

## 2016 ASABE Superior Paper Awards presented 2017

The articles published by ASABE in its three peer-reviewed journals during 2016 are eligible for 2017 Superior Paper Awards. Each Technical Community selects up to 5% of the papers published by their community for Paper Awards based on the articles timeliness, fundamental value, originality, and benefits to society, as well as for the quality of writing. Winning Paper Award authors are presented with a certificate at the Annual International Meeting.

### ES – Energy Systems

*Engineering Economics of Cotton Stalk Supply Logistics Systems for Bioenergy Applications*

**K. Sahoo, S. Mani**

Published in Transactions of the ASABE 59(3): 737-747 (doi: 10.13031/trans.59.11533).

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### ESH – Ergonomics, Safety, & Health

*Development and Evaluation of a Computer-Based ROPS Design Program*

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

Published in Journal of Agricultural Safety and Health 22(4): 247-260 (doi: 10.13031/jash.22.11745).

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### ITSC – Information Technology, Sensors, & Control Systems

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

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

Published in Transactions of the ASABE 59(4): 727-736 (doi: 10.13031/trans.59.11064).

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

**M. Mondaca, C. Y. Choi**

Published in Transactions of the ASABE 59(6): 1575-1584 (doi: 10.13031/trans.59.11908).

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### MS – Machinery Systems

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

**H. Liu, H. Zhu**

Published in Transactions of the ASABE 59(5): 1181-1192 (doi: 10.13031/trans.59.11760).

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*Fusion of Spectral and Electrochemical Sensor Data for Estimating Soil Macronutrients*

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

Published in Transactions of the ASABE 59(4): 787-794 (doi: 10.13031/trans.59.11562).

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*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**

Published in Transactions of the ASABE 59(3): 847-859 (doi: 10.13031/trans.59.11521).

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NRES – Natural Resources & Environmental Systems

*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**

Published in Transactions of the ASABE 59(6): 1681-1693 (doi: 10.13031/trans.59.11764).

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*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**

Published in Transactions of the ASABE 59(6): 1771-1781 (doi: 10.13031/trans.59.11594).

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

**V. Sharda, P. Srivastava**

Published in Transactions of the ASABE 59(6): 1733-1744 (doi: 10.13031/trans.59.11589).

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

**M. T. Hobbins**

Published in Transactions of the ASABE 59(2): 561-576 (doi: 10.13031/trans.59.10975).

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

**D. S. Andersen**

Published in Applied Engineering in Agriculture 32(1): 69-78 (doi: 10.13031/aea.32.11433).

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PAFS – Plant, Animal, & Facility Systems

*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**

Published in Transactions of the ASABE 59(4): 949-957 (doi: 10.13031/trans.59.11711).

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

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

Published in Transactions of the ASABE 59(4): 943-948 (doi: 10.13031/trans.59.11671).

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PRS – Processing Systems

*Analysis of Pear Dynamic Characteristics Based on Harmonic Response*

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

Published in Transactions of the ASABE 59(6): 1905-1913 (doi: 10.13031/trans.59.11845).

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*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**

Published in Applied Engineering in Agriculture 32(6): 925-930 (doi: 10.13031/aea.32.11692).

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