

# Scott's Seedings

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## Forage Sorghum, Sorghum Sudangrass, Sudangrass?

According to the third addition of *Southern Forages* by Drs. Don Ball, Carl Hoveland, and Garry Lacefield, "Sorghum-Sudan Hybrids and Sudangrass major uses are pasture, hay, and silage, having high quality if harvested at immature stage" and they are "difficult to make hay because of thick stems". "Management requires high stocking rates, preferably grazed rotationally, to utilize rapid growth and maintain high quality. Thin-stemmed varieties recover more rapidly after cutting or grazing than thick-stemmed varieties." While most people are familiar with the benefits of a good summer annual program for forages, the tendency has been focused on using products that provide high tonnage and rapid growth. Depending upon growing conditions, Sorghum-Sudangrasses can provide 5-7 tons of dry matter yield per acre, during a time of year when cool season grasses are not producing at adequate levels.

Sorghums and Sudangrasses should be seeded after soil temperatures reach 60-65 degrees F. Depending upon location, this should be around May 1<sup>st</sup>. Successful plantings may be accomplished with drill or broadcasted and then culti-packed. A well prepared seed bed (firm) is highly recommended. Seeding rates vary depending upon variety with Sorghum-Sudangrasses typically in the 50-75 lb/acre range and Sudangrass varieties seeded in the 25-40 lb/acre range. Soil pH should be between 6.0 and 7.5, and seed should be planted ½ to 1 inch in depth.

Optimum forage production of Sudangrasses and Sorghum-Sudangrasses should be based upon current soil test fertility requirements. Apply sufficient Nitrogen (50-75 lb/acre) at planting to insure establishment and stimulate plant development. An additional 40-50 pounds of N after each harvest will help reach optimum growth and production, but be careful to avoid over fertilization of N during drought and low moisture conditions to reduce the risks of Nitrate poisoning. BMR Hybrid Sudangrasses mature earlier than many varieties of Sorghum-Sudangrasses, so additional grazing and harvests can be made.

**Prussic acid poisoning (hydrogen cyanide) can be a concern when feeding Sorghum, Sorghum-Sudangrass, and Sudangrasses, so good management practices should be employed. Sudangrass has low levels of prussic acid, Sorghum-Sudangrass has intermediate levels, and Sorghums have the highest levels of this compound, according to University data and research. Prussic acid content is highest in young plants, therefore it is not recommended to graze or cut for green chop until the plant is approximately 20 inches tall (this also applies to young re-growth in pastures). In addition, do not graze or green chop for 10 days after a killing frost.**

Sudangrass and Sorghum-Sudangrass hybrids may be grazed any time after the plant has reached a height of 20 inches, usually 4-5 weeks after planting. For best results, it should be grazed with a heavy stocking rate (6 or more animals per acre) to remove forage down to approximately 6 inches in a few days. Sudangrass and Sorghum-Sudangrass will grow rapidly when the cattle are removed, and if the grazing period is short, cattle will be less likely to graze re-growth that is high in prussic acid. When planting any of the Sudangrasses or Sorghum-Sudangrasses for grazing, it's best to stagger plantings about 2-3 weeks apart in order to stagger maturities and make grazing management easier.

According to University studies, Sudangrass grazed early in its vegetative stage contains as much available energy as corn silage and considerably more protein, however mature Sudangrass and Sorghum-Sudangrass silages are 15-20% lower in available energy than corn silage. Grazing management will improve animal performance.

The use of brown midrib (BMR) Sudangrasses and Sorghum-Sudangrasses will improve animal intake with less lignin in the plant, thus making it more palatable. The combination of the BMR trait, as well as the smaller stems of Sudangrasses (when compared to Sorghum-Sudangrasses and Forage Sorghum) has made BMR Sudangrass a desirable hay crop as well as grazing crop.

Relative Feed Value (RFV) ranges between 75-110 for most Sudangrass and Sorghum-Sudangrass species, but timing of grazing or harvest can adversely affect the quality. Sudangrasses mature earlier than Sorghum-Sudangrasses, so good management practices should be implemented to achieve optimum results. Higher yields (by weight) can be achieved if plants are allowed to reach maturity, but quality of feed decreases as maturity increases. Higher yields or higher feed value, or perhaps a combination of the two?

SEEDWAY offers Bovine Bounty BMR Sorghum-Sudangrass and the new DSS685 and DSS695 BMR Forage Sorghums.

**Please don't hesitate to contact me directly with questions on forages and cover crops. I can be reached at 814-280-2451 or email [srushe@seedway.com](mailto:srushe@seedway.com).**

