

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## **INTAKE, DIGESTIBILITY AND PERFORMANCE OF LACTATING GOATS FED DIETS CONTAINING RICE BRAN (FAT) MEAL**

Aldivan Rodrigues ALVES\*<sup>1</sup>, Weverton Lopes da SILVA<sup>2</sup>, Viviany Lúcia Fernandes dos SANTOS<sup>2</sup>, Marcos Jácome de ARAÚJO<sup>2</sup>, Guilherme Passos da SILVA<sup>1</sup>, Gutemberg Cavalcante dos SANTOS<sup>1</sup>, Kerlen Emanuele Pinto da SILVA<sup>1</sup>, Tatiane Aguiar da SILVA<sup>1</sup>

\*corresponding author: [aldivan.alves@ifma.edu.br](mailto:aldivan.alves@ifma.edu.br)

<sup>1</sup>Instituto Federal do Maranhão – Campus Caxias, Maranhão, Brasil

<sup>2</sup>Universidade Federal do Piauí, Bom Jesus, Piauí, Brasil

The aim of this study was to evaluate the intake and apparent digestibility of nutrients and performance of lactating goats fed diets containing rice bran (fat) meal substituting maize meal. Eight crossbred dairy goats in a 4 × 4 Latin square design were used with two replications consisting of four diets: Treatment Control with 0 % replacement; 2 – 33 % replacement; 3 – 66 % replacement; 4 – 100 % replacement. The experiment lasted 80 days, distributed in four periods of 20 days with 15 days for animals to adapt to the diets and five days of data collection. The substitution of the maize meal for the rice bran (fat) meal affected the amount of milk produced obtained a decreasing linear effect ( $P < 0.05$ ), varied between 0.616 and 0.474 kg d<sup>-1</sup>. But, no affected ( $P > 0.05$ ) the intakes of dry matter (DM), organic matter (OM), crude protein (CP) and neutral detergent fiber (NDF), except for ethereal extract (EE), which obtained an increasing linear effect ( $P < 0.05$ ), the higher amount of EE in the diet (25 to 58 g kg<sup>-1</sup> the DM) when the substitution provided greater consumption of this nutrient. The apparent digestibility coefficients of DM, OM and NDF decreased linearly ( $P < 0.05$ ) as the level of rice bran (fat) meal in the, therefore, it is noticed that the total replacement of maize by rice bran (fat) meal reduces the digestibility of DM and NDF, which can be explained by the possibility of lipid present in rice bran to interfere negatively in ruminal fermentation and in the digestibility of nutrients, due to its fat consists predominantly of unsaturated fatty acids concentrate was increased. It was observed that the digestibility of the EE a quadratic effect ( $P < 0.05$ ) with the inclusion of rice bran in the diet, indicated that the animals with up to 66 % of substitution presented the maximum ability to metabolize dietary lipid. It is recommended to substitute 66 % of the maize meal for rice bran (fat).

**Keywords:** Alternative feed, ruminants, yield milk

**Acknowledgments:** The Foundation of Support Research of Maranhão (FAPEMA) for financial support.

Promoção e Realização:



Apoio Institucional:



Organização:

