

Influence of the selected animal farms on bacteriological contamination of the environment

Summary

The aim of this study was to assess the impact of the selected species of livestock animals on the bacteriological contamination of soil and that one within the premises where the animals are kept. The experimental material included the samples of soil and manure from laying hens, pigs' and silver foxes' farms. The mesophilic, psychophilic, *coli* group bacteria and other microorganisms of the *Enterobacteriaceae* family were evaluated. Most of mesophilic, psychophilic bacteria and those from *coli* group were found in soil originating from the farm of laying hens (3.10×10^7 , 3.70×10^8 , 3.70×10^4 cfu/g). Most of soil samples contained bacteria of the *Enterobacter* genus while *Klebsiella spp.* was detected only in the GIII sample from the pig farm. By contrast, *E. coli* occurred in soil sample GII from the hens' farm and in soil samples GI and GIII from the pigs' farm. The highest number of mesophilic and psychophilic bacteria, was found in hens (2.54×10^{10} and 1.67×10^{10} cfu/g) while most of coliforms occurred in the faeces of foxes (1.90×10^6 cfu/g). In the drops of hens *E. coli* was identified, while in the faeces of silver foxes *Enterobacter spp.*, *Salmonella choleraesuis* and *E. coli* were recorded and *Klebsiella spp.*, *Enterobacter aerogenes* and *E. coli* were found in the faeces of pigs.