

**Superior Paper Award Winners
1995 - 2023**

1995 presented 1996

F.A. PAYNE

Automatic Control of Coagulum Cutting in Cheese Manufacturing
APPLIED ENGINEERING in AGRICULTURE, Vol. 11, No. 5

D.D. JONES, M.F. KOCHER

Auger Design for Uniform Unloading of Granular Material: I. Rectangular Cross- Section Containers
TRANSACTIONS of the ASAE, Vol. 38, No. 4

V. ROS, R.J. SMITH, S.J. MARLEY, D.C. ERBACH

Mathematical Modeling and Computer- Aided Design of Passive Tillage Tools
TRANSACTIONS of the ASAE, Vol 38, No. 3

M. BENADY J.E. SIMON, D.J. CHARLES, G.E. MILES

Fruit Ripeness Determination by Electronic Sensing of Aromatic Volatiles
TRANSACTIONS of the ASAE, Vol. 38, No. 1

N.L. BUCK, G.P. GROFF

Determining the Thickness of Layers of Materials by Dielectric-Constant Measurements
TRANSACTIONS of the ASAE, Vol. 38, No. 6

D.K. GILES, J. GARDNER, H.E. STUDER

Mechanical Release of Predacious Mites for Biological Pest Control in Strawberries
TRANSACTIONS of the ASAE, Vol. 38, No. 5

Q. ZHANG, M.G. BRITTON

Predicting Hygroscopic Loads in Grain Storage Bins
TRANSACTIONS of the ASAE, Vol. 38, No. 4

T.J. TROUT, R.E. SOJKA, R.D. LENTZ

Polyacrylamide Effect on Furrow Erosion and Infiltration
TRANSACTIONS of the ASAE, Vol. 38, No. 3

L.G. SCHUMACHER, S.C. BORGELT, W.G. HIRES

Fueling a Diesel Engine with Methyl- Ester Soybean Oil
APPLIED ENGINEERING IN AGRICULTURE, Vol. 11, No. 1

H. RAMON, J. DE BAERDEMAEKER

Using Principal Gains for Evaluating and Optimizing the Performance of Sprayers
TRANSACTIONS of the ASAE, Vol. 38, No. 5

1996 presented 1997

B. Park, Y.R. Chen

Multispectral Image Co-Occurrence Matrix Analysis for Poultry Carcasses Inspection

TRANSACTIONS of the ASAE, Vol. 39, No. 4

R.W. Claycomb, M.J. Delwiche, C.J. Munro, R.H. BonDurant

Enzyme Immunoassay for On-Line Sensing of Milk Progesterone

TRANSACTIONS of the ASAE, Vol. 39, No. 2

X.C. Zhang, M.A. Nearing, L.M. Risse, K.C. McGregor

Evaluation of WEPP Runoff and Soil Loss Predictions Using Natural Runoff Plot Data TRANSACTIONS of the ASAE, Vol. 39, No. 3

K. Chao, R.S. Gates

Design of Switching Control Systems for Ventilated Greenhouses

TRANSACTIONS of the ASAE, Vol. 39, No. 4

T.G. Franti, G.R. Foster, E.J. Monke

Modeling the Effects of Incorporated Residue on Rill Erosion Part II: Experimental Results and Model Validation

TRANSACTIONS of the ASAE, Vol. 39, No. 2

W.H. Yang, S. Cenkowski, H.S. Wang

Microwave-Enhanced Denaturation of Sugar Beet Tissues

TRANSACTIONS of the ASAE, Vol. 39, No. 3

G.D. Williams, D.R. Bohnhoff, R.C. Moody

Locating Butt-Joints in Four-Layer, Nail-Laminated Assemblies

TRANSACTIONS of the ASAE, Vol. 39, No. 2

H. Xin, I.L. Berry, G.T. Tabler

Minimum Ventilation Requirement and Associated Energy Cost for Aerial Ammonia in Broiler Houses

TRANSACTIONS of the ASAE, Vol. 39, No. 2

H. Xin, K. Lee

Use of Aqua-Jel. and Feed for Nutrient Supply During Long Journey Air Transport of Baby Chicks

TRANSACTIONS of the ASAE, Vol. 39, No. 3

T.G. Franti, G.R. Foster, E.J. Monke

Modeling the Effects of Incorporated Residue on Rill Erosion Part I: Model Development and Sensitivity Analysis

TRANSACTIONS of the ASAE, Vol. 39, No. 2

1997 presented 1998

D.K. GILES, D.C. SLAUGHTER

Precision Band Spraying with Machine-Vision Guidance and Adjustable Yaw Nozzles

TRANSACTIONS of the ASAE, Vol. 40, No. 1

D.E. RESSLER, R. HORTON, J.L. BAKER, T.C. KASPAR

Testing a Nitrogen Fertilizer Applicator Designed to Reduce Leaching Losses

E.T. WEATHERLY, C.G. BOWERS, JR.

Automatic Depth Control of a Seed Planter Based on Soil Drying Front Sensing
TRANSACTIONS of the ASAE, Vol. 40, No. 2

T.L. FOUTZ, G.N. ROWLAND, M. EVANS

An Avian Modeling Approach for Analyzing Modeling and Analysis of Mixed-Flow
Bone Loss Due to Disuse
TRANSACTIONS of the ASAE, Vol. 40, No. 6

M.P. ZEIGLER, H.B. MANBECK, W.B. ROUSH

Sources of Variance in Feed Distribution Systems
TRANSACTIONS of the ASAE, Vol. 40, No. 2

R.H. ZHANG, P.N. DUGBA, D.S. BUNDY

Laboratory Study of Surface Aeration of Anerobic Lagoons for Odor Control of Swine Manure
TRANSACTIONS of the ASAE, Vol. 40, No. 1

M.A. BREVE, R.W. SKAGGS, J.E. PARSONS, J.W. GILLIAM

DRAINMOD-N, A Nitrogen Model for Artificially Drained Soils
TRANSACTIONS of the ASAE, Vol. 40, No. 4

Q. LIU, C. CAO, F.W. BAKKER- ARKEMA

Modeling and Analysis of Mixed Flow Grain Dryer
TRANSACTIONS of the ASAE, Vol. 40, No. 4

1998 presented 1999

D.C. YODER, J.B. WILKERSON, J.R. BUCHANAN, K.J. HURLEY, R.E. YODER

Development and Evaluation of a Device to Control Time Varying Flows
TRANSACTIONS of the ASAE, Vol. 41, No. 2

Y. TAO

Closed-loop Search Method for On-Line Automatic Calibration of Multi-camera Inspection Systems
TRANSACTIONS of the ASAE, Vol. 41, No. 5

Q. ZHANG, X. BU, M.G. BRITTON

An Analytical Model for Predicting Stresses in Grain Storage Bins
TRANSACTIONS of the ASAE, Vol. 41, No. 6

R. BAJEMA, G.M. HYDE, K. PETERSON

Precision Farming with Kinematic GPS Instrumentation Design for Dynamic Axial Compression of
Cylindrical Tissue Samples
TRANSACTIONS of the ASAE, Vol. 41, No. 3

T.D. GLANVILLE, J.L. BAKER, J.K. NEWMAN

Evaluation of Methods for Diagnosing Contamination in Rural Wells

TRANSACTIONS OF THE ASAE, Vol. 41, No. 6

K.M. ROBINSON, C.E. RICE, K.C. KADAVY

Design of Rock Chutes

TRANSACTIONS of the ASAE, Vol. 41, No. 3

N. GALILI, I. SHMULEVICH, N. BENICHO

Acoustic Testing of Avocado for Fruit Ripeness Evaluation

TRANSACTIONS of the ASAE, Vol. 41, No. 2

R.L. CLARK, R. LEE

Development of Topographic Maps for Precision Farming with Kinematic GPS

TRANSACTIONS of the ASAE, Vol. 41, No. 4

1999 presented 2000

G.J. Riley, K.G. Gebremedhin

Axial and Rotational Stiffness Model of Metal-Plate-Connected Wood Truss Joints

TRANSACTIONS of the ASAE, Vol. 42, No. 3

J.G. Ibarra, Y. Tao, J. Walker, C. Griffis

Internal Temperature of Cooked Chicken Meat Through Infrared Imaging and Time Series Analysis

TRANSACTIONS of the ASAE, Vol. 42, No. 5

J. Arogo, R.H. Zhang, G.L. Riskowski, D.L. Day

Mass Transfer Coefficient for Hydrogen Sulfide Emission From Aqueous Solutions and Liquid Swine Manure

TRANSACTIONS of the ASAE, Vol. 42, No. 5

H. Zhou, H. Xin

Effects of Heat Lamp Output and Color on Piglets at Cool and Warm Environments

TRANSACTIONS of the ASAE, Vol. 15, No. 4

L. Tian, J.F. Reid, J.W. Hummel Development of a Precision Sprayer for Site-Specific Weed Management

TRANSACTIONS of the ASAE, Vol 42 No. 4

R.R. Ruan, Z. Long, K. Chang, P.L. Chen, I.A. Taub

Glass Transition Temperature Mapping Using Magnetic Resonance Imaging

TRANSACTIONS of the ASAE, Vol 42 No. 4

S. Kang, S.R. Delwiche

Moisture Diffusion Modeling of Wheat Kernels During Soaking

TRANSACTIONS of the ASAE, Vol. 42, No. 5

A. Bechar, I. Shmulevich, D. Eisikowitch, Y. Vaknin, B. Ronen, S. Gan-Mor

Modeling and Experiment Analysis of Electrostatic Date Pollination

TRANSACTIONS of the ASAE, Vol.42, No. 6

2000 presented 2001

W.C. HOFFMANN, H.H.TOM

Effects of Lowering Spray Boom in Flight on Swath Width and Drift
APPLIED ENGINEERING IN AGRICULTURE Vol. 16, No. 3

A. MILLMIER, J. LORIMOR, C. HURBURGH, JR., C. FULHAGE, J. HATTEY, H. ZHANG Near-Infrared Sensing of Manure Nutrients

TRANSACTIONS of the ASAE Vol. 43, No. 4

H.M. KEENER, D.L. ELWELL, M.J. MONNIN

Procedures and Equations for Sizing of Structures and Windrows for Composting Animal Mortalities
APPLIED ENGINEERING in AGRICULTURE Vol. 16, No. 6

A. AL-FARAJ, G.E. MEYER, G.R. SCHADE, G.L. HORST

Dynamic Analysis of Moisture Stress in Tall Fescue (*Festuca Arundinacea*) Using Canopy Temperature, Irradiation, and Vapor Deficit
TRANSACTIONS of the ASAE Vol. 43, No. 1

D.L. BJORNEBERG, J.K. AASE, D.T. WESTERMANN

Controlling Sprinkler Irrigation Runoff, Erosion and Phosphorus Loss with Straw and Polyacrylamide
TRANSACTIONS of the ASAE Vol. 43, No. 6

J.N. IKEDIALA, J. TANG, T. WIG

A Heating Block System for Studying Thermal Death Kinetics of Insect Pests
TRANSACTIONS of the ASAE Vol. 43, No. 2

B.J. HE, Y. ZHANG, Y. YIN, T.L. FUNK G.L. RISKOWSKI

Operating Temperature and Retention Time Effects on the Thermochemical Conversion Process of Swine Manure
TRANSACTIONS of the ASAE Vol. 43, No. 6

A. SRIWATANAPONGSE, M. BALABAN, A. TEIXEIRA

Thermal Inactivation Kinetics of Bromelain in Pineapple Juice
TRANSACTIONS of the ASAE Vol. 43, No. 6

2001 presented 2002

N. SCHEERLINCK, P. VERBOVEN, K.A. FIKIIN, J. DE BAERDEMAEKER,

B.M. NICOLAÚ

Finite Element Computation of Unsteady Phase Change Heat Transfer During Freezing or Thawing of Food Using a Combined Enthalpy and Kirchhoff Transform Method
TRANSACTIONS OF THE ASAE Vol. 44, No. 2

S. ZOLNIER, R.S. GATES, R.G. ANDERSON S.E. NOKES, G.A. DUNCAN

Non-Water-Stressed Baseline as a Tool for Dynamic Control of a Misting System for Propagation of Poinsettias
TRANSACTIONS of the ASAE Vol. 44, No. 1

V.I. ADAMCHUK, M.T. MORGAN, H. SUMALI

Application of a Strain Gauge Array to Estimate Soil Mechanical Impedance On-The Go
TRANSACTIONS of the ASAE Vol. 44, No. 6

T.C. PEARSON

Detection of Pistachio Nuts with Closed Shells Using Impact Acoustics
APPLIED ENGINEERING IN AGRICULTURE Vol. 17, No. 2

M.D. SCHROCK, J.J. GRIMM, D.L. OARD R.K. TAYLOR, T.C. KOLB, J.D. ANDERSON Performance of a
Multipoint Pulse-Width Modulation Metering System for Ammonia
TRANSACTIONS of the ASAE Vol. 44, No. 2

B. PANNETON, R. THÉRIAULT, B. LACASSE

Efficacy Evaluation of a New Spray-Recovery Sprayer for Orchards
TRANSACTIONS of the ASAE Vol. 44, No. 3

A. LUO, J. ZHU, P.M. NDEGWA

Phosphorus Transformations in Swine Manure During Continuous and Intermittent Aeration Processes
TRANSACTIONS of the ASAE Vol. 44, No. 4

Y. SHI, D.B. PARKER, N.A. COLE, B.W. AUVERMANN, J.E. MEHLHORN

Surface Amendments to Minimize Ammonia Emissions from Beef Cattle Feedlots
TRANSACTIONS of the ASAE Vol. 44, No. 3

T.E. GRIFT, J.T. WALKER, J.W. HOFSTEE

Mass Flow Measurement of Granular Materials in Aerial Application – PART 2: Experimental
Model Validation
TRANSACTIONS of the ASAE Vol. 44, No. 1

2002 presented 2003

R.D. LAMM, D.C. SLAUGHTER, D.K. GILES

Precision Weed Control System for Cotton
TRANSACTIONS OF THE ASAE Vol. 45, No. 1

C.-C. JIA, W. YANG, T.J. SIEBENMORGEN, R.C. BAUTISTA, A.G. CNOSSEN

A Study of Rice Fissuring by Finite-Element Simulation of Internal Stresses Combined with
High-Speed Microscopy Imaging of Fissure Appearance TRANSACTIONS
OF THE ASAE Vol. 45, No. 3

T.E. GRIFT, J.W. HOFSTEE

Testing an Online Spread Pattern Determination Sensor on a Broadcast Fertilizer Spreader
TRANSACTIONS OF THE ASAE Vol. 45, No. 3

M. KACIRA, P.P. LING, T.H. SHORT

Machine Vision Extracted Plant Movement for Early Detection of Plant Water Stress
TRANSACTIONS OF THE ASAE Vol. 45, No. 4

S. MONGPRANEET, T. ABE, T. TSURUSAKI

Far Infrared - Vacuum and - Convection Drying of Welsh Onion

TRANSACTIONS OF THE ASAE Vol. 45, No. 5

Y.M. BAE, S.I. CHO

Response of Polymer Membranes as Sensing Elements for an Electronic Tongue

TRANSACTIONS OF THE ASAE Vol. 45, No. 5

A.C. SHETH, A.D. TURNER

Kinetics and Economics of Catalytic Steam Gasification of Broiler Litter

TRANSACTIONS OF THE ASAE Vol. 45, No. 4

A.J. BUKTA, K. SAKAI, A. SASAO, S. SHIBUSAWA

Free Play as a Source of Nonlinearity in Tractor-Implement Systems During Transport

TRANSACTIONS OF THE ASAE Vol. 45, No. 3

2003 presented 2004

S. WANG, J. TANG, R. CAVALIERI, D. DAVIS

Differential Heating of Insects in Dried Nuts and Fruits Associated with Radio Frequency and

Microwave Treatments TRANSACTIONS OF THE ASAE Vol. 46, No. 4

M. VANOTTI, A. SZOGI, P. HUNT

Extraction of Soluble Phosphorus From Swine Wastewater

TRANSACTIONS OF THE ASAE Vol. 46, No. 6

J. BONTA, F. PIERSON

Design, Measurement, and Sampling with Drop-Box Weirs

APPLIED ENGINEERING IN AGRICULTURE Vol. 19, No. 6

C. AGUIRRE, K. HAGHIGHI

Stochastic Finite Element Analysis of Transient Unsaturated Flow in Porous Media

TRANSACTIONS OF THE ASAE Vol. 46, No. 1

R. LU

Detection of Bruises on Apples Using Near-Infrared Hyperspectral Imaging

TRANSACTIONS OF THE ASAE Vol. 46, No. 2

K. ARORA, S. MICKELSON, J. BAKER

Effectiveness of Vegetated Buffer Strips in Reducing Pesticide Transport in Simulated Runoff

TRANSACTIONS OF THE ASAE Vol. 46, No. 3

K. GILLIS, D. KEN GILES, D. SLAUGHTER, D. DOWNEY

Injection Mixing System for Boomless, Target-Activated Herbicide Spraying

TRANSACTIONS OF THE ASAE Vol. 46, No. 4

J. SUTTLES, G. VELLIDIS, D. BOSCH, LOWRANCE, J. SHERIDAN, E. USERY

Watershed-Scale Simulation of Sediment and Nutrient Loads in Georgia Coastal Plain Streams Using the Annualized AGNPS Model

2004 presented 2005

R. SIVAKESAVA, J. IRUDAYARAJ, C. DEBROY

Differentiation of Microorganisms by FTIR-ATR and NIR Spectroscopy

TRANSACTIONS of the ASAE Vol. 47, No. 3

J. CHAPLIN, N. HEMMING, B. HETCHLER

Comparison of Impact Plate and Torque- Based Grain Mass Flow Sensors

TRANSACTIONS of the ASAE Vol. 47, No. 4

M.C. SIEMENS, D.E. WILKINS, R.F. CORREA

Development and Evaluation of a Residue Management Wheel For Hoe-Type No-Till Drills

TRANSACTIONS of the ASAE Vol. 47, No. 2

M.H. NICHOLS

A Radio Frequency Identification System for Monitoring Coarse Sediment Particle Displacement

APPLIED ENGINEERING IN AGRICULTURE Vol. 20, No. 6

H.Y. JEON, A.R. WOMAC, J. GUNN

Sprayer Boom Dynamic Effects on Application Uniformity

TRANSACTIONS of the ASAE Vol. 47, No. 3

T.M. BROWN-BRANDL, J.A. NIENABER H. XIN, R.S. GATES

A Literature Review of Swine Heat Production

TRANSACTIONS OF THE ASAE Vol. 47, No. 1

D.K. GILES, D. DOWNEY, D.C. SLAUGHTER J.C. BREVIS-ACUNA, W.T. LANINI

Herbicide Micro-Dosing for Weed Control in Field-Grown Processing Tomatoes

APPLIED ENGINEERING IN AGRICULTURE Vol. 20, No. 6

J.W. JONES, W.D. GRAHAM, D. WALLACH W.M. BOSTICK, J. KOO

Estimating Soil Carbon Levels Using an Ensemble Kalman Filter

TRANSACTIONS OF THE ASAE Vol. 47, No. 1

K.E. PERSYN, H. XIN, D. NETTLETON, A. IKEGUCHI, R.S. GATES

Feeding Behaviors of Laying Hens With or Without Beak Trimming

TRANSACTIONS of the ASAE Vol. 47, No. 2

2005 presented 2006

E.D. VORIES, P.L. TACKER, R. HOGAN

Multiple Inlet Approach to Reduce Water Requirements for Rice Production

APPLIED ENGINEERING IN AGRICULTURE Vol. 21, No. 4

D. BRABEC, R. MAGHIRANG, M. CASADA, E. HAQUE

Characterization and Modeling of a High-Pressure Water-Fogging System for Grain Dust Control

TRANSACTIONS OF THE ASABE Vol. 48 (1)

A. AMÉZQUITA, L. WANG, C.L. WELLER

Finite Element Modeling and Experimental Validation of Cooling Rates of Large Ready-to Eat Meat Products in Small Meat-Processing Facilities
TRANSACTIONS OF THE ASABE Vol. 48, No. 1

L.D. JACOBSON, H. GUO, D.R. SCHMIDT, R.E. NICOLAI, J. ZHU, K.A. JANNI

Development of the OFFSET Model for Determination of Odor-Annoyance-Free Setback Distances From Animal Production Sites: Part I. Review and Experiment
TRANSACTIONS OF THE ASABE Vol. 48, No. 6

J. WEI, F. ROVIRA-MAS, J.F. REID, S. HAN

Obstacle Detection Using Stereo Vision to Enhance Safety of Autonomous Machines
TRANSACTIONS OF THE ASABE Vol. 48, No. 6

X.-L. SU, Y. LI

Surface Plasmon Resonance and Quartz Crystal Microbalance Immunosensors For Detection of ESCHERICHIA COLI O157:H7
TRANSACTIONS OF THE ASABE Vol. 48, No. 1

G.J. HANSON, K.R. COOK, S.L. HUNT

Physical Modeling of Overtopping Erosion and Breach Formation of Cohesive Embankments
TRANSACTIONS OF THE ASABE Vol. 48, No. 5

W. YUAN, A.C. HANSEN, M.E. TAT, J.H. VAN GERPEN, Z. TAN

Spray, Ignition, and Combustion Modeling of Biodiesel Fuels for Investigating NOX Emissions
TRANSACTIONS OF THE ASABE Vol. 48, No. 3

K.G. GEBREMEDHIN, B. WU, C. GOOCH, P. WRIGHT, S. INGLIS

Heat Transfer Model for Plug-Flow Anaerobic Digesters
TRANSACTIONS OF THE ASABE Vol. 48, No. 2

2006 presented 2007

Y. DING, K.C. DAS, W.B. WHITMAN, J.R. KASTNER

Enhanced Biofiltration of Hydrogen Sulfide in the Presence of Methanol and Resultant Bacterial Diversity
APPLIED ENGINEERING IN AGRICULTURE Vol. 49, No. 6

D.-Y. CHEONG, C.L. HANSEN

Feasibility of Hydrogen Production from Anaerobic Mixed Fermentation
TRANSACTIONS OF THE ASABE Vol. 49, No. 2

B.B. HE, A.P. SINGH, J.C. THOMPSON

A Novel Continuous-Flow Reactor Using Reactive Distillation Technique for Biodiesel Production
TRANSACTIONS OF THE ASABE Vol. 49, No. 1

F. ROVIRA-MÁS, J.F. REID, Q. ZHANG

Development of the OFFSET Model for Determination of Odor-Annoyance-Free Setback Distances From Animal Production Sites: Part I. Review and Experiment

TRANSACTIONS OF THE ASABE Vol. 49, No. 1

D. DOWNEY, T.G. CROWE, D.K. GILES, D.C. SLAUGHTER

Direct Nozzle Injection of Pesticide Concentrate Into Continuous Flow for Intermittent Spray Applications

TRANSACTIONS OF THE ASABE Vol. 49, No. 4

M.T. VENEM, J.M. SHUTSKE, W.J. GILBERT

Testing and Creation of a Safety System to Disengage the PTO of a Tractor

APPLIED ENGINEERING IN AGRICULTURE Vol. 22, No. 1

R.D. HARMEL, R.J. COOPER, R.M. SLADE, R.L. HANEY, J.G. ARNOLD

Cumulative Uncertainty in Measured Streamflow and Water Quality Data for Small Watersheds

TRANSACTIONS OF THE ASABE Vol. 49, No. 3

A.V. VAN WAGENBERG, C.M.C. VAN DER PEET-SCHWERING, G.P. BINNENDIJK, P.J.P.W. CLAESSEN

Effect of Floor Cooling on Farrowing Sow and Litter Performance: Field Experiment Under Dutch Conditions

TRANSACTIONS OF THE ASABE Vol. 49, No. 5

J.A. SORENSEN, J.J. MAY, P.L. JENKINS, A.M. JONES, G.B. EARLE- RICHARDSON

Risk Perceptions, Barriers, and Motivators to Tractor ROPS Retrofitting in the New York State Farm Community

JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 12, No. 3

2007 presented 2008

R. S. COMER, P. D. AYERS, J. LIU

Evaluation of Engineering Plastic for Rollover Protective Structure (ROPS) Mounting

JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 13, No. 2

P. LIBERATI, P. ZAPPAVIGNA

A Dynamic Computer Model for Optimization of the Internal Climate in Swine Housing Design

TRANSACTIONS OF THE ASABE Vol. 50, No. 6

A MIZRACH, Z. SCHMILOVITCH, R. KOROTIC, J. IRUDAYARA J, R. SHAPIRA

Yeast Detection in Apple Juice using Raman Spectroscopy and Chemometric Methods TRANSACTIONS OF THE ASABE Vol. 50, No. 6

A. A. SZÖGI, M.B. VANOTTI

Abatement of Ammonia Emissions from Swine Lagoons Using Polymer-Enhanced Solid-Liquid Separation

APPLIED ENGINEERING IN AGRICULTURE Vol. 23, No. 6

B. PARK, S. C. YOON, K. C. LAWRENCE, W. R. WINDHAM

Fisher Linear Discriminate Analysis for Improving Fecal Detection Accuracy with Hyperspectral Images

TRANSACTIONS OF THE ASABE Vol. 50, No. 6

J. ENCISO-MEDINA, P. D. COLAIZZI, W. L. MULTER, C. R. STICKLER

Cotton Response to Phosphorus Fertilization Using Subsurface Drip Irrigation

APPLIED ENGINEERING IN AGRICULTURE Vol. 23, No. 3

**K. J. SHINNERS, G. S. ADSIT, B. N. BINVERSIE, M. F. DIGMAN, R. E. MUCK,
P. J. WEIMER**

Single-Pass, Split-Stream Harvest of Corn Grain and Stover

TRANSACTIONS OF THE ASABE Vol. 50, No. 2

D. L. BJORNEBERG, C. J. PRESTWICH, R. G. EVANS

Evaluating the Surface Irrigation Soil Loss (SISL) Model

APPLIED ENGINEERING IN AGRICULTURE Vol. 23, No. 4

M. E. TAT, J. H. VAN GERPEN, P.S. WANG

Fuel Property Effects on Injection Timing, Ignition Timing, And Oxides of Nitrogen Emissions from Biodiesel-Fueled Engines

TRANSACTIONS OF THE ASABE Vol. 50, No. 4

2008 presented 2009

**M. L. SARPOLA, R. K. PAASCH, E. N. MORTENSEN, T. G. DIETTERICH, D. A. LYTLE,
A. R. MOLDENKE, L. G. SHAPIRO**

An Aquatic Insect Imaging System to Automate Insect Classification

TRANSACTIONS OF THE ASABE Vol. 51, No. 6

P. ANDRADE-SANCHEZ, S. K. UPADHYAYA, C. PLOUFFE, B. POUTRE

Development and Field Evaluation of a Field-Ready Soil Compaction Profile Sensor for Real-Time Applications

APPLIED ENGINEERING IN AGRICULTURE Vol. 24, No. 6

R. SUI, J.A. THOMASSON, Y. GE, C. MORGAN

Multispectral Sensor For In-Situ Cotton Fiber Quality Measurement

TRANSACTIONS OF THE ASABE Vol. 51, No. 6

J. L. PURSWELL, B. K. FRITZ, S. L. BRANTON, S.A. LEIGH

Effects of System Pressure and Nozzle Type on Spray Application of Avian Vaccines

APPLIED ENGINEERING IN AGRICULTURE Vol. 24, No. 6

S. BALASUBRAMANIAN, V. M. PURI

Fouling Mitigation During Product Processing Using a Modified Plate Heat Exchange Surface

TRANSACTIONS OF THE ASABE Vol. 51, No. 2

C. S. RENSCHLER, D. C. FLANAGAN

Site-Specific Decision-Making Based on RTK GPS Survey and Six Alternative Evaluation Data Sources: Soil Erosion Predictions

TRANSACTIONS OF THE ASABE Vol. 51, No. 2

C. SHIH, Z. PAN, T. MCHUGH, D. WOOD, E. HIRSCHBERG

Sequential Infrared Radiation and Freeze-Drying Method for Producing Crispy Strawberries

TRANSACTIONS OF THE ASABE Vol. 51, No. 1

E. A. PAPPAS, R. S. KANWAR, J. L. BAKER, J. C. LORIMOR, S. MICKELSON

Fecal Indicator Bacteria in Subsurface Drain Water Following Swine Manure Application

TRANSACTIONS OF THE ASABE Vol. 51, No. 5

J. H. LUMKES JR., W. VAN DOORN IV

Design and Testing of a Dual-Path Front Hydrostatic Drive-By-Wire Control System for an Off-Road Vehicle

TRANSACTIONS OF THE ASABE Vol. 51, No. 4

2009 presented 2010

J.E. WOLFE III, O.T. LIND, D.W. HOFFMAN

A Constant-Volume Artificial Stream for Reducing Variation in Aquatic Process Measurements

TRANSACTIONS OF THE ASABE Vol. 52, No. 1

X. WANG, P. AYERS, A.R. WOMAC

Static Simulation and Analyses of Mower's ROPS Behavior In a Finite Element Model JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 15, No. 4

K.S. LEE, D.H. LEE, K.A. SUDDUTH, S.O. CHUNG, N.R. KITCHEN, S.T. DRUMMOND

Wavelength Identification and Diffuse Reflectance Estimation for Surface and Profile Soil Properties

TRANSACTIONS OF THE ASABE Vol. 52, No. 3

S.J. THOMSON, L.A. SMITH, J.E. HANKS

Evaluation of Application Accuracy and Performance of a Hydraulically Operated Variable-Rate Aerial Application System

TRANSACTIONS OF THE ASABE Vol. 52, No. 3

M.J. DE KAM, R.V. MOREY, D.G. TIFFANY

Integrating Biomass to Produce Heat and Power at Ethanol Plants

APPLIED ENGINEERING IN AGRICULTURE Vol. 25, No. 2

**K.C. LAWRENCE, S.C. YOON, D.R. JONES, G.W. HEITSCHMIDT, B. PARK,
W.R. WINDHAM**

Modified Pressure System for Imaging Egg Cracks

TRANSACTIONS OF THE ASABE Vol. 52, No. 3

M. CAMBRA-LÓPEZ, A. WINKEL, J. VAN HARN, N.W.M. OGINK, A.J.A. AARNINK

Ionization for Reducing Particulate Matter Emissions From Poultry Houses

TRANSACTIONS OF THE ASABE Vol. 52, No. 5

P.H. GOWDA, G.B. SENAY, T.A. HOWELL, T.H. MAREK

Lysimetric Evaluation of Simplified Surface Energy Balance Approach in the Texas High Plains

APPLIED ENGINEERING IN AGRICULTURE Vol. 25, No. 5

2010 presented 2011

G. BORREANI, E. TABACCO

Use of New Plastic Stretch Films with Enhanced Oxygen Impermeability to Wrap Baled Alfalfa Silage
TRANSACTIONS OF THE ASABE Vol. 53, No. 2

D. B. FUNK, Z. GILLAY

Dielectric Reference Materials for Mathematically Modeling and Standardizing Grain Moisture Meters
TRANSACTIONS OF THE ASABE Vol. 53, No.1

K. THEERARATTANANOON, X. WU, S. STAGGENBORG, J. PROPHETER, R. MADL, D. WANG

Evaluation and Characterization of Sorghum Biomass as Feedstock for Sugar Production
TRANSACTIONS OF THE ASABE Vol. 53, No. 2

M. J. LAWRENCE, J. W. GARTHE, D. R. BUCKMASTER

Producing Solid Fuel from Non-Recyclable Agricultural Plastics
APPLIED ENGINEERING IN AGRICULTURE Vol. 26, No. 2

B. WU

CFD Prediction of Mixing Time in Anaerobic Digesters
TRANSACTIONS OF THE ASABE Vol. 53, No. 2

S. IRMAK, J. M. REES, G. L. ZOUBEK, B. S. VAN DEWALLE, W. R. RATHJE, R. DEBUHR, D. LEININGER, D. D. SIEKMAN, J. W. SCHNEIDER, A. P. CHRISTIANSEN

Nebraska Agricultural Water Management Demonstration Network (NAWMDN): Integrating Research and Extension/Outreach
APPLIED ENGINEERING IN AGRICULTURE Vol. 26, No. 4

R. D. HARMEL, P. K. SMITH, K. W. MIGLIACCIO

Modifying Goodness-of-Fit Indicators to Incorporate Both Measurement and Model Uncertainty in Model Calibration and Validation
TRANSACTIONS OF THE ASABE Vol. 53, No. 1

K. B. CANTRELL, P.G. HUNT, K. S. RO, K. C. STONE, M. B. VANOTTI, J. C. BURNS

Thermogravimetric Characterization of Irrigated Bermudagrass as a Combustion Feedstock
TRANSACTIONS OF THE ASABE Vol. 53, No. 2

J. A. SORENSEN, P. JENKINS, B. BAYES, S. CLARK, J. J. MAY

Cost-Effectiveness of a ROPS Social Marketing Campaign
JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 16, No. 1

2011 presented 2012

B. SHARMA, C. L. JONES, A. KHANCHI

Tensile Strength and Shear Strength of Switchgrass Before and After Frost
BIOLOGICAL ENGINEERING TRANSACTIONS Vol. 4, No. 1

R. KUBOTA, A. M. ALVAREZ, W. W. SU, D. M. JENKINS

FRET-Based Assimilating Probe for Sequence-Specific Real-Time Monitoring of Loop-Mediated Isothermal Amplification

BIOLOGICAL ENGINEERING TRANSACTIONS Vol. 4, No. 2

**J. GUAN, H. HSIAO, J. V. ZWIENER, R. S. CURRENT, T. J. LUTZ, D. M. CANTIS,
J. R. POWERS JR., B. H. NEWBRAUGH, J. S. SPAHR**

Evaluating the Protective Capacity of Two-Post ROPS for a Seat-Belted Occupant During a Farm Tractor Overturn

JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 17, No. 1

Y. SHEN, J. A. OGEJO, K. E. BOWERS

Abating the Effects of Calcium on Struvite Precipitation in Liquid Dairy Manure

TRANSACTIONS OF THE ASABE Vol. 54, No. 1

M. CAMBRA-LOPEZ, T. HERMOSILLA, H. T. L. LAI, A. J. A. AARNINK, N. W. M. OGINK

Particulate Matter Emitted from Poultry and Pig Houses: Source Identification and Quantification

TRANSACTIONS OF THE ASABE Vol. 54, No. 2

T. J. SAUER, J. L. HATFIELD, F. L. HAAN, JR.

A Wind Tunnel Study of Airflow Near Model Swine Confinement Buildings

TRANSACTIONS OF THE ASABE Vol. 54, No. 2

R. G. HARDIN IV, S. W. SEARCY

Autonomous Cotton Module Forming System

APPLIED ENGINEERING IN AGRICULTURE Vol. 27, No. 4

F. MAZZETTO, A. CALCANTE, E. ORSI

Design, Development, and Evaluation of A Device For The Monitoring Of Liquid Manure Distribution Using Big Gun Sprinkler Distribution Systems

APPLIED ENGINEERING IN AGRICULTURE Vol. 27, No. 4

G. C. BORA, M. D. SCHROCK, D. L. OARD, J. GRIMM

Performance of A Pulse Width Modulated (PWM) Single to Multifold Outlet System for Variable-Rate Anhydrous Ammonia Application

TRANSACTIONS OF THE ASABE Vol. 54, No. 2

**M. A. NEARING, H. WEI, J. J. STONE, F. B. PIERSON, K. E. SPAETH, M. A. WELTZ,
D. C. FLANAGAN, M. HERNANDEZ**

A Rangeland Hydrology and Erosion Model

TRANSACTIONS OF THE ASABE Vol. 54, No. 3

M. LEE, K. R. DOUGLAS-MANKIN

An Environmental Trading Ratio for Water Quality Trading

TRANSACTIONS OF THE ASABE Vol. 54, No. 5

R. W. SKAGGS, B. D. PHILLIPS, G.M. CHESCHEIR, C. C. TRETTIN

Effect of Minor Drainage on Hydrology of Forested Wetlands

TRANSACTIONS OF THE ASABE Vol. 54, No. 6

A.M. SEXTON, A. SHIRMOHAMMADI, A. M. SADEGHI, H. J. MONTAS

Impact of Parameter Uncertainty on Critical SWAT Output Simulations
TRANSACTIONS OF THE ASABE Vol. 54, No. 2

A. Y. SHESHUKOV, C. B. SIEBEN MORGEN, K. R. DOUGLAS-MANKIN

Seasonal and Annual Impacts of Climate Change on Watershed Response Using an Ensemble of Global Climate Models
TRANSACTIONS OF THE ASABE Vol. 54, No. 6

N. PAI, D. SARASWAT

SWAT2009_LUC: A Tool to Activate the Land Use Change Module in SWAT 2009
TRANSACTIONS OF THE ASABE Vol. 54, No. 5

J. QIN, K. CHAO, M. S. KIM, S. KANG, B.-K. CHO, W. JUN

Detection of Organic Residues on Poultry Processing Equipment Surfaces by LED- Induced Fluorescence Imaging
APPLIED ENGINEERING IN AGRICULTURE Vol. 27, No. 1

H. HUANG, C. RUAN, J. LIN, M. LI, L. M. COONEY, W. F. OLIVER, Y. LI, A. WANG

Magnetic Nanoparticle Based Magnetophoresis for Efficient Separation of E. Coli 0157:H7
TRANSACTIONS OF THE ASABE Vol. 54, No. 3

K. B. HICKS, J. WILSON, R. A. FLORES

Progressive Hull Removal from Barley Using the Fitzpatrick Comminuting Mill
APPLIED ENGINEERING IN AGRICULTURE Vol. 27, No. 5

2012 presented 2013

G .R. DEBOY, W.M. KNAPP, W.E. FIELD, G.W. KRUTZ, C.L. CORUM

Establishing the Need for an Engineering Standard for Agricultural Hitch Pins
JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 18, No. 2

Y. TONG, T. KOZAI, N. NISHIOKA, K. OHYAMA

Reductions in Energy Consumption and CO2 Emissions for Greenhouses Heated With Heat Pumps
APPLIED ENGINEERING IN AGRICULTURE Vol. 28, No. 3

G.D.N. MAIA, G.T. SALES, G.B. DAY V, R.S. GATES, J.L. TARABA

Characterizing Physical Properties of Gas-Phase Biofilter Media
TRANSACTIONS OF THE ASABE Vol. 55, No. 5

D.H. LEE, K.A. SUDDUTH, S.T. DRUMMOND, S.O. CHUNG, D.B. MYERS

Automated Yield Map Delay Identification Using Phase Correlation Methodology
TRANSACTIONS OF THE ASABE Vol. 55, No. 3

Y. CHEN, H. ZHU, H.E. OZKAN

Development of a Variable-Rate Sprayer with Laser Scanning Sensor to Synchronize Spray Outputs to Tree Structures
TRANSACTIONS OF THE ASABE Vol. 55, No. 3

S.D. RYAN, A.G. GERBER, A.G.L. HOLLOWAY

A Computational Study of Sprays Produced by Rotary Cage Atomizers
TRANSACTIONS OF THE ASABE Vol. 55, No. 4

J.N. ACKERMAN, N. CICEK, J. OLESZKIEWICZ

Anaerobic Fermentation of Pig Manure to Increase Phosphorus Removal by Struvite
Precipitation
BIOLOGICAL ENGINEERING TRANSACTIONS Vol.5, No. 4

J.A. GUZMAN, G.A. FOX

Implementation of Biopore and Soil Fecal Bacteria Fate and Transport Routines in the
Root Zone Water Quality Model (RZWQM)
TRANSACTIONS OF THE ASABE Vol. 55, No. 1

J.P. BORDOVSKY, J.T. MUSTIAN

Cotton Response to Crop Row Offset and Orientation to Subsurface Drip Irrigation Laterals
APPLIED ENGINEERING IN AGRICULTURE Vol. 28, No. 3

R.W. HEALY, H.I. ESSAID

VS2DI: Model Use, Calibration, and Validation
TRANSACTIONS OF THE ASABE Vol. 55, No. 4

B.A. KING, D.L. BJORNEBERG

Transient Soil Surface Sealing and Infiltration Model for Bare Soil Under Droplet Impact
TRANSACTIONS OF THE ASABE Vol. 55, No. 3

J. LAMBA, T.R. WAY, P. SRIVASTAVA, S. SEN, C.W. WOOD, K.H. YOO

Surface Transport of Nutrients from Surface-Broadcast and Subsurface-Banded Broiler Litter
TRANSACTIONS OF THE ASABE Vol. 55, No. 3

F.R. LAMM, K.R. HARMONEY, A.A. ABOUKHEIRA, S.K. JOHNSON

Alfalfa Production with Subsurface Drip Irrigation in the Central Great Plains
TRANSACTIONS OF THE ASABE Vol. 55, No. 4

D.C. GOODRICH, I.S. BURNS, C.L. UNKRICH, D.J. SEMMENS, D.P. GUERTIN

M. HERNANDEZ, S. YATHEENDRADAS, J.R. KENNEDY, L.R. LEVICK

KINEROS2/AGWA: Model Use, Calibration, and Validation
TRANSACTIONS OF THE ASABE Vol. 55, No. 4

S. SANKARAN, R. EHSANI

Detection of Huanglongbing Disease in Citrus Using Fluorescence Spectroscopy
TRANSACTIONS OF THE ASABE Vol. 55, No. 1

S.C. YOON, K.C. LAWRENCE, D.R. JONES, G.W. HEITSCHMIDT

Improved Modified Pressure Imaging and Software for Egg Micro-Crack Detection and
Egg Quality Grading
APPLIED ENGINEERING IN AGRICULTURE Vol. 28, No. 2

**V.M. SMITH, P. KOLAR, M.D. BOYETTE, M. CHINN C. SMITH, R. GANGADHARAN,
G. ZHANG**

Advanced Oxidation of Toluene Using Ni-Olivine Catalysts: Part 1. Synthesis, Characterization, and

Evaluation of Ni-Olivine Catalysts for Toluene Oxidation
TRANSACTIONS OF THE ASABE Vol. 55, No. 3

**K. THEERARATTANANOON, F. XU, J. WILSON, S. STAGGENBORG MCKINNEY,
P. VADLANI, Z.J. PEI, D. WANG**

Impact of Pelleting and Acid Pretreatment on Biomass Structure and Thermal Properties of Wheat
Straw, Corn Stover, Big Bluestem, and Sorghum Stalk TRANSACTIONS OF
THE ASABE Vol. 55, No. 5

2013 presented 2014

P.-S. LIANG, J.-Y. YOON

Optofluidic Lab-on-a-Chip Monitoring of Subsurface Bacterial Transport:
BIOLOGICAL ENGINEERING TRANSACTIONS Vol. 6, No. 1

E. TAMIMI, M. KACIRA, C.Y. CHOI, L. AN

Analysis of Microclimate Uniformity in a Naturally Vented Greenhouse with a High- Pressure Fogging
System
TRANSACTIONS OF THE ASABE Vol. 56, No. 3

J. LAWRENCE, D.E. MAIER, R. L. STROSHINE

Three-Dimensional Transient Heat, Mass, Momentum, and Species Transfer in the Stored Grain
Ecosystem: Part II. Model Validation
TRANSACTIONS OF THE ASABE Vol. 56, No. 1

D.F. SCHIAVONE, A.A. TEIXEIRA, R.A. BUCKLIN, S.A. SARGENT

Design and Performance Evaluation of a Solar Convection Dryer for Drying Tropical Fruit
APPLIED ENGINEERING IN AGRICULTURE Vol. 29, No. 3

X. WANG, S.R.S.DEV, A. DEMIRCI, R.E. GRAVES, V.M. PURI

Electrolyzed Oxidizing Water for Cleaning-In-Place of On-Farm Milking Systems – Performance
Evaluation and Assessment
APPLIED ENGINEERING IN AGRICULTURE Vol. 29, No. 5

H.J. KIM, K.A. SUDDUTH, J.W. HUMMEL, S.T. DRUMMOND

Validation Testing of a Soil Macronutrient Sensing System
TRANSACTIONS OF THE ASABE Vol. 56, No. 1

S.D. RYAN, A.G. GERBER, A.G.L. HOLLOWAY

A Computational Study on Spray Dispersal in the Wake of an Aircraft
TRANSACTIONS OF THE ASABE Vol. 56, No. 3

C.N. HOWARD, M.F. KOCHER, R.M. HOY, E.E. BLANKENSHIP

Testing Fuel Efficiency of Tractors with Continuously Variable and Standard Geared Transmissions
TRANSACTIONS OF THE ASABE Vol. 56, No. 3

T.C. BRIDGES, R.S. GATES, E.M. SMITH, L.W. TURNER

Modeling the Growth of Laboratory and Farm Animals: Part 2. Polytocus Animals and the Relationship
of Birth Weight, Gestation Time, and Mature Size

TRANSACTIONS OF THE ASABE Vol. 56, No. 3

M. MONDACA, F. ROJANO, C.Y. CHOI, K.G. GEBREMEDHIN

A Conjugate Heat and Mass Transfer Model to Evaluate the Efficiency of Conductive Cooling for Dairy Cattle

TRANSACTIONS OF THE ASABE Vol. 56, No. 6

A.T. AL-MADHHACHI, G.J. HANSON, G.A. FOX, A.K. TYAGI, R. BULUT Measuring Soil Erodibility Using a Laboratory Mini JET

TRANSACTIONS OF THE ASABE Vol. 56, No. 3

S. ARNHOLD, M. RUIDISCH, S. BARTSCH, C.L. SHOPE, B. HUWE

Simulation of Runoff Patterns and Soil Erosion on Mountainous Farmland With and Without Plastic-Covered Ridge-Furrow Cultivation in South Korea

TRANSACTIONS OF THE ASABE Vol. 56, No. 2

J. GAO, L.E. WAGNER, F. FOX, S.H. CHUNG, J.K. VAUGHAN, B.K. LAMB

Spatial Application of WEPS for Estimating Wind Erosion in the Pacific Northwest

TRANSACTIONS OF THE ASABE Vol. 56, No. 2

O.Z. AL-HAMDAN, F.B. PIERSON, M.A. NEARING, C.J. WILLIAMS, J.J. STONE, P.R. KORMOS, J. BOLL, M.A. WELTZ

Risk Assessment of Erosion from Concentrated Flow on Rangelands Using Overland Flow Distribution and Shear Stress Partitioning

TRANSACTIONS OF THE ASABE Vol. 56, No. 2

V. SHARMA, D.R. RUDNICK, S. IRMAK

Development and Evaluation of Ordinary Least Squares Regression Models for Predicting Irrigated and Rainfed Maize and Soybean Yields

TRANSACTIONS OF THE ASABE Vol. 56, No. 4

E.R. DALY, G.A. FOX, A.T. AL-MADHHACHI, R.B. MILLER

A Scour Depth Approach for Deriving Erodibility Parameters from Jet Erosion Tests TRANSACTIONS OF THE ASABE Vol. 56, No. 6

B. VELUSAMI, T.P. CURRAN, H.M. GROGAN

Hydrogen Sulfide Gas Emissions in the Human-Occupied Zone during Disturbance and Removal of Stored Spent Mushroom Compost

JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 19, No. 4

2014 presented 2015

N. NAHAR, R. RORICK, S.W. PRYOR

Effects of Enzyme and Solids Loading on Sugar Beet Pulp Hydrolysis:

BIOLOGICAL ENGINEERING TRANSACTIONS Vol. 7, No. 1

B. PARK, W.R. WINDHAM, S.R. LADELY, P. GURRAM, H. KWON, S.C. YOON, K.C. LAWRENCE, N. NARANG, W.C. CRAY

Detection of Non-0157 Shiga Toxin-Producing *Escherichia coli* (STEC) Serogroups with Hyperspectral Microscope Imaging Technology

TRANSACTIONS OF THE ASABE Vol. 57, No. 3

D. WANG, W. YUAN, D. WANG, A. KUMAR

A Char-Supported Nano-NiO Catalyst for Biomass Syngas Cleanup with Conditioning TRANSACTIONS OF THE ASABE Vol. 57, No. 1

W. CHAYAPRASERT, A. CHANTALAK, A. SUKCHAROEN

Porosity Measurement of Granular Materials by Comparisons of Air Pressure Decay Rates
TRANSACTIONS OF THE ASABE Vol. 57, No. 5

J. QIN, K. CHAO, B.-K. CHO, Y. PENG, M.S. KIM

High-Throughput Raman Chemical Imaging for Rapid Evaluation of Food Safety and Quality
TRANSACTIONS OF THE ASABE Vol. 57, No. 6

A. KOLLER, Y. WAN, E. MILLER, P. WECKLER, R. TAYLOR

Test Method for Precision Seed Singulation Systems
TRANSACTIONS OF THE ASABE Vol. 57, No. 5

M.P. SAMA, T.S. STOMBAUGH

Performance Evaluation of a Tracking Total Station as a Position Reference for Dynamic GNSS Accuracy Testing
APPLIED ENGINEERING IN AGRICULTURE Vol. 30, No. 4

P. SAVOIE, P.L. HEBERT, F.-S. ROBERT

Novel Willow Header Adapted to a Pull-Type Forage Harvester: Development and Field Experiments
APPLIED ENGINEERING IN AGRICULTURE Vol. 30, No. 5

B.D. LUCK, J.D. DAVIS, J.L. PURSWELL, A.S. KIESS, S.J. HOFF, J.W.W. OLSEN

Effect of Measurement Density on Characterizing Air Velocity Distribution in Commercial Broiler Houses
TRANSACTIONS OF THE ASABE Vol. 57, No. 5

J.P. STINN, H. XIN

Heat and Moisture Production Rates of a Modern U.S. Swine Breeding, Gestation, and Farrowing Facility
TRANSACTIONS OF THE ASABE Vol. 57, No. 5

D.M. ENDALE, D.D. BOSCH, T.L. POTTER, T.C. STRICKLAND

Sediment Loss and Runoff from Cropland in a Southeast Atlantic Coastal Plain Landscape
TRANSACTIONS OF THE ASABE Vol. 57, No. 6

**K.R. THORP, E.M. BARNES, D.J. HUNSAKER, B.A. KIMBALL, J.W. WHITE,
V.J. NAZARETH, G. HOOGENBOOM**

Evaluation of CSM-CROPGRO-Cotton for Simulating Effects of Management and Climate Change on Cotton Growth and Evapotranspiration in an Arid Environment
TRANSACTIONS OF THE ASABE Vol. 57, No. 6

**B.J. ALLRED, D.L. GAMBLE, W.B. CLEVINGER, G.A. LABARGE, G.L. PRILL,
B.J. CZARTOSKI, N.R. FAUSEY, L.C. BROWN**

Crop Yield Summary for Three Wetland Reservoir Subirrigation Systems in Northwest Ohio
APPLIED ENGINEERING IN AGRICULTURE Vol. 30, No. 6

G.A. MOSHER, N. KEREN, S.A. FREEMAN, C.R. HURBURGH, JR

Development of a Safety Decision-Making Scenario to Measure Worker Safety in Agriculture
JOURNAL OF AGRICULTURAL SAFETY AND HEALTH Vol. 20, No. 2

2015 presented 2016

A Fluorescent Aptasensor Coupled with Nanobead-Based Immunomagnetic Separation for Simultaneous Detection of Four Foodborne Pathogenic Bacteria

L. Xu, Z. T. Callaway, R. Wang, H. Wang, M. F. Slavik, A. Wang, Y. Li

Transactions of the ASABE 58(3)

Simulation and Validation of Airflow Pressure Patterns in Hopper-Bottom Bins Filled with Wheat

J. A. Moses, V. Chelladurai, D. S. Jayas, K. Alagusundaram

Applied Engineering in Agriculture 31(2)

The Efficiency of Biofilters at Mitigating Airborne MRSA from a Swine Nursery

D. D. Ferguson, T. C. Smith, K. J. Donham, S. J. Hoff

Journal of Agricultural Safety and Health 21(4)

Ethanol Production from Sugarcane Bagasse Using SSF Process and Thermotolerant Yeast

G. M. Silva, R. L. C. Giordano, A. J. G. Cruz, K. D. Ramachandriya, I. M. Banat, M. R. Wilkins

Transactions of the ASABE 58(2)

Vegetated Treatment Area Effectiveness at Reducing Nutrient Runoff from Small Swine Operations in Central Texas

K. D. Higgs, R. D. Harmel, K. Wagner, P. K. Smith, R. L. Haney, D. R. Smith, R. Pampell

Applied Engineering in Agriculture 31(4)

Soil Erosion from Winter Wheat Cropland under Climate Change in Central Oklahoma

J. D. Garbrecht, X. C. Zhang

Applied Engineering in Agriculture 31(3)

Heterogeneity of Infiltration Rates in Alluvial Floodplains as Measured with a Berm Infiltration Technique

D. M. Heeren, G. A. Fox, D. E. Storm

Transactions of the ASABE 58(3)

A New Model for Phosphorus Loss in Runoff from Outdoor Cattle Lots

P. A. Vadas, L. W. Good, J. C. Panuska, D. L. Busch, R. A. Larson

Transactions of the ASABE 58(4)

Development of a Selective Automated Blossom Thinning System for Peaches

D. J. Lyons, P. H. Heinemann, J. R. Schupp, T. A. Baugher, J. Liu

Transactions of the ASABE 58(6)

Process-Based Modeling of Ammonia and Nitrous Oxide Emissions from Open-Lot Beef and Dairy Facilities

H. F. Bonifacio, C. A. Rotz, A. B. Leytem, H. M. Waldrip, R.W. Todd

Transactions of the ASABE 58(3)

Odor and Odorous Chemical Emissions from Animal Buildings: Part 3. Chemical Emissions

L. Cai, J. A. Koziel, S. Zhang, A. J. Heber, E. L. Cortus, D. B. Parker, S. J. Hoff, G. Sun, K. Y. Heathcote, L. D. Jacobson, N. Akdeniz, B. P. Hetchler, S. D. Bereznicki, E. A. Caraway, T. T. Lim

Transactions of the ASABE 58(5)

An Optical Sprayer Nozzle Flow Rate Sensor

J. S. Dvorak, L. E. Bryant

Transactions of the ASABE 58(2)

Flow, Spray Pattern, and Droplet Spectra Characteristics of an Electronically Actuated Variable-Orifice Nozzle

J. D. Luck, S. K. Pitla, M. P. Sama, S. A. Shearer

Transactions of the ASABE 58(2)

Feasibility of Using PFC^{3D} to Simulate Soil Flow Resulting from a Simple Soil-Engaging Tool

M. A. Sadek, Y. Chen

Transactions of the ASABE 58(4)

Analyzing Correlations between Stream Benthic Macroinvertebrate Community Structure, Water Quality, and Watershed Land Use in the Continental United States

H. N. Sandefur, E. Cummings, R. Z. Johnston, M. D. Matlock, D. I. Gustafson

Biological Engineering Transactions 7(4)

2016 presented 2017

Engineering Economics of Cotton Stalk Supply Logistics Systems for Bioenergy Applications

K. Sahoo, S. Mani

Transactions of the ASABE 59(3)

Development and Evaluation of a Computer-Based ROPS Design Program

P. D. Ayers, F. Khorsandi, Y. John, G. Whitaker

Journal of Agricultural Safety and Health 22(4)

Canopy Light Interception Conversion in Upright Fruiting Offshoot (UFO) Sweet Cherry Orchard

J. Zhang, Q. Zhang, M. D. Whiting

Transactions of the ASABE 59(4)

An Evaluation of Simplifying Assumptions in Dairy Cow Computational Fluid Dynamics Models

M. Mondaca, C. Y. Choi

Transactions of the ASABE 59(6)

Evaluation of a Laser Scanning Sensor in Detection of Complex-Shaped Targets for Variable-Rate Sprayer Development

H. Liu, H. Zhu

Transactions of the ASABE 59(5)

Fusion of Spectral and Electrochemical Sensor Data for Estimating Soil Macronutrients

W. J. La, K. A. Sudduth, H. J. Kim, S. O. Chung

Transactions of the ASABE 59(4)

Recalibration Methodology to Compensate for Changing Fluid Properties in an Individual Nozzle Direct Injection System

J. D. Luck, S. A. Shearer, B. D. Luck, M. P. Sama

Transactions of the ASABE 59(3)

Removal of Cattle Manure Constituents in Runoff from No-Till Cropland as Affected by Setback Distance

J. E. Gilley, A. J. Sindelar, B. L. Woodbury

Transactions of the ASABE 59(6)

Evaluating Greenhouse Gas Mitigation and Climate Change Adaptation in Dairy Production Using Farm Simulation

C. A. Rotz, R. H. Skinner, A. M. K. Stoner, K. Hayhoe

Transactions of the ASABE 59(6)

Value of ENSO-Forecasted Drought Information for the Management of Water Resources of Small to Mid-Size Communities

V. Sharda, P. Srivastava

Transactions of the ASABE 59(6)

The Variability of ASCE Standardized Reference Evapotranspiration: A Rigorous, CONUS-Wide Decomposition and Attribution

M. T. Hobbins

Transactions of the ASABE 59(2)

A Runoff and Sediment Routing Model for Open Lot Beef Feeding Facilities

D. S. Andersen

Applied Engineering in Agriculture 32(1)

Analysis of Pear Dynamic Characteristics Based on Harmonic Response

W. Zhang, D. Cui, Z. Liu, Y. Ying

Transactions of the ASABE 59(6)

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 32(6)

Evaluation of Alternative Cover Materials for Reducing Hydrogen Sulfide Emission from Municipal Solid Waste (MSW) Landfills

Y. Ding, C. Cai, J. Xiong, A. Qian, J. Wei, B. Hu, W. Wu, Z. Han, H. Zhang, W. Ni

Transactions of the ASABE 59(4)

Mortality Rate of Weaned and Feeder Pigs as Affected by Ground Transport Conditions

Y. Zhao, H. Xin, J. D. Harmon, T. J. Baas

Transactions of the ASABE 59(4)

2017 Presented in 2018

Effective Use of Dairy Manure Mixed with Sand Bedding for Gasification

H. Nam, A. L. Maglinao, S. C. Capareda

Transactions of the ASABE 60(1)

Evaluation of Low-Cost Hydrogen Sulfide Monitors for Use in Livestock Production

J. M. Beswick-Honn, T. M. Peters, T. R. Anthony

Journal of Agricultural Safety and Health 23(4)

Identification and Counting of Soybean Aphids from Digital Images Using Shape Classification

S. Sunoj, S. Sivarajan, M. Maharlooei, S. G. Bajwa, J. P. Harmon,

J. Nowatzki, C. Igathinathane

Transactions of the ASABE 60(5)

Detection of Internally Bruised Blueberries Using Hyperspectral Transmittance Imaging

M. Zhang, C. Li, F. Takeda, F. Yang

Transactions of the ASABE 60(5)

Profile Soil Property Estimation Using a VIS-NIR-EC-Force Probe

Y. Cho, K. A. Sudduth, S. T. Drummond

Transactions of the ASABE 60(3)

Spray Tip Configurations with Pulse-Width Modulation for Glufosinate-Ammonium Deposits in Palmer Amaranth (*Amaranthus palmeri*)

A. R. Womac, G. Melnichenko, L. Steckel, G. Montgomery, J. Reeves, R. M. Hayes

Transactions of the ASABE 60(4)

Influence of a Young *Pinus radiata* Canopy on Aerial Spray Drift

B. Richardson, T. Strand, H. W. Thistle, A. Hiscox, M. O. Kimberley, W. C. Schou

Transactions of the ASABE 60(6)

A Generic Pest Submodel for Use in Integrated Assessment Models

L. Rasche, R. A. J. Taylor

Transactions of the ASABE 60(1)

Cotton Irrigation Scheduling Using a Crop Growth Model and FAO-56 Methods: Field and Simulation Studies

K. R. Thorp, D. J. Hunsaker, K. F. Bronson, P. Andrade-Sanchez, E. M. Barnes

Transactions of the ASABE 60(6)

Crop and Location Specific Agricultural Drought Quantification: Part I. Method Development

R. L. McDaniel, C. Munster, J. T. Cothren

Transactions of the ASABE 60(3)

Geochemical Evolution and Leachate Transport Beneath Two Carcass Burial Sites: A Field Investigation

D. L. Pratt, T. A. Fonstad

Transactions of the ASABE 60(6)

Coefficients for Quantifying Subsurface Drainage Rates

R. Wayne Skaggs

Applied Engineering in Agriculture 33(6)

Evaluation of Conditions during Weaned Pig Transport

J. D. Harmon, S. J. Hoff, T. J. Baas, Y. Zhao, H. Xin, L. R. Follett

Applied Engineering in Agriculture 33(6)

A UHF RFID System for Studying Individual Feeding and Nesting Behaviors of Group-Housed Laying Hens

L. Li, Y. Zhao, J. Oliveira, W. Verhoijesen, K. Liu, H. Xin

Transactions of the ASABE 60(4)

Differences in Kernel Shape, Size, and Density between Healthy Kernels and Mold Discolored Kernels and their Relationship to Reduction in Aflatoxin Levels in a Sample of Shelled Corn

H. Shi, R. L. Stroshine, K. Ileleji

Applied Engineering in Agriculture 33(3)

Development of a Multispectral Structured Illumination Reflectance Imaging (SIRI) System and Its Application to Bruise Detection of Apples

Y. Lu, R. Lu

Transactions of the ASABE 60(4)

2018 Presented in 2019

Assessment of Perennial Grass Inventories Predicted in the Billion-Ton Studies

D. S. Jones, S. W. Searcy, L. M. Eaton

Transactions of the ASABE 61(2): 331-340 (doi: 10.13031/trans.12505).

Estimating Passive Stress Acting on a Grain Entrapment Victim's Chest

S. F. Issa, C. Wassgren, C. V. Schwab, R. Stroshine, W. E. Field

Journal of Agricultural Safety and Health 24(3): 113-126 (doi: 10.13031/jash.12552).

A Computational Fluid Dynamics Model of Biological Heat and Gas Generation in a Dairy Holding Area

J. L. Drewry, M. R. Mondaca, B. D. Luck, C. Y. Choi

Transactions of the ASABE 61(2): 449-460 (doi: 10.13031/trans.12394).

Structured Illumination Reflectance Imaging for Enhanced Detection of Subsurface Tissue Bruising in Apples

R. Li, Y. Lu, R. Lu

Transactions of the ASABE 61(3): 809-819 (doi: 10.13031/trans.12243).

Prediction of Aerial Spray Release from UAVs

M. E. Teske, D. A. Wachspress, H. W. Thistle

Transactions of the ASABE 61(3): 909-918 (doi: 10.13031/trans.12701).

A Precision Pruning Strategy for Improving Efficiency of Vibratory Mechanical Harvesting of Apples

X. Zhang, L. He, Y. Majeed, M. D. Whiting, M. Karkee, Q. Zhang

Transactions of the ASABE 61(5): 1565-1576 (doi: 10.13031/trans.12825).

Identification of Hydrologically Sensitive Areas Considering Watershed Process Dynamics

Y. Her, C. Heatwole

Transactions of the ASABE 61(6): 1891-1906 (doi: 10.13031/trans.12792).

How Do Temperature and Rainfall Affect Nitrous Oxide Emissions from Open-Lot Beef Cattle Feedyard Pens?

D. B. Parker, H. M. Waldrip, K. D. Casey, B. L. Woodbury, M. J. Spiels, K. Webb, W. M. Willis

Transactions of the ASABE 61(3): 1049-1061 (doi: 10.13031/trans.12788).

Improved APEX Model Simulation of Buffer Water Quality Benefits at Field Scale

G. M. M. A. Senaviratne, C. Baffaut, J. A. Lory, R. P. Udawatta, N. O. Nelson, J. R. Williams, S. H. Anderson

Transactions of the ASABE 61(2): 603-616 (doi: 10.13031/trans.12655).

Process-Based Modeling of Infiltration, Soil Loss, and Dissolved Solids on Saline and Sodic Soils

S. K. Nouwakpo, M. A. Wertz, A. Arslan, C. H. Green, O. Z. Al-Hamdan

Transactions of the ASABE 61(3): 1033-1048 (doi: 10.13031/trans.12705).

Carbon Footprint Assessment of a Large-Scale Pig Production System in Northern China: A Case Study

Y. Q. Zhou, H. M. Dong, H. W. Xin, Z. Z. Zhu, W. Q. Huang, Y. Wang

Transactions of the ASABE 61(3): 1121-1131 (doi: 10.13031/trans.12805).

Dimensions of the Modern Pig

I. C. F. S. Condotta, T. M. Brown-Brandl, J. P. Stinn, G. A. Rohrer, J. D. Davis, K. O. Silva-Miranda

Transactions of the ASABE 61(5): 1729-1739 (doi: 10.13031/trans.12826).

Simulation of Hydrogen Sulfide Emission from Deep-Pit Manure Storage During Agitation

H. Lin, W. Liu, J. Gan, Y. Wang, B. Hu

Transactions of the ASABE 61(6): 1951-1967 (doi: 10.13031/trans.12866).

Thermal Conductivity of Selected Foods at High-Pressure Processing Conditions

W. Sun, S. Zhu, H. S. Ramaswamy, Y. Yu, J. Li

Transactions of the ASABE 61(1): 317-325 (doi: 10.13031/trans.12435).

Nanoporous Stainless Steel Surfaces for Anti-Bacterial Adhesion Performances

G.-H. Ban, N. Rungraeng, Y. Li, S. Jun

Transactions of the ASABE 61(3): 1175-1179 (doi: 10.13031/trans.12677).

2019 Presented in 2020

[Agricultural Security Monitoring and Safety Alert System: Implementation of Wireless Video on the Farmstead](#)

S. G. Ehlers, R. L. Tormoehlen

Journal of Agricultural Safety and Health 25(4): 155-168 (doi: 10.13031/jash.13004).

[Design and Testing of an Impact Sensor Using Two Crossed Polyvinylidene Fluoride \(PVDF\) Films](#)

Y. Sun, R. Cao, Z. Lu, X. Nie, Z. K. Li, Y. H. Yu, H. P. Tian, X. Q. Qian, J. P. Wang

Transactions of the ASABE 62(5): 1195-1205 (doi: 10.13031/trans.13440).

[Automatic Recognition of Porcine Abnormalities Based on a Sound Detection and Recognition System](#)

S. Zhang, J. Tian, A. Banerjee, J. Li

Transactions of the ASABE 62(6): 1755-1765 (doi: 10.13031/trans.12975).

[Using gprMax to Model Ground-Penetrating Radar \(GPR\) to Locate Corn Seed as an Attempt to Measure Planting Depth](#)

K. O. M. Mapoka, S. J. Birrell, M. Z. Tekeste, B. Steward, D. Eisenmann

Transactions of the ASABE 62(3): 673-686 (doi: 10.13031/trans.12809).

[Design and Field Evaluation of a Robotic Apple Harvesting System with a 3D-Printed Soft-Robotic End-Effector](#)

C. J. Hohimer, H. Wang, S. Bhusal, J. Miller, C. Mo, M. Karkee

Transactions of the ASABE 62(2): 405-414 (doi: 10.13031/trans.12986).

[Development and Preliminary Evaluation of an Integrated Individual Nozzle Direct Injection and Carrier Flow Rate Control System for Pesticide Applications](#)

J. D. Luck, S. A. Shearer, M. P. Sama

Transactions of the ASABE 62(2): 505-514 (doi: 10.13031/trans.13170).

[Investigation of an Experimental Laser Sensor-Guided Spray Control System for Greenhouse Variable-Rate Applications](#)

T. Yan, H. Zhu, L. Sun, X. Wang, P. Ling

Transactions of the ASABE 62(4): 899-911 (doi: 10.13031/trans.13366).

[Sediment Phosphorus Release in a Shallow Eutrophic Reservoir Cove](#)

J. A. McCarty

Transactions of the ASABE 62(5): 1269-1281 (doi: 10.13031/trans.13309).

[Nitrate Removal by Floating Treatment Wetlands Amended with Spent Coffee: A Mesocosm-Scale Evaluation](#)

M. G. Keilhauer, T. L. Messer, A. R. Mittelstet, T. G. Franti, J. R. Corman

Transactions of the ASABE 62(6): 1619-1630 (doi: 10.13031/trans.13431).

[Quantification of Available Water Capacity Comparing Standard Methods and a Pedostructure Method on a Weakly Structured Soil](#)

J. Blake, A. T. Assi, R. H. Mohtar, E. F. Braudeau, C. L. S. Morgan

Transactions of the ASABE 62(2): 289-301 (doi: 10.13031/trans.13073).

[Computational Fluid Dynamics Simulation of Airflow through Standing Vegetation](#)

H. B. Gonzales, J. Tatarko, M. E. Casada, R. G. Maghirang, L. J. Hagen, C. J. Barden
Transactions of the ASABE 62(6): 1713-1722 (doi: 10.13031/trans.13449).

[Highly Efficient Biodiesel Conversion from Soybean Oil Using Liquid-Phase Plasma Discharge Technology](#)

S. Wu, M. A. Bashir, H. Hsieh, A. Krosuri, A. McDonald
Transactions of the ASABE 62(5): 1129-1134 (doi: 10.13031/trans.13534).

[Prediction of Optimum Supplemental Heat for Piglets](#)

H. F. M. Milan, A. S. C. Maia, K. G. Gebremedhin
Transactions of the ASABE 62(2): 321-342 (doi: 10.13031/trans.13015).

[A Novel Mathematical Model for Predicting Performance of the Sequential Batch Anaerobic Digestion Process: Part I](#)

H. M. Keener, F. Xu
Transactions of the ASABE 62(3): 719-729 (doi: 10.13031/trans.13246).

[Chilled Aeration to Control Pests and Maintain Grain Quality during Summer Storage of Wheat in the North Central Region of Kansas](#)

A. Morales-Quiros, C. A. Campabadal, D. E. Maier, S. Lazzari, F. Lazzari, T. W. Phillips
Applied Engineering in Agriculture 35(4): 657-688 (doi: 10.13031/aea.13252).

2020 Presented 2021

[Body Orientation and Points of Contact during Laboratory-Based Machinery Egress: Investigating Adherence to Safety Guidelines](#)

D. C. Kingston, B. Bashiri, A. Omoniyi, C. M. Trask
Journal of Agricultural Safety and Health 26(3): 95-104 (doi: 10.13031/jash.13931).

[A Portable Biosensing Device with Magnetic Separation and Quantum Dot Bead Labeling for Simple, Rapid, and Quantitative Detection of Salmonella Typhimurium](#)

X. Xi, R. Wang, P. Yao, L. Yao, S. Tung, Y. Li
Transactions of the ASABE 63(6): 1947-1955 (doi: 10.13031/trans.13880).

[Evaluation of Two Recurrent Neural Network Methods for Prediction of Irrigation Rate and Timing](#)

A. F. Jiménez, B. V. Ortíz, L. Bondesan, G. Morata, D. Damianidis
Transactions of the ASABE 63(5): 1327-1348 (doi: 10.13031/trans.13765).

[Quantifying Spray Deposition from a UAV Configured for Spot Spray Applications to Individual Plants](#)

B. Richardson, C. Rolando, M. Kimberley
Transactions of the ASABE 63(4): 1049-1058 (doi: 10.13031/trans.13724).

[Development of Prediction Model for Axle Torque of Agricultural Tractors](#)

W. S. Kim, Y. S. Kim, Y. J. Kim
Transactions of the ASABE 63(6): 1773-1786 (doi: 10.13031/trans.14012).

[Hardware and Software Design for Premixing In-Line Injection System Attached to Variable-Rate Orchard Sprayer](#)

Z. Zhang, H. Zhu, C. Hu

Transactions of the ASABE 63(4): 823-821 (doi: 10.13031/trans.13730).

[Impact of Riparian and Stream Restoration on Denitrification in Geomorphic Features of Agricultural Streams](#)

M. K. Welsh, S. K. McMillan, P. G. Vidon

Transactions of the ASABE 63(5): 1157-1167 (doi: 10.13031/trans.13777).

[Assessing the Climate Change Impacts on Grain Sorghum Yield and Irrigation Water Use under Full and Deficit Irrigation Strategies](#)

K. Kothari, S. Ale, J. P. Bordovsky, C. L. Munster

Transactions of the ASABE 63(1): 81-94 (doi: 10.13031/trans.13465).

[Potential Suitability of Subirrigation for Field Crops in the U.S. Midwest](#)

F. Yu, J. Frankenberger, J. Ackerson, B. Reinhart

Transactions of the ASABE 63(5): 1559-1570 (doi: 10.13031/trans.13783).

[Evaluation of Cotton Establishment Strategies Using Subsurface Drip Irrigation \(SDI\) in the Southern High Plains of Texas](#)

J. P. Bordovsky, J. T. Mustian

Applied Engineering in Agriculture 36(6): 891-904 (doi: 10.13031/aea.14098).

[Innovative Extension Methods in the U.S. to Promote Irrigation Water Management](#)

D. R. Rudnick, M. Stockton, S. Taghvaeian, J. Warren, M. D. Dukes, A. Kremen, C. G. Henry, J. Aguilar, B. Ortiz, A. Andales, C. A. Burr, X. Qiao, W. Liang, S. Walthour, S. H. Amosson

Transactions of the ASABE 63(5): 1549-1558 (doi: 10.13031/trans.13929).

[Effects of Elevated Platform and Robotic Vehicle on Broiler Production, Welfare, and Housing Environment](#)

X. Yang, X. Huo, G. Li, J. L. Purswell, G. T. Tabler, G. D. Chesser, C. L. Magee, Y. Zhao

Transactions of the ASABE 63(6): 1981-1990 (doi: 10.13031/trans.14115).

[Characterization of Zein Extracted from Wet Distillers Grains](#)

L. Guardiola-Ponce, A. Sudkamp, L. Yin, G. Padua

Transactions of the ASABE 63(4): 1059-1069 (doi: 10.13031/trans.13764).

[Deterrence of Aspergillus Flavus Regrowth and Aflatoxin Accumulation on Shelled Corn Using Infrared Heat Treatments](#)

D. L. Smith, G. G. Atungulu, S. Wilson, Z. M. Shad

Applied Engineering in Agriculture 36(2): 151-158 (doi: 10.13031/aea.13722).

2021 Presented 2022

[Ensilability and Nutritive Value of Sweet Sorghum and Sweet Pearl Millet Bagasse as Affected by Different Methods of Carbohydrate Extraction for Eventual Ethanol Production](#)

Saïed, Noura; Khelifi, Mohamed; Bertrand, Annick; Tremblay, Gaëtan; Aïder, Mohammed

Transactions of the ASABE 64(2): 401-411 (doi: 10.13031/trans.14071)

[Assessing Nonresponse Bias in Farm Injury Surveillance Data](#)

Cheryl L. Beseler, Risto H. Rautiainen

Journal of Agricultural Safety and Health 27(4): 215-227 (doi: 10.13031/jash.14554)

[A Dynamic Model for the Relationship between Rice Growth and Meteorology, Water, Nitrogen, and Canopy Structure](#)

Kenichi Tatsumi

Transactions of the ASABE 64(5): 1581-1610 (doi: 10.13031/trans.14371)

[MISIRoot: A Robotic, Minimally Invasive, *in Situ* Imaging System for Plant Root Phenotyping](#)

Zhihang Song, Wei Qi, Jian Jin

Transactions of the ASABE 64(5): 1647-1658 (doi: 10.13031/trans.14306)

[Evaluation of Soil Moisture Sensing Technologies in Silt Loam and Loamy Sand Soils: Assessment of Performance, Temperature Sensitivity, and Site- and Sensor-Specific Calibration Functions](#)

Kiran Sharma, Suat Irmak, Meetpal S. Kukal, Mehmet C. Vuran, Amit J. Jhala, Xin Qiao

Transactions of the ASABE 64(4): 1123-1139 (doi: 10.13031/trans.14112)

[Modeling Soil Forces on a Rotary Tine Tool in Artificial Soil](#)

Safal Kshetri, Brian L. Steward, Mehari Z. Tekeste

Transactions of the ASABE 64(5): 1693-1704 (doi: 10.13031/trans.14336)

[Development of a Small Electric Robot Boat for Mowing Aquatic Weeds](#)

Yutaka Kaizu, Tetsuo Shimada, Yusuke Takahashi, Sho Igarashi, Hiroyuki Yamada, Kenichi Furuhashi, Kenji Imou

Transactions of the ASABE 64(3): 1073-1082 (doi: 10.13031/trans.14295)

[Field Performance Evaluation of Pulse-Width Modulation and Pressure-Controlled, Fixed-Orifice Application Systems for Sensor-Based Nitrogen Applications](#)

Jackson S. Stansell, Samantha L. Teten, Samuel E. Marx, Joe D. Luck

Applied Engineering in Agriculture 37(3): 467-480 (doi: 10.13031/aea.14289)

[Power-Saving Solutions for Pre-Compensated Load-Sensing Systems on Mobile Machines](#)

Xin Tian, Patrick Stump, Andrea Vacca, Stefano Fiorati, Francesco Pintore

Transactions of the ASABE 64(5): 1435-1448 (doi: 10.13031/trans.14376)

[Techno-Economic Analysis of Constant-Flow Woodchip Bioreactors](#)

Lindsey M. Hartfiel, Michelle L. Soupir, Kurt A. Rosentrater

Transactions of the ASABE 64(5): 1545-1554 (doi: 10.13031/trans.14300)

[Development of a Land Suitability Framework for Sustainable Manure Utilization](#)

Gourab K. Saha, Raj Cibin, Herschel A. Elliott, Heather E. Preisendanz

Transactions of the ASABE 64(1): 273-285 (doi: 10.13031/trans.14000)

[A 2020 Vision of Subsurface Drip Irrigation in the U.S.](#)

Freddie R. Lamm, Paul D. Colaizzi, Ronald B. Sorensen, James P. Bordovsky, Mark Dougherty, Kris Balkcom, Daniele Zaccaria, Khaled M. Bali, Daran R. Rudnick, R. Troy Peters

Transactions of the ASABE 64(4): 1319-1343 (doi: 10.13031/trans.14555)

[Validating the Glass Transition Hypothesis in Explaining Fissure Formation in Rough Rice Kernels During the Drying Process](#)

Zephania R. Odek, Terry J. Siebenmorgen, Griffiths G. Atungulu
Transactions of the ASABE 64(6): 1763-1770 (doi: 10.13031/trans.14595)

[Energy and Exergy Efficiencies of Fluidized and Fixed Bed Rice Drying](#)

Kaushik Luthra, Sammy Sadaka
Transactions of the ASABE 64(6): 1943-1954 (doi: 10.13031/trans.14670)

2022 Presented 2023

[Wood Pellet Production with the Inclusion of Rice Hull Derived Bio-oil](#)

Tyler Lowe, Jason Street, Brian Smith, James Wooten, Brian Mitchell, El Barbary Hassan, Islam Elsayed
Applied Engineering in Agriculture 38(6): 903-915 (doi: 10.13031/aea.15162)

[Vision and Radar Steering Reduces Agricultural Sprayer Operator Stress without Compromising Steering Performance](#)

Travis A. Burgers, Kelly J. Vanderwerff
Journal of Agricultural Safety and Health 28(3): 163-179 (doi: 10.13031/jash.15060)

[Crop Improvement for Circular Bioeconomy Systems](#)

Carlos D. Messina, Fred van Eeuwijk, Tom Tang, Sandra K. Truong, Ryan F. McCormick, Frank Technow, Owen Powell, Laura Mayor, Neal Gutterson, James W. Jones, Graeme L. Hammer, Mark Cooper
Journal of the ASABE 65(3): 491-504 (doi: 10.13031/ja.14912)

[Deep-Pest-Detector: Automated Detection and Localization of Processionary Moth Nests on Pine Trees via Aerial Drones and Deep Neural Networks](#)

Nael Jaber, Naseem Daher, Daniel Asmar
Applied Engineering in Agriculture 38(2): 253-272 (doi: 10.13031/aea.14715)

[Validation Principles of Agricultural Machine Multibody Dynamics Models](#)

Bailey Adams, Matthew Darr
Journal of the ASABE 65(4): 801-814 (doi: 10.13031/ja.15045)

[Status of Spray Penetration and Deposition in Dense Field Crop Canopies](#)

Alvin R. Womac, Erdal Ozkan, Heping Zhu, John Kochendorfer, Hongyoung Jeon
Journal of the ASABE 65(5): 1107-1117 (doi: 10.13031/ja.15091)

[Experimental Investigation on Traction, Mobility, and Energy Usage of a Tracked Autonomous Ground Vehicle on a Sloped Soil Bin](#)

Chetan M. Badgajar, Daniel Flippo, Edwin Brokesh, Stephen Welch
Journal of the ASABE 65(4): 835-847 (doi: 10.13031/ja.14860)

[A Global Rain-Driven Soil Erosion Investigation Based on Simulated Breakpoint Precipitation](#)
[Andrew Fullhart, Ryan McGehee, Mark A. Nearing, Mariano Hernandez, Mark A. Weltz, David C. Goodrich](#)

Journal of the ASABE 65(5): 1081-1096 (doi: 10.13031/ja.14817)

[Upper Rio Grande Basin Water-Resource Status and Trends: Focus Area Study Review and Synthesis](#)

Kyle R. Mankin, Christine Rumsey, Graham Sexstone, Tamara Ivahnenko, Natalie Houston, Shaleene Chavarria, Gabriel Senay, Linzy Foster, Jonathan Thomas, Allison Flickinger, Amy E. Galanter, David Moeser, Toby L. Welborn, Diana E. Pedraza, Patrick M. Lamber
Journal of the ASABE 65(4): 881-901 (doi: 10.13031/ja.14964)

[Creating a Circular Nitrogen Bioeconomy in Agricultural Systems through Nutrient Recovery and Upcycling by Microalgae and Duckweed: Past Efforts and Future Trends](#)

Pandara Valappil Femeena, Gregory R. House, Rachel A. Brennan
Journal of the ASABE 65(2): 327-346 (doi: 10.13031/ja.14891)

[Design and Development of a Broiler Mortality Removal Robot](#)

Guoming Li, Gary Daniel Chesser, Jr., Joseph L. Purswell, Christopher Magee, Richard S. Gates, Yijie Xiong
Applied Engineering in Agriculture 38(6): 853-863 (doi: 10.13031/aea.15013)

[Coupling Circularity with Carbon Negativity in Food and Agriculture Systems](#)

Lillian Lower, Julia Cunniffe, Jay J. Cheng, William Joe Sagues
Journal of the ASABE 65(4): 849-864 (doi: 10.13031/ja.14908)

[Some Physical Properties of Aflatoxin-Inoculated Cottonseed](#)

Catelyn Bridges, Janie McClurkin Moore
Journal of the ASABE 65(3): 655-664 (doi: 10.13031/ja.14922)

2023 Presented 2024

[Waste to Worth: A Case Study of the Biogas Circular Economy in Pennsylvania](#)

Stephanie M. Herbstritt, Siobhan L. Fathel, Brett Reinford, Tom L. Richard
Journal of the ASABE 66(3) (doi: 10.13031/ja.14889)

[Equine Assessment Procedures in Professional Association of Therapeutic Horsemanship Unmounted Programs](#)

Sarah Andersen, Michael L. Pate, Judy Smith, Holly Clement, Rose Judd-Murray
Journal of Agricultural Safety and Health 29(2) (doi: 10.13031/jash.15457)

[A Methodology for Combine Performance Analyses in Wheat Harvests with GNSS Data](#)

Yang Wang, Yaguang Zhang, Dennis Buckmaster, James Krogmeier, Owen Powell, Laura Mayor, Neal Gutterson, James W. Jones, Graeme L. Hammer, Mark Cooper
Journal of the ASABE 66(6) (doi: 10.13031/ja.15388)

[A Multimodal Optical Sensing System for Automated and Intelligent Food Safety Inspection](#)

Jianwei Qin, Jeehwa Hong, Hyunjeong Cho, Jo Ann Van Kessel, Insuck Baek, Kuanglin Chao, Moon Kim
Journal of the ASABE 66(4) (doi: 10.13031/ja.15526)

[An Advanced Robotic System for Precision Chemical Thinning of Apple Blossoms](#)

Xinyang Mu, Magni Hussain, Long He, Paul Heinemann, James Schupp, Manoj Karkee, Minghui Zhu
Journal of the ASABE 66(5) (doi: 10.13031/ja.15678)

[Stereo Vision Controlled Variable Rate Sprayer for Specialty Crops: Part II. Sprayer Development and Performance Evaluation](#)

Carla Roman, Hongyoung Jeon, Heping Zhu, Javier Campos, Erdal Ozkan
Journal of the ASABE 66(5) (doi: 10.13031/ja.15578)

[Data quality control for stationary infrared thermometers viewing crops](#)

Paul D. Colaizzi, Susan A. O'Shaughnessy, Steven R. Evett, Gary W. Marek, David Brauer, Karen S. Copeland, Brice B. Ruthardt
Applied Engineering in Agriculture 39(4) (doi: 10.13031/aea.15642)

[Effect of Mechanical Solids Separators on Potential Reduction of Methane Emissions from Dairy Manure Storage](#)

Abdolhossein Edalati, Yike Chen, Tyler John Barzee, Hamed M. El-Mashad, Ruihong Zhang
Journal of the ASABE 66(3) (doi: 10.13031/ja.15371)

[Application of Sediment Fingerprinting to Apportion Sediment Sources: Using Machine Learning Models](#)

Kritika Malhotra, Jingyi Zheng, Ash Abebe, Jasmeet Lamba
Journal of the ASABE 66(5) (doi: 10.13031/ja.14906)

[Improving Air Quality in Broiler Rooms Using an Electrostatic Particle Ionization System](#)

Myra Martel, Shelley Kirychuk, Bernardo Predicala, Roger Bolo, Yingjie Yang, Brooke Thompson, Huiqing Guo, Lifeng Zhang
Journal of the ASABE 66(4) (doi: 10.13031/ja.15291)

08/22/22