

THEME 5 | GRASSLANDS AND FORAGES

Degradability of Piatã grass silage (*Urochloa brizantha* cv. BRS Piatã) with additives

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With a seasonality of forage production there is a decrease in forage production in the dry season. In contrast, production in the rainy season is excessive and the management of the areas should be cautious. In this sense, forage conservation is an essential management practice to guarantee quality food during times of forage shortage, in order to meet the requirements of the animal throughout the year and to increase the efficiency of use not to pass during the period of greatest production. The objective of this study was to evaluate the effect of different additives on the *in situ* degradability of DM of *Urochloa brizantha* silage cv. BRS Piatã. The piatã grass, established in the experimental area of Embrapa Agrossilvipastoril in Sinop - Mato Grosso, was used the factorial scheme 6 x 5, in the completely randomized design, with three replicates per treatment, totaling 90 experimental silos, maintaining the specific mass of 650 Kg/m³. The material was submitted to the different treatments: without additive - (control); with bacterial inoculant; with antibiotic-bacterial inoculant; with milled grain corn (MGM); crude glycerin (CG) and soybean molasses (SM) in the amount of 100 g.kg⁻¹ of the natural material, was crushed and ensiled in experimental PVC silos provided with Bunsen type valves. Experimental silos were opened on days 3, 7, 14, 28 and 56 days. Only the silages of the last fermentation period were used for 56 days. The incubation procedure was performed in the Animal Metabolism Sector of UFMT - Sinop. For this purpose a crossbred bovine, with average weight of 500 kg, fistulated in the rumen, was used in *U. brizantha* cv. Marandu with water ad libitum supplemented with 2 kg / day of concentrate (protocol of the ethics committee on the use of animals N^o 23108.701716/14-7), using the times: 0; 2; 4; 6; 12; 16; 24; 36; 48 and 72 hours. In the incubation residues the DM contents were determined in order to estimate the disappearance ratio of these fractions of the samples in the respective incubation times. The silages with MSJ and MGM showed higher soluble fraction (A), 40.18 and 41.02%, while silage control and Sil All 4x4 had the lowest levels (18.06 and 19.8%, respectively). The lowest levels of potentially degradable insoluble fraction (B) are from the silages with MSJ and MGM with 45.85 and 47.85, respectively. As for fraction "B", the silages with CG, MSJ and MGM were the smaller values, in relation to the other silages. In the potential degradation (sum of the fractions A and B) the MSJ and MGM silages also showed high ruminal DM degradability (86.06 and 88.87%, respectively). This is explained by the fact that MGM has a high content of starch with a potentially high degradable fraction, becoming available to the ruminal microorganisms. It is recommended the addition of MSJ or MGM (100 g.kg⁻¹ MV) in ensilage of piatã grass, because presented the best *in situ* digestion parameters of MS.

Keywords: crude glycerin, bacterial inoculant, soya molasses, tropical grasses

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