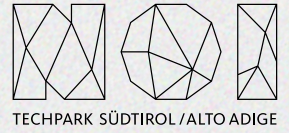


INTERNATIONAL
CONFERENCE
ON FERMENTED
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BOOK OF
ABSTRACTS

Polyphasic characterisation of lactic acid bacteria diversity associated with Sub-appennino Dauno sheep milk from “Gentile di Puglia” breed, for application in Pecorino cheese and the design of a cereal-based fermented beverage.

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● Preserving and valorising Apulian food biodiversity is a key strategy to promote the innovation of agro-food systems associated with regional Marginal Areas, including a diverse range of animals, plants, and micro-organisms (especially those of interest for food fermentation). “Gentile di Puglia”, is an autochthonous sheep breed of millenary origins typical of the South of Italy, particularly associated with Foggia province (i.e. *Subappennino Dauno* and *Tavoliere* areas), also recognised for traditional cheese production. Here, we report a case study related to the marginal area of the *Subappennino Dauno/Monti Dauni*, in the north of Apulian Region, i) isolating lactic acid bacteria (LAB) from sheep milk (breed “Gentile di Puglia”) and ii) performing a polyphasic characterisation of LAB for the design of multi-strains starter culture for Pecorino cheese and the design of a cross-over cereal-based fermented beverage (“Senatore Cappelli” durum wheat variety). The evaluations concerned protechnological properties, antimicrobial activity, sensorial aspects, and the study of volatile organic compounds. MF, HC, GS and VC are supported by the funding of the European Union Next-Generation EU [PNRR–Mission 4 Component 2, Investment 1.4–D.D. 1032 17/06/2022, CN00000022] within the Agritech National Research Centre for Agricultural Technologies. FB and MP received funding PNRR, Investment 1.3-Award Number: Project code PE00000003, Project title: “ON Foods-Research and innovation network on food and nutrition Sustainability, Safety and Security–Working ON Foods”.

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