

CHEMICAL COMPOSITION OF FEEDS FOR POULTRY

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ABSTRACT

This article analyzes statistical data on grain and oilseed crops grown in Karakalpakstan. According to statistical results, in the last 5 years, wheat, corn, white sorghum, barley, tarik, and rice have been grown from grain crops grown in Karakalpakstan, and sunflower, flax, sesame, safflower, and peanut have been grown from oilseed crops. The chemical composition and nutritional value of each plant was studied. It is worth noting that oilseed crops have a higher protein, fiber, and fat content, while grain crops have a higher carbohydrate content. The highest energy metabolism value was found for sesame (720 kcal), and the lowest for sunflower meal (210 kcal).

Keywords. Broiler chickens contain protein, fat, carbohydrates, fiber, ash, cereals and oilseeds

INTRODUCTION

In most countries of the world, poultry farming occupies a leading position among other sectors of agriculture, providing the population with high-quality dietary food products, as well as raw materials for processing, and is considered the most productive and profitable sector. Currently, the transition to an intensive basis of production is also taking place rapidly in poultry farming. In particular, the large poultry farms that have been reorganized are fully industrial-type enterprises.

In the development of the livestock sector in our country, it plays an important role in providing the population with high-quality meat, milk and other food products, as well as in increasing the employment of our citizens and increasing their incomes. In our country, one of the most important tasks is to satisfy the population's demand for livestock products with meat, milk, eggs and other products in the domestic market, as well as to increase production volumes and ensure the stability of their prices.

Poultry network, ensuring the repeated production of poultry, fulfillment of contractual tasks on product production, and specialized in egg production, egg-meat production, and breeder poultry production. Poultry farms in the direction of egg production are organized only in chicken farms. Chicken eggs are tasty for food, economically efficient, and widely available in regions with a convenient food base for raising chickens. Egg-meat farms are mainly typical of poultry farms. Farms in this direction produce meat and eggs. The main direction of breeding work in poultry farming is the production of eggs and duck, goose and turkey chicks from incubation as a commodity product for incubators.

Today, poultry farms occupy a high share in the agricultural market, which is due to the high intensity of growth in poultry farming and the rapid turnover of funds in this sector. It is this

sector that requires the search for alternative methods of reducing the cost of production by optimizing feeding, simplifying the management of the production process and minimizing personnel costs. As of January 1, 2023, the number of poultry in the Republic of Karakalpakstan reached 5,196.9 thousand heads. In 2020 and 2021, the number of poultry amounted to 4,743.2 and 5,055.4 thousand heads. As of January 1, 2023, 14.8 percent of the total number of poultry in Uzbekistan belonged to farms, 26.3 percent to dehkans (personal assistant) farms, and 58.9 percent to organizations engaged in agricultural activities. Compared to the corresponding period of 2017 (these figures were 11.5; 61.9 and 26.6%), poultry in all categories of farms increased by 20.0 million heads (28%). Egg and meat production are also growing from year to year. Egg production in Karakalpakstan amounted to 387 million by 2022. Taking into account the last 10 years, egg production has increased by 400%, from 96.8 million to 386.9 million. Meat production in Karakalpakstan reached its highest level in 2017, reaching 8.9 thousand tons. In subsequent years, by 2019, meat production decreased by 2 times to 4.1 thousand tons. The annual increase in the number of poultry increases the need for feed, which in 2018 amounted to 20,195 tons. It is also worth noting that in 2018 there were only 9 enterprises registered in Uzbekistan, now their number has reached 32. However, in Karakalpakstan there are no enterprises producing feed for poultry.

Today, the production of high-quality feed from the required range of resources is one of the most important factors in realizing the genetic potential of highly productive breeds of poultry in the egg and meat directions.

Since 80-85% of poultry feed is made up of cereals, great attention is paid to its chemical composition. For this reason, the general chemical composition (moisture, protein, fat, fiber, nitrogen-free substances, ash content) of cereals is studied. Based on statistical data, the general chemical composition of local cereals (corn, wheat, white sorghum, barley, tarik, rice, sunflower meal) growing in Karakalpakstan was studied.

As is known, the growth rate of an animal depends on nutrition and the degree of saturation of the diet with nutrients. Feed used at home does not always satisfy the body's need for biologically active substances, therefore, various biologically active additives (feed additives) are widely used in world practice. At the same time, the effectiveness of the use of feed additives in our country has not yet been well studied, given the high cost of feed additives available on the market.

In direct proportion to this situation, there has been a tendency to increase the number of farms of all categories producing agricultural products. That is, while farms have increased by 113.6%, 115.7%, and 102.8% in the last 3 years, Dekhkan (personal assistant) has increased by 103.3%, 103.3%, and 103.5%. We can see that agricultural organizations have increased by 116.7%, 158.2% and 116.2%, respectively.

Today, in the livestock sector of our republic, the most widely grown grain crops in the Republic of Karakalpakstan are wheat, corn, barley, and rice, with white sorghum and tarik being included in state statistics in the last five years. The production of grain crops has different indicators every year. The annual indicators of grain crops grown are not much different from previous years, while the growth in the poultry sector is significant. This situation leads to a decrease in the production of animal feed and an increase in imports. In addition, sunflower,

flaxseed, sesame, safflower, and peanuts are grown from oilseed technical crops in Karakalpakstan. According to statistical results, only sunflower and sesame are grown annually from oilseed crops, but not in sufficient quantities to be used as feed for farm animals and poultry. The main part of poultry feed, 50-60%, is wheat and corn, 20-25% is soybean and sunflower meal, and the remaining 20-25% is various additives, vitamins, and minerals.

1-Table Biochemical composition of local cereal plants

Indicator name	wheat	Corn	White corn	Barley	Millet	Rice
Dry matter	86.00	86.00	84.7	86.0	85.4	86.0
Protein content	11.8	10.3	11.9	10.3	4.14	7.5
Ash content	1.7	1.2	2.9	2.4	2.1	3.9
Klechatka	3.9	2.2	11.3	5.6	10.24	9.7
Fat content	2.2	4.9	4.6	2.4	1.57	2.6
Non-nitrogenous substances	66.4	67.4	54	65.3	67.35	62.3
Calcium mg/100g	54	34	46	93	62	40
Phosphorus mg/100g	370	301	325	353	361	328
EA kcal/100g	304	365	329	288	298	303

CONCLUSION

According to statistical results, in the last 5 years, wheat, corn, white sorghum, barley, tarik, and rice have been grown from grain crops in Karakalpakstan, and sunflower, flax, sesame, safflower, and peanut have been grown from oil crops. The chemical composition and nutritional value of local forage grain and oil crops were studied. It was found that oil crops have a higher protein, fiber, and fat content, while grain crops have a higher carbohydrate content. It was found that sesame has the highest energy metabolism value (720 kcal), and sunflower meal has the lowest (210 kcal).

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