

BUFFALO MEAT PRODUCTION IN THE AMAZON REGION

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INTRODUCTION

The main purpose of buffalo breeding in the Amazon region is meat production, in extensive systems based on native pastures, mainly in floodable lowlands. Well drained savannah native pastures are also used although in a lesser extent. In farms exploited with low technologic inputs, the herds have a satisfactory performance, where the animals can reach liveweight of about 350 kg with two years of age. This result make those buffalo production systems a viable alternative for areas of difficult use with agriculture or other animal species. On the other hand, experience has shown that using available low cost technology, easy of being adapted, it is possible to increase buffalo meat production, taking care to preserve the environment and promoting regional economic and social development. This paper presents the main research results in buffalo meat production in different Amazon ecosystems.

MEAT PRODUCTION

Native pasture ecosystems: Liveweight of three buffalo breeds with two years of age raised in a well drained savannah native pasture of Marajó Island and supplemented with minerals is shown in Table 1 (1).

TABLE 1. Liveweight of buffaloes raised in well drained savannah native pastures of Marajó Island.

| Buffalo breed | Weight at birth (kg) | Weight with 2 year (kg) |
|---------------|----------------------|-------------------------|
| Mediterranean | 36.8 | 369.0 |
| Kerebau | 36.8 | 322.7 |
| Jaffarabadi | 36.2 | 308.3 |

Lowland floodable native pasture ecosystems: Results obtained in native pastures of floodable shores of Amazon River without any supplements are better than those obtained in highland native pasture, as show in Table 2 (2). Buffaloes fattened in these ecosystems can reach from 429 up to 507 kg with 2.5 years of age, as shown in Table 3 in which are also presented the respective carcass weight (3).

Index terms: Native pasture, cultivated pasture, liveweight gain, carcass.

TABLE 2. Liveweight of two-year old buffaloes raised in lowland floodable pastures of Amazon River shores

| Buffalo breed/type | Weight at birth (kg) | | Males | Females |
|--------------------|----------------------|--|-------|---------|
| | | | | |
| "Baio" | 32.6 | | 336.0 | 319.5 |
| Murrah | 33.0 | | - | - |
| Mediterranean | 34.0 | | 402.0 | 372.5 |
| Kerebau | 36.5 | | 337.5 | 326.0 |
| Jaffarabadi | 37.5 | | 328.0 | 326.0 |

TABLE 3. Final and carcass weight of buffaloes raised in lowland floodable pastures of Amazon River shores.

| Weight (kg) | Buffalo breed / type | | | |
|-------------|----------------------|-------------|---------|--------|
| | Mediterranean | Jaffarabadi | Kerebau | "Baio" |
| Final | 461.2 | 429.0 | 507.2 | 434.2 |
| Carcass | 228.7 | 199.0 | 243.7 | 204.5 |

Cultivated Pasture Ecosystem: Data from two places of the Amazon region (4,5) showing liveweight daily gains and final weight of buffaloes of 2.5 years of age grazing cultivated pasture, stocking rate of 2 head/ha, are presented in Table 4.

TABLE 4. Daily gains and final weight of buffaloes in cultivated pastures

| Pasture | Daily gains (kg) | Final weight (kg) | Local |
|----------------------|------------------|-------------------|-----------------|
| <i>B. humidicola</i> | 0,686 | 438 | Belém-PA |
| <i>B. humidicola</i> | 0,372 | 417 | I. de Marajó-PA |

Buffalo meat is also produced in lowland floodable cultivated pastures. Data of daily gains and final weight of buffaloes of 18 to 23 months of age in these ecosystems are presented in Table 5 (6).

TABLE 5. Daily gains and final weight of buffaloes grazing lowland floodable cultivated pastures (stocking rate of 1.5 head/ha)

| Pasture | Daily gain (Kg) | Final weight (kg) | Local |
|-----------------------|-----------------|-------------------|----------|
| <i>E. pyramidalis</i> | 0,772 | 437 | Belém-PA |
| <i>E. pyramidalis</i> | 0,631 | 395 | Belém-PA |

Integrated Ecosystems: In Table 6 it is shown the performance of Mediterranean buffaloes with 23 months of age, fattened in floodable native pastures during the dry period (August to

March) and in cultivated pasture of *Brachiaria humidicola*, stocking rate of 3 head/ha during the rainy season (March to August) (7).

TABLE 6. Daily gains and final weight of buffaloes in integrated pasture grazing systems.

| Period | Daily gain (kg) | Final weight (kg) | % |
|-----------------|--------------------|----------------------|---|
| August to March | 0,650 | 319 | - |
| March to August | 0,551 | 427 | - |
| Total period | 0,596 | 427 | - |

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