Tropentag, September 15-17, 2021, hybrid conference

"Towards shifting paradigms in agriculture
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Presence of Listeria in Boursin and Chevrotin Goat Cheese Sampled in the Alfenas Region, Brazil

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Abstract

The production of goat's milk in Brazil shows an exponential and continuous increase, which drove the increase in the production of more elaborated dairy products, such as gourmet cheeses type Boursin and Chevrotin. However, there is no national legislation to characterise these products, adopting general standards. Another point is the microbiological quality of these cheeses, especially in relation to Listeria wich representes na important parameter of quality and risk to food health. The objective of this work was to evaluate the physical-chemical and microbiological characteristics of two types of Brazilian analog goat's cheeses type, Boursin and Chevrotin, in the Alfenas-MG region. Thereby, establish the physical-chemical characteristics of the local product, relating them to the legislation in force in the country, in order to meet the demand of improvements in the dairy sector, evidencing occasional divergences and their respective social and economic impact. For this purpose ten cheeses, 05 Boursin and 05 Chevrotin types, produced in Alfenas region, were purchased at the local market and the fat and humidity was determined using the Gerber method and oven drying, respectively, and analysed according to the current legislation. Also was analysed the presence of listaria spp., *Salmonella* spp and quantification of total coliforms. From the physicochemical point of view, 57.2 % and 39.02 % of fat and 77.56 % and 47.36 % of moisture were observed for cheeses type Boursin and type Chevrotin, respectively, results appropriate to national legislation for high and medium humidity cheeses. As for the microbiological analyzes, it was determined that there was no *salmonella* in any of the products analyzed. Listeria monocytogenes was found in 40 % of the samples of both cheeses, and 60 % and 80 % of total coliforms in Boursin and Chevrotin cheeses. It is concluded that the cheeses type Boursin and type Chevrotin produced and packaged in the region of Alfenas / MG, although they are in agreement with the legislation in relation to the contents of fat and humidity, however they were positive for Listéria, being not indicated for consumption presenting health risk.

Keywords: Boursin cheese, Chevrotin cheese, foodborne disease, listeria, microbiology

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