

THE EFFECT OF 'LACTOSAN' ON THE TOTAL NUMBER OF LACTOBACILLUS AND ENTEROBACTERIA IN THE RECTUM CONTENT OF HEALTHY AND SUFFERING FROM DIARRHEA CALVES

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Summary. The preventive effect of „Laktosan“ on clinically healthy calves and the effectivity of this preparation in treating the calves suffering from diarrhea have been studied. The total number of *Lactobacteria* and *Enterobacteria* in the content of rectum of 16 calves was investigated.

„Lactosan“ is a liophilized bacterial preparation consisting of two strains of *Lactobacillus* - *L. plantarum* and *L. fermentum*. Sick calves were given two doses of the preparation *per os* twice daily for three consecutive days. One dose contains 0,5 g of liophilized preparation, having 13,6 log *Lactobacillus* per g. Healthy cows were given 1 dose of the preparation once a day for two days. „Etrovitin“ and „Trimerazin“ were applied for the treatment of sick calves in the control group.

It was determined that „Lactosan“ positively effects the endoflora of the digestive tract of calves - the total number of *Lactobacteria* increased in healthy calves ($p < 0,01$) as well as in sick ones ($p < 0,001$). The total number of *Lactobacillus* was restored in a three day period, while with the commonly used medicine the total number of *Lactobacteria* and *Lactobacillus* was lower ($p < 0,01$) after the same period of treatment.

It was also determined that the total number of *Lactobacillus* in the rectum content of the sick calves decreased compared to the healthy ones ($p < 0,01$). The interrelationships between *Enterobacteria* and *Lactobacillus* had changed as well.

Keywords: calves, diarrhea, lactobacillus, enterobacterium.