Plant Materials Center, Bismarck, North Dakota

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







Forestburg switchgrass Blackwell switchgrass year average forage production Six locations Five years Ten varieties/seed Fals Fals Undes Onida Fegus Fals Lake Andes Onida sources Pathfinder switchgrass Onida Falls Falls Lake Andes Fals Fals Lake Andes Ditte Sunburst Cave-in-Rock switchgrass Biomass yields were heavily dependent on seasonal precipitation and varieties. ergus Fals Lake Vrdes Onida Fals Fals Undes Onida Pierre USDA-NRCS Plant Mate rials Center

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Switchgrass Biomass and Performance Trials