

STUDIES ON THE EFFICIENCY OF EQUIPMENT SANITATION OPERATIONS IN THE MEAT MICROPRODUCTION SECTION OF I.U.L.S.

D.-R. Manoliu¹, M.M. Ciobanu¹, F.D. Lipşa¹, M.C. Ciobotaru¹,
I. Gucianu¹, B.-G. Anchidin¹, E.I. Flocea¹, P.C. Boişteanu¹

¹“Ion Ionescu de la Brad” University of Life Sciences, Iaşi, Romania
e-mail: manoliudiana96@yahoo.com

Abstract

Hygiene in the meat industry is of paramount importance not only as a matter of food safety but also affecting product quality, regulatory compliance, consumer trust, and the overall economic and environmental sustainability of the industry. To assess the effectiveness of equipment sanitation procedures in the meat processing department at the University of Life Sciences Iasi, microbiological studies were conducted during three phases: pre-operational, operational, and post-operational. In each phase, sixty-three swab samples were collected from various surfaces, instruments, and machinery, including the cutting table, knives, meat grinder, meat mincer (cutter), filling machine, and carts and racks. The lowest average microbial amount (0.0122 cfu/cm²) was observed during the post-operational phase, after sanitation procedures. Three of the six points sampled showed a total microbial count below the detection limit. Conversely, the highest average total aerobic bacterial count (1.86 cfu/cm²) was recorded during the operational phase, with particularly elevated levels on the knife (3.33 cfu/cm²) and cutting machine (2.25 cfu/cm²) samples.

Key words: meat processing units, microbial contamination, food safety