The practice of using bioresonance technology when growing broilers in Russia A. Avakova, E. Stepanchenko, M. Ostrovsky (North Caucasian Research Institute of Animal Breeding, Krasnodar, NP "German-Russian Institute of Biomagnetic Cybernetics and nanotechnology ", Russia)

One of the ways of more fully disclosing the genetic potential of poultry productivity and obtaining ecologically clean high-quality products is the development of fundamentally new technologies in industrial poultry farming, including those based on the use of electromagnetic radiation. In the North Caucasus Research Institute of Livestock (SKNIIZH), Krasnodar, a bioresonance technology has been developed, which makes it possible to increase the safety of poultry, its productivity, and the efficiency of feed use. The technology is implemented through exposure of the bird to a weak electromagnetic field in the frequency spectrum of biologically active substances, the vibrations of which coincide with the vibrations of certain body structures. The mechanisms of bioresonance effects of various substances are specific, but the results boil down to

The practical implementation of bioresonance technology is carried out using the device "IMEDIS-BRT-A" according to the SKNIIZh method (A.G. Avakova, Yu.A. Kovalev, V.S. Podolskaya, 2009).

Efficiency of growing broilers with BRT

The first application of the technology in a production environment was carried out at LLC Poultry Farm "Phoenix" of the Krasnoarmeisky District, on broilers of the cross "ROSS-308" with cage keeping. The results obtained in the experimental building showed an advantage over the control in terms of safety, growth rate and feed conversion.

Further use of bioresonance technology was carried out at various sites for growing broilers with different livestock at floor keeping (Table 1).

Table 1

Name production sites	Groups	Planted per diem chickens, PC.	weight daily chicken G	Number of days cultivation	Safety, %	Average alive weight 1 heads for slaughter, Kg	Average daily weight gain, g	^{Consumption} feed on 1 kg gain	European coefficient efficiency
LLC "Poultry farm "Novgorodskaya", V. Novgorod. December 2011	о	21100	37	41	97.4	2,266	54.4	1.81	301.8
	то	20880	37	41	96.8	2,200	52.8	1.80	294.1
LLC "Poultry farm "Novgorodskaya", V. Novgorod. January 2012	0	21100	37	41	97.4	2,266	54.4	1.81	301.8
	то	21120	37	40	97.2	2.168	53.3	1.84	291.1
CJSC "Agrocomplex", P / F "Slavyanskaya", Krasnodar region. October 2010	о	36000	38	36	94.1	1.817	46.8	1.84	258.1
	то	36000	38	36	93.4	1,748	45.6	1.86	243.8
CJSC "Agrocomplex" P / F "Slavyanskaya" Krasnodar region. October 2010	0	15000	38	39	95.7	2,042	51.4	1.84	272.7
	то	15000	38	39	94.5	2,013	50.6	1.85	263.6
LLC "Yugmelprodukt", st. Zhurovskaya, Vyselkovsky district, Krasnodar Territory. July 2009	0	31500	46	39	95.6	2,150	54.0	1.87	281.8
	то	31500	46	39	93.0	2,000	50.1	1.90	251.0
LLC poultry farm "Phoenix", Krasnoarmeisky	0	13000	39	35	94.4	1,983	55.3	1.46	366.3
district of Krasnodar region. January 2007	то	13000	39	35	92.3	1.916	53.4	1.51	333.7

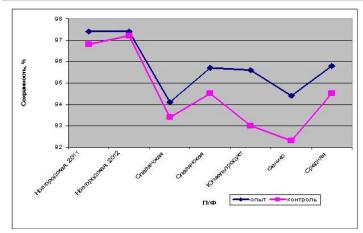
O - Experimental buildings using BRT K - Control

buildings

As follows from the data given in the table, in cases where bioresonance impact, the best results are obtained in safety of chickens, gains and feed costs. Obviously, as a percentage, the zootechnical indicators in the experimental groups of birds exceed the control ones in the range of 1.1–3.3%, which at first glance does not seem significant. In industrial poultry farming, crosses are used that maximize their productivity potential and even a small additional improvement in these indicators is essential.

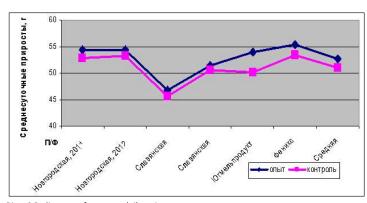
Obviously, the higher the safety of poultry in the farm, the more difficult it is to improve this indicator. The average survival rate in the experimental poultry houses increased by 1.3% (Fig. 1). The highest safety of chickens was obtained at Novgorodskaya Poultry Farm LLC, Veliky Novgorod, with the use of bioresonance technology this indicator was improved by 0.1–0.6%.

The lower the safety in the control, the better the work of the bioresonance technology is manifested, so at LLC Yugmelprodukt and LLC Poultry Fenix, safety increased by 2.6% and 2.1%, respectively.



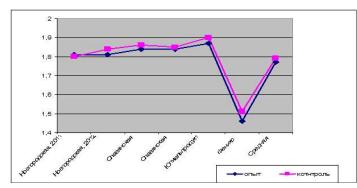
Rice. one.Indicators of safety of broiler chickens

Since the indicators of average daily gains depend on the timing of feeding, it is not entirely correct to compare them at different terms of feeding poultry, therefore, we will comment on them as the difference between experience and control expressed as a percentage. So, on average, for all designated poultry farms, an increase in average daily gains of 3.3% was obtained, with variations from 1.5% at Slavyanskaya to 7.7% at Yugmelprodukt LLC.



Rice. 2.Indicators of average daily gains

The efficiency of using compound feed per unit of production is one of the important economic aspects of poultry farms. It depends on the quality and range of ingredients, the balance of the diet, feeding technology and the ability of broilers to absorb feed and pay for it in increments. Bioresonance technology can only affect the last component - the ability of broilers to digest feed and this influence is obvious (Fig. 3).



Rice. 3.Indicators of feed consumption kg / kg

On average, in the experiment, 1.1% less compound feed was spent per 1 kg of live weight gain, i.e. 20 g of compound feed is saved on each kilogram. This figure ranges from 0.5% to 3.4%.

The totality of the manifested effects from the use of BRT determines a significant economic effect. Moreover, we would like to remind you of an increase in the biological quality of chicken obtained with the use of BRT, as the protein content rises to 7% with a simultaneous decrease in fat to 26% of the control level. In addition, in the prototype meat, there is a greater accumulation of deficient micro- and macroelements: the level of calcium increased by 12.5%, iron - by 36.6%, copper - by 185%, sodium - by 44%, and manganese - 4 times (A.G. Avakova, 2008).

The proposed technology does not require re-equipment of production and can be used on all types of equipment. Equipment for bioresonance technology is easy to use and, if necessary, can be fully automated, does not require large investments and pays off in less than 2 months. The life of equipment for bioresonance technology is at least 10 years.

The new technology opens up great prospects for the development of poultry farming, which may contribute to ensuring the competitiveness of domestic products in the world meat market in the near future.

Literature

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A. Avakova, E. Stepanchenko, M. Ostrovsky The practice of using bioresonance technology when growing broilers in Russia // XVIII "- M .:" IMEDIS ", 2012, v.1 - P.123-129