Fosca Vezzulli

KEY-WORDS:
COFFEE-TRACEABILITY-CONTAMINANT-SENSORY ANALYSIS

PROFILE

I am a second-year PhD student in Food Tecnology specialized in Sensory analysis and coffee chain. My passion draw me to Coffee origins and makes me eager to improve coffee producers' life quality

AFFILIATION

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LANGUAGES

Mother language

Level C1

HOW TO REACH ME

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PROJECT TITLE

Multifactorial Traceability of coffee processing

Steps of the research

- Samples identification and green coffee characterization
- Identification of discriminant traits (markers)
- Monitoring of roasting performed with different profiles
- Characterization of roasted coffee and evaluation of the preserved markers
- Focus on process contaminants (Acrylamide)
- Quantification of fixed compounds and volatile aroma compounds (GC/MS)
- Extraction with different methods (moka, espresso, filter) and final evaluation of the traceability elemental markers
- NIR methods to evaluate green coffee quality

Main Results

Sensory profile of Italian espresso coffee from Specialty Coffee and correlations with cupping profile
Metabolomic and sensory profile of different extraction methods

Research Contribution

The different issues analysed may help in building more solid and reliable knowledge on:

- Traceability methods and fraud mitigation in coffee supply chain
- Aroma formation and modification via variety, terroir, altitude, post harvesting processes and roasting modulation
- Pathways of acrylamide formation and good practises of roasting to prevent production on uncompliant roasted coffee
- Reliable and easy to use methods for green coffee quality control

Why should you care?

Coffee production deals with several socioeconomical and sustainability issues. On one and, being able to trace back coffee will allow producers to get the right income for the quality provided, on the other, prevent coffee waste due to contamination or low quality lots will reduce the environmental impact of the production.