

Alcoholic fermented cagaita (*Eugenia dysenterica*): Identification of Volatile Compounds

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Cagaita (*Eugenia dysenterica*)

- Native fruit from the Brazilian Cerrado with great potential for food innovation. It is rich in sugars and bioactive compounds, making it suitable for the production of fermented beverages.
- Alcoholic fermentation represents a valuable alternative to utilize this raw material, generating products with distinct sensory attributes and added market value.
- The identification of volatile compounds formed during fermentation is essential to understand the aromatic profile of the final beverage. Such information contributes to product optimization, consumer acceptance, and the development of high-quality fermented drinks from native Brazilian fruits.



To identify and quantify volatile compounds present in the alcoholic fermented juice of cagaita.



cagaita (*Eugenia dysenterica*)



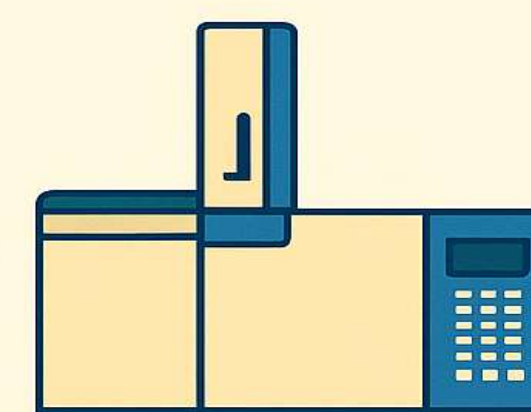
Filtered

Cagaita alcoholic ferment samples were filtered.



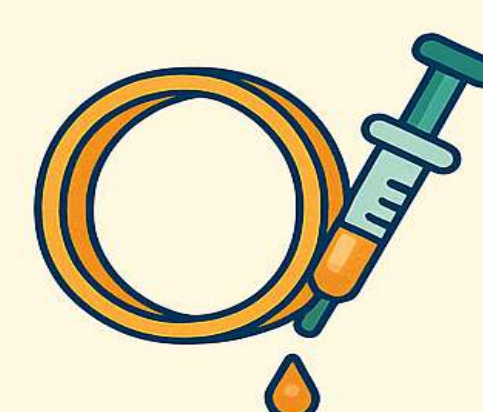
Stored

and analyzed at the Laboratory of Extraction and Separation Methods (LAMES-UFG).



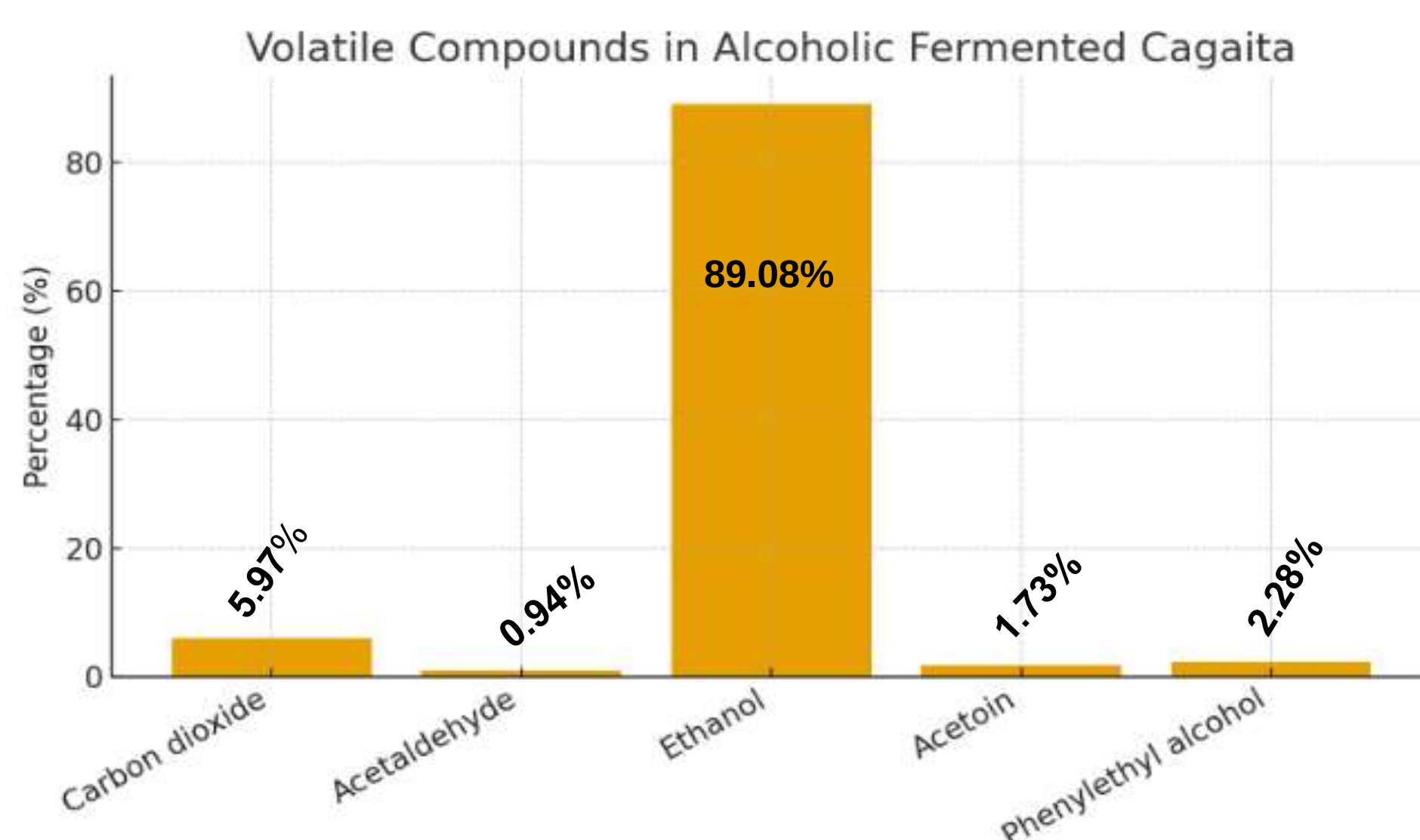
Gas chromatography

Volatile compounds were identified by gas chromatography (Agilent 7890B) coupled to a triple quadrupole mass spectrometer (7000D).



Headspace injection

using a DB-WAX column (30 m × 250 μm × 25 μm). Headspace injection of 3 μL of sample was performed



Ethanol was the predominant compound, representing approximately 89% of the volatile profile, followed by CO₂ and phenylethyl alcohol, both contributing to the sensory and aromatic characteristics of the beverage.

CONCLUSION

- The alcoholic fermentation of cagaita resulted mainly in ethanol production, accompanied by other volatiles that enhance the aroma complexity.
- These findings highlight the potential of cagaita as a raw material for the production of fermented beverages with unique sensory attributes.

REFERENCES

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