IMPROVING THE PRODUCTION OF CATTLE MEAT BY PERFECTING THE MANAGEMENT OF EXPLOITATION

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Abstract: *Improving the exploitation management of cattle for meat involves the implementation in the farms of the modern technologies, with high degree of efficiency, using commercial hybrids with a high biological value, with high degree of fodder conversion. In order to express the genetic attributes at optimal parameters, cattle must be fed with ratios with high digestibility, rich in energy, farm management implemented, having to lead to the production of marbled meat at a price affordable to consumers. The best performances at fattening are achieved by using commercial hybrids for meat, balanced nutrition programs, healthy animals, and have been implemented the best farm management.*

Key words: *cattle, exploitation, management, meat;*

INTRODUCTION

The performance of cattle subject to fattening for meat production is given by the following technological parameters:

- farm management;
- the quality of the genetic material subject to fattening;
- health status;
- microclimate factors;
- feed conversion index;
- the average daily gain over the fattening period;
- the age at which the optimal economic weight is achieved. [1, 10, 11, 14]

The best performances are obtained by using breeds and meat hybrids with high genetic potential, balanced nutrition programs, healthy animals, control of nutrition factors, efficient farm management. Using in the food of cattle of silos, of cereals depends on the possibilities of the farms to obtain them, the way of preparation and the ability of cattle to turn them into meat. Maize rich in starch provides the necessary energy for exploitation, recommended ratios for high productions must contain up to 85% of silos, 12% of coarse and 3% of premix containing macro and microelements. In some intensive systems of meat production at low prices, in cattle food can be used sub-products resulted from the processing of some products, which can replace cereals due to their high energy-protein levels. [6, 7]

Protein supplements from the extractive industries ensure the need for mineral substances, supplementing calcium as a macro element, being necessary due to the small amount existent in grain. For a fattening with higher technological indices of economy, it is necessary to supplement the ratios for exploitation in stabbing, according to the data presented below:

- proteins 12-14.00%;

- calcium 0.6-1.00%;
- phosphorus 0.3-0.50%;
- potassium 0.6-1.10%;
- magnesium 0.2-0.30%;
- sodium 1.0-2.20%

The amount of substance ingested by cattle represents one of the basic elements, contributing to the formation of feed rations, parameter which depend by the following factors:

• dependents by the genetic material designed for fattening;
• operating environment in different systems;
• the management implemented in the farm by the farmer. [2, 4, 12, 13]

The amount of dry substance ingested by cattle subjected to fattening is dependent by the quality and mode of preparation of the feed, the food behavior being modified according to the exploitation system between the duration of the ingestion and the rumination duration existing very complex relations. The duration of rumination can evolve in the same way as the duration of ingestion, while the exploitation on pasture it can be reduced when the animal extends its duration of ingestion, beyond the normal values. The digestion represents the mechanical, chemical and microbial phenomena, through which the fodder are fragmented, for to pass the digestive tract barrier. Some researchers, analyzing mechanical phenomena in extensive exploitation, have found that:

• The duration of ingestion was 7-9 hours/day, in 10 feeding rounds;
• The mastication was of 67-80 movements during 60 seconds;

Changing feed, to similar feed compositions, produces changes in their ingestion, changing the duration of digestion and rumination time, for these reasons to achieve good results, it is necessary to implement measures in order to improve the management of feed distribution regardless of the exploitation system. It is considered that the cattle feed way and level, subject to fattening, influences the intensity of metabolic processes and feed conversion indices of food consumed. [3, 5, 8, 9, 15]

MATERIAL AND METHOD

Due to the fact that the improvement of the production of cattle for meat cannot be done only through the implementation of an efficient farm management, the economy of production is also given by the management of rations over a day, a phenomenon researched in this scientific approach, taking into account the fact that the distribution of feed leads to a change in the proportion of volatile fatty acids, of pH and ammonia concentration. More frequent administration of rations has effects on meat production if in the rations are administered corn from silos whose pH is lower.

RESEARCH RESULTS

In the management of fattened cattle farms, ration distribution management has a particular importance in achieving meat production, the magnitude of the effects of the number of meals, on ruminant fermentations can be reduced, and distribution in the form of a single feed, allows the increasing of meat production, increasing the efficiency of feeding through:

- use of legumes as single feeds together with concentrates and silos;
- has beneficial effects on digestion;
- stimulates ruminal fermentations.

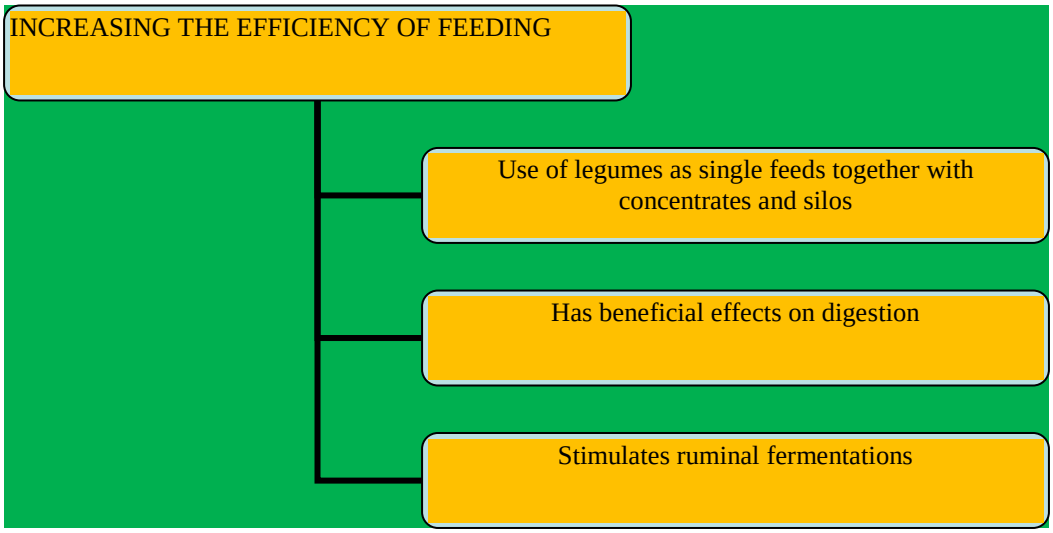

Figure 1. Increasing the efficiency of feeding

By fermentation of fodder, are produced fermentative changes, characterized through a reduction in the amount of digested organic substance. Treatments applied to feed have positive effects on ruminant digestion and contribute to increasing meat productions obtained because the urea administered in the rations increases the proportion of volatile fatty acids, influencing the synthesis of amino acids.

In order to obtain increased meat production, the management of feed distribution should take into account:

- reduction of increased digestion time in order to avoid acidosis that adversely affects meat production by decreasing daily average growth;
- slow migration from one type of feed to another, respecting the adaptability period of at least 30 days;

Improving the production of cattle meat cannot be achieved under economic conditions than by improving farm management, by implementing the best exploitation technologies, in addition to feed distribution technologies. By improving breeding technologies, intensifying breeding, increases the production of quantitative meat but especially qualitatively obtaining meat with a high degree of marriage and good tenderness.

The use of additives in rations provides disease control, can improve feed efficiency and meat quantity, by increasing daily average gains and gaining meat with high protein levels. It can be improved feed conversion indices of feed and increased economic efficiency of by increasing the number of series on the productive cycle. The use of beta-antagonists in the first part of fattening leads to higher quantities of high quality meat with very good conversion indices. In order to improve the management and increase the production of bovine meat we recommend the following high performance technologies, which to improve:

- the welfare of animals for fattening;
- nutrition efficiency;
- the quality of the environment;
- natural conditions of exploitation;
- ante and post mortem conditions in processing units;
- the conditions for processing the meat;

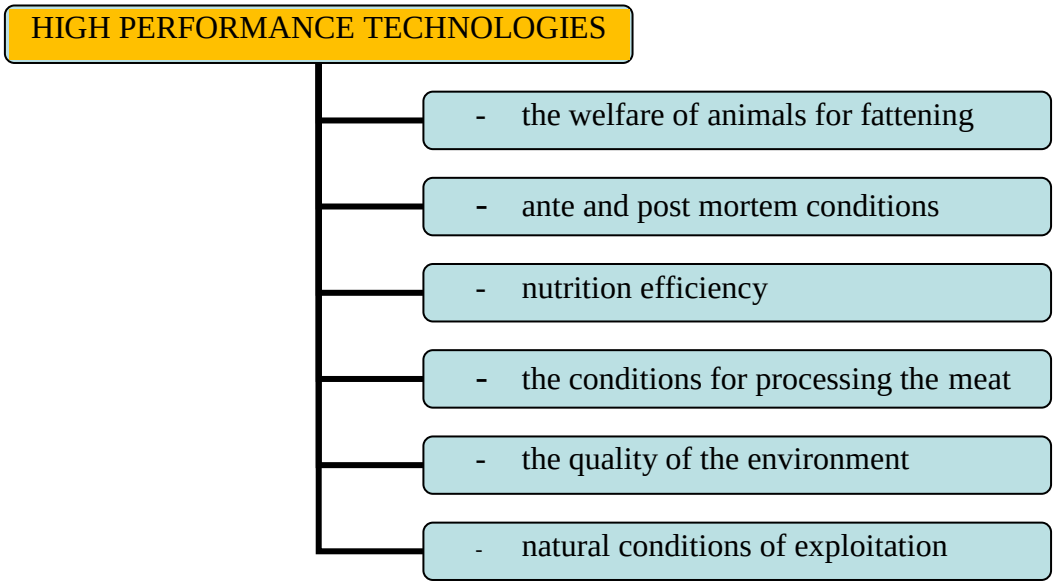

Figure 2. High performance technologies

All of these performant technologies proposed for implementation can help to increase the efficiency of cattle for fattening exploitation, high daily average gains, higher conversion feed ratios, and obtaining high quality meat.

Respecting transport conditions up to processing units, pre and post mortem activities, avoiding stress are obtained high-quality carcasses, without defects, with special organoleptic and physicochemical features, that meet the increasingly sophisticated demands consumers of agro-food products.

CONCLUSIONS

The best performances regarding the production of cattle meat are obtained by using meat breeds and hybrids with high genetic potential, balanced nutrition programs, healthy animals, control of nutrition factors, and efficient farm management.

The use of silos, in cattle food, of cereals depends by the possibilities of the farms to obtain them, the way of preparation and the ability of cattle to turn them into meat.

At the same composition of feed, feeding modification produces changes in induction ingestion, changes in the proportion of end products of digestion, altering ruminal residence time and altering the flow of rumen output to the other gastric compartments of the formed products.

Improving the production of bovine meat cannot be achieved under economic conditions but by improving management, implementing the best exploitation technologies, in addition to feed distribution technologies.

By improving breeding technologies, intensifying breeding, increases the production of meat, but especially qualitatively, meat with a high degree of marriage and good tenderness.

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