Visions for a Sustainable Planet

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257-23 Annual and Seasonal Yields, and Base Temperature of Three Cynodon Grasses Under Three Clipping Schedules in Southeastern Brazil.

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Cynodon grasses are becoming increasingly popular in brazilian forage-livestock systems. Newly released materials, however, are distributed without well established management recommendations. For many novel genotypes, potential yield and seasonal yield distribution patterns are unknown under the environmental conditions of Brazil. The objective of this study was to determine the annual yields, seasonal yield distribution and lower base temperature (Tb) of three Cynodon genotypes under three harvest schedules with irrigation and fertilization. Plots were arranged in a randomized complete block design replicated four times and harvested every two, four, or six weeks at 7 cm height. Annual forage yield was greater under longer rest periods. Total forage accumulation of Tifton 85 and Jiggs did not differ but both exceeded that of Vaquero under all schedules accumulating 32.7 Mg DM ha⁻¹ under 5 w.k, 21.6 Mg DM ha⁻¹ under 4 w.k and 14.6 Mg DM ha⁻¹ under 2 w.k. Vaquero produced 24.3, 17.2 and 12.0 Mg DM ha⁻¹ under the 6, 4 and 2 w.k schedules respectively. The Tb was higher in Tifton 85 (13.9° C) than in Jiggs (12.5° C) and Vaquero (6.3° C), and this impacted seasonal yield patterns of the three grasses. Tifton 85 was the most seasonal, with 66/34% in summer and in winter, followed by Jiggs at 63/37%, and Vaquero at 55/45%. Tifton 85 and Jiggs seem to be more interesting alternatives than Vaquero, because they are more productive. Jiggs deserves further study under Brazilian conditions.

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