



PRODUCTIVITY AND METABOLISM IN CALVES OBTAINED FROM EXPERIMENTAL DRY COWS WITH DIFFERENT LEVELS

ПРОДУКТИВНІСТЬ І ОБМІН РЕЧОВИН У ТЕЛЯТ, ОТРИМАНИХ ВІД ПІДДОСЛІДНИХ СУХОСТІЙНИХ КОРІВ З РІЗНИМИ РІВНЯМИ ПРОБІОТИЧНОЇ ДОБВКИ «БІОМАГН»

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Annotation. It is established that higher viability of calves of the experimental groups markedly affected the dynamics of their live weight. The live weight of calves 2, 3, 4 and 5th experimental groups at birth was higher than in control by 1.5; 1.7; 2.4 and 1.8 kg, or 5.9; 6.6; 9.4 and 7.0%. According to the data, calves of the experimental groups in the first 30 days after birth increased live weight by 681-713 g, which is 32-64 g, or 4.9-9.8% more than in control. With the increase in age, the difference between the average daily growths of the live weight of the calves of the experimental and control groups decreased and in the second month of life was 4.4-7.6%, in the third-3.9-6.9, the fourth-3.5-4.6%. At the age of 4 to 6 months, the growth of calves of the experimental groups gradually decreased to the level of control, which is apparently due to the decrease in the prolonged effect of the feed additive "Biomagn". It can be noted that proving the level of feed additive "Biomagn" in the diet of dry cows to 7-13 g/ch/day contributes to increased viability and intensity of growth of their calves in the first 3 months after birth by 4.6-8.2%. On the basis of complex zootechnical and physiological-biochemical evaluation of the results of the experiment, we can conclude that the optimal dose on the biotic feed additive "Biomag" for dry cows is 11 g/goal/day.

Ключові слова: телята, раціон, кормова добавка, жива маса, сухостійні корови, природи, годівля

Introduction.

Obtaining a viable, functionally active offspring, and in subsequent and highly productive animals is one of the most important problems of production. The solution of this problem in ruminants is impossible without much attention to the processes of scar fermentation. The degree of use of feed, the level of synthesis of LZHK and microbial mass, which are very important components in providing the body with complete protein and energy[2].

Despite the fact that probiotics are often used as interchangeable with direct feeding microorganisms (DFM), there is a slight difference in their determination of



animal feeding. The US Food and Medicine Quality Management has identified DFM as feed products that are believed to be or are a natural source of viable microorganisms. More sidely, different definitions are used to describe probiotics [7].

Probiotic preparations are available in various forms, and their effectiveness sometimes differs depending on whether they are mono- or multi-strain. A new approach to using probiotics is to use a combination of probiotics strains. It is believed that this strategy has significantly affected the nutrition of animals, increased the benefits of health and created even a more favorable balance of intestinal metabolism, animal welfare and productivity than single -standing crops. They can be introduced in several ways, but the oral method is most common in animal husbandry [1].

Most importantly, they should be "safe for use". According to the current bacterial nomenclature, the International Code of Nomenclature should be used for the name or classification of new probiotic strains. Despite the fact that probiotics are considered a possible replacement of antibiotic growth stimulants, the mechanism of their action is excellent. The impact of probiotics is species -specific and may also depend on the physiological and immunological state of the animal, which is introduced [1,2].

Biomagn probiotic remedy is a kind of feed additive and is used to add a high content of fiber, corn, soybean to diet. It can withstand the process of feed granulation with a temperature of up to 85o C. It is mainly intended for the breakdown of anti -nutrient necrochmaid polysaccharides, starch. It is used to restore the intestinal microflora for antibiotic therapy, as well as as a detoxint. Due to additional release of nutrients can be achieved improving feed conversion [5, 6].

Результати досліджень.

Since the level of completeness and balance of feeding of dry cows are directed, on the one hand, to ensure their high in further milk, and on the other hand - to increase the vitality obtained from them, in the experiment, along with the above issues, the impact of different levels [3].

Dry cows should be constantly in a state of medium fatness, from which one hundred percent depends on both indicators of reproductive capacity and subsequent dairy productivity of animals. These indicators adversely affect both low and excessive



feed consumption. Therefore, the basis of the first scientific and economic experiment was the task of optimizing the feeding process by using the diet of dry cows of the feed additive "Biomagn" in the diet of dry cows. [1].

During the experiment, the actual feed consumption was taken into account by dry cows, once in a decade for two adjacent days.

The scientific and economic experiment was conducted in 5 groups of dry analogues (10 heads each), of which 1 control and four (2, 3, 4 and 5) research groups were allocated. Feeding of cows of all subject groups was carried out according to the same diets. The difference was that the animals of the control group consumed the feed of the main diet, and in the diets of cows 2, 3, 4 and 5th research groups were introduced in addition to the biotic benefits "Biomagn" 7; 9; 11 and 13 g/goal/day [4].

As a result, the study of the level of probiotic feed additives did not adversely affect the consumption of feed by subject animals.

The higher viability of calves of the experimental groups markedly affected the dynamics of their live weight. Moreover, the difference in live weight was noted immediately on the birthday of calves. As mentioned, the live weight of calves 2, 3, 4 and 5th research groups at birth was higher than in control by 1.5; 1.7; 2.4 and 1.8 kg, or 5.9; 6.6; 9.4 and 7.0%.

In the monthly age, the calves of the experimental groups by live weight were ahead of the control peers by 2.5-4.4 kg, or 5.6-9.8%, in 2-Miss-by 3.4-5.9 kg, or 5.2-9.0%, in 3-month-by 4.2-7.3 kg, or 4,9-8 4.0-7.8% and at 6 months of age-by 4.1-8.5 kg, or 3.0-6.2%.

According to the data, calves of the experimental groups in the first 30 days after birth increased live weight by 681-713 g, which is 32-64 g, or 4.9-9.8% more than in control.

With the increase in age, the difference between the average daily growths of the live weight of the calves of the experimental and control groups decreased and in the second month of life was 4.4-7.6%, in the third-3.9-6.9, the fourth-3.5-4.6%.



At the age of 4 to 6 months, the growth of calves of the experimental groups gradually decreased to the level of control, which is apparently due to the decrease in the prolonged effect of the feed additive "Biomagn".

Conclusions.

1. In general, it can be noted that proving the level of feed additive "Biomagn" in the diet of dry cows up to 7-13 g/goal/day contributes to increased viability and intensity of growth of their calves in the first 3 months after birth by 4.6-8.2%.

2. Therefore, on the basis of a complex zootechnical and physiological-biochemical evaluation of the results of the experiment, we can conclude that the optimal dose on the biotic feed additive "Biomag" for dry cows is 11 g/goal/day.

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Анотація. Встановлено, що більш висока життєздатність телят дослідних груп помітно позначилася на динаміці їх живої маси. жива маса телят 2, 3, 4 і 5-ї дослідних груп при народженні була вищою порівняно з контролем відповідно на 1,5; 1,7; 2,4 і 1,8 кг, або 5,9; 6,6; 9,4 і 7,0%. Як свідчать дані, телята дослідних груп у перші 30 днів після народження щодоби збільшували живу масу на 681-713 г, що на 32-64 г, або 4,9-9,8% більше, ніж у контролі. Із збільшенням віку різниця між середньодобовими приростами живої маси телят дослідних і контрольної груп зменшувалася і уже на другому місяці життя становила 4,4-7,6%, на третьому – 3,9-6,9, четвертому – 3,5-4,6%. У віці від 4-х до 6-ти місяців інтенсивність росту телят дослідних груп поступово зменшувалася до рівня контролю, що, очевидно, пов'язано із зниженням пролонгуючої дії кормової добавки «Біомагн». Можна відмітити, що доведення рівня кормової добавки «Біомагн» в раціоні сухостійних корів до 7-13 г/гол/добу сприяє підвищенню життєздатності та інтенсивності росту їх телят у перші 3 міс після народження на 4,6-8,2%. На основі комплексної зоотехнічної і фізіолого-біохімічної оцінки результатів експерименту можна зробити висновок про те, що оптимальною дозою про біотичної кормової добавки «Біомагн» для сухостійних корів є 11 г/гол/добу.

Ключові слова: телята, раціон, кормова добавка, жива маса, сухостійні корови, прирости, годівля