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EFFICIENT BEEF PRODUCTION TECHNOLOGY

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Abstract:
The article highlights the results of scientific and economic experience in studying the growth and development of cattle bulls and the effectiveness of beef production technology.
It has been established that the introduction of mineral and vitamin supplements into the diet of imported cattle bulls during cultivation improves the digestibility of nutrients in the feed eaten, increases the formation of meat productivity, daily live weight gain and the efficiency of beef production technology in farm conditions.

Key words:goby, imported livestock, top dressing, minerals, vitamin, nutrients, digestibility, meat productivity, live weight, average daily gain, efficiency.

Introduction

The intensification of the production of beef meat in the farm provides for an all-round increase in the productivity of livestock, obtaining the maximum amount of production per unit of feed. A necessary condition for the successful solution of this problem is the provision of animal feed. In strengthening the food base, it is necessary to follow the path of a significant expansion of the industrial production of combined feed enriched with high-protein supplements, vitamins, microelements, antibiotics and other means that increase the nutritional value of feed.The supply of animals in sufficient quantities with various chemical compounds and biostimulants will make it possible to more fully use the reserves to increase the productivity of animals, improve quality and reduce the cost of production.[2,4,7].
Among the factors that determine the usefulness of feeding calves of imported livestock during cultivation, the conditions of mineral and vitamin nutrition are essential. In connection with the expansion and refinement of ideas about the

requirements of bulls and the physiological role of biogenic mineral elements and vitamins, these issues have become of great importance.

An increase in meat productivity, on the one hand, and the use of products and waste products of technical processing as feed, on the other, has led to the fact that quite a part of the diets do not provide the needs of bulls for certain minerals and vitamins. As a result, it became necessary to use mineral and vitamin supplements and premixes. Their inclusion in diets is determined by the content of minerals and vitamins in the feed and the recommended norms for the needs of bulls in them.

At present, a significant amount of both experimental material and data on best practices in beef production has been accumulated. However, they were obtained in various natural and economic zones of the country, each of which has its own characteristics of animal husbandry.Therefore, in this paper, we consider the features of the mineral and vitamin nutrition of bulls when growing in the mainly sharply continental climate of the Ferghana Valley. The ways of covering the deficiency of minerals and vitamins in the diets of imported cattle bulls when grown on farms are considered. It is known that the functions of cells in the animal body are associated with minerals and vitamins. The importance of minerals and vitamins for cattle bulls during cultivation can be judged by the consequences that occur when they are insufficiently or excessively supplied to the body. These consequences can be very diverse, but the main ones are as follows:1) violation of the functional activity of organs and systems and the occurrence of alimentary diseases; 2) decrease in meat productivity and meat quality; 3) deterioration in the use of dietary nutrients and an increase in feed costs for the formation of meat productivity.Of course, all these phenomena can be the result of some kind of disease or insufficient content of energy and nutrients in the diet, but when they occur in healthy animals and with ample feeding, it is necessary to pay attention to the content of minerals and vitamins in the diets. [1,5,9,11,12,13,14].

Objects and methods of research

To study the mineral nutrition of bulls of imported black-and-white cattle when grown for meat, a scientific experiment was carried out in the farm “Shukurdavlat” of the Kushtepa district of the Fergana region. During the experiments, it was assumed that the supply of mineral substances would be complete if the deficiency was replenished to a certain level by mineral supplementation.

Research results and discussion.

Experience to establish the optimal concentration of minerals in the dry matter of the feed, a scientific and economic experiment was carried out in bulls at the age of 9 months.

For the experiment, 30 bulls were selected and, according to the principle of analogues, they were divided into three even groups. The experiment consisted of a preliminary period of 52 days, an experimental period of 75 days, and a 15-day final period. In the preliminary period, all bulls received a diet consisting of hay, silage, root crops, mixed fodder and haylage. In the experimental period, the feed was replaced with ground barley grain and cotton meal.

To create different levels of minerals in the diets of groups II and III, a complex mineral supplement was introduced, in which they are in%: table salt in group II - 40.9, defluorinated feed phosphate - 44.3, bicarbonate of soda - 6.09, disubstituted sodium phosphate - 9.1, magnesium oxide - 1.301, iron sulfate - 0.401, copper sulfate - 0.107, cobalt chloride - 0.014, potassium iodide - 0.005, respectively in group III - 20.009; 66.001; 7.895; 6.159; 1.007; 0.151; 0.041; 0.061; 0.008.

211 g of the mixture per head per day was introduced into the diet of bulls of the II experimental group, which contributed to an increase in the level of minerals in the diet to 6.21% in dry matter.

In the rations of the bulls of the III experimental group, 511 g of top dressing was introduced, which corresponded to 8.21% of minerals in the dry matter. Feeding was not introduced into the rations of the first experimental group, and the content of mineral substances was 4.89% of the dry matter. The content of individual macro-microelements (potassium, sodium, zinc, cobalt, copper, manganese) in the diets of II and III experimental groups was the same.The average daily gain in live weight in all groups at the beginning of the experiment was the same and amounted to 787-815 g. By the end of the experimental period, a regular decrease in productivity was noted in all groups, however, the most dramatic decrease was observed in bulls of the III experimental group (by 19.43% in relation to preliminary period). In group I bulls, productivity decreased by 16.11%, and in group II bulls, only by 7.01%.

It should be noted that in the II group of bull-calves that received a diet with a content of minerals in the diet in the amount of 6.21%, the cost of feed units per 1 kg of live weight gain was lower than in groups I and III. Feed payment in group II was 0.985

kg, while in groups I and III it was 0.792 and 0.889 kg, respectively, of the average daily gain in live weight per 1 kg of feed units.

Based on these studies, it can be concluded that feeding calves with diets containing 6.21% of minerals on a dry matter basis has a more favorable effect on meat productivity and feed payment than feeding diets containing 4.89 and 8.21% of mineral substances. substances.

The provision of calves grown for meat with minerals should be judged not only by their total influx in the diet, but also on the basis of a detailed study of feed for the content of calcium, phosphorus, potassium, manganese, copper, zinc, cobalt, iodine and other elements.

Conclusions

Summarizing the above, it can be noted that the regulation of mineral and vitamin nutrition is a necessary condition for the full feeding of bulls grown for meat and obtaining high meat productivity (at the age of 18 months 490 - 530 kg of live weight) with economical use of feed.

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