

Monitoring of the epidemiological situation of avian salmonellosis in poultry marketing units

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Abstract

The aim of the proposed investigation was to establish the bacterial microflora present on poultry carcasses and eggs sold in the food network of the central agricultural market from Chisinau; especially, bacteria of the genus Salmonella spp. During the investigation was studied the type and number of bacterial colonies and was serotyped the bacteria of the genus Salmonella spp. At the same time was performed the sensitivity of the isolated microflora to some more frequently antibiotics used in poultry farms. The research samples were taken from refrigerated carcasses of broilers chickens and eggs from poultry farms from the republic. The investigation's result confirmed the presence of an associated microflora with Srteptococcus, Staphylococcus, E. Coli and bacteria of the genus Salmonella spp. in poultry carcasses and eggs of current consumption. From the total number of samples taken, in 12% of them was detected the bacteria of the genus Salmonella spp. The serotyping confirmed the presence of the following Salmonella spp. serotypes: S. Infantis, S. Enteritidis and S. Typhimurium. The antibiotic resistance tests confirmed a low sensitivity of the isolated microflora to some of the most common antibiotics used in birds' raising. The area of inhibition ranged from 8mm to 0 mm in most tested antibiotics; the most sensitive antibiotic proved to be florfinicol with a maximum inhibition area of 18 mm. The obtained results demonstrate the presence of some pathogenic serotypes of Salmonella spp. which can have a major risk for public health.

Key words: chickens, carcasses, antibiotic resistance, contamination, samples, serotyping.