UNIVERSITÀ DEGLI STUDI DI PADOVA

Curriculum vitae

Family name: Massaro
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Date of birth: 02/08/1997
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Place of birth: Dolo, Venezia

Education:

- PhD in Animal and Food Science, University of Padua (2021-)
- M.Sc. Master's in Animal Science and Technology (2019-2021)
- B.Sc. Bachelor's in Animal Science and Technology (2016-2019)

Research areas:

- Animal feeding and nutrition
- Dairy cows
- Milk quality

PhD project:

Enteric fermentation contributes meaningfully to the total greenhouse gas emissions (GHG) of the agricultural sector. The reduction of these emissions has the double benefit to reduce the impact of the livestock sector on the environment and to increase the efficiency of feed conversion into meat and milk products.

Nutritional strategies proposed to reduce emissions include feeding ruminants with aromatic plants, oil extracts and active compounds to manipulate microbial activity and to interfere with the fermentation processes that lead to methane synthesis.

Furthermore, these additives can be useful for improve animals' health and can change the smell and taste of milk products.

The aim of this Ph.D. project is:

- To develop a simple, economic, reliable, and repeatable *in vitro* methodology to study rumen microbial fermentations and to measure the methane potential of rumen fluid collected from animals fed with different diets;
- To test different aromatic plants as ingredients for dairy cow diets and study *in vivo* and *in vitro* their potential effects on rumen fermentation pathway and methane emissions, on cows' health, on milk production and quality (i.e. chemical composition, fatty acid profile, flavor, presence of benefic molecule for human health), and on cheese quality.

Supervisor:

Professor Franco Tagliapietra

Publications:

https://www.researchgate.net/profile/Selene-Massaro