

Microbial communities participating in Mezcal production. Environmental reservoirs contribution, fermenting consortia, and flavour contribution

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Project Description:

Mezcal is a spirit beverage produced by traditional families from nine states of Mexico. Its production relies on indigenous microorganisms responsible for the spontaneous fermentation of cooked stems from plants belonging to the genus *Agave*. Several studies have focused on characterizing the fermenting consortia; however, the environmental reservoirs of the microorganisms remain understudied. For us, our interest is focused on characterizing microorganisms located in microenvironments surrounding traditional factories, such as soil, plant endophytes, utensils, water, and insects, as well as the family roles linked to the maintenance of these microenvironments. Our results suggest that cross-"contamination" procedures carry microorganisms responsible for fermentation from all these sources to the cooked juices. We hypothesize that the uniqueness of these microenvironments is accountable for the heterogeneous and unrepeatable sensory profile of each batch of Mezcal; moreover, it is responsible for the beverage's terroir.

Project Notices

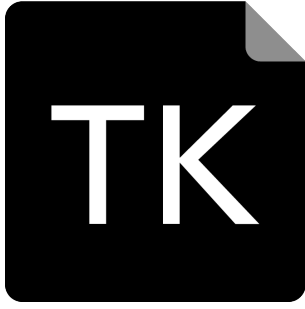


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