

Bermudagrass

Bermudagrasses (*Cynodon* species), also called wiregrass or devilgrass, are planted throughout South Carolina primarily on golf courses, athletic fields, tennis courts, bowling greens and high-quality lawns. They are primarily used in areas where fine-textured, high-quality turf is essential for sports activities and when maintenance budgets are adequate.

Bermudagrass is native to Africa where it thrives on fertile soils. Today, most of the bermudagrasses used for turf are hybrids of two different *Cynodon* species: *C. dactylon* and *C. transvaalensis*.

Bermudagrass produces a vigorous, light to dark green, dense turf that is well adapted to most soils and climatic regions in the southern United States. Bermudagrass has **excellent** wear, drought and salt tolerance and is a good choice for oceanfront property. It establishes rapidly and is competitive against weeds and, depending on the cultivar, is available as seed, sod or sprigs.

Bermudagrass has a large number of cultural and pest problems which restrict its use in many situations. It is not suitable for most home lawns because of the need for restricted-use pesticides to control nematodes and insects. It also requires the most maintenance for an acceptable appearance of any turfgrass.

In most areas of South Carolina, bermudagrasses become dormant (turn brown) in cold weather. Overseeding in fall with ryegrass is a common practice to maintain year-round green color. Bermudagrasses are susceptible to several nematode, insect, and disease problems. **Bermudagrasses also have very poor shade tolerance and should not be grown underneath tree canopies or building overhangs.** They spread

very rapidly by both above- (stolons) and below- (rhizomes) ground runners that are very difficult to control within flowerbeds, walks and borders. Due to its rapid growth tendency, thatch buildup can become a problem in bermudagrass. A reel mower should also be used to produce the highest possible quality turf stand.

During periods of rapid growth, a minimum of twice weekly mowing may be necessary to prevent scalping.

Cultivars

There are several bermudagrass cultivars being used for turf (see Table 1). Currently, improved seeded bermudagrass cultivars are being aggressively developed. Most seed is available with the hull removed (hulled) or with the hull remaining (unhulled). Hulled seed germinates faster but costs more; unhulled seed lasts longer in unfavorable weather such as fall, winter or early spring, before germinating. Only some cultivars are commercially available from turf producers.

Common

This is the bermudagrass traditionally available for establishment by seed. However, it generally produces a looser netted turfgrass with a coarse texture, low shoot density and light green color and for these reasons is less desirable than other available cultivars. Common is often planted in seed mixes with bahiagrass or tall fescue for roadsides or reclamation sites.

Improved Common

The improved common type seeded varieties (e.g., **Bradley, Burning Tree, Cheyenne, Jackpot, Mirage, Primavera, Princess, Pyramid, Sahara, Savannah, Sonesta, Sultan, Sundance, Sundevil I**

& II, SunStar, Sydney, Yuma and others) are darker green, deeper-rooted, medium-textured, and moderately denser compared to common bermudagrass. They are general-purpose, turf-type bermudagrasses used for golf course roughs and fairways, lawns, parks, roadsides and sports turf. Use them in areas where improved characteristics are desired, but where quality and level of maintenance are lower than the sterile hybrid varieties. Cold tolerance the first year after seeding also is a concern with seeded varieties. OKS91-11 is a seeded variety from Oklahoma State University noted for its cold tolerance. Most of today's bermudagrass seed is produced in western Arizona, the Imperial Valley of California and Oklahoma.

Quickstand (or Quicksand)

Quickstand is a selection from Kentucky released in 1993. It is a common bermudagrass that is extremely winter hardy and is an aggressive growing and spreading grass. It is not as fine-textured or as dense as hybrid bermudagrasses, but is a suitable alternative in areas that experience periodic winterkill.

FloraTex

This variety was jointly released in 1993 by the University of Florida and Texas A&M University. It is noted for its low maintenance inputs in terms of fertilizer and water, and extended fall color and earlier spring green-up. Its texture is medium and density moderate. It also appears to be much less susceptible to dollar spot disease and bermudagrass stunt mite. FloraTex must be vegetatively established and produces numerous seed heads in late spring. It should be used where desired turf quality is higher than common bermudagrass but the level of maintenance and quality are lower than the Tif varieties.

GN-1

GN-1 is a recent introduction by Greg Norman evaluated as CT-2. It is a hybrid bermudagrass with darker green color than Tifway bermudagrass and similar leaf density, but with a wider leaf texture. GN-1 is vegetatively established because seed is unavailable. Its aggressive lateral growth habit allows GN-1 to recover quickly from damage and also "stripes" better from mowing during summer than most other bermudagrass selections.

Midway, Midiron, Midlawn, Midfield

These cultivars were released by the Kansas Agricultural Experiment Station predominantly for their cold tolerance. They are presumed hybrids between cold tolerant *C. dactylon* and *C. transvaalensis*. These medium-textured grasses produce few seed heads and are used for lawns, fairways and roughs where winterkill is a common problem.

Tiflawn

Tiflawn was released in 1952 and is noted for its medium dark green color; medium fine texture and shoot density; vigorous growth rate and establishment; and moderately low growing height. Tiflawn has excellent drought and wear tolerance as well as exceptional recuperative potential. It is widely grown on sports fields, recreational areas and lawns; however, it is susceptible to bermudagrass mites.

TifSport

This 1997 bermudagrass release from the United States Department of Agriculture and the University of Georgia is an induced gamma-irradiated mutant from Midiron bermudagrass and is reported to have superior cold tolerance and desirable turf texture and density. This grass has a texture and color similar to Tifway and Tifway II and should be used in similar sites such as fairways and tees. It has shown good winter hardiness in Georgia, Kentucky, Tennessee, and Oklahoma. It produces no seed, therefore, must be vegetatively propagated.

Tifway

Tifway is a dark green bermudagrass with medium texture and high shoot density. Tifway has better tolerance to pest problems than Tifgreen. Tifway is used in areas of moderate maintenance, such as fairways and sports fields and higher maintained lawns. Tifway is currently considered the best overall bermudagrass selection for high-quality lawns, sports fields and golf course fairways.

Tifway II

Tifway II is a mutant of Tifway that was released in 1984 for its improved frost and nematode tolerance. It has a similar appearance to Tifway with increased shoot density and seed heads. Tifway II can be used in moderate maintenance situations. Tifway and

Tifway II make beautiful yards if adequate time, machine and labor resources are dedicated to their establishment and upkeep.

Excerpted from *Southern Lawns: Best Management Practices for the Selection, Establishment and Maintenance of Southern Lawngrasses, EC 707, 2003*

Table 1. Characteristics of Popular Improved Bermudagrass Varieties (From Southern Lawn).

Variety	Seeded	Texture	Green Color	Uses
Baby	no	medium fine	medium dark	golf fairways/tees/lawns
Blackjack	yes	medium	medium dark	fairways/tees/lawns
Bradley	yes	medium	medium dark	fairways/tees/lawns
Burning Tree	yes	medium	medium dark	fairways/tees/lawns
Celebration	no	medium	medium	fairways/roughs/lawns
Cheyenne	yes	medium course	light	golf roughs/lawns
Common	yes	course	light	roughs/lawns/roadsides
Continental	yes	course	light	roughs/lawns
DelSol	yes	medium	medium dark	fairways/tees/lawns
FloraTeX	no	medium	medium	fairways/roughs/lawns
GN-1	no	Medium fine	dark	fairways/roughs/lawns
Guymon	yes	medium	light	light
Jackpot	yes	medium	light	light
Majestic	yes	medium	medium dark	fairways/roughs/lawns
Mercury	yes	medium	medium dark	fairways/roughs/lawns
Midfield	no	medium	dark	fairways/roughs/lawns
Midiron	no	medium	dark	fairways/lawns
Midlawn	no	medium	dark	fairways/roughs/lawns
Midway	no	medium	dark	fairways/roughs/lawns
Mirage	yes	medium	light	fairways/roughs/lawns
Mohawk	yes	medium	medium	fairways/roughs/lawns
NuMex Sahara	yes	medium course	light	roughs/lawns
OKS 91-11	yes	medium	medium dark	fairways/roughs/lawns
Ormond	no	medium	blue green	fairways/roughs/lawns
Panama	yes	medium	medium dark	fairways/roughs/lawns
Paradise	yes	medium	medium	fairways/roughs/lawns
Primavera	yes	medium	light	fairways/roughs/lawns
Primo	yes	medium	medium	fairways/roughs/lawns
Princess	yes	medium	light	fairways/roughs/lawns
Pyramid	yes	medium	light	fairways/roughs/lawns
Quickstand	no	medium	medium	roughs/lawns/roadsides
Santa Ana	no	medium	blue green	fairways/roughs/lawns
Savannah	yes	medium	medium dark	fairways/roughs/lawns
Shanghai	yes	medium	medium	fairways/roughs/lawns
Shangri-La	yes	medium	medium dark	fairways/roughs/lawns
Soliel	yes	medium	medium	fairways/roughs/lawns
Sonesta	yes	medium	light	roughs/lawns
Southern Star	yes	medium	medium	fairways/roughs/lawns
SR 9554	yes	medium	dark	fairways/roughs/lawns
Sultan	yes	medium	medium	fairways/roughs/lawns
Sundance	yes	medium	medium	fairways/roughs/lawns

Table 1. Characteristics of Popular Improved Bermudagrass Varieties (From Southern Lawn Continued).

Sundevil I & II	yes	medium	light	roughs/lawns
SunStar	yes	medium	medium	fairways/roughs/lawns
Sunturf	no	fine	dark	fairways/roughs/lawns
Sultan	yes	medium	medium	fairways/roughs/lawns
Sydney	yes	medium	medium dark	fairways/roughs/lawns
Texturf 10	no	medium	dark	fairways/roughs/lawns
Tiflawn (57)	no	medium	dark	fairways/lawns
TifSport (Tift-94)	no	medium	dark	fairways/tees/lawns
Tifton 10	no	coarse	blue green	roughs/lawns
Tifway (419)	no	fine	dark	fairways/tees/lawns
Tifway II	no	fine	dark	fairways/lawns
U3	yes	medium coarse	light	fairways/roughs/lawns
Windsor Green	no	medium fine	dark	fairways/roughs/lawns
Yukon	yes	medium	medium	fairways/roughs/lawns
Yuma	yes	medium	ligh	fairways/roughs/lawns

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