

## Egg-Laying Characteristics of Hens Belonging to "Lohmann Brown-Classic" and "Lohmann Sandy" Crosses

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**Abstract:** *The article presents changes in egg laying characteristics of hens belonging to "Lohmann brown-classic" and "Lohmann sandy" crosses and draws conclusions.*

**Keywords:** *Egg, cross, product, innovative.*

**INTRODUCTION.** It is known that eggs are necessary for human health as a food rich in protein. Egg productivity of chickens depends on many factors, the main of which are feeding technology, storage conditions, breed characteristics of chickens, age of chickens.

Their composition should not be overlooked when raising quality eggs. On average, eggs contain 11-13% protein, 11-13% fat, 2.5-3.2 mg% iron, 250-470 µg% vitamin A, as well as vitamins D and B2, selenium, chromium in significant amounts.

A chicken egg is a complex system that ensures growth, development, formation of tissues and organs, and nutrition of the embryo during embryonic development. Egg cells are formed during embryonic development.

**The purpose of the study.** Production of eggs based on innovative technology of experimental chicken crosses in the conditions of the poultry farm.

**The purpose of the study.** Study of the weight of chicken eggs obtained from promising "Lohmann brown-classic", "Lohmann sandy" crosses.

**Research object.** "Lohmann brown-classic", "Lohmann sandy" chicken crossbreeds in the direction of promising eggs, which are kept at the "Nurummat Kurbanov" farm, Ellikkala district, Republic of Karakalpakstan.

**Research results.** According to most scientists, egg production and its quality depend on the composition of the feed, which proves that it is possible to achieve quantitative and qualitative indicators by adding additional ingredients.

The egg mainly consists of four components, the egg white is 62-66% of the whole egg weight, the yolk is 32-36%, the cortex and the shell. An egg has an air sac at the blunt end. In addition to protein, egg white contains the main part of riboflavin. The yolk is the main "reserve" of nutrients. It contains more proteins, vitamins of group B, iron and fat, vitamins A, D, choline, lecithin. The quality of eggs also depends on the methods of its storage. The optimal conditions for storing eggs should be a temperature of 0 °C, a relative humidity of 85% and a special gas environment, that is, a mixture of nitrogen and carbon dioxide gas. A special carboxymethyl cellulose protective layer applied to the egg shell is used to store eggs.

Table 1 shows egg productivity of chickens belonging to Lohmann brown-classic and Lohmann sandy crosses in the research works.



**Table 1** Egg productivity of chicken crosses

Indicators		Unit of measure	Crosses	
			Lohmann brown-classic	Lohmann sandy
			n-20	
			X±Sx	
Ovulation	Age at 50% productivity	Day	141	144
	The peak of egg production	%	92,4	93,2
Number at the beginning of egg laying	Egg productivity in 12 months	Dona	314,2±5,52	319,4±4,78
	Egg productivity in 14 months	Dona	349,3±5,65	353,1±6,28
Weight at the beginning of laying eggs	Egg productivity in 12 months	Kg	18,7±0,31	18,8±0,24
	Egg productivity in 14 months	Kg	19,4±0,4	20,7±0,31
Average egg weight	Egg weight in 12 months	G	59,7±0,24	58,9±1,25
	Egg weight at 14 months	G	61,8±1,07	61,4±1,05

The analysis of the data presented in Table 1 shows that the experimental Lohmann brown-classic (n=20) and Lohmann sandy (n=20) crossbred hens were 142 days old in the first group, and 142 days old in the second group. the average was 144 days.

**Conclusion.** The differences between the peak of egg production were higher by 0.8% in chickens belonging to Lohmann sandy crosses compared to Lohmann brown-classic crosses. In the data obtained on egg productivity in 12 months, the egg productivity of Lohmann brown-classic crosses was 314.2±5.52 eggs, while egg productivity in 14 months was equal to 349.3±5.65 eggs. Accordingly, this indicator was 319.4±4.78 and 353.1±6.28 pieces in chickens belonging to Lohmann sandy crosses.

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