

## **The influence of the feed material Reasil® Humic Health on the elimination rate of antibacterials from the body of broilers**

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In the first experiment on the broiler chickens in 2019 at the Slavinskaya poultry farm in the Krasnodar region 4 buildings were involved. The building number 22 (38 788 heads) and building number 16 (40 040 heads) were two control groups. The building number 23 (38 800 heads) and building number 20 (45 310 heads) were experimental groups. The broilers in the experimental groups received Reasil® Humic Health feed material additionally as part of the premix at the dose 0.5 kg of the feed material per 1 ton of feed. Reasil® Humic Health is based on unmodified microporous humic acids from Leonardite. The conditions and therapeutical preventive treatment schemes for all chickens were the same.

At 18 days of age a control slaughter of chickens was carried out in the quantity of 10 heads from each group. The muscle tissue was investigated. The analysis by the Premi test system for the presence of a residual amount of antibiotics and coccidiostatics in the broiler meat of all control groups showed a positive result, and the analysis of the meat of the experimental group showed the negative result. A repeat test at 21 days of age showed the same results.

In the second experiment broilers of the COBB 500 cross were reared at the vivarium of Saratov State Vavilov Agrarian University. From 21 day of age, all chickens were given the drug “Florfenicol” orally for 7 days, in dosages according to the instructions for use. During the experiment chickens of the 1st, 2nd and 3d experimental groups in addition to the main diet were fed Reasil® Humic Health in the amount of 1.0, 1.5 and 2.0 g per 1 kg of feed respectively. Poultry slaughter was carried out 24 hours after the start of antibiotic drinking and after 24 hours, 72 hours, 7 days and 10 days after stopping the antibiotic drinking. As a result, it was found that the combined use of the antibiotic Florfenicol and Reasil® Humic Health in doses of 1.0-2.0 g / kg of feed does not prevent the accumulation of the antibacterial drug in muscle tissue at therapeutic concentrations. The combined use of the antibiotic Florfenicol and Reasil® Humic Health in a dose of 1.0 g / kg accelerates the elimination of the antibacterial drug from broiler’s body by 2 times, and in doses of 1.5 and 2.0 g / kg of feed – by 4 times after discontinuation of antimicrobial therapy.

The results of two experiments show that the feed material Reasil® Humic Health based on unmodified microporous humic acids from Leonardite accelerates the elimination of antibiotics and coccidiostats from the muscle tissue of broiler chickens.