



SS-AGR-25

Tifton-9 Pensacola Bahiagrass ¹

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Tifton-9 is an improved Pensacola bahiagrass variety that was bred and developed by Dr. Glen Burton, Agricultural Research Service, U.S.D.A., and the Georgia Coastal Plain Experiment Station. It has several improved characteristics. Tifton-9 produces 30 to 40% more forage per year than the old Pensacola variety from which it was developed. See Table 1 for yield comparisons at Gainesville, FL.

Tifton-9, as well as other Pensacola types, have more frost and cold tolerance than Argentine or Paraguay 22. Thus, it may produce more growth at the beginning and end of the growing season. Besides producing more forage, Tifton-9 is much more vigorous in the seedling stage, has longer leaves, and is equal to Pensacola in digestibility. The increased seedling vigor should provide for more rapid stand establishment and increased ability to compete with weeds. Grazing information is somewhat limited, but in one study steers made good weight gains on Tifton-9. This indicates that it is palatable and acceptable to cattle.

Some improved forage varieties lose vigor with advancing generations. Tifton-9 was bred to continue its improved characteristics through advanced generations. On the other hand, if seeds are harvested

from non-certified fields where Tifton-9 has been allowed to crossbreed with old-type Pensacola plants, improvements may diminish. Therefore, use of certified seed of Tifton-9 will insure that the grower is getting maximum use of the improvements.

Tifton-9 should be adapted to, and can grow in, the same geographic areas and on the same soil types where Pensacola bahiagrass is now grown.

Land Preparation and Planting

An ideal site on which to plant Tifton-9 would be new ground or areas where bahiagrass has never been planted. Next would be fields that have been in row crops or have been cultivated for several years. These sites should have almost no bahiagrass plants and relatively low populations of bahiagrass seed in the soil. This should result in a fairly pure stand of Tifton-9 plants. Many of the sites to be planted to Tifton-9 will be old pastures that need to be renovated. These may have been planted to bahiagrass or have been infested with bahiagrass through movement of seed by animals from one area to another. The end result is that something needs to be done to eliminate the bahiagrass plants present, and also reduce the population of seed in the soil.

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In order to convert an old bahiagrass pasture to Tifton-9, the following land preparation and planting procedures are suggested:

1. Plow with a moldboard plow. This will bury many of the surface weed seed too deep to germinate.
2. Plant an annual forage crop, such as pearl millet or sorghum-sudangrass, during the warm season and a small grain, ryegrass, or clover, during the cool season. The growing of annual crops with associated cultivation helps to eliminate any remaining bahiagrass plants and reduces the population of bahiagrass seed near the soil surface.
3. Bahiagrass can be planted from February through July in most areas of Florida. Plantings made from late March through May can be lost due to drought, especially in South Central Florida. Thus, it may be wise to avoid planting during this time period. Plant on a clean-tilled seedbed that has been prepared by using a heavy cutting disc, or other suitable tillage tool, plus a finishing disc that leaves a smooth surface free of trash.
4. If possible, use a cultipacker type seeder or some other precision seeder in order to place all of the seed at a uniform depth. Seed should be planted at 1/2 to 3/4 inch deep.
5. Plant 4 or more pounds of germinable seed per acre. IFAS research, thus far, indicates that 4 pounds of seed per acre can produce as good a stand of grass as higher seeding rates if the seedbed is properly prepared. But, a seed lot that has a high rate of dormant seed (40 to 50%) may give poor results at 4 pounds per acre. On land where competition from weeds may be severe, more than 4 pounds may be needed to obtain a satisfactory stand of grass. In the past, the recommended seeding rate for the older bahiagrass varieties has been 12 to 15 pounds of seed per acre broadcast. When Tifton-9 first came on the market, the price of seed was high. Now that the price has come down, producers may want to plant 15 to 20 pounds of seed per acre. At the lower seeding rate of 4 pounds, competition from grassy and broadleaf weeds

may be of concern. Mow to control the broadleaf weeds and the Tifton-9 should compete well with most seedling grasses, including the old Pensacola bahiagrass.

Fertilizing for Establishment

The soil should be limed to a pH of 5.0 to 5.5 before planting. On land that has been cropped in the past, it may be more efficient to apply the major fertilizer elements after planting. Apply fertilizer when the bahiagrass seedlings have emerged from the soil. Apply 30 to 40 pounds of nitrogen per acre along with phosphorous and potash according to a soil test recommendation. When the bahiagrass plants are large enough to start spreading, apply an additional 40 to 50 pounds of nitrogen.

Weed Control During Establishment

No herbicide is available for use at planting and while plants are young and immature. Therefore, be sure to start with a clean-tilled seedbed. Use mowing to control broadleaf weeds. No control is available for grassy weeds, such as seedling bermudagrass, crabgrass, and the "old" bahiagrass seed that might germinate. Once the grass is well-established, the phenoxy-type herbicides, such as 2,4-D and Banvel, can be used to control broadleaf weeds.

Seed Production

Seed of Tifton-9 Pensacola bahiagrass will be grown and sold by variety name only as a class of certified seed. Certified seed is seed that has been determined by an official seed certifying agency to conform to standards of genetic purity and identity as to kind or variety. Certification of seed production fields will be done by the Georgia Seed Development commission in cooperation with the Georgia Department of Agriculture. Individuals wanting to grow certified seed of this variety should contact the Georgia Seed Development Commission, 2420 South Milledge Ave., Athens, GA 30605.

Plant variety protection is provided under Title V of the federal "Plant Variety Protection Act" of 1970. This means that the variety can be sold only as a class of certified seed. A bag of Tifton-9 seed must carry a blue certified tag to be legally sold. For the

buyer of seed, the blue certified tag gives assurance that the seed is Tifton-9.

Table 1. Forage yield (lbs/acre) at five harvests in one growing season.

Variety	May 31	June 29	Aug. 3	Sept. 9	Oct. 25	Total Yield
Tifton-9	1940	1110	3260	3340	1520	11,170 lbs
Pensacola	1190	950	2630	3090	870	8,730 lbs
Argentine	560	480	2220	3460	1040	7,760 lbs