrared thermometry
K.W. Peterson, D.J. Bremer, J.M. Blonquist Jr.
International Turfgrass Society Research Journal
October 2017
Vol. 13, No. 1, p. 113-118
doi:10.2134/itsrj2016.09.0788

16-323-J Physiological and pathogenic contributors to the summer decline of *Poa trivialis*
C. Thompson, M. Kennelly, J. Fry, M. Sousek, Z. Reicher
International Turfgrass Research Journal
October 2017
Vol. 13,3 Issue1
doi: 10.2134/itsrj2016.05.0304

16-373-J Evapotranspiration from spider and jade plants can improve relative humidity in an interior environment
K. Williams, E.W. Kerschen, C. Garten, M.M. Derby
HortTechnology
December 2016
Vol. 26, Issue 26, p. 803-810
10.21273/HORTTECH03473-16

16-380-J Transcriptome analysis reveals potential mechanisms for inhibition of intumescence development by UV radiation in tomato
Q. Wu, S. Park, M.B. Kirkham, K.A. Williams
Environmental and Experimental Botany
February 2017
Vol. 134, p. 130-140
http://dx.doi.org/10.1016/j.envexpbot.2016.11.006

Northwest Research-Extension Center

15-406-J Comparison of corn, grain sorghum, soybean, and sunflower under limited irrigation
A.J. Schlegel, Y. Assefa, D. O'Brien, F.R. Lamm, L.A. Haag, L.R. Stone
Agronomy Journal
January 2016
Vol. 108, No. 2, p. 670-679
doi:10.2134/agronj2015.0332

15-412-J Simplified equations to estimate flushline diameter for subsurface drip irrigation systems
F.R. Lamm and J. Puig-Bargués
Transactions of the American Society of Agricultural and Biological Engineers
November 2016
Vol. 60(1): 185-192
doi: 10.13031/trans.12131

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-023-S 2015 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1121
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-225-A Longevity: An important aspect in SDI success
F.R. Lamm, D.H. Rogers, I. Kisekka, J. Aguilar
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
2016
February 23-24, 2016. p. 19-28

16-226-A Using the K-State center pivot sprinkler and SDI economic comparison spreadsheet - 2016
F.R. Lamm, D.M. O'Brien, D.H. Rogers
Proceedings of 28th Central Plains Irrigation Conference, Kearney, NE
February 23-24, 2016. p. 29-37

Plant Pathology

14-068-B Mycotoxins in grain chains
J.F. Leslie and A.F. Logrieco
Mycotoxin reduction in grain chains
July 2014
Ames, Iowa 50010, USA, John Wiley and Sons, Inc., p. 376, July 2014 ISBN: 978-0-813-82083-5

14-225-J Effects of seed protection chemicals on stand and yield of grain sorghum at Ottawa, Kansas, 2013
D.J. Jardine and E. Adee
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/PDMR/volume8/abstracts/ST009.asp

14-235-J Effects of seed protection chemicals on stand and yield of soybeans at Courtland, Kansas, 2013
D.J. Jardine
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/PDMR/volume8/abstracts/ST008.asp

14-236-J Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2013
D.J. Jardine, E. Adee, K. Kusel
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume8/abstracts/st007.asp

15-030-J Independent mis-splicing mutations in TaPHS1 causing loss of preharvest sprouting (PHS) resistance during wheat domestication
S. Liu, S.K. Sehgal, M. Lin, J. Li, H.N. Trick, B.S. Gill, G. Bai
New Phytologist
November 2015
208: 928-935
https://doi.org/10.1111/nph.13489

15-039-J Adult plant resistance to *Puccinia triticina* in a geographically diverse collection of *Aegilops tauschii*
B. Kalia, D.L. Wilson, R.L. Bowden, R.P. Singh, B.S. Gill
Genetic Resources and Crop Evolution
June 2017
(2017) 64: 913-926
https://doi.org/10.1007/s10722-016-0411-2

15-070-B Pathology for the curious: Why study pathology?
W.W. Bockus
2015
University of Canberra Press, Canberra, Australia

15-217-J Morphological characterization and trichothecene genotype analysis of a fusarium head blight population in South Africa
A. Minnaar-Ontong, L. Herselman, W-M. Kriel, J.F. Leslie
European Journal of Plant Pathology
June 2017
Vol. 148, Issue 2, p. 261-269
https://doi.org/10.1007/s10658-016-1085-5

15-314-J RNA interference tools for the western flower thrips, *Frankliniella occidentalis*
I.E. Badillo-Vargas, D. Rotenberg, B.A. Schneweis, A.E. Whitfield
Journal of Insect Physiology
May 2015
Vol. 76, p. 36-46
https://doi.org/10.1016/j.jinsphys.2015.03.009

15-387-J Near-Infrared spectroscopic evaluation of single-kernel deoxynivalenol accumulation and fusarium head blight resistance components in wheat
K.H.S. Peiris, W.W. Bockus, F.E. Dowell
Cereal Chemistry
June 2015
Vol. 93, Issue 1
https://doi.org/10.1094/CCHEM-03-15-0057-R

15-400-J Assessing impact of online delivery of turfgrass and landscape information
M.M. Kennelly and J.A. Hoyle
Journal of Extension
October 2015
Vol. 53, No. 5
https://www.joe.org/joe/2015october/tt4.php

15-420-J Colorant application volume and color persistence on a 'Chisholm' zoysiagrass lawn
R. Braun, J. Fry, M. Kennelly, D. Bremer, J. Griffin
HortTechnology
June 2016
Vol. 26, No. 3 3341-319

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-028-J Quantifying variety-specific heat resistance and the potential for adaptation to climate change
J.B. Tack, J.A. Barkley, T.W. Rife, J.A. Poland, L.L. Nalley
Global Change Biology
22(August 2016)8:2904-2912

16-031-J Evaluation of selective herbicide combinations and Paclobutrazol on rough bluegrass control
C. Thompson, M. Sousek, Z. Reicher, J. Fry, M. Kennelly
Crop, Forage and Turfgrass Management
July 2016
2:1-3
doi:10.2134/cftm2015.0213

16-032-J Rough bluegrass incidence in a new tall fescue sward as affected by seeding rate and mowing height
C. Thompson, J. Fry, R. Braun, M. Kennelly
Crop, Forage and Turfgrass Management
March 2017
3:2016-11-0074
doi:10.2134/cftm2016.11.0074

16-034-J Phylogenomics of *Xanthomonas* field strains infecting pepper and tomato reveals diversity in effector repertoires and identifies determinants of host specificity
A.R. Schwartz, N. Potnis, S. Timilsina, M. Wilson, J. Patane, J. Martins, G.V. Minsavage, D. Dahlbeck, A. Akhunova, N. Almeida, G.E. Vallad, J.D. Barak, F.F. White, S.A. Miller, D. Ritchie, E. Goss, R.S. Bart, J.C. Setubal, J.B. Jones, B.J. Staskawicz
Frontiers in Microbiology
June 2015
http://journal.frontiersin.org/article/10.3389/fmicb.2015.00535

16-037-J Genomic selection for processing and end-use quality traits in the CIMMYT spring bread wheat breeding program
S.D. Battenfield, C. Guzmán, R.C. Gaynor, R.P. Singh, R.J. Peña, S. Dreisigacker, A.K. Fritz, J.A. Poland
The Plant Genome
July 2016, 9(2)
doi:10.3835/plantgenome2016.01.0005

16-053-J Thrips transmission of tospoviruses
D. Rotenberg, A.L. Jacobson, D.J. Schneweis, A.E. Whitfield
Current Opinion in Virology
December 2015
15:80–89
https://doi.org/10.1016/j.coviro.2015.08.003

16-061-J RNAi mediated, stable resistance to Triticum mosaic virus in wheat
J.L. Shoup, L.F. Cruz, H.N. Trick, J.P. Fellers
Crop Science
April 2016
56: 4: 1602-1610
doi:10.2135/cropsci2015.09.0577

16-074-J Gene targeting by the TAL effector PthXo2 reveals cryptic resistance gene for bacterial blight of rice
J. Zhou, Z. Peng, J. Long, D. Sosso, B. Liu, J. Eom, S. Huang, S. Liu, C.V. Cruz, W.B. Frommer, F.F. White, B. Yang
The Plant Journal
May 2015
Vol. 82, Issue 4
doi: 10.1111/tpj.12838

16-076-J The maize brown midrib4 (bm4) gene encodes a functional folylpolyglutamate synthase (FPGS)
L. Li, S. Hill-Skinner, S. Liu, D. Beuchle, H.M. Tang, C.T. Yeh, D. Nettleton, P.S. Schnable
The Plant Journal
February 2015
81(3):493-504
doi: 10.1111/tpj.12745

16-080-J Precisely mapping a major gene conferring resistance to Hessian fly in bread wheat using genotyping-by-sequencing
G. Li, M.-S. Chen, E. Edae, J. Poland, E. Akhunov, S. Chao, G. Bai, B.F. Carver, L. Yan
BMC Genomics
2015
0.741666667

16-082-J Influence of nitrogen source and application timing on large patch of zoysiagrass
G.L. Miller, D.T. Earlywine, R. Braun, J. Fry, M.M. Kennelly
Crop, Forage and Turfgrass Management
May 2016
2:1-9
doi:10.2134/cftm2015.0189

16-089-J Precisely mapping a major gene conferring resistance to Hessian fly in bread wheat using genotyping-by-sequencing
G. Li, Y. Wang, M.-S. Chen, E. Edae, J. Poland, E. Akhunov, S. Chao, G. Bai, B.F. Carver, L. Yan
BioMed Central Genomics
February 2015
0.741666667
https://doi.org/10.1186/s12864-015-1297-7

16-090-J Fine mapping and characterization of *Sr21*, a temperature-sensitive diploid wheat resistance gene effective against the *Puccinia graminis* f. sp. *tritici* Ug99 race group
S. Chen, M.N. Rouse, W. Zhang, Y. Jin, E. Akhunov, Y. Wei, J. Dubcovsky
Theoretical and Applied Genetics
April 2015
128(4):645-656
doi: 10.1007/s00122-015-2460-x

16-091-J Impact of the D genome and quantitative trait loci on quantitative traits in a spring durum by spring bread wheat cross
J.R. Kalous, J.M. Martin, J.D. Sherman, H.Y. Heo N.K. Blake, S.P. Lanning, J.L. Eckhoff, S. Chao, E. Akhunov, L.E. Talbert
Theoretical and Applied Genetics
September 2015
128(9):1799-1811

16-092-J Genetic diversity among wheat accessions from the USDA National Small Grains Collection
J.M. Bonman, E.M. Babiker, A. Cuesta-Marcos, K. Esvelt-Klos, G. Brown-Guedira, S. Chao, D. See, J. Chen, E. Akhunov, J. Zhang, H.E. Bockelman, T.C. Gordon
Crop Science Society of America
2015
55:1243-1253

16-093-J Evaluation and association mapping of resistance to tan spot and Stagonospora nodorum blotch in adapted winter wheat germplasm
Z. Liu, I. El-Basyoni, G. Kariyawasam, G. Zhang, A. Fritz, J. Hansen, F. Marais, A. Friskop, S. Chao, E. Akhunov, P.S. Baenzier
Plant Disease
October 2015
99:1333-1341
https://doi.org/10.1094/PDIS-11-14-1131-RE

16-098-J Multiplexed, trait-linked marker set for rapid genotyping in wheat using next generation sequencing
A. Bernardo, S. Wang, P. St. Amand, G. Bai
PLOS ONE
December 2015
10(12): e0143890
https://doi.org/10.1371/journal.pone.0143890

16-103-J Development of a D genome specific marker resource for diploid and hexaploid wheat
Y.Wang, T. Drader, V.K. Tiwari, L. Dong, A. Kumar, N. Huo, F. Ghavami, M.J. Iqbal, G.R. Lazo, J. Leonard, B.S. Gill, S.F. Kianian, M-C. Luo, Y.O. Gu
BMC Genomics
August 2015
1.115277778
https://doi.org/10.1186/s12864-015-1852-2

16-108-J GSP: A web-based platform for designing genome-specific primers in polyploids
Y. Wang, V.K. Tiwari, N. Rawat, B.S. Gill, N. Huo, F.M. You, D. Coleman-Derr, Y.Q. Gu
Bioinformatics
August 2016
Vol. 32, Issue 15
https://doi.org/10.1093/bioinformatics/btw134

16-119-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.T Zemetra, E. Akhunov, B. Friebe, J. Poland, B.S. Gill
The Plant Journal
April 2016
Vol. 86, Issue 2, p. 195-2017
https://doi.org/10.1111/tpj.13153

16-130-J Emergence of a new population of the select agent *Rathayibacter toxicus*: An ecologically complex, geographically isolated bacterium
M. Arif, G.Y. Busot, R. Mann, B. Rodoni, S. Liu, J.P. Stack
PLOS ONE
May 2016
11(5): e0156182
https://doi.org/10.1371/journal.pone.0156182

16-135-J Genome analysis of *Rathayibacter toxicus* strain WAC3373 from Western Australia, sequencing, assembly and annotation
M. Arif, G.Y. Busot, R. Mann, B. Rodoni, S. Liu, J.P. Stack
Phytopathology
December 2016
Vol. 106, Issue 12, p. 22-25, S5

16-139-J Natural occurrence of viruses and associated grain yields of paired symptomatic and nonsymptomatic tillers in Kansas winter wheat fields
D. Rotenberg, W.W. Bockus, A.E. Whitfield, K. Hervey, K.D. Baker, Z. Ou, A.G. Laney, E.D. De Wolf, J.A. Appel
Phytopathology
2016
106(2) 202-210

16-151-J The lolium pathotype of *magnaporthe oryzae* recovered from a single blasted wheat plant in the United States
M. Farman, G. Peterson, L. Chen, J. Starnes, B. Valent, P. Bachi, L. Murdock, D. Hershman, K. Pedley, J.M. Fernandes, J. Bavaresco
Plant Disease
May 2017
Vol. 101, No. 5, p. 684-692
https://doi.org/10.1094/PDIS-05-16-0700-RE

16-162-J Environmental conditions associated with stripe rust in Kansas winter wheat
B.S. Grabow, D.A. Shah, E.D. DeWolf
Plant Disease
November 2016
Vol. 100, No. 11, p. 2306-2312
http://dx.doi.org/10.1094/PDIS-11-15-1321-RE

16-165-J Management strategies for barley yellow dwarf on winter wheat in Kansas
W.W. Bockus, E.D. De Wolf, T.C. Todd
Plant Health Progress
2016
17:122-127
doi: 10.1094/PHP-RS-15-0050

16-171-J United States Culture Collection Network: 2015 meeting report and call to action
M.P. Griffith, E. Gunter, K. Hanser, R. Humber, B.W. Johnson, A. Kermode, M. Krichevsky, M. Laudon, J. Leach, J. Leslie, M. May, U. Melcher, D. Nobles, C. Richards, N.R. Fonseca, S. Robinson, M. Ryan, J. Scott, C. Silflow, A. Vidaver, K. Webb, J. Wertz, S. Yentsch, S. Zehr
USDA-ARS publication 326614

16-174-J Active dispersal through soil and colonization of organic matter by *Fusarium proliferatum*
A.R. Gaige, T. Todd, J. Stack
Phytopathology
2016
106:S4.1

16-189-J An evaluation of the status of living collections for plant, environmental, and microbial research
K. McCluskey, J.P. Parsons, K. Quach, C.S. Duke
Journal of Biosciences
May 2017, Vol. 42, Issue 2
https://doi.org/10.1007/s12038-017-9685-6

16-195-J Effect of soil-test phosphorus and phosphorus fertilization on the severity of soybean sudden death syndrome
D.R. Diaz, E. Adee, C.R. Little
Crop, Forage and Turfgrass Movement
December 2016
Vol. 2, Issue 1
10.2134/cftm2015.0193

16-197-J Gene targeting by the TAL effector PthXo2 reveals cryptic resistance gene for bacterial blight of rice
J. Zhou, Z. Peng, J. Long, D. Sosso, B. Liu, J. Eom, S. Huang, S. Liu, C.V. Cruz, W.B. Frommer, F.F. White, B. Yang
The Plant Journal
2015
82(4)632-643

16-198-J The maize brown midrib4 (bm4) gene encodes a functional folylpolyglutamate synthase
L. Li, S. Hill-Skinner, S. Liu, D. Beuchle, H.M. Tang, C.T. Yeh, D. Nettleton, P.S. Schnable
The Plant Journal
2015
81(3)493-504

16-199-J Long read and single molecule DNA sequencing simplifies genome assembly and TAL effector gene analysis of *Xanthomonas translucens*
Z. Peng, Y. Hu, J. Xie, N. Potnis, A. Akhunova, J. Jones, Z. Liu, F.F. White, S. Liu
BioMed Central Genomics
2016, 5:17-21
https://doi.org/10.1186/s12864-015-2348-9

16-203-J Identification and characterization of suppressors of plant cell death (SPD) genes from *Magnaporthe oryzae*
W. Sharpee, Y. Oh, M.Yi, J. Jeon, W. Franck, A. Eyre, L. Okagaki, B. Valent, Y.H. Lee, R. Dean
Molecular Plant Pathology
2017
18(6) 850-863

16-246-J Plant organ evolution revealed by phytotranscriptomics in *Arabidopsis thaliana*
L. Lei, J.G. Steffen, E. J. Osborne, C. Toomajian
Scientific Reports
5.546527778
doi:10.1038/s41598-017-07866-6

16-252-B Fungal genetic resources for biotechnology
K. McCluskey
Microbial Resources
2017
Chapter 11 in Microbial Resources, edited by Ipek Kurtböke, Academic Press, 2017, p. 219-235, ISBN 9780128047651
https://doi.org/10.1016/B978-0-12-804765-1.00011-4

16-261-J Genomics-based marker discovery and diagnostic assay development for wheat blast
M.L. Pieck, M.L. Farman, G.L. Peterson, J.P. Stack, B. Valent, K.F. Pedley
Plant Disease
2017
101(1) 103-109

16-262-J Evaluation of spring and fall fungicide applications for large patch management in zoysiagrass
K. Obassa, J. Fry, D. Bremer, M. Kennelly
International Turfgrass Society Research Journal
October 2017
Vol. 13, Issue 1
10.2134/itsrj2016.04.0274

16-263-J Molecular cytogenetic mapping of satellite DNA sequences in *Aegilops geniculata* and wheat
D.-H. Koo, V.K. Tiwari, E. Hřibová, J. Doležel, B. Friebe, B.S. Gill
Cytogenetic and Genome Research
2016
148:314-321
https://doi.org/10.1159/000447471

16-270-J Salivary gland morphology, tissue tropism and the progression of Tospovirus infection in *Frankliniella occidentalis*
M. Montero-Astúa, D.E. Ullman, A.E. Whitfield
Virology
June 2016
Vol. 493, p. 39-51
http://dx.doi.org/10.1016/j.virol.2016.03.003

16-302-J Molecular, genetic and evolutionary analysis of a paracentric inversion in *Arabidopsis thaliana*
P. Fransz, G. Linc, C.-R. Lee, S. A. Aflitos, J. R. Lasky, C. Toomajian, H. Ali, J. Peters, P. van Dam, X. Ji, M. Kuzak, T. Gerats, I. Schubert, K. Schneeberger, V. Colot, R. Martienssen, M. Koornneef, M. Nordborg, T. E. Juenger, H. de Jong, M. E. Schranz
The Plant Journal
July 2016
88(2), 159-178
doi: 10.1111/tpj.13262

16-317-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
Plant Disease
October 2016
Vol. 100, No. 10, p. 2062-2068
https://doi.org/10.1094/PDIS-02-16-0171-RE

16-323-J Physiological and pathogenic contributors to the summer decline of *Poa trivialis*
C. Thompson, M. Kennelly, J. Fry, M. Sousek, Z. Reicher
International Turfgrass Research Journal
2017
13:1-9
doi: 10.2134/itsrj2016.05.0304

16-337-J The small GTPase MoSec4 is essential for the vegetative development and pathogenicity by regulating the extracellular protein secretion in *Magnaporthe oryzae*
H. Zheng, S. Chen, X. Chen, S. Liu, X. Dang, C. Yang, M.C. Giraldo, J. Zhou, Z. Wang, B. Valent
Frontiers Plant Science
2016
1.304166667

16-346-J First report of wheat blast caused by *Magnaporthe oryzae* pathotype triticum in Bangladesh
P.K. Malaker, N.C.D. Barma, T.P. Tiwari, W.J. Collis, E. Duveiller, P.K. Singh, A.K. Joshi, R.P. Singh, H.-J. Braun, G.L. Peterson, K.F. Pedley, M.L. Farman, B. Valent
Plant Disease
2016
100(11) 2330

16-362-B The genus Tospovirus: Emerging bunyaviruses that threaten food security
A. Whitfield and J. Oliver
Annual Review of Virology
2016
29:3(1) 101-124

16-365-J A review of living collections with special emphasis on sustainability and its impact on research across multiple disciplines
K. McCluskey
Biopreservation and Biobanking
February 2017
Vol. 15, Issue 1
https://doi.org/10.1089/bio.2016.0066

16-369-J Expansion of signal transduction pathways in fungi by extensive genome duplication
L.M. Corrochano, A. Kuo, M. Marcet-Houben, S. Polaino, A. Salamov, J.M. Villalobos-Escobedo, J. Grimwood, M. Isabel Álvarez, J. Avalos, D. Bauer, E. P. Benito, I. Benoit, G. Burger, L.P. Camino, D. Cánovas, E. Cerdá-Olmedo, J.-F. Cheng, A. Domínguez, M. Eliáš, A.P. Eslava, F. Glaser, G. Gutiérrez, J. Heitman, B. Henrissat, E.A. Iturriaga, B. Franz Lang, J.L. Lavín, S. Chan Lee, W. Li, E. Lindquist, S. López-García, E.M. Luque, A.T. Marcos, J.l. Martin, K. McCluskey, H.R. Medina, A. Miralles-Durán, A. Miyazaki, E. Muñoz-Torres, J.A. Oguiza, R.A. Ohm, M.Olmedo, M.Orejas, L.Ortiz-Castellanos, A.G. Pisabarro, J. Rodríguez-Romero, J. Ruiz-Herrera, R. Ruiz-Vázquez, C. Sanz, W. Schackwitz, M. Shahriari, E. Shelest, F. Silva-Franco, D. Soanes, K. Syed, V.G. Tagua, N.J. Talbot, M.R. Thon, H. Tice, R.P. de Vries, A. Wiebenga, J.S. Yadav, E.L. Braun, S.E. Baker, V. Garre, J. Schmutz, B.A. Horwitz, S. Torres-Martínez, A. Idnurm, A. Herrera-Estrella, T. Gabaldón, I.V. Grigoriev
Current Biology
2016
26(12)1577-1584 ISSN 0960-9822,
https://doi.org/10.1016/j.cub.2016.04.038

16-375-J A complete set of *Triticum aestivum-Aegilops speltoides* Robertsonian translocation lines
W. Liu, D.H. Koo, B. Friebe, B.S. Gill
Theoretical Applied Genetics
2016
129(12) 2359-2368

Southeast Research and Extension Center

14-236-J Effects of seed protection chemicals on stand and yield of soybeans in Kansas, 2013
D.J. Jardine, E. Adee, K. Kusel
Plant Disease Management Reports
March 2014, Vol. 8
https://www.plantmanagementnetwork.org/pub/trial/pdmr/volume8/abstracts/st007.asp

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-023-S 2015 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1121
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-025-S 2015 Kansas performance tests with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1123
Kansas Agricultural Experiment Station

16-056-J Limited irrigation for sweet corn planted at different dates on claypan soil
D.W. Sweeney, M.B. Kirkham, C.W. Marr
Crop, Forage and Turfgrass Management
August 2016, Vol. 2
doi:10.2134/cftm2015.0216

16-141-J Growth and forage quality responses of smooth bromegrass to nitrogen placement and timing
J.L. Moyer and D.W. Sweeney
Agronomy Journal
September 2016
108:2453-2461
doi:10.2134/agronj2015.0503

16-176-J Tillage, seeding rate, and fertilizer placement for corn grown in claypan soil under low-yielding conditions
D.W. Sweeney
Crop, Forage and Turfgrass Management
June 2016
Vol. 2
doi:10.2134/cftm2015.0217

16-194-J Exploring agricultural production systems and their fundamental components with system dynamics modelling
J.P. Walters, D.W. Archer, G.F. Sassenrath, J.R. Hendrickson, J.D. Hanson, J.M. Halloran, P. Vadas
Ecological Modelling
August 2016
333:51-65
http://dx.doi.org/10.1016/j.ecolmodel.2016.04.015

16-300-J Virtual nitrogen as a tool for assessment of nitrogen management at the field scale: A crop rotation approach
W. Grzebisz, R. Lukowiak, G.F. Sassenrath
Field Crops Research
April 2018
218:182-194
https://doi.org/10.1016/j.fcr.2018.01.009

16-301-A Modeling and simulating nutrient management practices for the Mobile River Watershed
V.J. Alarcon and G.F. Sassenrath
The 16th International Conference on Computational Science and Its Applications (ICCSA 2016)
July 2016
p. 33-43
doi: 10.1007/978-3-319-42111-7_4

16-315-S 2016 Southeast Agricultural Research Center Research Report
L. Lomas and multiple co-authors
Kansas Agricultural Experiment Station
Vol. 2, Issue 3
http://newprairiepress.org/kaesrr/vol2/iss3/

Southwest Research-Extension Center

14-226-J Corn and grain sorghum response limited irrigation, drought, and hail
N.L. Klocke, R.S. Currie, I. Kisekka, L.R. Stone
Applied Engineering in Agriculture
2014
30(6): p. 915-924, 2014
doi: 10.13031/aea.30.10810

15-342-J Evaluation of ammoniated wheat straw during a receiving and growing period for beef cattle
E.R. Schlegel, S.P. Montgomery, J.W. Waggoner, C.I. Vahl, E.C. Titgemeyer, W.R. Hollenbeck, D.A. Blasi
The Professional Animal Scientist
June 2016
Vol. 32, Issue 3, p. 295-301
http://dx.doi.org/10.15232/pas.2015-01448

15-406-J Comparison of corn, grain sorghum, soybean, and sunflower under limited irrigation
A.J. Schlegel, Y. Assefa, D. O'Brien, F.R. Lamm, L.A. Haag, L.R. Stone
Agronomy Journal
January 2016
Vol. 108, No. 2, p. 670-679
doi:10.2134/agronj2015.0332

16-021-S 2015 Kansas performance tests with winter wheat varieties
J. Lingenfelser and multiple co-authors
SRP1119
Kansas Agricultural Experiment Station

16-022-S 2015 Kansas performance tests with corn hybrids
J. Lingenfelser and multiple co-authors
SRP1120
Kansas Agricultural Experiment Station

16-023-S 2015 Kansas performance tests with soybean varieties
J. Lingenfelser and multiple co-authors
SRP1121
Kansas Agricultural Experiment Station

16-024-S 2015 Kansas performance tests with grain sorghum hybrids
J. Lingenfelser and multiple co-authors
SRP1122
Kansas Agricultural Experiment Station

16-025-S 2015 Kansas performance tests with sunflower hybrids
J. Lingenfelser and multiple co-authors
SRP1123
Kansas Agricultural Experiment Station

16-230-J Limited irrigation of corn-based no-till crop rotations in west central Great Plains
A.J. Schlegel, Y. Assefa, T.J. Dumler, L.A. Haag, L.R. Stone, A.D. Halvorson, C.R. Thompson
Agronomy Journal
April 2016
108:1132-1141
doi:10.2134agronj2015.0536

16-287-J Kochia *(Kochia scoparia)* emergence profiles and seed persistence across the central Great Plains
J.A. Dille, W. Stahlman, J. Du, P.W. Geier, J.D. Riffel, R.S. Currie, R.G. Wilson, G.M. Sbatella, P. Westra, A.R. Kniss, M.J. Moechnig, R.M. Cole
Weed Science
September 2017
Vol. 65:6
doi: 10.1017/wsc.2017.18

16-318-J Yield and soil water in three dryland wheat and grain sorghum rotations
A.J. Schlegel, Y. Assefa, L.A. Haag, C.R. Thompson, J.D. Holman, L.R. Stone
Agronomy Journal
January 2017
109:227-238
doi:10.2134/agronj2016.07.0387

16-319-J Drought-tolerant corn hybrids yield more in drought-stressed environments with no penalty in non-stressed environments
E. Adee, K. Roozeboom, G. Balboa, A. Schlegel, I.A. Ciampitti
Frontiers in Plant Science
October 2016
Vol. 7
doi: 10.3389/fpls.2016.01534

16-326-J Corn yield and grain nutrient uptake from 50 years of nitrogen and phosphorus fertilization
A. Schlegel and J. Havlin
Agronomy Journal
2016
109:335-342
doi:10.2134/agronj2016.05.0294

Statistics

14-028-J Intraspecific variation of a dominant grass and local adaptation in reciprocal garden communities along a US Great Plains' precipitation gradient: implications for grassland restoration with climate change
L.C. Johnson, J.T. Olsen, H. Tetreault, A. DeLaCruz, J. Bryant, T.J. Morgan, M. Knapp, N.M. Bello, S.G. Baer, B.R. Maricle
Evolutionary Applications
July 2015
8, p. 705-723
doi:10.1111/eva.12281

15-147-J Effect of mouse antisera targeting the *Phlebotomus papatasi* midgut chitinase PpChit1 on sandfly physiology and fitness
M. Robles-Murguia, N. Bloedow, L. Murray, M. Ramalho-Ortigao
Memorias Institute Oswaldo Cruz
December 2014
Vol. 109(8): 1064-1069
doi: 10.1590/0074-0276140382

15-329-J Identification and quantification of anthocyanins in transgenic purple tomato
X. Su, J. Xu, D. Rhodes, Y. Shen, W. Song, B. Katz, J. Tomich, W. Wang
Food Chemistry
July 2016
Vol. 202, p. 184-188
https://doi.org/10.1016/j.foodchem.2016.01.128

15-342-J Evaluation of ammoniated wheat straw during a receiving and growing period for beef cattle
E.R. Schlegel, S.P. Montgomery, J.W. Waggoner, C.I. Vahl, E.C. Titgemeyer, W.R. Hollenbeck, D.A. Blasi
The Professional Animal Scientist
June 2016
Vol. 32, Issue 3, p. 295-301
http://dx.doi.org/10.15232/pas.2015-01448

15-413-J Shelf life of fresh meat products under LED or fluorescent lighting
K.S. Steele, M.J. Weber, E.A.E. Boyle, M.C. Hunt, A.S. Lobaton-Sulabo, C. Cundith, Y.H. Hiebert, K.A. Abrolat, J.M. Attey, S.D. Clark, D.E. Johnson, T.L. Roenbaugh
Meat Science
July 2016
Vol. 117, p. 75-84, ISSN 0309-1740
https://doi.org/10.1016/j.meatsci.2016.02.032

16-241-S Cattlemen's Day 2016
Coordinating authors E.A. Boyle, J.S. Drouillard, multiple co-authors
Kansas Agricultural Experiment Station Research Reports
Vol. 2, Issue 1
http://newprairiepress.org/kaesrr/vol2/iss1/

16-379-J The effect of temperature and host plant resistance on population growth of the soybean aphid biotype 1 (Hemiptera: Aphididae)
A.R. Hough, J.R. Nechols, B.P. McCornack, D.C. Margolies, B.K. Sandercock, D.Yan, L. Murray
Environmental Entomology
February 2017
Vol. 46, Issue 1, p. 58-67
https://doi.org/10.1093/ee/nvw160

Director's Report of Research in Kansas 2016

Kansas Agricultural Experiment Station Research Reports
newprairiepress.org/kaesrr/

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