Establishing Switchgrass

Harvestable yields are typical in the planting year
If the site grows dryland corn, it will grow switchgrass
Plant 2 to 3 weeks either side of the optimum corn planting date
No-till seed into soybean stubble is preferred or clean till & pack like for alfalfa
Spend money on quality certified seed & weed control
- Plant 30 PLS per ft² to 1/2” deep
- Pre-emergent application of 1 qt of atrazine plus 32 oz of Facet/L/acre
- Mow broadleaf weeds - the 4th of July, then spray with 1 qt/a of 2,4-D

Liberty Switchgrass Facts

- Yields 7-8 tons per acre with no irrigation
- One round bale of Liberty switchgrass (1,400#) will yield 55 gallons of ethanol
- Liberty switchgrass produces 5.4 times more energy than it takes to grow and harvest
- Liberty switchgrass sequesters more than 1 ton of carbon per acre each year

Grazing Warm-season Grasses

Background:
- What if I plant these feedstocks before there’s a market?
- Evaluate livestock performance (ADG & BW) gains/costs for potential bioenergy feedstocks
- Switchgrass, big bluestem, indiangrass, & W/S mixes (Mix 1 = CenUSA; Mix 2 = 60% switchgrass & Little Bluestem)
- Seeded 3 reps in 1-acre pastures in spring 2011
- Fertilized with 46M nitrogen in spring of each grazing year
- Grazed to 2 to 3 Animota for 69, 74, & 81 d in 2012, 2013, & 2014

In the first 2 years (2012 & 2013):
- Switchgrass in the least productive, big bluestem, indiangrass, & Mix 1 (1:1) are similar, & Mix 2 (42%, 5%, 8%, 55%) was most productive
- Trends were consistent across years (P=0.05); Mix 1 = Mix 2
- Appropriate management is critical
- Switchgrass performance would improve with timely grazing
- Grazing W/S grasses provides revenue & mitigates risk for bioenergy
- $2+/lb. per pound, gross returns range from $400-550 per acre
- W/S grasses may provide cash flow with appropriate mg

2014CenUSA-MITCHELL (1)

2014CenUSA-MITCHELL (2)

2014CenUSA-MITCHELL (3)