

перечисленных выше гельминтов и полное соответствие их биологическим условиям, имеющимся в Республике Беларусь.

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MORPHO-BIOCHEMICAL INDICATORS OF BLOOD OF CATTLE BY FEEDING MAIZE-SAPROPEL FEED

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The introduction of unconventional protein sources into the diets makes it possible to provide the body of animals with nonessential and irreplaceable amino acids necessary for interrelation of metabolism and effective homeostasis for their growth and development. The expediency of feeding dry gluten as an unconventional source of protein to over-repairing bulls during the fattening period has been shown. The validity of the use of gluten in the diets of polygastric animals has been proven by a number of blood parameters characterizing protein, carbohydrate and lipid metabolism [1-3, 6].

Sapropels are being studied to improve the digestibility and biological value of corn by-products. This is proved by the fact that they are a natural natural source of mineral and biologically active substances. The use of these feeds normalizes cicatricial digestion, secretory and detoxification functions of the liver, hematopoiesis, and lymph formation. The general strengthening effect of sapropel and feed based on them makes it possible to use them for the prenosological prevention of the consequences of poly-stress effects in order to avoid the development of acute and chronic diseases [4, 5].

Purpose of the study: to assess the effectiveness of using different recipes for maize-sapropel feed by morpho-biochemical blood parameters in 4 groups of calves: 1 – control; Group 2 – raw maize feed; Group 3 maize-sapropel feed -15 % and group 4-20 % sapropel. In the diets of young cattle, maize-sapropel feed was introduced instead of the standard compound feed KR-3 and was 15 % in terms of nutritional value. Scientific and economic experiments were carried out in the conditions of the «Proress-Vertelishki» of the Grodno region.

In the blood and serum, biochemical parameters were determined using a MEDONICCA-620 hematology analyzer and a DIALABAAnalyzer20010 D analyzer. Blood samples for biochemical studies were taken from the jugular vein 2.5-3 hours after the morning feeding from 4 heads from each group. The morpho-biochemical composition of the blood of the control and experimental gobies corresponded to the physiological norm for the given species, age and productivity of animals. In all experimental groups the number of erythrocytes increased by an average of 0,3 % in the second, by 0,5 % in the third, by 0,7 % in the fourth group; hemoglobin on average by 1,0-4,1 %, total protein by 1,4-4,2 %, carotene 1,0-4,4 %), calcium 7,6-8,4 % ($P < 0,05$), phosphorus by 3,7-5,9 %, $P < 0,05$ with significant differences in the alkaline reserve indicator by 8,3-13,7 % ($P < 0,001$). When studying the eatability of the feed ration by animals of the sub-experimental groups, no significant differences were found. Remains of feed in the troughs were minimal – on average about 2-3 %, and in the second experimental group, where raw corn feed was used, up to 4-5 % of the mass of feed ration. determining the effect of different levels of corn-sapropel feed intake on the health and metabolism of the experimental livestock. The introduction of corn-sapropel feed in different doses, instead of the standard compound feed, had a positive effect on the biochemical composition of the blood of the animals of the experimental groups and did not have a negative effect on the health and metabolism of the gobies.

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