Titulo: PREVALENCE OF *Streptococcus lutetiensis* IN COALHO CHEESE PRODUCED IN THE SERTÃO PARAÍBA.

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ABSTRACT

Originally produced in the Northeast states of Brazil from raw milk, cheese is currently gaining space and interest in other regions of Brazil. The cheese curd is obtained by coagulation of milk by means of rennet or other suitable coagulating enzymes, supplemented or not by the action of selected lactic bacteria and marketed up to ten days. This production is concentrated mostly in middle region Sertão, distributed in its seven microrregions, Catolé do Rocha, Cajazeiras, Sousa, Itaporanga, Patos, Piancó and Serra do Teixeira. Thus, this middle region concentrates most of cheese Coalho production of Paraíba. The *S. luteriensis* it is a reclassification *S. infantaruis* subs *coli* and *S. infantarius* subs *infantarius* belongs to group 4, which hydrolyze esculin. This study aimed to determine the prevalence of *Streptococcus lutetiensis* in handmade cheese Coalho produced in the Sertão of Paraiba by PCR and sequencing. They used 15 Coalho cheese samples collected in 4 microrregions of Paraiba: Cajazeiras, Sousa, Patos and Itaporanga. The samples were sent to the laboratories of Microbiology and Molecular Biology CSTR / UFCG - Patos, to perform inoculation in specific media (MRSeM17), isolation of strains, DNA extraction, amplification of the 16S rRNA gene PCR product sequencing and identification of the microorganism through deposit in the GenBank database (National Center for Biotechnology Information - NCBI) using the BLAST tool (Basic Local Alignment Search Tool). This study revealed that the four microrregions analyzed only the Cajazeiras had no representation of *Streptococcus lutetiensis,* however Sousa, Itaporanga and Patos had respectively 26.2%, 22.1% and 4.8%. The species belonging to the group D are considered undesirable in cheese, including *S. lutetiensis* and their presence can be attributed to precarious hygiene habits from milking to cheese manufacturing.

Keywords:Northeast region; cheese of Coalho; *Streptococcus lutetiensis*.