

BERMUDAGRASS BREEDING -- VEGETATIVE

UNIVERSITY OF GEORGIA  
Tifton, Georgia

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(ongoing since 1956)

The most significant accomplishment of our turf research program at Tifton, Georgia in 1988 was the official release of Tifton 10 turf bermudagrass. This is an increase of vegetative material that I collected from a lawn in Shanghai, China in 1974. It sheds pollen but sets few seeds and must, therefore, be propagated vegetatively. It is a hexaploid with  $2n = 54$  chromosomes. Common bermudagrass has 36 chromosomes and the Tif turf bermudas have 27. Tifton 10 has a unique bluish-green color that sets it aside from other turf bermudagrasses. It has been evaluated at nine locations in Georgia, Florida, Texas, and New Jersey.

Tifton 10 rapidly establishes from stolons and above ground stems. Under low-cost management (2.5 lbs. N/1,000 sq. ft./yr., irrigated only in dry periods and mowed at 1 1/2 inch once a week), it has maintained turf quality similar (but coarser textured) to Tifway and Tifway 2 at all locations except Ft. Lauderdale, Florida where severe mole cricket damage destroyed stands during establishment. Tifton 10 was not seriously affected by mole cricket infestations at Gainesville, Florida and showed the least damage of 26 bermudagrass entries at Savannah, Georgia. Tifton 10 has received higher turf quality ratings than Midiron at locations where the two cultivars were compared. Tifton 10 received top winter survival ratings in New Brunswick, New Jersey and has survived at the Mountain Station at Blairsville, Georgia when the winter temperature in 1983-84 dropped to  $-20^{\circ}\text{F}$ .

Tifton 10 should be suited for roughs, roadsides, low traffic athletic fields, commercial landscaping areas, and lawns. Its unusual dark bluish-green color will be useful for contrast plantings in various recreational areas. Because of its stoloniferous habit, care will need to be taken to keep it out of flower beds and other non-grassed areas. Traffic tolerance tests have not been conducted on Tifton 10 but its rapid recovery indicates it may have a use in low traffic athletic areas.

The mild winters that we experienced in 1987-88 kept us from getting differential ratings on the winter hardiness tests that we have planted on the golf courses in Blairsville, Georgia and Highland, North Carolina.