

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## PEARL-MILLET GRAZING FOR DAIRY COWS RECEIVING TOTAL MIXED RATION

Maurício CIVIERO\*<sup>1,2</sup>, Gabriela Marta MICHELON<sup>1</sup>, Wender Souza SANTOS<sup>1</sup>, Mariana Nunes de SOUZA<sup>1</sup>, Luís Henrique SCHAIZ<sup>1</sup>, Artur Martins BARBOSA<sup>1</sup>, Daniella Thaís de Castro BESSANI<sup>3</sup>, Henrique Mendonça Nunes RIBEIRO-FILHO<sup>1</sup>

<sup>1</sup>Universidade do Estado de Santa Catarina, Lages, Santa Catarina, Brasil

<sup>2</sup>Faculdades Integradas do Vale do Iguaçu, União da Vitória, Paraná, Brasil

<sup>3</sup>Universidade Federal da Fronteira Sul, Realeza, Paraná, Brasil

The effects of inclusion of a tropical grass in dairy cattle diets, consisting exclusively of total mixed ration (TMR), deserves a more profound study. This work aimed to evaluate the milk production and composition from dairy cows receiving three nutritional strategies: 100% TMR (control group), 75% TMR + pearl millet grass (*Pennisetum glaucum* cv. Campeiro) and 50% TMR + pearl-millet grass. The TMR composition was corn silage + concentrated food in a 60:40 proportion. Nine multiparous Holstein and F1 Jersey x Holstein cows with 136±40 days in milk and 520±41 kg of body weight were distributed in an experimental design of 3 x 3 Latin-square. The pearl-millet was strip-grazed with pre- and pos-grazing sward height targets of 60 and 30 cm, respectively. The crude protein and neutral detergent fiber contents of the TMR were 149 and 340 g kg DM<sup>-1</sup> and for the pearl-millet grass were 200 and 646 g kg DM<sup>-1</sup>, respectively. The pre grazing herbage mass, pre- and pos sward height were similar between treatments 75 and 50% TMR, averaging 3508 kg DM ha<sup>-1</sup>, 62 and 31 cm, respectively. The TMR intake in the control group was 20.7 kg DM cow<sup>-1</sup> and decreased to 14.8 and 10.9 kg DM cow<sup>-1</sup> in the 75 and 50% TMR groups. The 4% fat corrected milk production decreased (P<0.05) from 26.7 kg cow<sup>-1</sup>, in the control group, to 25.2 and 24.4 kg cow<sup>-1</sup> in the 75 and 50% TMR groups, respectively. The milk fat and protein contents were similar between treatments, averaging 46 e 33 g kg<sup>-1</sup>, respectively. The results showed that dairy cows grazing pear-millet grass and receiving 50% of TMR, when compared to dairy cows receiving only TMR *ad libitum*, may maintain up to 90% of milk production without alterations in milk fat and protein contents.

**Keywords:** Milk production, Milk composition, *Pennisetum glaucum*.

Promoção e Realização:



Apoio Institucional:



Organização:

