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Nationality: India
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Education:

- PhD student in Animal and Food Science (2022-)
- M.Sc. in Sustainable Agriculture (2019-2022)
- B.Sc. in Agricultural Science (2014-2018)

Research areas:

- Plant Nutrition
- Transcriptomics

Brief description of Ph.D project:

Profiling plant-microbial associations and modulating these interactions by biostimulant treatments to enhance the ability of plants to cope with environmental stressors. Maintaining a healthy environment, while increasing plant yield and quality, is one of the key aspects of sustainable agriculture. The application of chemical pesticides and fertilizers can undermine soil quality and the invertebrate population. Therefore, the scientific community is studying the role and specific

effects of organic plant biostimulants as a gradual and promising replacement for chemical products. The present work aims to explore the effects of biostimulant treatments on sugar beet and tomato such as the model crops. For this purpose, we will compare the microbiome profiles of plants cultivated in hydroponics and field conditions. Then, we will exploit the effect of foliar application on plants grown in the open field. We will investigate (i) the consequences of biostimulant application on the composition of plant endophytic communities, (ii) the expression level of key genes related to hormonal and signalling metabolism, (iii) and its impact on yield traits of the model crop.

Supervisor:

Professor Piergiorgio Stevanato

Publications: Google scholar link

<https://scholar.google.com/citations?hl=en&user=ROvTBtkAAAAJ>