



REGIONS OF ADAPTATION OF FAIRWAY GRASSES

South of line A-A, bermudagrass is the most important fairway grass. North of line B-B bluegrass, red fescue, and the bentgrasses are well-adapted. The area between these two lines is a transition zone where local factors such as topography, exposure, soil type, and personal preference dictate the choice. In this area *Zoysia* generally does well and the more winter-hardy bermudas are seldom killed.

BENTGRASS FOR FAIRWAYS

HOLMAN M. GRIFFIN, Northeastern Agronomist, USGA Green Section

Without doubt, bentgrass provides some of the best fairways in the northern regions where cool season grasses are grown. With player demands being what they are for close-clipped, dense, resilient, weed-free turf on fairways, there is no other grass so well adapted to furnish these conditions in northern climes.

Bentgrass is now being grown on greens in almost all states except the hot, humid Gulf Coast region but its adaptation for fairway use is in the areas north of a line roughly coinciding with the 39th parallel. Actually, the area lying generally between the 38th and the 40th parallels is a transition

zone where bentgrass and bermuda compete for favor with neither one being entirely satisfactory.

Bentgrass for fairways does require a more intensive and costly program in most cases to achieve the desired result. A good watering system is almost a necessity, although there are exceptions to this in some areas. Insect and disease control are also essential as is good fertility and attention to soil pH. With the use of creeping bents for fairways we will also find the necessity for thatch control.

I am sure that many of our good bent fairways today are the progeny of the old South German or volunteer

FAIRWAYS AND THE ROUGH . . .

bent mixtures where the best adapted strains have survived and dominated. These are excellent fairways but they have taken years to develop.

The most commonly used bents on fairways today are the colonials, Astoria and Highland which are quite often mixed with a small percentage of creeping bent such as Seaside. In the

last three or four years we have heard more about Penncross but its use on fairways is still limited. However, with our improved techniques and machines for thatch control, it is well within the realm of possibility that the more aggressive creeping strains of bentgrass will soon be favored for fairway turf.

BERMUDAGRASS VARIETIES USED ON FAIRWAYS

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"Bermudagrass, *Cynodon dactylon* (L) Pers., is a warm season perennial, growing best with temperatures above 70° F. During periods of prolonged high temperatures with a shortage of moisture, growth will slow down. The lack of cold hardiness limits the northern distribution. Bermuda is known by many colloquialisms, such as wiregrass, devilgrass, creeping fingergrass, dog-toothgrass, quickgrass, Indian couch, and numerous others. The type species *Cynodon dactylon* derives from Kuon (Kun), dog, and odous, tooth, alluding to the sharp scales of the rhizome, hence one name—dogtoothgrass."*

Bermudagrass is the major fairway grass in the southern half of the United States. It is believed to have been introduced from Africa or India, and is reported to have been brought to Savannah, Ga., in about 1751. Since 1751, it has been a pest in many crops but its suitability for fairway use has been outstanding.

Bermuda can be increased by seed, rhizomes, or by stolons. The new selections of recent years are propagated by vegetative parts altogether. As yet, these new selections do not produce seed which when planted will be exactly like its parent plants. The seed harvested from U-3 does not produce plants the same as its parent.

There are about nine main selections being used on fairways. Some are be-

ing used which were not originally chosen for fairway use.

The bermuda used originally and still a popular grass is called Common bermudagrass. Common bermudagrass is planted by using seed. Improvements of the Common type have been made in the past 10-15 years. Some of our better strains of today were selected in old established Common bermudagrass fairways.

U-3 was selected in 1936. It was observed at Arlington, Va., and Beltsville, Md., and released in 1957 for fairway use. Since then, it has been extensively used from Kansas to Baltimore and farther south. It has not been used extensively in the extreme South. It has to be planted by the use of vegetative parts in order to be like the parent plant.

Ormond is a strain of bermuda originally from Ormond Beach, Fla., and has a blue-green appearance. It is vigorous, susceptible to dollar spot, but somewhat tolerant to leaf spot. It is well adapted to Florida conditions and is being used as a fairway grass throughout that state. Its lack of cold tolerance has restricted its use farther north.

Tiflawn was originally selected as Tiflaw 57 and still is known by this number but was released in 1952 as Tiflawn. It is a darker green color than Common bermuda. It makes a

*Manual of the Grasses of the United States, A. S. Hitchcock