

BUFFALO MEAT PRODUCTION ON INTENSIVE ROTATIONED GRAZING SYSTEM ON CASTANHAL, PARÁ STATE, BRAZIL.

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ABSTRACT

Sixty Murrah buffaloes, fifteen months old weighing 322.5 kg, were fattened in Castanhall, Pará State, Brazil, in "*Brachiaria humidicola*", during 224 days, with mineral supplementation. The pasture of 25 ha was divided on eight plots, and used on intensive rotationed system, with five days of occupation and 35 days of resting. The animals gained 0.530 kg average daily weight, what represents daily gain weight/ha of 1.272 kg, three times superior to the regional average. The economical evaluation indicated net income of US\$ 138.31/ha/year, five times superior to the average of the productive sector.

Key words: Amazon, cultivated pasture, Murrah, pasture fertilization.

INTRODUCTION

Buffaloes farming in the Brazilian Amazon is made predominantly on extensive system and low productivity is still due to the inadequate use of the natural resources and not enough use of technologies, with low costs. The climatical conditions and the huge extension of arable lands appropriated to grow cultivated pastures fulfil the needs for the expansion of this activity (6). However, there is a need of efficient alternatives on feeding, management and improvement of the herd, searching to use its productivity. Among them there is a distinction for the improvement of the pastures with cultivated gramineous of high proteic level, adequate management of the pasture, intensive use and sustentable of the soil, searching the slaughter in a shorter time, with better quality of the carcass (2). Thus, this work attempts to rise the buffaloes productivity of slaughter, on intensive rotationed system of "*Brachiaria humidicola*", searching better economic profit.

MATERIAL AND METHODS

This work was realized in Castanhall, Pará State, Brazil, climatic type Afi of Köppen, with rainy season (January to June) and dry season (July to December), annual average temperature of 26°C, annual precipitation of 2,761mm, relative air humidity of 86% and 2,385 hours of solar radiation, and soil yellow oxisol. Were utilized 60 Murrah males buffaloes, weighting in average 322.5 kg and fifteen months old, in pasture of *Brachiaria humidicola*, during 224 days (from 06/24/2001 to 02/20/2002), on pasture pressure of 1.72 A.U/ha to 2.35 A.U/ha, on eight plots (Figures 1 and 2), on intensive rotationed grazing, with 5 days of grazing and 35 days of resting. The pasture was fertilized with 50 kg of P₂O₅/ha, as reactive phosphate - Arad, applied on cover. The composition of the mineral supplement "ad libitum", on covered troughs, had 74 g of phosphorus/kg of the product (75 kg of iodized common salt, 50 kg of bicalcic phosphate and 3 kg of premix)

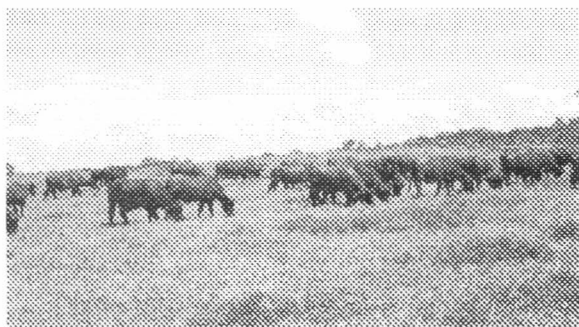


Figure 1. Module used.

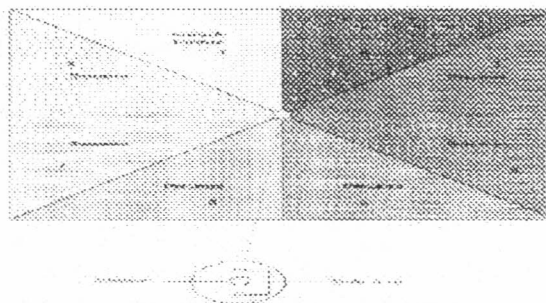


Figure 2. Module used.

RESULTS AND DISCUSSION

The animals gained average of 0.530kg of daily weight/head, what means daily gain weight/ha of 1.272 kg, three times superior to Amazon media.

This gain is superior to the ones found on the literature (3, 4), in continuous grazing, in *Brachiaria humidicola*, on Marajó island, Para State, Brazil. In other work (5) was observed daily gain weight of 0.474kg/head, on the same gramineous, on intensive rotationed grazing, under pasture pressure between 1.5 A.U and 2.4 A.U/ha, that corresponds to a daily gain weight/ha of 1,422 kg of 12% superior of this work. On Figure 3 is illustrated the ponderal performance of the buffaloes, during the experimental period. These animals were slaughtered with about 23 months of age and 47.35% of carcass profit, in relation to the weight on the farm, being classified by the Brazilian and Paraense Association of Buffaloes Farmer, as "baby buffalo", reaching better price on its commercialization. Its carcass have fat well distributed, marbled meat and excellent visual aspect (Figure 4).

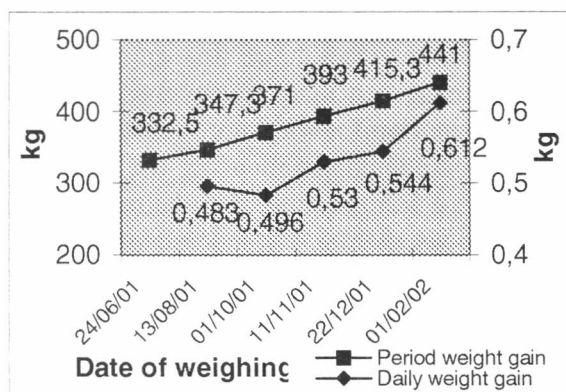


Figure 3. Ponderal development.



Figure 4. Buffaloes Carcasses.

On Table 1, it is the economical evaluation of the intensive meat production, where is observed a net income of US\$ 85.07/ha, what corresponds to US\$ 138.31/ha/year. This value is about five times higher than the profit observed in the country, in systems using medium technology.

Table 1 - Economical evaluation.

Parameter	Quantity	Value (US 1.00)	Value (US 1.00)
Total cost ¹	-	-	869.73
Gain of weight (kg) ²	7.110	0.42	2,996.55
Net income ³	-	-	2,126.82
Net income (ha)	-	-	85.07
Net income (ha/ano)	-	-	138.31

¹ Mineral salt, vacinne, vermifuge, workers, forage manutention. ² Comercialization of the animals. ³ Comercialization of the animals minor costs. US\$ 1.00 = R\$ 2.61.

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