Technique standardization to characterize at the molecular level native yeasts of Paipa cheese produced in Boyacá and Cundinamarca, Colombia.

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Paipa Cheese is the only traditional produced cheese in Colombia that involves a process of maturation. The presence of yeast plays an important role in this process because some of them help metabolize lactate and promote deacidification, but others can cause changes on the aroma and flavor, adversely affecting its marketing. For this reason, a molecular identification is critical to know the precise yeast species involved in the process and that are not to be considered contaminants. In this work we standardized the procedures that lead to molecular characterization. We used 17 samples of strains isolated from different stages of maturation and production. DNA extraction was performed by adapting the DNeasy Plant Kit (QIAGEN). PCR amplification of the segments of the 26S ribosomal DNA region was done, specifically the D1/D2 domain of the yeast isolates, with the primers NL1 and NL4 in varying conditions of volumes, time and temperature in the thermal cycler; they were checked by agarose gel electrophoresis of 1%. Was obtained between 14 and 26 ng / ul DNA in the extraction. Amplification of a fragment between 500 and 600 base pairs was achieved independently of the conditions, confirming the purity of extracted DNA and standardization of protocols used, which will lead to the final molecular characterization of yeast.