Superior Paper Awards 2023 presented 2024

The articles published by ASABE in its three peer-reviewed journals during 2023 are eligible for 2024 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.

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)

<u>Equine Assessment Procedures in Professional Association of Therapeutic Horsemanship Unmounted Programs</u>

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)

<u>Stereo Vision Controlled Variable Rate Sprayer for Specialty Crops: Part II. Sprayer Development</u> 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)

<u>Effect of Mechanical Solids Separators on Potential Reduction of Methane Emissions from Dairy Manure Storage</u>

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

<u>Application of Sediment Fingerprinting to Apportion Sediment Sources: Using Machine Learning</u> 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)