

Best Production Practices for Improvement of Beef Cattle Carcass Quality

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Introduction

Best production practices for Beef Cattle (BPP) is a protocol created by Embrapa Beef Cattle in Brazil, to guide farmers towards more sustainable production. The protocol includes checkpoints to the whole production system (management, nutrition, animal health and welfare, pasture, reproduction, environmental, etc.). Despite the benefits of the BPP, it is not mandatory for Brazilian farmers. As such, until the present moment only a few farmers have adopted it.

Objectives

The aim of this work was to evaluate the impact of the BPP on the carcass classification of animals from farms registered in the Brazilian government incentive program “Precoce MS”.

The Program:



- Created in 2017, in Mato Grosso do Sul - Brazil
- Provides tax benefits to beef producers who harvest animals at young ages with superior carcass quality.
- Almost a quarter of the total beef harvested in MS State is originated from this program.

Data Analysis

We have analyzed data from over a million animals slaughtered from the beginning of 2017 until the end of 2018, from 1,337 farms.

At the slaughterhouse, animals were submitted to carcass classification. To comply with the program requirements, carcasses should meet three basic criteria: age, fat deposition and carcass weight (Fig. 1)

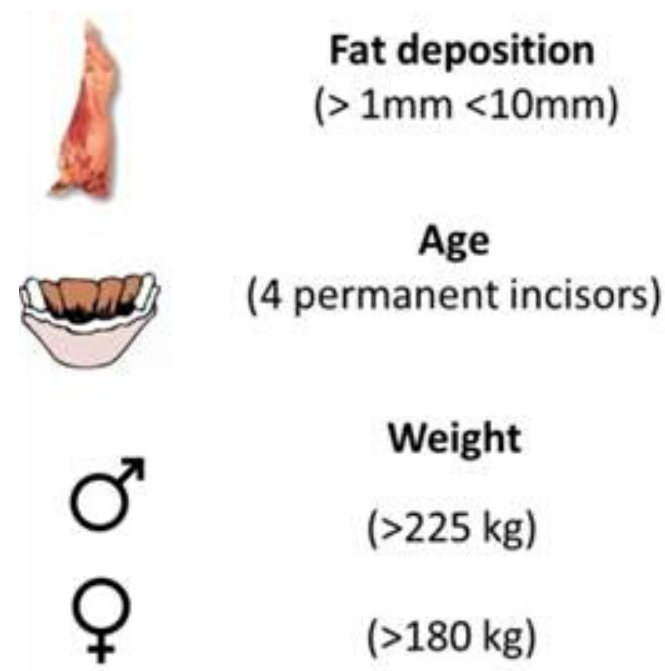


Figure 1. Criteria for receiving government incentive.

Results

Farmers that adopted BPP had only 12.4% of disqualified animals compared to 16.1% from farms that did not adopt the protocol ($P < 0,001$).

Incentive participants	Farms (n)	Animals (n)	Disqualified carcass (%)
Non BPP adopters	1,319	1,030,881	16.1 ^a
BPP adopters	18	26,972	12.4 ^b

a,b Different letters in the same column indicate significant differences between groups, based on Pearson’s Chi-Square Test ($p < 0.001$).

Conclusion

These results indicate that farms that followed the BPP protocol achieved significantly higher quality carcass. We expect that this outcome will encourage additional farmers to adopt the protocol in the future.

More information about BPP and Precoce program available at:



<https://cloud.cnpqg.embrapa.br/bpa/>
<https://www.precoce.semagro.ms.gov.br/>