Bermuda 2000 – A potential bermudagrass forage for Florida

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INTRODUCTION

Bermudagrass is the most planted forage species in the southeastern USA, covering around 15 million ha (Talaiáferro et al., 2004). Bermudagrass has been preferred over other warm-season perennial grass species due to greater nutritive value and persistence under adverse climatic conditions and management practices.

In the southeastern USA, warm-season perennial grass production is limited in early spring and late autumn and there is a need to develop cultivars less sensitive to shorter daylength and/or decreased temperatures to have greater forage production in those periods of shortage of forage. The early spring forage production is highly desirable because producers may increase their profitability by decreasing the needs for supplementation.

Bermuda 2000 (B2000) is a bermudagrass entry that was accidentally introduced in the UF/IFAS Range Cattle Research and Education Center in 2000. Dr. Paul Mislevy brought a load of Tifton 85 plant material from the USDA/ARS Crop Genetics and Breeding Unit in Tifton, GA and noticed that there was a different bermudagrass plant in the research area where the Tifton 85 was established. The B2000 plant was collected, multiplied in a greenhouse, and later transferred to the field where a pure stand of the B2000 was established.

OBJECTIVES

The objective of this study was to evaluate herbage accumulation and nutritive value of B2000 in Florida.

MATERIALS AND METHODS

The studies were conducted in Ona, FL and Marianna, FL from April to October 2015 and 2016. Treatments were different bermudagrass entry/cultivars, Jiggs, ‘Tifton 85’, ‘Coastal’, ‘Tifton 44’, and B2000 in Ona and Jiggs, ‘Tifton 85’, ‘Coastal’, ‘Tifton 44’, ‘Alicia’, ‘Russell’, and B2000 in Marianna, distributed in a randomized complete block design with four replicates.

Plots were 3 x 2 m and were harvested at 15 cm stubble height with 4 wk regrowth interval. Plots were fertilized with 60 kg N, 15 kg P2O5, and 60 kg K2O after every harvest.

RESULTS

There was a significant cultivar × month interaction for herbage accumulation, crude protein (CP), and in vitro digestible organic matter (IVDOM) concentrations of bermudagrass harvested every 4 weeks in 2015 and 2016 at Ona, FL.

CONCLUSIONS

Research projects conducted in Florida indicated that B2000 has greater early spring forage production than most of the other bermudagrass cultivars with similar nutritive value and persistence. B2000 will likely be named Mislevy2000 and released in 2019.