

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## SHEEP INGESTIVE BEHAVIOR ON MASSAI GRASS PASTURES

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Greater understanding of ingestive behaviour of grazing animals allows for the development of management strategies and more efficient utilization of pastures. The objective of this study was evaluating ingestive behaviour of sheep grazing Massai grass submitted to different frequencies and intensities of intermittent defoliation. The experiment was carried out in Macaíba/RN, during 300 days between January and October of 2015. The experimental area was 0.96 ha, divided in 4 modules (0.24 ha each). Each module was subdivided in to six paddocks of 0.04 ha. The treatments consisted in two levels of light interception (IL, %) plus two post-grazing heights (cm): 90/15; 95/15; 90/25 and 95/25. Twenty (20) sheep with no defined racial pattern (SPRD) were used. Moreover, all the sheep were castrated males with mean live weight of 30±2kg. The behavioral variables were grazing time, biting rate, rumination time and rest time. All of which were evaluated every five minutes over 48-hour period by visual observations. Data were subjected to variance analysis and means analyzed for statistical significance by Tukey test ( $\alpha=0,05$ ). There was a significant effect ( $P < 0.05$ ) for all variables studied on the ingestive behaviour. The highest grazing time was observed for animals in 95/15 combination, with a mean of 435 min day<sup>-1</sup>. This behavior may have been caused by sward structure presented by leaf:stem ratio and forage availability, forcing animals to graze for a longer time and thus resulting in longer rumination time and shorter rest time. The highest biting frequency was observed for animals kept at 90/15 combination, with a mean of 40.8 bites min<sup>-1</sup>. The animals possibly increased their biting rates to maintain a steady consumption, as they obtained the lowest grazing times 401.5 min day<sup>-1</sup>. Shorter rumination time was observed for animals in pastures managed with 90/15, with a mean of 386.5 min day<sup>-1</sup>. This may be explained by presence of younger pastures, with a higher leaf:stem ratio and better nutritional value. The animals that had the longest rest times also presented shorter grazing times. The frequency and intensity of defoliation influenced time of grazing, rumination and bite rate of sheep in Massai grass pasture, under intermittent grazing conditions.

**Keywords:** bite rate, intermittent stocking, grazing time, rumination

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