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## ANOMALIES OCCURRING IN EGGS IN OVARIAN DISEASES IN QUAILS AND WAYS OF THEIR PREVENTION

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## АНОМАЛИИ, ВОЗНИКАЮЩИЕ В ЯЙЦАХ ПРИ ЗАБОЛЕВАНИЯХ ЯИЧНИКОВ У ПЕРЕПЕЛОК, СПОСОБЫ ИХ ПРОФИЛАКТИКИ

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*Abstract.* Nowadays, people are suffering from food shortage. To meet the protein needs of people, meat and eggs of birds are of great importance. Among non-infectious diseases of quails in Azerbaijan, ovarian and oviduct pathologies are mainly observed. Ovarian pathologies are most often observed in ovaries of white English breed. Eggs obtained from them as a result of ovarian disease have no bark, are deformed, their weight is reduced, striped deposits are observed on the bark, and their ability to hatch is reduced. To prevent diseases of quails after 210 days use sodium salt of succinic acid, Aydagh zeolite, sprouted and enriched with ultraviolet rays wheat and Poly-Vital. Ovarian and oviduct diseases are prevented, and egg quality is improved.

*Аннотация.* В настоящее время люди страдают от нехватки продовольствия. Для удовлетворения потребностей людей в белке большое значение имеют мясо и яйцо птиц. Среди неинфекционных заболеваний перепелов в Азербайджане в основном наблюдаются патологии яичников и яйцевода. Патологии яичников чаще всего наблюдаются у белой английской породы. Яйца, полученные при патологии не имеют скорлупы, деформированы, их масса уменьшена, на скорлупе наблюдаются полосатые отложения, а их способность к выведению снижается. Для профилактики заболеваний перепелов через 210 дней используют натриевую соль янтарной кислоты, айдагский цеолит, пророщенную и обогащенную ультрафиолетовыми лучами пшеницу и Поли-Витал. В результате предотвращены заболевания яичников и яйцеводов, повысилось качество яиц.

*Keywords:* quail, ovary, oviduct, egg, therapy, prophylaxis, disease.

*Ключевые слова:* перепел, яичник, яйцевод, яйцо, терапия, профилактика, заболевание.

The world faces great problems in the 21st century and food security is of great importance among them. Currently, more than 30% of 197 countries in the world suffer from food shortages, so it means 200 kg of food per person during every year. In order to meet human needs for protein, quailing is developed. Diseases of the ovarian pathways in quails are mostly observed when no zoogenic rules are not followed. Temperature and relative humidity play a major role in the occurrence of the disease [1, 2].

Scientists who study quails [3, 5] point out that changing in the ratio of calcium to phosphorus, especially in the old age, and the lack of vitamin E in the feeds cause diseases in the 5 parts of the ovarian pathway. To get normal eggs from older quails researchers advise to add antibiotics to the feedstock in order to prevent ovarian pathway diseases during this period [1, 4].



### Materials and methods

The study was conducted on 500 quail aged 10 to 40 weeks at the ASAU Quail Breeding Training Farm, in the laboratory of the Department of Non-Communicable Diseases and in the veterinary clinic. Diagnosis was made using ultrasonic examination and patanatomic splitting to identify the condition of ovarian organs. The blood test is based on general analysis methods. The rate of sedimentation of erythrocytes, leukocytes, hemoglobin and erythrocytes in the blood has been determined. The chemical, biochemical indicators and mass of eggs has been based on the methodology of the Russian Scientific Research Technology Institute of Poultry.

### Results and discussion

30% of quails which were found suitable for ovary and ovarian pathway diseases during our examination among older quails, and which give abnormal eggs, are diagnosed using ultrasound examination. Others were selected on the basis of clinical physiological examinations and treatment therapies were performed on them. As we know, European countries currently don't use antibiotics and hormones for the treatment of diseases. In the treatment of diseases we used 0.03 grams of amber acid for 1 kg of live mass, and added 4,3 grams of wheat directly germinated and rich with ultraviolet rays to feed ration, added 0,2 mgr of Poly-Vital, 4 grams Aydagh seolith to feed. When determining ultrasonic examination and clinical physiological changes after the treatment and prophylaxis in the control group and in the groups we were researching, it became clear that the blood composition changes around the physiological norm. The results obtained in determining the quality of the eggs are shown in the following Table.

Table

INDICATORS OF EGG PRODUCTIVITY OF QUAILS

Groups	Indicators of productivity					
	Heads, number	Egg number	Weight of the egg, g	Abnormal eggs	The result, the number	Dead
Control group	250	4552	8,4	93	19	6
Experience group (new method)	250	5250	8,9	38	3	4

As a result of the treatment and prophylaxis performed on the patient quails in the experience group, 698 more eggs were obtained in comparison to the control group. A large difference was found in the weight of the eggs. That difference was 0.5 gr in each egg. Because of the high influence of the treatment, there were only 3 wasters and 4 dead ones in the experience group. But 19 quails were wasted and 6 ones were dead in the control group as a result of ovary and ovarian pathway diseases. One of the main indicators is that in the first group quails were dead as a result of trauma and cannibalism, not because of ovary and ovarian pathways diseases. When identifying anomalies that occurred in the egg, it was found that not only the number of the eggs taken from quails suffering from ovarian pathologies was getting lower, but also the weight of the egg. So egg scores in the control group were found to be less than 0.8 grams in the experimental group. During the study, eggs were isolated as a waster and sold as second-class egg, because of 15.6% of eggs was abnormal. The treatment group As a result of the high efficiency of treatment and prophylaxis in the experience group, only 2.5% of eggs taken from quails were selected and sold as second-class egg.

### Conclusion

The main reasons for ovarian abnormal eggs were: calcium-like sediments on the bark of 15% of the abnormal eggs, the bark looked like marble on 35% of the eggs, the formation of strips, and 50% cracked, broken eggs. The results obtained from the research indicate that in the end of the

period in which eggs were got from quails to prevent diseases caused by ovarian pathway diseases after 210 days 5-6 more days were added on condition that sodium salt of amber acid, Aydagh seolith, wheat germinated and rich with ultraviolet rays and Poli-Vital were added twice a month to the ration the quails.

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