



Research Site Leader:  
 Kelly Nelson, University of Missouri



**SITE CHARACTERISTICS**

- Drainage system installed in 2009
- Soil: Putman silt loam
- Rotation: Continuous Corn

**WATER MANAGEMENT PRACTICES**

- Non-drained
- Conventional Drainage (depth 2', spacing 20')
- Controlled Drainage (depth 2', spacing 20')

**SITE MEASUREMENTS (2010-2013; n= # of years)**

- Tile Flow (n = 4)
- Tile Water Quality: Nitrate-N, Reactive P (n = 4)
- Soil Texture (n = 1)
- Soil Bulk Density (n = 1)
- Soil Fertility: pH, Cation Exchange Capacity, Neutralizable Acidity, SOM (n = 4)
- Soil Nitrate and Ammonium (n = 4)
- Greenhouse Gas Emission: N<sub>2</sub>O, NH<sub>3</sub> (n = 4)
- Crop Yield (n = 4)
- Final Plant Population (n = 4)
- Biomass: Vegetative (n = 4)
- Total N: Vegetative, Grain (n = 4)
- On-Site Weather Station: Precipitation, Air Temperature, Relative Humidity, Solar Radiation, Wind Speed and Direction (n = 4)