



Richard Stroshine
Ph.D. Cornell University - 1980

Professor

College of Agriculture Dean's Team Award – Integrated Corn Ethanol Co-Products – 2010
Purdue University Cooperative Extension Specialist Association Team Award – Managing Moldy Corn - 2010

Research Areas:

Physical Properties of Biomaterials, Agricultural Materials & Food Products – Magnetic resonance detection of quality in agricultural materials & food products; measurement of grain storability & quality; grain drying & storage; physical properties related to quality of agricultural products & foods; properties of biomaterials as they relate to biomedical & bioprocess engineering.

Classes Taught:

ABE 305 – Physical Properties of Biological Materials
ABE 450 – Design and Optimization in Finite Element Analysis
ASM 550 – Grain Drying and Storage
ASM 245 - Materials Handling and Processing

Selected Publications:

Marvasti, M.B., D. Zare, and **R.L. Stroshine**. 2015. An Integrated Energy and Quality Approach to Optimization of Green Pea Drying in a Hot Air Infrared-Assisted Vibratory Bed Dryer. *Journal of Food Engineering*.

Kingsly, A.R.P., K.E. Ileleji, and **R.L. Stroshine**. 2013. Stress relaxation behavior of corn distillers dried grains with solubles (DDGS) in relation to caking. *Powder Technology*, 235:866-872.

Lawrence, J., D.E. Maier, and **R.L. Stroshine**. 2013. Three-dimensional transient heat, mass, momentum, and species transfer in the stored grain ecosystem. Part II: Model Validation. *Transactions of the ASABE* 56(1):189-201.

Lawrence, J., D.E. Maier, and **R.L. Stroshine**. 2013. Three-dimensional transient heat, mass, momentum, and species transfer in the stored grain ecosystem: Part I. Model development and an evaluation. *Transactions of the ASABE* 56(1): 179-188.

Roberts, M.J., W.E. Field, D.E. Maier, and **R.L. Stroshine**. 2013. Determination of effort required to insert a rescue tube into various grain types. *Journal of Agricultural Safety and Health* 18(4): 293-308.

Moog, D.J.P., **R.L. Stroshine**, and L.M. Seitz. 2010. Fungal Susceptibility at Four Temperature-Moisture Combinations and Carbon Dioxide Kit Color Reader Evaluation. *Cereal Chemistry* 87(3):182-189.

Kingsley, A.R.P., K.E. Ileleji, C.L. Clementson, A. Garcia, D.E. Maier, **R.L. Stroshine**, and S. Radcliffe. 2010. The Effect of Process Variables during Drying on the Physical and Chemical Characteristics of Corn Dried

Distillers Grains with Solubles (DDGS) – Plant Scale Experiments. *Bioresource Technology* 101(1):193-199.

Abbott, J.A., R. Lu, B.L. Upchurch, and **R.L. Stroshine**. 2010. Technologies for nondestructive quality evaluation of fruits and vegetables. *Horticultural Reviews*, 20:1-120.

Clementson, C., K. E. Ileleji and **R. L. Stroshine**. 2009. Particle segregation within a pile of bulk dried distillers grains with soluble (DDGS) formed by gravity-driven discharge and variability of nutrient content. *Cereal Chemistry* 86(3): 267-273.