

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

INCLUSION OF ACETIC ACID IN BRS ZURI CULTIVAR TILLAGE

Pamela Kerlyane TOMAZ¹, Cleiber Daril MONTAGNA¹, Luciana JUNGES¹, Eva Nara Oliveira GOMES¹, Diego Martins da Silva ECHEVERRIA¹, Juliana Oliveira BATISTOTI¹, Luís Carlos Vinhas ÍTAVO¹, Alexandre Menezes DIAS*¹

*corresponding author: alexandre.menezes@ufms.br

¹Mato Grosso do Sul Federal University (Universidade Federal do Mato Grosso do Sul), Campo Grande-MS, Brazil

The cultivar BRS Zuri, launched in 2014, presents production of up to 21.8 tons of dry matter ha⁻¹ year⁻¹ and this can generate a surplus of forage, which can be strategically used in periods when production does not meet the demand of bulky. Thus, silage may be one of the alternatives for the use of this material. Thus, the objective of this work was to evaluate the fermentative characteristics and losses of the *Panicum maximum* cv. BRS Zuri with inclusion of acetic acid levels. The experimental design was a completely randomized design with four levels of acetic acid (0, 3, 6 and 9%) and four replicates per treatment. The forage used was collected in free growing stage and ensiled in PVC silos (10 cm in diameter x 43 cm in length). A layer of sand was added to the bottom of the silo and TNT to determine the losses. The content of dry matter (DM), pH, ammoniacal nitrogen (N-NH₃) and gas, effluent and total dry matter losses were determined. The data were analyzed through analysis of variance and regression and the choices of the linear and quadratic models were based at the 5% level of significance. The inclusion of acetic acid linearly reduced DM and pH, every 1% of acetic acid addition consisted of a reduction of 0.144% of MS and 0.131 of pH. However, the inverse was observed for total losses of DM and effluent, thus, every 1% of acetic acid inclusion increased 0.359% of DM and 1.60 kg of ton⁻¹, respectively. No effects of acid addition on N-NH₃ and gas losses were observed. The inclusion of acetic acid at the 3% level of DM favored silage conservation and presented lower losses

Keywords: additive, fermentative parameters, forage conservation, losses, *Panicum maximum*

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