

## Performance of Russell Bermudagrass

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### INTRODUCTION

Bermudagrass (*Cynodon dactylon*) is a warm-season, perennial grass introduced into the United States from southeast Africa. Widely used throughout the southeastern United States for pasture, bermudagrass also produces good quality hay when managed properly. More than 12 million acres of this grass are grown in the southern United States. Common bermudagrass is established from seed, while hybrid cultivars are established by planting rhizomes or stolons (Twidwell and Eichhorn, 1999). Since the release of “Coastal” bermudagrass in 1943, forage breeders and forage producers alike have been interested in the development and potential of new hybrid bermudagrass cultivars. The objective of this article is to provide an overview of “Russell” bermudagrass, which was released in 1994.

### RUSSELL BERMUDAGRASS

Russell bermudagrass was found in the late 1970's in a field near Seale, Alabama, by Donald Bice, Extension agent in Russell County. The field had originally been planted to the Mississippi State University variety, “Callie”, but since Callie soon winter killed throughout Alabama, it became clear that the grass which had dominated the field was unique, probably either a mutation of Callie or a natural hybrid between Callie and common bermudagrass (Ball et al., 1996). Success with on-farm evaluations led to the grass being entered in variety trials in Tallahassee, Alabama in 1988.

A unique trait of Russell is that in the first harvest of the season it has almost always out yielded all other varieties to which it has been compared. Rate of spread, primarily by stolons, has been as fast or faster than most cultivars commonly available. In 1994, Russell was recognized as a cultivar with a joint release by the Alabama Agricultural Experiment Station and by the Louisiana Agricultural Experiment Station. The northern limit for use of this cultivar has not been established, but it has persisted for years in locations as far north as Pell City, Alabama and Homer, Louisiana (Eichhorn and Brown, 1996).

In an Alabama study, Russell produced similar forage yields to that of Coastal (Table 1), the cultivar which is considered the bermudagrass standard and which has been the subject of many research studies throughout the South. Forage quality of Russell was similar to that of several other commonly grown hybrids when grown in a test in Alabama, but in-vitro digestibility was lower than Coastal in a test in Louisiana (Tables 1 and 2).

There are many producers throughout the South that have planting material of Russell

available. The Wade Correctional Institute, a prison in northwest Louisiana, planted an acreage of Russell in 1997, and they now offer planting material for sale. In Louisiana, it has been planted on many acres in the northern part of the state. It has not been as popular in the southern part of the state where "Alicia" and "Jiggs" are more popular. Additional forage yield and quality data on Russell bermudagrass can be found in the article that immediately follows this article dealing with "Sumrall 007" bermudagrass.

#### REFERENCES

- Ball, D.M., R.A. Burdett, and M.M. Eichhorn. 1996. Russell bermudagrass. Alabama Agricultural Experiment Station circular no. 316.
- Eichhorn, M.M. and T.F. Brown. 1996. Performance of Russell and Coastal bermudagrass. Hill Farm Research Station Agronomy Research Report, pp. 89-94.
- Twidwell, E.K. and M.M. Eichhorn. 1999. Bermudagrass varieties for hay and pasture in Louisiana. Louisiana Cooperative Extension Service publication no. 2315.

Table 1. First cut and season-long dry matter yields of entries in bermudagrass variety trial in Shorter, Alabama (1992-1994).

Cultivar	1992		1993		1994	
	First cut	Season long	First cut	Season long	First cut	Season long
	----- lbs/acre -----					
Russell		6,701	23,819	7,587	18,092	5,459
Tifton 85	4,920	23,736	6,822	18,984	2,910	18,064
Coastal		4,987	21,732	7,217	17,055	5,420
Tifton 44	5,535	22,318	6,223	14,545	4,452	18,787
Tifton 78		3,841	19,377	5,684	14,396	3,192
						13,835

Table 2. Forage yield and quality measurements of Russell and Coastal bermudagrass at the Hill Farm Research Station, Homer, Louisiana.

Cultivar	Yield	IVDDM	CP	NDF
	-- lbs/acre --	----- % -----		
Russell	17,700	56.8	11.6	69.6
Coastal	15,160	58.6	12.3	69.1