

DAYTIME BEHAVIOR OF GIROLANDO HEIFERS IN MARANDU PALISADEGRASS PASTURES WITH PROTEIN SUPPLEMENTATION IN AUTUMN

COMPORTAMENTO DIURNO DE NOVILHAS GIROLANDO EM PASTOS DE CAPIM MARANDU COM SUPLEMENTAÇÃO PROTÉICA NO OUTONO

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Cattle production in Brazil is mainly based on the use of pasture as the main source of nutrients. Supplementation together with the correct pasture management has been one of the main tools to optimize animal production. In addition, understanding how the animal adjusts its ingestive behavior, determining the time spent grazing, rumination and idle time is a fundamental parameter for the development of nutritional management strategies. This research aimed to identify if canopy height and protein supplementation interfere in daytime behavior of Girolando breed in Marandu Palisadegrass pastures with intermittent defoliation. The experiment was conducted at Instituto de Zootecnia in Nova Odessa, São Paulo, Brazil. The method used was the visual observation and the activities of the animals were written every 10 minutes (grazing, rumination and idle time), from 6:30 a.m. to 6:30 p.m., thus comprising 12 continuous hours. The cattle were properly identified with colored ribbon around the neck. Treatments consisted in two supplements (100% and 140% of rumen degradable protein requirement), and pre-grazing and post-grazing canopy heights (25 cm and 15 cm respectively), according to a completely randomized design in 2x2 factorial arrangement with 3 replications, from April to May 2017. African Mahogany seedlings were planted in February/2016, in three rows or one row (5 m between trees) spaced 15 m apart (Marandu Palisadegrass 4,500 m² paddocks) but were not considered in this work, since they were with 67 cm average height, without interference in pasture growth. Data were subjected to analysis of variance using PROC MIXED of SAS® (Statistical Analysis System, version 9.3) statistical package. The means of the treatments were estimated using "LSMEANS" and the comparison between them performed by Student t test (P < 0.05). There was interaction between supplements x canopy height (P=0,0353) and canopy height x activities (P=0,0111). Supplements did not influence the activities, with values of 236 and 229 minutes with pre-grazing and 239 and 237 minutes with post grazing for supplements of 100 and 140% of the PDR, respectively. Animals spent more time grazing with post-grazing height (460 minutes) compared with pre-grazing height (387 minutes), but with post-grazing height animals spent less time ruminating (103 minutes) compared with pre-grazing height (150 minutes). For the idle time there was no significant difference between canopies height. With pre and post-grazing heights grazing time was greater than the rumination time and idle time. With post-grazing height consumption is limited by the decrease in the supply of leaf blades, then the animals need to spend more time grazing to compensate for lower feed availability and to meet nutritional requirements, consequently the time spent in rumination is affected, decreasing.

Keywords: *Brachiaria brizantha*, grazing, rumen degradable protein

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