

ORGANIC CHEESE MILK QUALITY AND HYGIENE OF THE PRODUCT MADE IN SOUTHEASTERN POLAND

QUESO ORGÁNICO CALIDAD E HIGIENE DE LA LECHE DEL PRODUCTO HECHO EN SOUTHEASTERN POLAND

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RESUMEN

The organic market in the European Union has developed significantly in recent years. The aim of this work was to evaluate the quality of organic food (raw milk) intended for cheese making, produced in 9 farms in southeastern Poland. The chemical composition of milk, freezing point, microbiological quality were evaluated. In addition analyses of milk acidity as well as cheese milk properties were also covered. To evaluate the hygiene of the production and safety of the product marketed, 50 samples were taken for analysis. The evaluation in this area included microbiological analysis of crude milk during cheese production, microbiological analysis of premises hygiene, and the effectiveness of cleaning and disinfection procedures. From the results obtained it was evident that the raw milk intended for cheese production produced in southeastern Poland was characterized by the correct chemical composition and the freezing point. In single raw milk samples, inflammation of the udder was observed, which was associated with a decrease of lactose content, alkalinity of pH as well as high somatic cell counts in milk. In some of the farms, insufficient hygiene was observed in the milk production including washing and disinfection of equipment which affected high levels of bacteria in milk such as *Enterobacteriaceae*, *staphylococci* and yeast and mold. Low content of lactic acid bacteria was observed that's why it is recommended to produce cheeses with the addition of pure cultures of lactic acid bacteria to reduce milk coagulation time and to protect cheeses from excessive growth of undesirable microorganisms.

Key words: organic food, milk, cheese production, southeastern Poland

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