



Texas Agricultural Extension Service

People Helping People

Adapted Grasses for Texas Pastures

Donald J. Dorsett*

Bermudagrasses

(Warm-season perennials)

Coastal bermudagrass is the most widely adapted high-potential pasture grass in Texas. Coastal grows best on loam and sandy-type soils, but can produce satisfactorily on clay soils which have adequate drainage. Plans should be made to use high levels of fertilization and intensive grazing for maximizing profits from Coastal.

Brazos bermudagrass, released by Texas A&M in 1983, is higher quality than Coastal but produces slightly less total forage. Brazos is adapted to the same area that Coastal is and will provide better animal gains.

Tifton-44 bermudagrass is higher quality forage, but slightly less productive than Coastal. It is tolerant to cold, but is slower to establish than Coastal.

Callie bermudagrass exceeds Coastal in quality, but is not as cold tolerant. Callie bermudagrass has exhibited some leaf rust infection, but no data on damage has been collected. In sandy soils, heavy fertilization of Callie promotes invasion of common bermudagrass.

Coastal, Brazos and Tifton-44 must be established from vegetative material. Other bermudagrasses which are established from sprigs and vegetative material include *Alicia*, *Zimmerly Select* and *African Star*. These bermudas also grow well on soils to which other bermudas are most adapted.

NK-37 and *Common bermudagrasses* may be established from seed. These varieties usually show more susceptibility to leaf diseases, which would limit their potential in the Gulf Coast area.

Introduced Bluestems

(Perennial warm-season)

Generally, bluestems lack the quality and yield potential of other grasses. Most of these characteristically grow on soils low in phosphorus.

Pretoria 90 has the highest yield and quality potential of other bluestem varieties. Its disadvantages are low seed production, low seed quality and difficulty in obtaining a stand. For best results, Pretoria 90 should be planted from vegetative material. Once

established, Pretoria 90 responds well to fertilization and provides good-quality leafy forage.

Gordo and *Medio bluestems* are quite popular in the middle Gulf Coast area. These varieties can be established from seed. Medio is a leafier and higher quality grass than Gordo, but stands of Medio generally have not lasted as long as stands of Gordo. Both of these varieties can be improved considerably by adequate fertilization, rotation grazing and using the forage before the plants become stemmy and unpalatable.

Angleton bluestem grows satisfactorily in low, wet soils in the Gulf Coast area. It grows later in the spring and fall than most other bluestem varieties.

KR bluestem was publicized considerably 20 or 25 years ago as a soil-conserving grass to reduce erosion. KR grows abundantly in the Austin-San Antonio-Edwards Plateau area, but leaf and forage production are low.

Kleberg bluestem was developed in the King Ranch area. It grows in clumps with slender stems. Most of the leaves are near the base. It provides satisfactory quality grazing in the South Texas sandy soils.

Caucasian bluestem has fine stems that grow slightly taller than other introduced varieties. Most of these are near the base and contain some red color.

Lovegrasses

(Warm-seasoned perennials)

Weeping lovegrass varieties have received considerable publicity in the past few years. These grasses are best adapted to extremely sandy soils. They grow best in the Northwest Texas and Southwest Oklahoma area. They are effective for stabilizing soil and are very nutritious when young and tender. Their quality declines very rapidly during the summer and should be grazed intensely with a high stocking rate when forage is young.

Varieties include: *Common weeping lovegrass*, *Ermelo*, *Morpa* and *Renner*. Morpa was recently released by the Oklahoma Experiment Station. Renner and Ermelo are varieties released by the Texas Research Foundation at Renner, Texas. Renner is the newest release, reported to be higher quality than Ermelo. All lovegrass varieties have similar characteristics of adaptation and would grow

*Extension forage specialist, The Texas A&M University System.

satisfactorily on sandy, well-drained, droughty soils in the Gulf Coast area.

Paspalums

(Warm-season perennials)

As a group, the paspalums are high quality grasses, but limited in production.

Dallisgrass is the most widely adapted, productive paspalum for the Gulf Coast. It grows during cool weather, regrows rapidly after grazing, responds to fertilization and tolerates wet soils.

Pensacola Bahiagrass and other bahiagrasses grow well in the high rainfall area of southeastern states, such as Alabama, Georgia and Florida. Bahia can be established from seed and makes satisfactory growth in the Gulf Coast area. Most growth of bahia occurs in the lower two or three inches. Thus, the grass should be grazed extremely close and then cattle rotated to another part of the pasture. Bahia usually does not tolerate drought as well as Coastal bermudagrass or dallisgrass. Bahia has been promoted as a grass which will grow without fertilization, but this concept has no place in profitable pasture programs.

Long Tom and *brownseed paspalums* are native to many poorly drained soils in the area. These grasses are members of the paspalum family and are higher quality than many other grasses. For maximum quality, they should be grazed before seedheads form.

Rhodesgrass

(Warm-season perennials)

The rhodesgrasses are naturally high-quality grasses with a satisfactory degree of drought tolerance. *Common rhodesgrass* grew abundantly in the Coastal Bend and South Texas area until the rhodesgrass scale insect became predominant and claimed many stands. *Bell rhodesgrass* is a new variety which is resistant to rhodesgrass scale.

Panicgrass

(Warm-season perennial)

Kleingrass-75 is a relatively new panicgrass which offers considerable potential for the Gulf Coast pastures. This new grass is drought tolerant, grows on a wide range of soil conditions, can be readily established from seed, is high quality and grows early in the spring and late in the fall. *Kleingrass* has grown satisfactorily in the Gulf Coast area on soils that have good internal drainage.

Warm-Season Annual Grasses

Johnsongrass, although a warm-season perennial, behaves more as an annual. The production practices

should be similar to those of seeded sorghum hybrids. *Johnsongrass* can be a high-quality forage before seedheads appear. *Johnsongrass* loses its quality and leafiness faster than most of the pasture grasses. For maximum grazing results, *Johnsongrass* should be disked lightly in late winter and fertilized throughout the season. Continuous grazing of *Johnsongrass* seriously reduces the stand for subsequent seasons. Cattle should be rotated frequently to permit regrowth.

Sorghum alnum is a hybrid with *Johnsongrass* as a parent. It behaves as a weak perennial and cultural practices should be similar to that for other warm-season annual sorghum hybrids.

Sorghum-sudan hybrids are fast-growing, good-quality forages which can be used for growing calves and grazing animals for high market values. The sorghum-sudan hybrids can make good quality hay if harvested before seedheads form. The economics of sorghum-sudan hybrids is questionable when hay is to be used for the beef cow herd.

Millet is a warm-season annual grass that can be used in place of sudan for temporary pasture or hay. Indications are that millet does not have the prussic acid potential that sorghums have. Millets tend to be higher in nitrates than sudans, but are rapidly growing grasses that furnish high quality grazing or hay if harvested prior to seedhead formation.

Cool-Season Annual Grasses

Gulf ryegrass offers considerable potential for high-quality grazing in permanent pasture sods. It works well when overseeded in bermudagrass sod. Three factors are essential for successful overseeding of *Gulf ryegrass*: removal of summer grass by close grazing, mowing or harvesting hay; sacrafication of the soil; and high levels of fertilization.

Small Grains - Other cool-season annuals, such as oats, rye, barley and wheat can provide an abundance of high-quality grazing. Winter pastures of these species should also be planted to *Gulf ryegrass* to extend the grazing season. These forages are extremely high quality and should be grazed by animals with high market value, such as stocker calves or beef cows with young calves.

Cool-Season Perennial Grasses

Fescue is a cool-season perennial grass that is well adapted to high rainfall areas or soils that are wet or poorly drained. *Fescue* performs well in the clay soils of the blacklands, bottomlands of East Texas and the Gulf Coast. *Fescue* can dependably furnish good quality winter pasture for all classes of livestock. *Fescue* toxicity (*fescue foot*) is a problem with all animals grazing *fescue*, but research is actively progressing toward a solution to this problem.

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