

## INTENSIVE BUFFALOES MEAT PRODUCTION IN CONFINEMENT, IN PARA STATE, BRAZIL

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### ABSTRACT

Were fattened 40 buffaloes of Murrah race, with 15 months of age, in confinement, in Para State, Brazil, fed with *Pennisetum purpureum* trituated, more wheat bran and protein salt/animal/day, contend 30 kg of maize meal, 35 kg of mineral salt, 25 kg of iodized common salt, 8 kg of urea and 2 kg of ammonia sulfate. The profit of daily/animal weight was of 0.814 kg. The low animal performance aggravated the economic return of the confinement. However, this system can be used as a handling strategy or in emergencies situations, as accidental fire, attack of plagues and diseases in pasture.

**Key words:** Amazon, Murrah race, intensive grazing, supplementary feeding.

### INTRODUCTION

The domestic buffalo (*Bubalus bubalis*) had its origin in Asia, after Africa, later in Europe and recently in America, through the Marajo island, Para State, Brazil, in 1895, with Mediterranean race, from Italy. This animal has a basic paper in the rise of the economic level of the agricultural communities in the Asian countries, as milk, meat and work producers (2). In Latin America, in Brazil and, especially, in Para State, its contribution on this aspect can be of great importance, as meat producers, with good performance in confinement conditions. Lately, this animal species has constituted an important alternative source of meat production, mainly to supply the demands of the developing countries, for its similarities, and in some cases, superiority in nutritional composition, when compared to red and white meat, bovine and chicken, respectively (3). Thus, this work aims to intensify the buffaloes meat production in confinement system.

### MATERIAL AND METHODS

This work was carried through in the Mount Castle Farm, Castanhal, Para State, Brazil, in humid tropical climate, with rainier season (january the june) and less rainy (july the december), annual average temperature of 26°C, annual pluvial precipitation of 2.761 mm, air relative humidity of 86% and 2.389 hours of insolation (1). The soil is Yellow Latossolo. Were fattened 40 buffaloes of Murrah race, with 15 months of age and 294 kg, in confinement, during 237 days (08/26/01 the 04/20/02), fed with elephant grass (*Pennisetum purpureum*) trituated, given to the animals in the beginning of the morning and end of the afternoon, more 1 kg of wheat bran/200 kg of alive weight and 0.400 kg of protein salt/animal/day, contend 30 kg of maize meal, 35 kg of mineral salt, 25 kg of iodized common salt, 8 kg of urea and 2 kg of ammonia sulfate. The confinement area had abundant water of good quality (Figures 1 and 2).

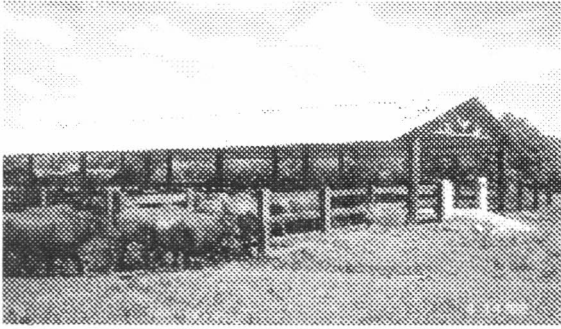
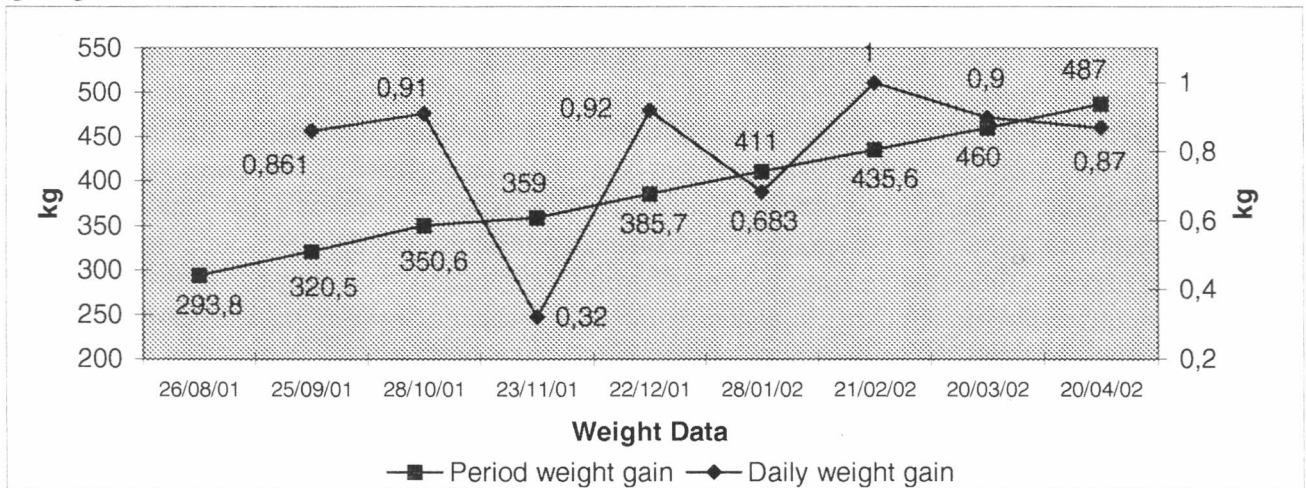


Figure 2. Co

After 89 days, the experimental animals had access to artificial lagoon, with shadow, between 10 a.m. to 3 p.m. The elephant grass was chemical fertilized with 111 kg of  $P_2O_5$ /ha (reactive phosphate Arad), and buffaloes manure, in the ratio of 20 t/ha/year, distributed after each cut, in cut interval of 30 days. The economic evaluation of these system was effected, considering the costs with feeding, vaccine, vermifuge and workers.

## RESULTS AND DISCUSSION

The final alive weight of the animals were 487 kg what corresponds on daily weight gain of 0,814 kg (Figure 3).



**Figure 3.** Buffaloes ponderal performance during the experimental period.

Was observed that in the third weight the buffaloes had reduced its ponderal performance (0,320 kg), probably by the fact of manure had accumulated in the animals leather and bothered them, beyond the negative climatic effect, mainly the temperature and air relative humidity. In the following weight, the bath, in artificial lagoon, made possible the cleanness of the animals and promoted the waste of the corporal heat and the return of its performance, probably given the biggest animal comfort. After that, in the beginning of the rainiest period (january), a small reduction in the daily weight gain was observed (0,683 kg). These lesser performances had aggravated the economic return of the confinement (Table 1). However, the confinement can be used as a handling strategy, with objective of regular the supply of animals for abates and/or in emergencies situations, such as accidental fire, attack of plagues and diseases in the pasture, etc.

**Table 1** - Economic evaluation.

Item	Quantity	Value (US\$)	Value (R\$)
Wheat bran (kg)	18,670	0.07	1,330.50
Protein salt (kg)	3,792	0.14	566.62
Worker (man/day)	237	4.17	989.77
Foot and mouth disease vaccine (unity)	80	0.27	22.37
Clostridiosis vaccine (unity)	80	0.31	25.44
Vermífuge (unity)	80	0.64	51.49
Fertilizer and manutention (2 ha)	-	-	76.62
Instalation	-	-	108.30
Weight gain (kg)	7,720	0.42	3,242.40
Total cost	-	-	3,171.11
Liquid revenue	-	-	71.29

US\$ 1.00 = R\$ 2.61.

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