

Title: **PREVALENCE OF *Lactococcus garvieae* IN COALHO CHEESE PRODUCED IN THE SERTÃO PARAÍBA.**

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ABSTRACT

The *Lactococcus garvieae* was classified as a component of the indigenous microflora of dairy products made with unpasteurized milk. Despite being considered an emerging pathogen in aquaculture and associated with subclinical mastitis in cattle, *L. garvieae* isolated from different sources proved to be genetically unrelated and research found that dairy strains compared with pathogenic used not shelter determinants of virulence genes. Since the concept of lactic acid bacteria was introduced as a group of organisms, new species have been described, renamed or rearranged. For identification of microorganisms based on genetic information is recommended to use methods to establish phylogenetic relationships as the sequencing of the gene encoding the 16S rRNA and the intergenic region. This study aimed to identify the prevalence of *Lactococcus garvieae* in handmade Coalho cheese produced in the Sertão of Paraíba. Four microrregion that makes the Sertão were collected 15 Coalho cheese samples. For isolation of the colonies, DNA extraction, polymerase chain reaction (PCR) of 16S rRNA genes the samples were sent to the Molecular Microbiology and Biology Labs CSTR/UFCG-Patos. For sequencing the amplified and purified material was sent to the Department of Genomic/UFPE. The identification of microorganisms occurred through deposit in the GenBank database (National Center for Biotechnology Information, NCBI) using the BLAST tool (Basic Local Alignment Search Tool). *L. garvieae* was isolated in all the regions surveyed in this study. The prevalence percentages ranging from 2.43% to 25%. Although there are no reports in the literature of the isolation and identification of *L. garvieae* in Brazilian industrial or artisanal cheeses, the species has been found in cow's milk cheeses and other countries.

Keywords: Northeast region; cheese of Coalho; *Lactococcus garvieae*.