THE BIO4VERBA PROJECT: PRESERVE THE BIODIVERSITY OF LOCAL VERZASCHESE AND BIONDA DELL'ADAMELLO GOAT **BREEDS THROUGH THE ENHANCEMENT OF THEIR PRODUCTIONS AND THE CREATION OF AN EX-SITU GENETIC RESERVE**



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INTRODUCTION

In recent years, goat has gained a significant role in the livestock sector, thanks to the efforts of breeders in mountainous rural communities, the contributions of associations formed to protect native breeds, and the promotion and marketing of traditional caprine products. The Italian BIO4VerBa project, funded by the Lombardy Region – Rural Development Program (PSR) 2014-2020, arises from the need of breeders to preserve and enhance the Verzaschese and Bionda dell'Adamello local goat breeds and their respective products, emphasizing the importance of pasture on milk quality, as well as its environmental impact.



AIMS

- Y To characterize the milk and cheese from the goat breeds involved in the production of Formaggella del Luinese D.O.P. (Verzaschese, Camosciata delle) Alpi, Saanen) and Fatuli from Val Saviore (Bionda dell'Adamello), two typical Lombard products;
- Y To verify the contribution of Verzaschese breed milk in the production of Formaggella del Luinese D.O.P. compared to the cosmopolitan breeds
- ✓ **To characterize** the **Fatulì** cheese from **Val Saviore** for its **valorization**;
- Y To encourage the breeders who use grazing activities through the characterization of their products allowing the contribution of grazing to the sensory characteristics of the cheeses;
- Y To expand the Lombardia Animal Genetic Resources Bank (LABank), initiated in 2008, by including genetic material of the Bionda dell'Adamello breed and increasing that of the Verzaschese breed.



The results of the BIO4VERBA Project will include: 1) the analysis of milk composition and technological properties in the two local breeds, for characterizing the role of these breeds in the cheese-making process, 2) the assessment of the influence of the territory on the quality of milk from different breeds and the contribution of grazing to the organoleptic characteristics of the characterization of the microbiome and **volatilome** of **milk** and **cheeses** from the four studied breeds.

Finally, in support to these in-situ conservation actions, the germplasm (spermatozoa) of the Verzaschese and Bionda dell'Adamello breeds will be cryopreserved to create their ex-situ genetic reserve.







for Verzaschese breed: Az. Agr. Il Vallone, Az. Agr. Francesco Panozzo, Az. Agr. Pian del Lares, Az. Agr. Riccardo Mocellin; for Bionda dell'Adamello breed: Az. Agr. Federico Maffeis, Soc. Agr. Il Prestello, Az. Agr. Le Frise, Comunità Montana di Valle Camonica - Parco Adamello e Tutela Ambientale.

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