

News Release
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For: Around the County

Annual Forage Gives Flexibility in Your System

When planning your forage needs for the year consider the benefits of using warm season annual grasses in your system as they are good options for forage production. These annual grasses can be used to produce hay, silage, green chop, or grazing both during the summer or winter. Mary Drewnoski, Extension Beef Specialist and Daren Redfearn, Extension Forage and Crop Residue Specialist at UNL provides information on species selection and some key management considerations based on desired use.

If you are interested in hay production, there are some considerations. When planted in early July, sorghum-sudangrasses can produce 3 to 4 tons by early-mid September where pearl millet will likely produce 2 to 3 tons per acre, although there are improved varieties of pearl millet that can produce similar forage yields. Drying may take 3 to 5 days for sorghum-sudangrass since it has large stems. Using a hay conditioner to crush the stems will increase the rate of drying. Pearl millet has slightly smaller stems. This may speed the drying rate, but a hay conditioner is still needed. If making hay, a higher seeding rate may help to reduce stem size. Forage quality of the hay depends on the stage of maturity at harvest. A good balance between yield and quality is to cut sorghum-sudangrass or pearl millet hay during the boot stage. Forage quality can range from 55 to 65% TDN and 6 to 10% CP when the plant is between the dough and boot stage.

Foxtail millet hay yield potential is less than sorghum-sudangrass or pearl millet. Typical hay yields range from 1.5 to 2.5 tons/acre, but it is also earlier maturing and dries quickly. Seed cost is also usually less for foxtail millet.

If you are considering silage, both sorghum-sudangrass and pearl millet can be used, however, forage sorghum may be a better option due to its greater yield potential with expected yields of 4 to 6 tons of DM (11 to 17 tons at 35% DM). The energy content of sorghum silage can be 60 to 65% TDN with a crude protein content of 7 to 8%. A good target is to harvest at soft dough, especially if you do not have the ability to process the kernel. It may be necessary to swath and then chop to get the correct moisture (30 to 35%).

If you are considering grazing during the summer or fall, sudangrass (not the hybrid) may be best suited for grazing. Sudangrass usually has less yield potential than sorghum-sudangrass. It has smaller stems and will regrow after the initial grazing, resulting in equal or better yields in a grazing situation. Sudangrass also has less risk of prussic acid poisoning than sorghum-sudan. Pearl millet can also be used for grazing, and unlike sudangrass and sorghum-sudangrass, it does not produce prussic acid which means that it can be grazed during the initial frost period. To avoid prussic acid poisoning when grazing sudangrass or sorghum-sudan, cattle should be removed prior to the first frost and can be allowed to start grazing again 7 days after the killing frost. Grazing can begin when sudangrass and pearl millet reach 15 to 20 inches in height, but cattle should be moved when stubble height reaches 6 to 8 inches to allow for regrowth. Do not start grazing sudangrass before it reaches 15 inches as there is a risk of prussic acid poisoning. If the growth is greater than 36 inches tall, harvesting as hay, or silage may be best since grazing cattle will trample the forage and result in both waste and slow regrowth. Thus, if the goal is for late summer grazing it may be advantageous to delay planting until mid to late July to ensure that the plants are at the desired stage for grazing.

Grazing during the winter is also an option. Considerations include: yield, forage quality, class of livestock utilizing the forage and supplementation strategies if needed. Windrow grazing may be an option in your systems as well. You might also consider adding other species to increase the diversity of your mix as well.

If you are interested in learning more about the benefits and flexibility of utilizing summer annuals in your forage production system, please do not hesitate to contact your local UNL Extension office.