

## POWER EFFICIENCIES, RUMINATION AND CHEWING BY COWS F1 DUTCH/ZEBU FED WITH DIETS CONTAINING OR NOT FORAGE PALM

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The objective of evaluating the power and efficiencies of F1 cows chewing Dutch/Zebu fed with diets containing or not forage Palm. The study was approved by the Ethics Committee of the Universidade Estadual de Montes Claros (Protocolo138/2017). The experiment was conducted on the Experimental Farm of UNIMONTES in Janaúba-MG. 08 lactating cows were used. The experimental design were two Latin squares 4 X 4, simultaneous. Four experimental diets were used: 1 = sorghum silage diet; 2 = 50% diet of sorghum silage, 50% forage Palm; 3 = elephant grass diet; diet 4 = 50% of elephant grass, 50% forage Palm. The bulky relationship: 75:25 concentrate. We evaluated the time spent and the number of chews merísticas by rumen cake, power efficiency and rumination, the time chewing and total the number of merísticas chews per day of dry matter and neutral detergent fiber. The number of cakes, chewing merísticas number ruminados/day and the time chewing total ( $P < 0.01$ ) were lower in the diets with forage Palm. The dry matter feed efficiency ( $P < 0.01$ ), in  $g\ h^{-1}$ , was higher in the diets with silage of sorghum. The efficiency of rumination of dry matter in  $g\ h^{-1}$  ( $P < 0.01$ ) increased with the inclusion of Palm, both in diet with silage as in grass diet. Rumination of efficiency already FDNcp in  $g\ h^{-1}$  ( $P < 0.01$ ) was highest in the diets with grass compared to silage diet + palma. For chewing in neutral detergent fiber ( $P = 0.02$ ), sorghum silage diet presented 88.57 minute kg, which is the smallest value, and diets with inclusion of Palm gained the highest values, averaging 119.95 minutes kg. The Association of forage Palm in 37.5% of the total diet of sorghum silage or fresh elephant grass reduces the time chewing and power efficiency of the NDF, while increasing efficiency and rumination of the dry matter.

**Keywords:** rumen cake, elephant grass, intake, digestibility