MANAGEMENT STRATEGIES FOR PASTURE RECOVERY IN GUINEAGRASS (*Panicum maximum* Jacq.) AND STARGRASS (*Cynodon nlemfuensis* Vanderyst) PASTURES

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Degradation of pastures can occur when senescent material accumulates, which in turn limits an effective grazing. We evaluated the effects of reducing the senescent material in African Stargrass (*Cynodon nlemfuensis* Vanderyst) and Guineagrass (*Panicum maximum* Jacq. cv Mombasa) pastures. We cut Stargrass using a grass mower BCS® 630 Max and Guineagrass with a scythe at 5, and 15 cm stubble height, respectively. We hand-clipped samples at 5, and 10 cm height at 25, and 17 days of regrowth for Stargrass and Guineagrass plots. Biomass, structural components, and nutritional value were analyzed in the Research Center for Animal Nutrition at the University of Costa Rica. We found higher biomass yields in the control plots for both grasses, having similar values for Stargrass (4154 vs 4796 kg DM.ha^{-1}) and higher differences were found in Guineagrass (5063 vs 13661 kg DM.ha^{-1}). The treated plots had higher percent of leaves in Stargrass (42.6 vs 34.3 %) and Guineagrass (38.7 vs 68.4 %), resulting in an increase in the leaf-to-stem ratio for both. The changes in the structural components favored higher protein contents in Stargrass (16.5 vs 13.4 %) and Guineagrass (9.9 vs 6.3 %). Fiber content was similar in Stargrass (62.5 vs 63.7 %) but its digestibility was almost five percent higher in the treated plots (58.4 vs 53.7 %). The lower fiber values found in Guineagrass in the treated plots (65.7 vs 72.6 %), increased its digestibility (67.2 vs 47.5 %). Guineagrass was the species with greater changes in nutritional value because of the changes in structural components. The lower yields obtained in the treated plots can be offset by the potential higher dry matter intakes in the cattle grazing pastures with leafier growth after senescent material is reduced.

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