

AGRICULTURAL SCIENCES

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SELECTION AND BREEDING WORKS PERFORMED DURING THE CREATION OF NEW RABBIT BREEDS

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Abstract

During the creation of a new breed in rabbit breeding, selection and breeding works are carried out using various breeding methods. At this time, unrelated breeds are selected and crossed. During the creation of the desired breed, better quality traits are strengthened, improved and bred in purity.

The results of the research conducted in rabbit breeding show that the hereditary characteristics acquired by the newly created breeds of rabbits during breeding are strengthened and their breeding quality increases even more.

Keywords: crossbreeding, inbreeding, selection, improvement, rabbit breeding, breeding, precocity

Introduction

In order to satisfy the population's demand for meat in the Republic, there is a need to develop alternative fields in animal husbandry. In recent times, the number of entrepreneurs engaged in rabbit breeding, which is one of the alternative fields of animal husbandry, is increasing. Because rabbit farming is one of the promising and profitable areas of animal husbandry. In a short time, due to high productivity and early maturity, rabbit breeding can produce dietary meat, valuable fur raw materials and feathers can be obtained [1; 2; 3].

As for the intensity of growth, rabbits are much better than other animals in this regard. During the life cycle, rabbits can grow 10-12 times [4; 5; 6; 7].

We believe that the development of rabbit farming, which is considered one of the alternative fields in our republic, can help meet the population's demand for animal meat.

In order to develop this field in our republic and expand the scope of interest, research works were conducted in the direction of obtaining new types of rabbits

using different breeds of rabbits in the "Rabbit Breeding Farm" operating at the institute.

The purpose of the research work is to create a new type and breed of rabbits with a strong constitution, uniform color, and a meat tendency. At the same time, it is to study the biological economic characteristics of the newly purchased rabbit type and breed.

The task of the research work is to protect and strengthen the high productivity and breeding quality of the obtained puppies, to increase their number, to study their height and development.

In the conducted scientific research, rabbits were bred according to **V.A.Alexandrov's "Rabbit breeding" methodology (2001)**[8].

during the study was determined (table 1), the live mass growth of rabbits (table 2), the ability of rabbits to use feed efficiently (table 3), the percentage of survival (table 4), the economic efficiency of scientific research was calculated (**Kobolenko 2004**) [9] and biometric processing was carried out (**Plokhinsky 1970**) [10].

Table 1

Implications for the genetic basis of fertility

Indicators	Age			Inheritance, %		Productivity index, times	
	In the mother at 6 months	At 6 months old	6-month-old kittens	From mother	From father	From mother	From father
Live weight, gr	1170 ± 0.3	942.5 ± 0.5	1370 ± 1.7	85.4	14.6	1.17	1.45
Straight length of the body, cm	29.0 ± 0.5	32.0 ± 0.8	34.0	14.7	5.8	1.17	1.06
Chest width	6.0 ± 0.35	7.0 ± 0.38	8.0	25.0	12.5	1.33	1.14
My chest	21.0 ± 0.51	22.0 ± 0.53	24.0	12.5	8.3	1.14	1.09
The width of the back	7.0 ± 0.9	8.0 ± 1.3	9	22.2	11.1	1.28	1.12
The length of the ear	5.0 ± 0.9	6 ± 1.1	7	28.5	14.2	1.40	1.16
The width of the ear	3 ± 0.9	3.5 ± 1.0	4	25	12.5	1.33	1.14
Continued							
Indicators	Age			Selection efficiency, difference		Relative growth in offspring, %	
	In the mother at 6 months	At 6 months old	6-month-old kittens	From mother	From father	From mother	From father
Live weight, gr	1170 ± 0.3	942.5 ± 0.5	1370 ± 1.7	200	427	14.5	31.2
Straight length of the body, cm	29.0 ± 0.5	32.0 ± 0.8	38.0	5	2	-	-
Chest width	6.0 ± 0.35	7.0 ± 0.38	8.0	2	1	-	-
Heart girth	21.0 ± 0.51	25.0 ± 0.53	28.0	3	2	-	-
The width of the back	7.0 ± 0.9	9.0 ± 1.3	11	2	1	-	-
The length of the ear	6.0 ± 0.9	6.5 ± 1.1	8.5	2	1	-	-
The width of the ear	4.5 ± 0.9	4.8 ± 1.0	5.5	1	0.5	-	-

Table 2

The dynamics of changes in the live mass of puppies from the newly created Azerbaijani rabbit breed by age, absolute (g) and relative growth (%) indicators, n=5

Gender	Live weight at the age of 1 month, g	Live at 3 months old mass, q	Live at 6 months of age mass, q	3 months old absolute increase in age, q	3 months old relative increase in age, %	6 months old absolute increase in age, q	6 months old relative increase in age, %
Male	240	735	1350	5.5	206.2	6,8	83.6
Male	230	560	1180	3.7	143.4	6,8	110.7
Female	210	555	1370	3.8	164.2	9.0	146.8
Male	265	560	1170	3.2	111.3	6,7	108.9
Male	305	850	1360	6.0	178.6	5,6	60.0

In the course of the research, the ability of rabbits to use feed efficiently was determined.

Table 3

Feeding rabbits by age

Feeds, q	Age of rabbits, days, q.					
	1-30	30-60	60-90	90-120	120-150	150-180
Barley	35-50	55-60	65-85	85-90	95-110	110-120
Green clover	20	25-30	30-40	45-55	55-65	65-80

Rabbits are mainly fed with barley and green clover. Calculations show that rabbits ate an average of 62.5 g of feed per head per 1-30 days. Of this, 20 g was

green clover and 42.5 g was barley. During the year, the percentage of rabbits kept alive during breeding was also determined.

Table 4

Survival percentage of farmed rabbits

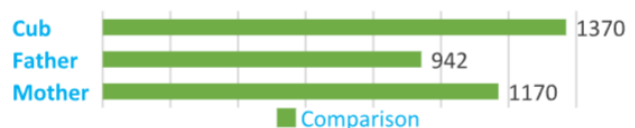
Number of rabbits at the beginning of the year, head	Number of rabbits after 6 months, head	Salary retention percentage, %
36	28	77.8

As can be seen from the table, the percentage of safe storage of rabbits for 6 months was 77.8%.

It is clear from the dynamics of the change of traits in the 4th generation new rabbit breed obtained as a re-

sult of Gangatma crossing that the color of the Decorative Deaf rabbit breed prevailed in the offspring obtained ($C m^{C m \text{ dominant}}$ genes). The coefficient of color transmission is 93.75% for Decorative Deaf rabbits, and 6.25% for F_3 breeding litters.

Comparison



Decorative dwarf



F₃ generations



A new breed of rabbit

Conclusion: The following results were obtained in the conducted scientific research

1. The live weight of new rabbit puppies was on average 210-305 g at 1 month of age, 555-850 g at 3 months of age, and 1170-1370 g at 6 months of age.

2. The live weight of the purchased chicks At the age of 6 months, it was 200 g more than the live mass of the mother (the live mass of the mother was 1170 g at the appropriate age) and 427.5 g more than the live mass of the father (the live mass of the father was 942.5 g at the appropriate age).

3. A new rabbit has the ability to give birth to 6-8 litters under sexual conditions. It is the same with his mother.

4. At the age of 3 months, the absolute increase was 3.2-6.0 g, and the relative increase was 111.3-206.2%.

5. At the age of 6 months, absolute growth was 5.6-9.0 g, and relative growth was 60.0-146.8%.

9. The color transmission coefficient was 93.75% for the Decorative Deaf rabbit breed, and 6.25% for the F_3 generation litter.

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