

REPORT:

LIQUIDNATURE IMPROVE THE SAFETY OF FRESH MEAT

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1. JUSTIFICATION AND OBJECT OF THE STUDY

LIQUIDNATURE (DOMCA SA) is a mixture of natural aromatic compounds with antioxidant and preservative properties. The object of this study is the evaluation of the antimicrobial potential of this product in the control of Enterobacteriaceae in fresh meat.

2. METHODOLOGY

Shelf life study

The shelf life studies allow the evaluation of microorganism's ability/capacity to grow and survive in food under certain conditions; to do so an analytical monitoring system is conducted during an established time of conservation. At the present study, the microbiological quality of fresh meat was evaluated when adding LIQUIDNATURE (doses of 1 and 3 g/kg). A control batch was included without any treatment. Each treatment was conducted twice.

Monitorization

Sampling was made during a period of 7 days at different times of conservation. The samples were kept refrigerated at 4 ± 1 °C. For the determination of Enterobacteriaceae we applied the method according to international standard with count method of colonies on McConkey Agar (Biokar Diagnostics) of a determined quantity of sample and its decimal dilution obtained from the stock solution. And incubated at 37°C during 48 hours. The results are expressed as the number of colony forming units per gram of sample (cfu/g).

3. RESULTS

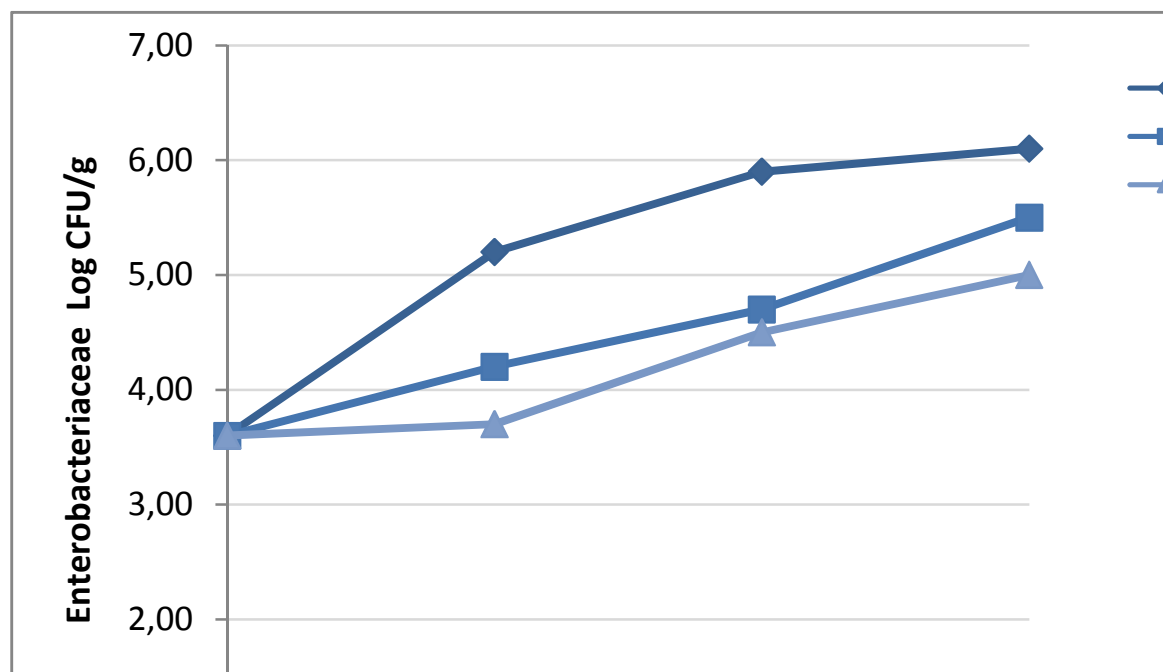


Figure 1 . Evolution of *Enterobacteriaceae* in fresh meat.