## USE OF THE STRAIN LACTOBACILLUS SP. 13/2 FOR GROWING RABBITS

## Pokhylko Y.

Institute of Agricultural Microbiology and Agroindustrial Manufacture of the NAAS of Ukraine,
Probiotic laboratory

e-mail: pohilko.yura@gmail.com

Among the main problems hindering the effective management of rabbit breeding, a special place is occupied by the gastrointestinal diseases of animals associated with opportunistic infections. These diseases caused by dysbacteriosis are most often observed in young animals and can lead to death. The formation and preservation of the balance of the intestinal microbiota is a complex dynamic process.

For a long time, antibiotics were used for the treatment of infectious diseases caused by opportunistic microbiota. However, the problem of antibiotic resistance of microorganisms encouraged to find new ways to solve this problem. The intensive introduction of probiotics into animal husbandry is one of these ways.

Probiotics used to resolve problems of the gastrointestinal tract of rabbits are composed of bacteria isolated from various sources. However, it is known that the source of isolation of probiotic strains determines their biological activity.

In this regard, remains urgent creation of a probiotic preparation on the basis of representatives obligate microbiota of the gastrointestinal tract of a rabbit.

In the investigation, we used a strain of lactic acid bacteria *Lactobacillus* sp. 13/2 was isolated from the gastrointestinal tract of rabbit. This strain was previously studied and identified in the probiotic laboratory of the Institute of Agricultural Microbiology and Agroindustrial Manufacture NAAS of Ukraine. Lactic acid bacteria (LAB) were incubated on hydrolyzed milk at 37°C±2°C for 48 hours. The bacterial suspension was added to drinking water in an amount of 10 ml of bacterial suspension per 1 l of drinking water. The experiments were carried out on outbred healthy rabbits aged 28-35 days.

The effectiveness of the use of the strain *Lactobacillus sp.* 13/2 for the correction and restoration of the microbiota of the gastrointestinal tract of rabbits was evidenced by an increase in the number of LAB in the experimental groups compared with the control intact group of animals. Also in the research groups of rabbits, a tendency toward a decrease in the number of fungi was observed.

It was revealed that the weight of the rabbits of the test group and rabbits of the control group did not differ significantly. However, it was set the lower (10%) feed consumption per unit production in rabbits of the experimental group, who were given the bacterial suspension compared to control group of animals. So the *Lactobacillus* sp. 13/2 strain provided a significant reduction in the number of facultative microbiota and increasing the number of bifidobacteria and LAB in the gastrointestinal tract of rabbits that resulted in better conversion of feed.

The obtained results suggest the possibility of using a strain of *Lactobacillus* sp. 13/2 as the base of probiotic preparation for rabbits.