Biomass Potential of Switchgrass
(*Panicum virgatum*)

**Description**
- Perennial, warm-season grass
- Native to North Dakota and most of the U.S.
- Tall, deep-rooted, and rhizomatous
- Adapted to a wide range of soil conditions
- Heavy biomass growth in late spring and early summer

**Establishing and Managing a Successful Stand**
- **Use an adapted variety** – seed origin affects plant performance
- **Choose a suitable site** – plants perform best on moderate to fine-textured deep soils with more than 14 inches of annual precipitation
- **Seed at proper depth** – seed shallow (1/4 inch) in a firm seedbed
- **Plant at recommended seeding rate** – 3.5 - 4.5 lb/ac pure live seed in North Dakota (double the rate if broadcast method)
- **Control weeds** – apply herbicide or mow
- **Fertilize** – nitrogen improves biomass yield (soil testing is recommended)
- **Plan your harvest** – delay until late summer or early fall for stand longevity and long-term biomass production

**Switchgrass Biomass and Performance Trials**
- **Six locations**
- **Five years**
- **Ten varieties/seed sources**

Biomass yields were heavily dependent on seasonal precipitation and varieties.