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RATIONING LIPID IN POWER QUAIL MEAT PRODUCTION

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The article presents the results of an experimental study of optimal lipid levels and sources in compound feed for quail meat. Found that the use in feeding quail meat mixed feed with the level of fat 5% with the addition of soybean oil improves live weight by 3.8%, average daily gain - 3.6%, and the increase in weight of the pectoral muscles - 12, 1%, muscles pelvic limb - by 5.5%. The principles of lipid nutrition quail meat with the level of crude oil and lipid sources providing a mixed feed using soya oil and fat content of 5%.

Quail, the level of fat, a source of lipids, body weight, carcass yield, carcass yield

Today breeding quail in Ukraine is characterized by intensive development. However, despite the prospects of development, the industry has production problems, including lack of special feeding programs that would take into account the peculiarities of rock quail. The absence of such programs increases the number of errors in the full feeding birds, which reduces the efficiency of nutrients and incomplete realization of the genetic potential productivity. Thus, the development of norms lipid nutrition quail meat production performance is in the case of topical issues.

The use of various origins fat feeding stimulates the growth of young, egg productivity, improved ability reproducible, food and biological value of the resulting product. The positive effect of the use of fat supplements due to their high energy value and diverse effects on metabolism in animals. In particular, in addition to the diet of poultry fat supplementation appears action to preserve nitrogen, increased use of amino acids for protein synthesis, absorption of fat-soluble vitamins. It is proved that metabolic energy fed birds lipids used more efficiently than metabolic energy of carbohydrates and protein.

Thus, despite the fact that fat quite a long time used in feeding poultry, and in the literature there are many works on their influence, a number of questions about their management in feeding quail meat, highlighted enough.

The purpose of research - to develop the concept of lipid nutrition quail meat direction of productivity.

The material for scientific and economic experiments were Pharaoh quail species.

Experiments were carried out by groups analogs. Used daily poultry age at which the principle of analogues were formed in the first series of experimental studies three groups: control and experimental 2, the second - four: control and 3 research. In forming groups into account age, sex and live weight of the animals.

Experiment on calves quail meat direction of productivity lasted 49 days and was divided by age into 2 sub-periods: 1-21 and 22-49 days each.

Subjects were fed poultry placer complete feed, distributing twice a day (morning and evening), while accounting for their remains.

The level of crude oil in feed for poultry regulated change in the number of individual components and feed their mass fraction using a combination of mathematical optimization methods of calculation using WinMix 3.0.

When feeding of young quail feed containing 3 and 7% of the live weight of fat in 42 days age was lower at 13.3 ($p < 0.05$) and 15.2 g ($p < 0.01$) or 4, 9 and 5.6% compared to the control group of birds. While the live weight of poultry 3rd group was lower than 1.9 g or 0.7%, compared with poultry group 2.

Thus, the highest body weight in 14-49-day age characterized by young control group, which were fed feed containing 5% fat.

As a result of controlling slaughter quail was found that changing the terms of their feeding by raising or lowering crude fat in the diets affects the yield of products of slaughter. Quails control group of 35, 42 and 49-day age all indicators slaughter young prevailed 2 and 3rd groups.

The second series of studies were focused on the optimal source of lipids in the diet of quail. For this purpose, complete feed that the contents of essential

nutrients and energy consistent with the standards established for this type of bird. The chemical composition of the feed, which was used for feeding quail meat subjects was identical and differed only source of lipids.

If the day-age young control and experimental groups for body weight was similar figures, in 35-, 42- and 49- day-it is not equally varied and depended on the composition of feed. In particular, the highest body weight at this age different young 4th group that ate feed with soybean oil. He prevailed counterparts in the control group was 8.7 g; 13.8 and 6.3 g ($p < 0.05$).

The results of experimental slaughter cattle have shown that feeding of poultry animal feed with soy oil in all periods of cultivation helped increase their ante mass by 3.2, 5.2 and 1.5%, and carcass weight by 3.0, 4.5 and 1.2% compared to control ($p < 0.05$)

Based on the research, the principles of lipid nutrition quail with the level and sources of lipids. The use of animal feed in feeding quail meat direction of productivity levels of fat and 5% addition of soybean oil helps to improve productivity and quality of meat products.

The use of a feeding quail meat direction of productivity 1-49 days of age animal feed containing 5% crude fat increases the live weight of 5.6 - 6.0%, the average growth rate - 5.8%, carcass weight - 6, 7-8,0%, increases the weight of edible parts: the pectoral muscles - in 8,2-12,4%, pelvic limb - to 11,5-12,3%.

Consumption of meat quails trend productivity of animal feed with the addition of soybean oil in the general level of fat in the fodder contributes to 5% of the live weight of 3.8%, the average growth rate - 3.6%, and increased breast muscle mass - 12, 1% of the muscles of the pelvic limb - by 5.5%.

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