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**ETHOLOGICAL FUNDAMENTALS OF INCREASING THE  
 PRODUCTIVITY OF KARAKALPAK SUR KARAKOL SHEEPS IN  
 TAKHTAKOPIR DISTRICT OF THE NEW NORTHERN TERRITORY OF  
 THE REPUBLIC OF KARAKALPAKSTAN**

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**ABSTRACT**

*Ecological features, biological features of the Karakalpak sur karakul sheep bred in the Takhtakupir region of the new northern regions, the influence of these features on the formation and manifestation of productivity in sheep and their offspring, ways of increasing productivity are presented.*

**KEYWORDS:** *Ethological Features, Biological Characteristics, Generations, Productivity of Karakul Sheep.*

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**INTRODUCTION**

One of the most important sectors of the republic's livestock breeding is karakul breeding, which is karakul sheep are adapted to the use of about 20.0 mln. Hectares desert pastures characterized by severe extreme conditions. The main product of karakul sheep- karakul skins are unparalleled in the world with their color, variety and attractiveness of different flowers.

The noted valuable properties of karakul sheep have led to their spread and fertilization in more than 40 countries around the world. Among these countries, Uzbekistan, Kazakhstan, Turkmenistan, Tajikistan, South Africa, Namibia and Afghanistan are developed countries in karakul breeding fields.

In the last 10-15 years, attention has been paid to the study of the impact of their ethological characteristics on the formation of productivity characteristics in karakul sheep.

This is due to the growing interest in the study of the behavior of farm animals, ie their ethology.

Research in this area is directly related to the development of advanced technologies for feeding, care, selection and breeding of animals.

It is known that animals differ in behavior, respond to different levels of environmental influences. In this sense, from ancient times, people have distinguished them by their behavior and, accordingly, made effective use of their productivity.

The President and the Government of the Republic of Uzbekistan, like all sectors of the economy, pay great attention to the development of the karakul industry. In the Action Strategy for the five priority areas of development of the Republic for 2017-2021 states a special attention is paid to "... consistent development of agricultural production, further strengthening food security in the country, increasing the production of environmentally friendly products, rapid development of animal husbandry, to meet the growing demand of the population for livestock products."

**As the object of research** were selected Karakalpak sur karakul sheep, their offspring, karakul skins, wool, meat and dairy products.

**Research subjects.** The subject of research is the study of the ethological and related characteristics of Karakalpak Sur Karakul sheep in the new northern region - Takhtakupir district.

**The purpose of the study** is to determine the ways to increase the productivity of Karakalpak Sur Karakul sheep bred in Takhtakupir district of the new northern region on the basis of ethological characteristics, biological properties, the impact of these characteristics on the formation and manifestation of productivity in sheep and their offspring.

**Research methods.** The barra skin performance of the experimental sheep was assessed on the basis of the Guidelines for Breeding and Evaluation of Lambs in Karakul (S. Yu. Yusupov et al., 2015). Mathematical data were processed mathematically according to the manual "Manual for biometrics for zootechnics" (N. A. Plokhinsky 1969) in the methods of variational statistics. [1.2.]

Agricultural animal breeds differ from each other by their unique biological characteristics. The main importance of biological properties is reflected in the adaptation of animals to the conditions of fertilization, in which they show maximum productivity.

In this context, it is important to determine the biological characteristics of animals in order to study their adaptability and maximum productivity.

It is known that karakul sheep are a breed of sheep adapted for fertilization in desert pastures and are fed from pastures almost all year round.

Nutrition, water scarcity, acute continental weather conditions (hot up to 500 C, cold up to 20-250 C) of desert conditions formed specific biological features as a complex of anatomical-physiological and external signs in karakul sheep.

It is known from literary sources that all farm animals, including karakul sheep, have biological indicators of internal and external nature, the last group includes live weight, external dimensions, body composition indices, constitution types, viability and other indicators.

Based on the above, research has been conducted to study some biological indicators of sheep of different ethological types and their offspring.

Live weight. Live weight of Karakul sheep is one of the indicators determining their physiological condition, growth, development, obesity rate, size, size and productivity. This figure depends on many factors, including gender, age, breed, type of constitution, feeding and fertilization conditions, and more.

Certain studies have found that live weight also depends on the ethological types of animals. Insufficient research has been done in this direction in Karakul sheep.

Taking into account the above, in the course of the study, the dynamics of changes in the live weight indicator over the main seasons in sheep belonging to different ethological types in the experiment were studied. The data obtained were summarized as follows.

## Results

From the data, it can be seen that in all seasons, the predominance of ethological type 1 sheep in terms of live weight. The live weight of type 1 sheep after calving was  $36.49 \pm 0.42$  kg, which is 1.36 kg ( $R < 0.05$ ) more than the second type and 3.73 kg ( $R < 0$ ) compared to the third type. (0.001).

The size of this indicator at the time of separation of lambs from sheep was  $39.72 \pm 0.48$  kg in type 1 ethology,  $38.42 \pm 0.47$  kg in type 2, and  $36.14 \pm 0.49$  kg in type 3, the advantage of the first type was 1.3 kg ( $R < 0.05$ ) compared to the second type and 3.58 kg ( $R < 0.001$ ) compared to the third type. It was noted that the live weight of sheep increased further by the time of calving, as well as sheep of ethological type 1 had a higher statistically reliable ( $R < 0.05$ ; 0.001) live weight than sheep of the second and third types.

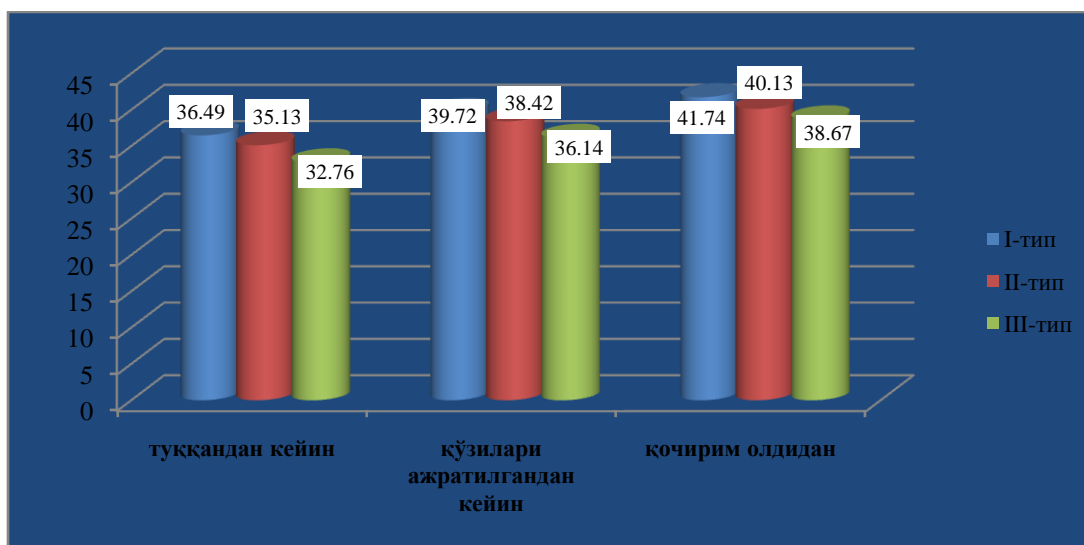


Figure 1. Variation in live weight of sheep throughout the seasons

**Practical suggestions for production**

The fact that the main means of efficient use of desert areas is the karakul industry, which requires increasing its efficiency as much as possible. In this regard, in order to increase the productivity of karakul sheep and their offspring, it is recommended to use the biological properties of Karakalpak Sur Karakul sheep of different ethological types identified in my research, effective ways to use the potential of sheep belonging to different ethnological types.

**CONCLUSION**

It should be noted that from the data which given in the table, sheep of the second ethological type were also characterized by statistically reliable ( $R < 0.05$ ) high live weight compared to sheep belonging to the third ethological type.

Differences and statistically reliable advantages, which are noted, can be explained by the different feeding activity of different types of sheep.

**REFERENCES**

1. Yusupov S. and others. A guide to breeding and evaluation of lambs in karakul. - Tashkent, 2015. - p.31.
2. Ploxinskiy N.A. Guidance on biometrics for zootechnics. Moscow. 1969. - p.256.