



Tifton 85 Bermudagrass ¹

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Tifton 85 bermudagrass is a hybrid bermudagrass developed by the USDA-ARS in cooperation with the University of Georgia Coastal Plain Experiment Station, Tifton, Georgia. Released in 1992, it is a cross between a plant introduction from South Africa and Tifton 68, a highly digestible, but cold-susceptible hybrid. It is sterile and does not produce seed. Tifton 85 has larger stems, broader leaves and a darker green color than other bermudagrass hybrids. It has larger but fewer rhizomes (underground stems that can produce new plants) than Coastal or Tifton 44. Its stolons (above ground runners) are large and grow very rapidly.

At the Coastal Plain Experiment Station, Tifton 85 produced 26% more forage that was 11% more digestible than Coastal bermudagrass. In other research in Georgia, Tifton 85 was compared to Tifton 78 in a three-year grazing study with steers grazed continuously from mid-April to mid-October. Results in Table 1 show an annual live weight gain of 1032 pounds per acre from Tifton 85 compared to 738 pounds per acre for Tifton 78. These results indicate the increased vigor and productivity of Tifton 85 over that of the older bermudagrasses. Observations in Florida indicate that Tifton 85 is well suited for use as a grazing and/or hay crop. Some hay

producers have commented that because of the larger stems and higher yields, it takes longer to dry than Coastal. Initial observations indicate that it does have rapid stolon growth and may be easier to establish than Tifton 78, which has been somewhat variable in its ease of establishment. Observations to date indicate no disadvantages of Tifton 85 and indicate that it is well suited as a grazing and/or hay crop for Florida.

ESTABLISHMENT

Tifton 85 can be established by planting sprigs with mechanical planters or by broadcasting and disking in tops. Sprigs can be dug and planted starting in late winter, when the plants are still dormant, and through the spring and summer. Tops (green stems) can be harvested and planted in the summer. Plants should be fully mature (8 to 10 weeks old) before harvesting. Use conventional hay equipment for cutting and baling the tops. Adjust the baler to make small bales (60 - 70 pounds) that can be easily handled. Try to plant tops during rainy, cloudy weather. Dry soil and bright hot days may dry out the planting material, especially tops, resulting in a poor stand. Always plant in moist soil or irrigate if available.

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Immediately after planting, the soil should be packed with a heavy cultipacker or land roller. Small plantings can be packed by driving a tractor back and forth over the planted area. For weed control recommendations at establishment, see SS-AGR-08 *Weed Management in Pastures and Rangeland* in the "Weeds in the Sunshine" series. Apply 30 pounds of nitrogen per acre, and phosphorus and potassium according to soil test recommendations as soon as the grass starts to emerge. Apply 70 pounds of nitrogen per acre plus 1/2 of the recommended potassium 30 days later or when runners start to form. With adequate and continuous soil moisture, complete coverage of Tifton 85 should occur in 90 days.

If the grass is planted early in the year, the first growth can be harvested for hay. Some fall growth should be accumulated to help protect stolons of the new planting from freezing. Although Tifton 85 has less cold tolerance than Tifton 44 or Coastal, this is not expected to be a problem in Florida and especially in peninsular Florida. When possible, all planting should be completed by the end of July. This will give the plants plenty of time to develop before winter. In peninsular Florida, Coastal and other bermudagrasses have been successfully established from late summer and fall plantings when soil moisture was adequate and a relatively mild winter followed. Some additional risk of stand failure may be involved with late plantings as compared to earlier plantings.

If there is a considerable amount of frosted grass in the spring following first year establishment, it may be desirable to remove it by harvesting or burning. Burn in early March or when the chance of a freeze has passed. Try to burn after a rain when the soil surface is moist and burn with the wind for a cooler fire. Do this to avoid fire damage to the stolons and plants that have developed from stolons. Soon after burning, apply 80 to 100 pounds of nitrogen along with recommended amounts of phosphorus and potassium.

Tifton 85 can be used for both grazing and hay production. Under grazing, add additional nitrogen during the growing season if additional production is needed. For hay production, apply 80 to 100 pounds

of nitrogen plus recommended amounts of phosphorus and potassium for each hay harvest. Potassium should not be depleted to low levels since research has shown some stand loss for bermudagrass under low potassium levels.

In summary, Tifton 85 appears to be the highest yielding, most digestible bermudagrass available for use in Florida.

Much of the information used in writing this publication was obtained from G. W. Burton (USDA-ARS), R. N. Gates (USDA-ARS) and G. M. Hill (Department of Animal and Dairy Science, University of Georgia Coastal Plain Experiment Station, Tifton, GA).

Table 1. Three-year average performance of steers grazing Tifton 78 or Tifton 85 pastures. ¹

Grass	Average daily gain(lb/day)	Carrying capacity(steer days/A)	Total live weight gain(lb/A)
Tifton 85	1.47	704	1032
Tifton 78	1.43	534	738

¹Data from Hill, et al. Fertilized annually with 225 pounds of nitrogen in 3 split applications plus adequate P and K.