Microbial and Physico-chemical Dynamics During the Fermentation of Conservolea and Kalamàta Table Olives

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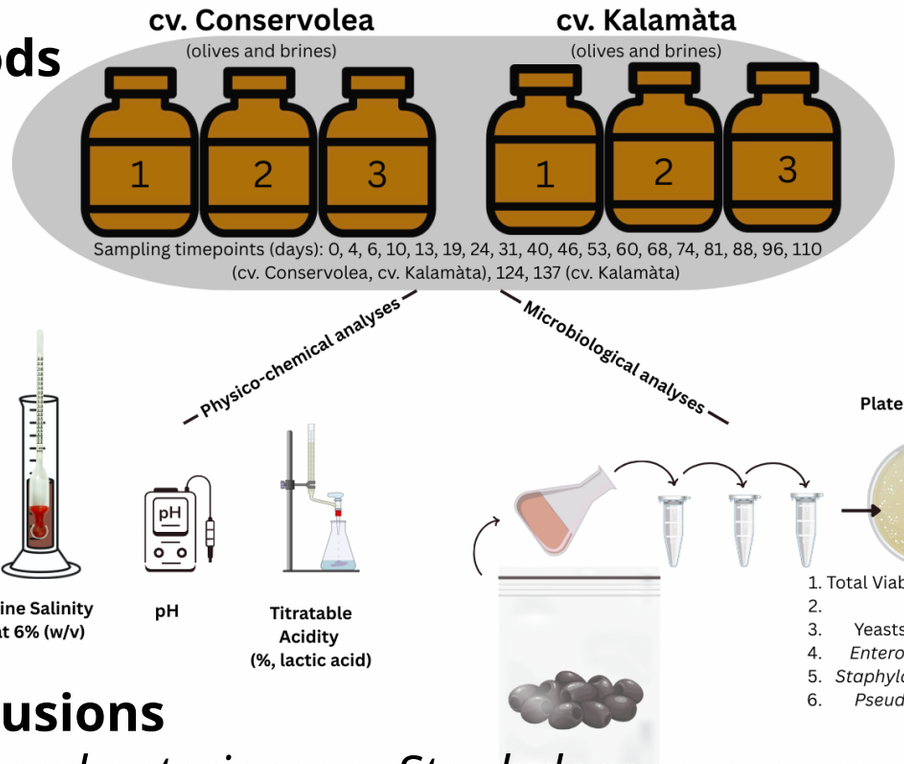
Background

Fermentation mitigates the bitterness of table olives, and Greek-style fermentation promotes natural fermentation by Yeasts and Moulds and Lactic Acid Bacteria (LAB) in brine [1]. This research focuses on the Greek-style fermentation of Kalamàta (*Olea europaea* L. cv. Kalamàta) and Conservolea (*Olea europaea* L. cv. Conservolea) varieties of natural black olives by testing their physico-chemical properties and microbial dynamics.

Methods



Conclusions

- *Enterobacteriaceae*, *Staphylococcus aureus* , and *Pseudomonas* spp. did not survive within the first 15 days.
- cv. Conservolea black olives supported a more stable and efficient LAB-driven fermentation than cv. Kalamàta.

Results

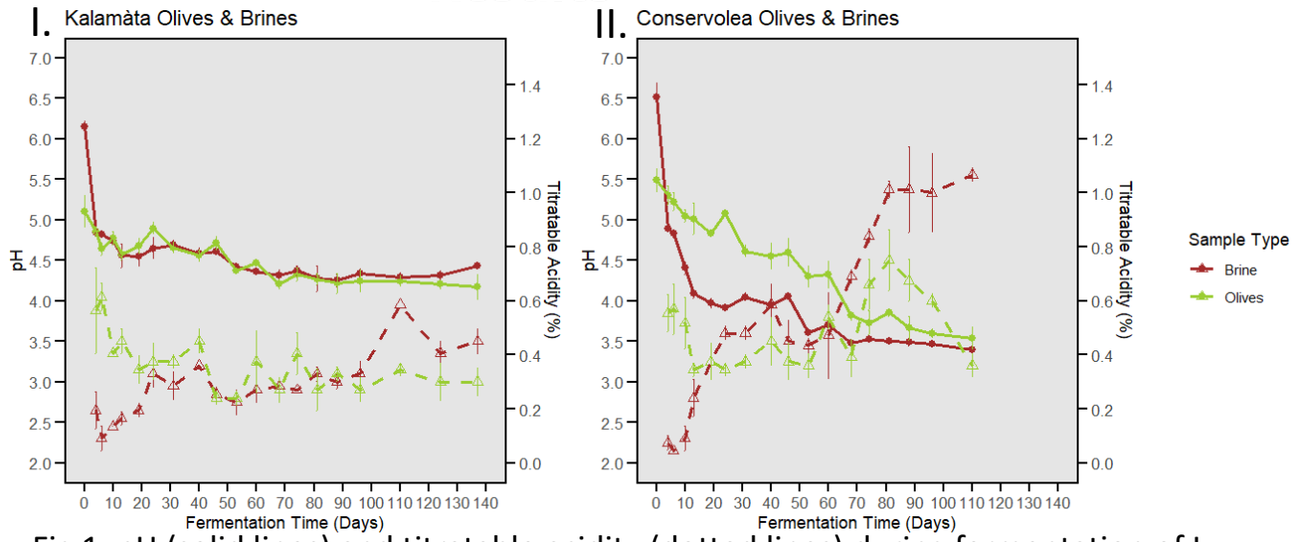


Fig 1. pH (solid lines) and titratable acidity (dotted lines) during fermentation of I. cv. Kalamàta cv. and II. Conservolea olives and brines.

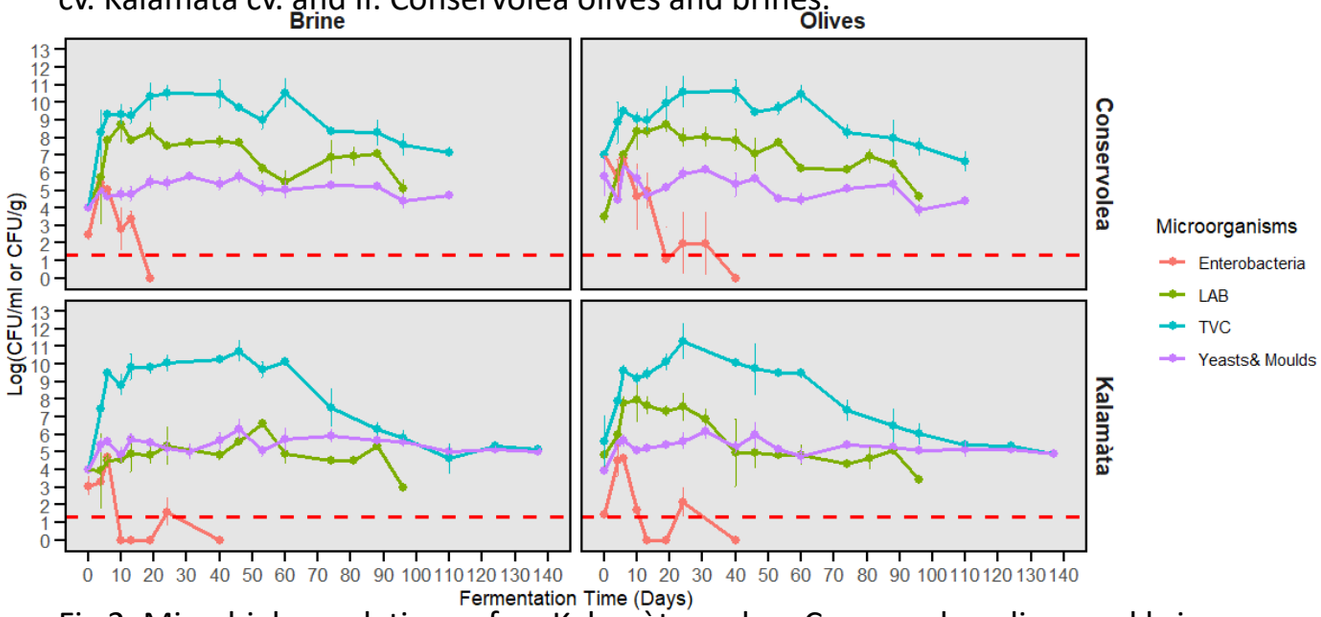


Fig 2. Microbial populations of cv. Kalamàta and cv. Conservolea olives and brines.

Aknowledgements

The FAIROmics project has received funding from the European Research Executive Agency via the Horizon Europe Marie Skłodowska-Curie programme under grant agreement N°101120449. Views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Funded by the European Union

References

(1) Argyri et al.,2020,10.3390/microorganisms8081241