

Università degli Studi di Padova

Curriculum Vitae

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Education:

- PhD in Animal and Food Science, Università di Padova (2020-)
- M.Sc. Master's in Agricultural science and technology (2014-2017)
- B.Sc. Bachelor's in Viticulture and enology science and technology

Research areas:

- Soil organic carbon
- Soil biology
- Soil fertility
- Cover crops
- Conservation agriculture

PhD project:

Soil organic conservation and soil fertility restoration are to main concerns that agriculture is facing, while the global population is growing and climate change is threatening food security.

Conservation agriculture aims to improve carbon sequestration and conservation, thanks to reduced tillage and permanent soil cover. Soil cover is obtained both with crop residue and cover crops, i.e. crops are sown to protect soil and feed soil biology between cash crops.

This particular tool can achieve a high complexity level with living mulches or companion crops, with an important use of Fabaceae species, to promote nitrogen symbiotic fixation.

All these new techniques and approaches need new instruments to investigate soil fertility and to drive crop growth. Methods like the Fertimetro tool, soil organic matter, and soluble compounds, and enzymatic activities can give useful information to improve soil carbon content, develop good biological fertility, and besides, quality crop and food production. Healthy crops need healthy soil.

Supervisor:

Giuseppe Concheri

Publications:

https://scholar.google.com/citations?user=RQwV1r0AAAAJ&hl=it&citsig=AM D79oqqah85mCpgJWBXceUuhEGh9XxS6w