

Johnsongrass

Tim Schnakenberg
Regional Agronomy Specialist
Galena, MO
417-357-6812 schnakenbergc@missouri.edu

UNIVERSITY OF MISSOURI
 Extension

The Good

Quality ● Tonnage
Persistence ● Drought Tolerance

Palatability Study (1999-2001)

- Averaged 11.6% Crude Protein; 58% TDN
- Among 16 grasses studied, Johnsongrass ranked 1st for CP and 2nd for TDN, slightly lower than bermudagrass

Grazing Preference During Morning Grazing (2007)

- Yearling steers had access to 14 species
- 1st Place - 9,200 bites from Alamo Switchgrass
- 2nd Place - 6,000 bites from Johnsongrass

Source: Nobel Foundation

The Bad

- Reproduces from seed and rhizomes
- Rhizomes have been found 5 ft deep
- Rhizomes can develop within 19 days of seedling emergence
- 275 ft of rhizomes from one plant
- 80,000 seeds from one plant that can remain viable for 10 years.
- Robs desirable species of light, nutrients and water

The Ugly

Prussic Acid

- Cyanide poisoning at frost or before grasses reach 18-24" in drought
- Not an issue in millets and some lines of sudangrass
- Not an issue in cured hay

Nitrate Toxicity

- Accumulation in lower stems in dry weather
- Remains toxic in hay; Dissipates around 50% in silage

Sorghum Cystitis

- Uncommon issue in horses leading to loss of control of rear legs and bladder;
- May lead to permanent spinal cord damage

Johnsongrass Control Options in Forages

- Heavy Grazing / Low Mowing
 - Reduced seed production
 - Depletes carbohydrates in rootstocks; The growing point sits 4-8” above ground; Rhizome development reduced if plant height is kept below 12-15”
- Weed Wiper, Spot Treatment or Full Renovation using Glyphosate
 - Effective but will not eliminate it with one pass.
- Selective Herbicides (expect stunting)
 - Outrider (*sulfosulfuron*)-Bermudagrass, Native Grass, Fescue
 - Pastora (*nicosulfuron*)-Bermudagrass
 - Panoramic / Impose (*imazapic*)-Bermudagrass, Native Grass

Outrider Herbicide Use Tips

- Sulfosulfuron active ingredient; Now sold by Valent
- Works well on Johnsongrass, nutsedge, cheat and downy brome
- Most effective with first growth Johnsongrass prior to seedhead
- Can be injurious to fescue and other cool season grasses. Calibration is imperative.
- Apply 0.75-1.0 oz/acre. Use a non-ionic surfactant (90% ai) at 1-2 qt/100 gallons of spray solution
- There is no grazing restriction but it's recommended to not mow or graze for 2 weeks before or after application