

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## PERFORMANCE OF MILKING COWS FED FORAGE CACTUS IN SUBSTITUTION TO CORNMEAL

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Concentrated feed normally used in animal feed, such as cornmeal and soybean meal, appear as the main sources of energy and protein, respectively, associated with diet. However, taking into account the need for supplementation in the feeding of animals at certain periods of the year, if there is a shortage of food, the price of such feed leads to a considerable increase in the cost of milk production. The total replacement of corn by forage cactus is a viable alternative that may constitute the concentrated diet of ruminants. And the forage cactus stands out in this aspect, because, besides being adaptable to arid and semi arid regions, it has a high proportion of total digestible nutrients (TDN). This study aimed to evaluate the use of forage cactus instead of cornmeal in diets based on sugar cane for milking cows. The experiment was conducted at the Experimental Station of São Bento do Una, belonging to the Agronomic Institute of Pernambuco - IPA. 10 cows in lactation Holstein, Black and White variety (HPB) were used, with average daily milk production of 20 kg. The experimental period lasted 85 days, divided into five sub-periods of 17 days, in which the first 10 days were used for adaptation and the last seven for sampling and data. The animals were divided into an experimental design in 5x5 Latin square, double, in which treatments consisted of increasing levels of substitution of cornmeal by forage cactus. The samples were processed and submitted to bromatological and chemical analyzes, and the results used to estimate the performance. The dry matter intake decreased linearly ( $P < 0.05$ ) in grams / day g / kg metabolic body weight and percentage of body weight. The remaining intake also followed the same trend of dry matter intake decreases linearly ( $P < 0.05$ ) except for the consumption of neutral detergent fiber. No differences ( $P > 0.05$ ) were observed in the apparent digestibility of dry matter, organic matter, crude protein, non-fibrous carbohydrates. However, the apparent digestibility of neutral detergent fiber was influenced ( $P < 0.05$ ). Milk production did not differ ( $P > 0.05$ ) when fat was corrected to 3.5%, with the substitution of cornmeal by forage cactus. The substitution of cornmeal by forage cactus decreases nutrient intake and milk production without affecting the apparent digestibility of nutrients and the production of fat-corrected milk production of dairy cows with up to 18 kg of milk per day.

**Keywords:** sugar cane, intake, feed efficiency, milk yield

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