Challenges for Miscanthus

- **Yields**  Yields have been primarily estimated from small plots and very small hand-sampled areas

- **Yield stability**  There have been conflicting reports about yield stability over time due to inability to consider multiple stand-ages within a single location and season

- **N fertilizer**  There are conflicting reports of effectiveness and necessity of N fertilizer

- **Soil and water quality**  Cropland retirement to perennials can reduce N loss by 85%, but the extent of N loss reductions under biomass crop management is unknown

- **Unknown risks**  Due to uncertainties surrounding management, yields and stability, producers take on unknown risks when establishing Miscanthus

Our Plan  LAMPS will use a field-based approach to address the challenges facing Miscanthus establishment and production. The LAMPS experiment will consist of fields large enough to accommodate commercially available equipment similar to what Miscanthus producers will use. Further, we will use commercial fertilizer and fertilizing equipment to develop best management practices for maintaining productive Miscanthus stands.

Our Goal  By establishing multiple stand-ages of Miscanthus within a single site, LAMPS will determine how stand-age, fertilization and growing season affect yields and yield stability over time. Data generated from LAMPS will reduce uncertainties facing Miscanthus production and operations.
To develop and maintain a collaborative research network focused on determining the realistic large-scale performance, yield stability and best management practices for Miscanthus as a biomass crop. We seek to benefit producers, biomass processors, equipment manufacturers and academics by answering fundamental agronomic questions. LAMPS will provide crucial information to advance Miscanthus as a feedstock option and diversify the portfolio of bioenergy crops in the Midwest.

Get Involved!
Participating in the LAMPS collaboration will offer the following benefits:
• Access to large-scale Miscanthus trials across the state of Iowa
• Opportunity to learn how to grow and maintain Miscanthus at a large scale
• Access to and introduction to Miscanthus experts and information
• Hands-on experience with all aspects of a Miscanthus operation
• Infrastructure developed in this project will be an asset to future research and funding opportunities

How You Can Help
• Monetary contributions
• In-kind donations:
  • Land access
  • Personnel hours
  • Equipment
  • Plant material

Proposed Site Locations

Our Vision
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