

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## INGESTIVE BEHAVIOR OF CONFINED SHEEP FEEDED WITH DIETS CONTAINING BRAN OF CASSAVA PEEL

Ellen Cristina Vale SILVA\*<sup>1</sup>, Anderson Lopes PEREIRA<sup>1</sup>, José Antônio Alves CUTRIM JUNIOR\*<sup>2</sup>, Eduardo Matheus Nascimento REIS<sup>2</sup>, Adriana CASTRO<sup>2</sup>, Igor Cassiano Saraiva SILVA<sup>1</sup>, Thamys Polynne Ramos OLIVEIRA<sup>3</sup>, Danilo Rodrigues Barros BRITO<sup>2</sup>

\*corresponding author: ellencortez1@hotmail.com

<sup>1</sup>Universidade Federal do Maranhão, Chapadinha, Maranhão, Brasil

<sup>2</sup>Instituto Federal de Educação, Ciência e Tecnologia do Maranhão, São Luís – Maracanã, Maranhão, Brasil

<sup>3</sup>Universidade Federal do Vale do São Francisco, Petrolina, Pernambuco, Brasil

The objective of this study was to evaluate the ingestive behavior of sheep in confinement fed different levels of inclusion of 0, 14, 28 and 42% of bran of cassava peel. The research was conducted in the Ovinocaprinocultura Sector of the Federal Institute of Education, Science and Technology of Maranhão (IFMA) in São Luís, Maracanã Campus. Twenty-four sheep with no defined breed pattern (SPRD), with approximately eight months of age and with initial mean body weight of 18 kg, were used in delineate in factorial arrangement with six times and four treatments. The confinement comprised a period of 77 days, with the first 14 days for adaptation and 63 days for the experimental period. The behavioral assay was performed at 25 days of confinement. The mean time spent and the number of chewing per ruminal bolus was obtained in three two-hour periods using a digital timer. The results for ingestive behavior were obtained by the relationship:  $EAL = CMS/TAL$ ;  $ERU = CMS/TRU$ ;  $ERU = CFDN/TRU$ ;  $TMT = TAL+TRU$ ;  $BOL = TRU/MMtb$ ;  $MMnd = BOLMMnb$ . Where, EAL is feed efficiency (grams of MS/ hour); CMS is the consumption of MS (grams of MS / day); TAL corresponds to the feeding time (hours / day); ERU is the efficiency of rumination (grams of MS / hour and grams of FDN / hour); TRU is the time of rumination (hours/day and seconds/day); TMT is the total mastication time (hours/day); BOL, the number of bolus (in/day); MMtb is the time of chewing per bolus (seconds/bolus); MMnd, the number of chewing (n<sup>o</sup>/day); and MMnb, the number of chewing per bolus (n<sup>o</sup>/bolus). The experiment was conducted according to the approval of the research ethics committee (Protocol N<sup>o</sup>.23249.013271.2016-93). There was no significant effect ( $P < 0.05$ ) among the evaluated treatments for the variables EAL, TMT, BOL, MMnd, MMnb, MMtb. There was an effect ( $P < 0.05$ ) of Dry Matter ERU for the inclusion levels of FCM, and the 28% level achieved the highest result (170.88g MS/h) in which rumination efficiency increased in g/MS from the first inclusion level, while the 14% level did not differ from the other treatments. According to Van Soest (1994), the increase in FDN contents promotes an increase in rumination time due to the greater need for fiber processing. Bran of cassava peel increases the ruminating efficiency of the dry matter by up to 28% inclusion.

**Keywords:** chewing, feeding, rumination

Promoção e Realização:



Apoio Institucional:



Organização:

