



**E414**

**Comparison of the use of ozone and chlorine as antimicrobial preparations in disinfection of eggshell for consumption on a farm in Kosovo**

Nora Rrahimi Hasani ; Gentian Hasani  
Faculty of Natural Science, Tirana, Albania

The objective of this study was to discover the effects of applying two antimicrobial drugs (ozone and chlorine) on chicken eggshell in a poultry farm in Kosovo. Ozone and chlorine in the form of sodium- $\text{NaHClO}$  hypochlorite were applied to the eggshell at different concentrations and at different times to prove at what concentration and at what time each of these two disinfectants has the highest effect. During egg processing, samples were taken from 10 different points on the production line, 5 points on the equipment surface and 5 samples from the hands of workers for microbiological analysis. A high amount of total bacteria was observed in all samples, but after the application of disinfectants we saw a decrease of these bacteria. It is assumed that workers hands and equipment may be a source of secondary pollution. Ozone can also be used in lower concentration and safer than chlorine. Keywords: eggs for consumption, antimicrobial, ozone, chlorine.