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## Researches of reproductive features and viability of grey karakul sheep in the conditions of Karakalpak

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### Abstract

Karakalpakstan is one of the largest and perspective regions of pasturable animal industries of Uzbekistan. Here there are big areas of not mastered pastures which should be mastered in immediate prospects (Ustyrt Plateau, the drained bottom of Aral Sea).

In article questions karakul sheep breeding are considered. These animals can adapt to severe natural-climatic conditions and give high-grade production.

The astrakhan fur made in Karakalpakstan, basically, is characterized by nobleness and a variety of commodity properties that is defined new sort of karakul sheep and intra pedigree astrakhan variety inherent in them. This difference in many respects promotes that it uses a steady consumer demand and commercial success in the -fur market.

Karakul sheep of black and partially severe coloring long since successfully get divorced in a southern part of Karakalpakstan. Last year's steps on expansion of a zone of cultivation karakul sheep on the north, on Ustyrt Plateau become, try to expand and color assortment of production at the expense of cultivation karakul sheep of grey coloring on which last years the raised demand of the international market is marked. In this connection, studying of productive and some biological features grey karakul sheep in these zones of cultivation, is the actual problem having the big practical and economic value.

**Keywords:** Karakul sheep, viability, rams-manufacturers, grey and blue colouring, morphological indicators of blood

### Introduction

The karakul sheep as well as any other pet, is a product of an inhabitancy and has the specific conditions of existence with which it is historically connected. During centuries-old selection and selection in these conditions their biological feature and productive properties was formed.

A number of authors consider, that between karakul sheep breeds of different colourings the difference, both in display constitutional features, and in their efficiency and reproductive features [3 is marked; 136., 10; 163-168;]. So they consider, that black sheep on colouring constitutional are stronger, and animal grey colouring, owing to the biological features, are more exacting to conditions of cultivation and are less viable, grey in comparison with black some also is peculiar to sheep constitutional weakening, in communication, with what at their cultivation special, more favorable conditions.

In the conditions of Karakalpakstan such researches were not spent, available only works [4; 22.; 9; 74-76.; 6; 94-98.; 7; 19-22;] on studying of is productive-biological features of sheep Karakalpak grey in the conditions of southern region.

### Reproductive features and viability of sheep

Karakul, being one of the basic branches of pasturable animal industries of Karakalpakstan, is recognised to play the important role in development of extensive deserted territories of Ustyrt Plateau and the drained bottom of Aral Sea. These territories characterised by an is sharp-continental climate and easily damaged vegetative cover, it is possible to use successfully only at the expense of rational receptions of operation of deserted pastures by animals well adapted for these severe conditions.

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reproductive features is marked. So they consider, that black sheep on colouring constitutional are strong, and animal grey colouring, owing to the biological features, are more exacting to conditions of development and are less viable. Grey in comparison with black some also is peculiar to sheep constitutional weakening in this connection at their cultivation special, more favorable conditions.

Reproductive ability karakul sheep is closely connected with their fruitfulness and viability. Level of reproduction of herd in karakul sheep breeding for today, unfortunately, mismatches the increased requirements of branch. Last years the number increase karakul sheep in economy of Karakalpakstan goes slowly, and in separate years its some reduction took place also.

There upon before us there was a task in view to study reproductive functions and viability karakul sheep of grey and black colourings in comparative aspect.

Considering an urgency of the given question, we had been studied fruitfulness and viability of sheep. For revealing of force of display of these signs at sheep, it has been generated two flocks of sheep of black colouring of 2,5-4,5 years, they have been inseminated by a seed of grey rams-manufacturers of blue and silvery colouring.

Sheep it is artificial birth twice in one hunting by a seed of the same rams-manufacturers.

During the period before insemination and pregnancy ewes were in identical conditions of feeding and the maintenance. After a birth lambs as were in identical conditions.

During the period lambs from 1167 twice, in one cycle of the inseminated sheep, in planned terms born 1019 uterus, that is borned has made 87,3 %. 1049 lambs that makes 102,9 percent have been thus received.

Thus, as burned, and fruitfulness indicators karakul sheep quite corresponded middle to standard indicators on breed [5; 311;], etc.

From the received 1049 goals of an issue of 518 goals (49,4 %) there were grey and 531 goals (50,6 %) - black. More low in table 3.9.1 data on their viability are cited.

**Table 1:** Viability of karakul

colouring	sex	age									
		born		fall		year		1,5 ages		2,5 ages	
		heads	%	heads	%	heads	%	heads	%	heads	%
Grey	Young ewe	260	100	253	97,3	250	96,1	243	93,4	236	90,1
	Sheep	258	100	250	96,9	-	-	-	-	-	-
Black	Young ewe	262	100	257	98,1	255	97,3	249	95,0	243	92,7
	Sheep	269	100	262	97,4	-	-	-	-	-	-

On all groups of lambs from a birth to differ from mothers the greatest percent of a case on the various reasons was observed, thus among lambs of grey colouring it was a little above, than among black. The similar difference was marked and at other age.

As a whole for 2,5 years the withdrawal among grey lambs has made 9,9 percent whereas on group of black lambs it was equal to 7,3 percent.

Thus, results of experience have shown, that both fruitfulness and viability karakul sheep in the conditions of Karakalpakstan corresponds middle to standard indicators on breed, thus these indicators on group of black sheep were a little above, than at grey, that confirms representation about their some constitutional weakening.

One of the important exponents of display of vital signs is character of morphology of blood karakul sheep. Researches

[1; 250.; 2; 38.; 10; 163-168;], etc. distinctions in a picture of blood at karakul sheep depending on age, constitution type are established. Considering, that pastbishchno-climatic conditions zones of Aral sea of Karakalpakstan differ from a traditional zone of their cultivation, before us there was a task in view rather to study morphological features of blood in connection with distinction in colouring, the constitution and age of animals on concentration of red and white blood, and definition of white blood was supplemented with disclosing blood formulas.

Researches were spent according to the standard methods. Blood for this purpose undertook from blood veins. The analysis of morphological indicators of blood can be begun with the analysis of these indicators at lambs. These data are presented in table 3.9.2. Considering them it is possible to notice at once, that on concentration of red blood, that is

erythrocyte lambs of black colouring, a little bit more low these indicators at grey lambs more primary look, that is respiratory functions of blood at them are a little lowered. If to consider concentration of red blood at individuals of different type of the constitution lambs of the rough constitution more favourably look. At them the maximum concentration of red blood is marked.

The minimum concentration is observed in blood of lambs of the gentle constitution. The intermediate place is occupied by lambs of the strong constitution. Hence, various respiratory function of blood at the lambs differing as the constitution. Most intensively this function is inherent in lambs of the rough constitution. Down of this function it is shown at lambs of grey colouring and the gentle constitution. If to pass to consideration of white blood it is possible to note a little bit other position. On concentration of white blood, that is leukocytes lambs of black colouring most favourably look. If to consider, that concentration of leukocytes defines level of natural resistance of an organism of animals it is possible to conclude, that level of this nature of karakul lambs of black colouring a little above, than at the grey.

In it, by the way, directly specifies that high relative density basocyte, lymphoid and eosinophil in white blood which at them was marked. If to pass to distinctions in white blood depending on constitution type it is absolutely clear, that as the constitution individuals of the strong constitution most favourably look, they are followed by individuals rough and close a number of the individual of the gentle constitution.

Let's consider morphological indicators of blood at adult sheep, and during different seasons of year. These indicators are presented in tables 3.9.3 and 3.9.4. First of all, we will consider these indicators at a uterus during an autumn season when they are in a single condition and do not undergo any physiological loadings connected with pregnancy and a lactation of milk for lambs. From the analysis of autumn indicators of morphology of blood of sheep follows, that they clearly differ depending on colouring and constitution type, and this difference in many respects repeats those distinctions which have been revealed at lambs. On concentration of red blood grey sheep though and it is not considerable, nevertheless surpassed black, that is with the years at grey sheep intensity of respiratory function of blood was more clearly shown. As to distinctions in concentration of red blood at individuals of the different constitution they mainly were in favour of animals of black colouring of the strong constitution, and at grey sheep in favour of the gentle constitution. The raised concentration of red blood at grey, and among them at individuals of the gentle constitution testifies that colour karakul the raised respiratory function of blood is peculiar to sheep and first of all their gentle representatives. Without it the specified sheep in essence coddled animals, could not be vital enough to remain at cultivation.

Finishing speech about red blood it is possible to pay attention to concentration platelet grey sheep. They it is ready above, than at black animals. It means, that the intensification of respiratory function of blood at grey sheep does not conduct to its considerable permeability through blood vessels. Excessive permeability is warned by the raised coagulability of blood for the account platelet.

Passing to the analysis of white blood, it is necessary to notice, that unlike lambs its concentration at adult sheep considerably above. Increase of concentration of white

blood means with the years age increase of level of natural resistance of an organism that is usually peculiar to all kinds and breeds of agricultural animals and all representatives of fauna. In this plan karakul sheep are allocated with nothing. Their adult individuals more natural, than young growth. Black sheep surpassed in concentration of white blood grey a little, that confirms opinion on higher vitality of black sheep in comparison with grey. Passing to seasonal changes of red and white blood it is possible to tell, that unlike autumn during a spring season concentration erythrocyte and leukocytes in blood karakul sheep considerably decreases at obvious increase of concentration platelet. Among many reasons of this phenomenon it is necessary to note, first of all those consequences which were taken out by animals during wintering. It is possible to carry pauperisation of an organism by vitamins, enzymes, microcells, sharp decrease in fatness, immunity recession to them etc. From wintering karakul sheep leave usually weakened and emaciated. A uterus besides become to home pregnancy also gives rise to lambs then begin intensively qualities. Here this condition also was expressed in spring indicators of morphology of blood. These indicators are in the best way shown at black sheep on colouring on red and partly white blood.

Thus, results of the spent researches and supervision allow to conclude, that morphological structure of blood of sheep of different colourings, age and constitutional types in the conditions of northern zones of Karakalpakstan not equal, that testifies to different display of these vital signs animal in the given conditions. Animals of the strong constitution and black colouring look more preferable. It means, that for successful cultivation of grey sheep it is necessary to create, more the than best conditions of feeding and their maintenance, especially during the winter period and to select on cultivation of individuals of the strong constitution.

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