

Bahiagrass: A Quick Reference¹

Yoana C. Newman²

In Florida, bahiagrass is a warm-season perennial planted more than any other improved grass. Two thirds of improved pastures are planted with bahiagrass and some of its attractions for producers include its excellent adaptation, ease of management, persistence under low fertilization and close grazing, as well as its relatively simple planting.

However, prospective growers need to be willing to compromise in quality and production because this grass has some limitations in quality and quantity compared with other options like hybrid bermudagrasses.

Origin

Native to South America, to equivalent latitude to that of northern Florida.

Use

Most of the acreage is used for grazing, with some hay and sod production, and production of seed harvested from pastures.

Adaptation

pH: 5.5 to 6.5. High pH (approximately > 6.5) will start negatively affecting production.

Soil: Low to high fertility; sand to clay, dry to wet.
 Rainfall: > 35 inches.

Climate: Subtropical and humid regions; coastal plains.

Management Practices

Planting date: March (if irrigated) or during summer (June-August; rainy season).

Planting rate: 15 lb/acre or 25-30 lb/acre (low rates will have more initial competition with weeds).

Planting depth: 1/4 – 1/2 inch maximum. A common mistake is to plant it too deep.

Fertilization

Planting: As soon as plants have emerged, apply 30 lb Nitrogen (N)/acre, all phosphorus (P_2O_5) and 50% of potassium (K_2O) recommended in soil test. 30-40

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2. Yoana C. Newman, assistant professor, Agronomy Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

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days later, apply rest of the potassium plus 70 lb N/acre.

Grazing:

Low input system: 50 lb N/acre/yr only; P_2O_5 as per recommendation based on soil and tissue tests; no phosphorus (P_2O_5), and no potassium (K_2O).

Medium input system: 100 lb N/acre/year; P_2O_5 as per recommendation based on soil and tissue tests; or tissue P is less than 0.15%), and 50 lb K_2O /acre/year.

High input system: 160 lb N/acre/year (80 lb N/acre in spring + 80 lb N/acre in fall), P_2O_5 , and K_2O as per soil and tissue test recommendation.

Hay: 80 lb N/acre/cut + P_2O_5 , and K_2O as per soil test recommendation. Do not apply any fertilizer after mid-August.

Seed Production: In hay fields; same recommendation as above. If grazing, 60-80 lb N/acre in Feb or Mar, when seed heads appear remove cattle and apply 60-80 lb N/acre.

Weed Control

Seedlings are susceptible to phenoxy type herbicides (2,4-D or Banvel), can only spray when plants are 8 inches tall.

Pests and control

Mole crickets. Control with nematode biological control traps.

Table 1.

Bahiagrass	Description	Yield (lb/acre/year)	Quality*	Cold Tolerance	Seasonality
<i>Common (not recommended)</i>	Short, broad leaves	Very Low	Very Low	Sensitive	
Pensacola	Long, narrow leaves	3500-10000	Low	FL - panhandle	Mar-Oct
<i>Tifton 9</i>	Longer leaves than Pensacola	30% more than Pensacola	Low	Some	1 more week of growth than Pensacola.
<i>Argentine</i>	Wider leaves Less seed heads		Low	Low	No growth in early spring
Bahiagrass	Purity	Light Seed**	Germination	Dormant Seed ***	Seed Yield
Pensacola	95-98	3-5	50-60	25-30	50-120
<i>Tifton 9</i> †	95-98	3-5	60-70	15-25	
<i>Argentine</i>	80 ‡	20	85-90	10-15	150-200

* Quality is measured as crude protein (CP) and digestibility. Low is CP= 8-9% and digestibility= 45-60%

** Light seed refers to the inert (dead) material in samples. The inert material is the part of the seed called "glume" or the shell that encases the cariopsis (true seed in grasses).

*** Refers to seed other than hard seed that will neither germinate nor decay during the prescribed test period and condition.

† Selection out of Pensacola for higher germination and less dormant seed.

‡ Less than Pensacola due to Ergot.