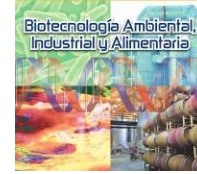


Poster



Characterization of the microbiome of sourdoughs from Andalusian artisan bakers

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ABSTRACT

The elaboration of products based on sourdough is becoming increasingly popular and successful in the market, due to consumer demand for more natural, healthy and good-tasting products. Defining sourdough as a mixture of flour and water, rich in microorganisms dominated by lactic acid bacteria (LAB), yeast and acetic acid bacteria, contributing to the production of organic acids, aromas and helping to improve stability, texture and freshness of the dough(1).

The present study intends to characterize the microbiota of this artisan sourdough from one of the most representative bakeries in Andalusia, in addition to analyzing the stability of its composition as a function of time, therefore three samples were subjected to the isolation and identification of lactic acid bacteria (LAB) and acetic bacteria themselves which were differentiated by their band pattern from a REP PCR(2), 16S ribosomal RNA gene DNA was amplified and purified from representatives of each pattern(3).

After sequencing the DNA of the candidates, the genera of lactic acid bacteria (LAB) *Companilactobacillus* and *Lactobacillus* dominate the sourdough population, *Acetobacter* and *Gluconobacter* were identified as representatives of acetic acid bacteria and the genus *Saccharomyces* was maintained for yeasts.

In conclusion, microorganisms representative of the sourdough have been identified at the genus and species level, which have maintained their stability over time, likewise, different microorganisms have been incorporated into this sourdough in the last sample taken from this bakery.

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