

Curriculum Vitae

Prof. Carlo Andreotti

Free University of Bozen/Bolzano

Faculty of Agricultural, Environmental and Food Sciences

Education

- 2002 - Ph.D. in “Fruit Tree, Forestry and Ornamental Agro-Ecosystems”, University of Bologna. Thesis title: ‘Phenolic compounds of *Pyrus communis*: cultivar characterization and evaluation of their role in plant response to abiotic and biotic stresses’
- 1997 - Laurea (equiv. to M.Sc.) in Agricultural Sciences, University of Bologna

Academic positions

- Current position: Associate Professor at the Free University of Bozen/Bolzano (unibz) since 2015

National Scientific Habilitation (ASN) as full professor (Abilitazione Scientifica Nazionale alle funzioni di professore universitario di prima fascia nel Settore Concorsuale 07/B2 - SCIENZE E TECNOLOGIE DEI SISTEMI ARBOREI E FORESTALI. Validità dal 03/06/2021 al 03/06/2032).

- Previous academic positions:
 - o Assistant Professor (Researcher) at unibz from 2009 to 2014
 - o Researcher at CRA (Consiglio Nazionale per le Ricerche in Agricoltura) at the Fruit Production Unit in Forlì (FC) from 2008-2009
 - o Research Assistant (with post doctorate fellowships) at the Dipartimento Colture Arboree of the University of Bologna from 02/2002 to 01/2007
 - o Contract Professor at the University of Teramo (Faculty of Agriculture) for the course “Morphology and physiology of grapevine”, Academic Years 2004-2005, 2005-2006, 2006-2007;
 - o Contract Professor at the University of Teramo (Faculty of Agriculture) for the course “Cytology, anatomy and plant physiology”, Academic Year 2007-2008

DIDACTIC ACTIVITIES (last three years)

2023-24

- “Viticulture” (3 credits), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: English;

- “Fruit production” (6 credits), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: English;
- “Integrated Orchard and Vineyard Management” (module of *Canopy Management*, 3 credits), International Master of Horticultural Science (LM-69, IMaHS). Course held at unibz. Language of the course: English;
- “Arboricoltura generale” (12 hours), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: Italian

2022-23

- “Viticulture” (3 credits), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: English;
- “Fruit production” (6 credits), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: English;
- “Vineyard management in mountain areas” (3 credits), Ms in Viticulture, Enology and Wine Marketing (LM-69, VEM). Course held at unibz. Language of the course: English;
- “Integrated Orchard and Vineyard Management” (module of *Canopy Management*, 3 credits), International Master of Horticultural Science (LM-69, IMaHS). Course held at unibz. Language of the course: English;
- “Quality of horticultural products” (3 credits), Ms Food Sciences for Innovation and Authenticity (LM-70). Course held at unibz. Language of the course: English

2021-22

- “Viticulture” (3 credits), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: English;
- “Fruit production” (6 credits), Bc of Agricultural, Food and Mountain Environmental Sciences (L-25), at unibz. Language of the course: English;
- “Vineyard management in mountain areas” (3 credits), Ms in Viticulture, Enology and Wine Marketing (LM-69, VEM). Course held at unibz. Language of the course: English;
- “Integrated Orchard and Vineyard Management” (module of *Canopy Management*, 3 credits), International Master of Horticultural Science (LM-69, IMaHS). Course held at unibz. Language of the course: English;
- “Quality of horticultural products” (3 credits), Ms Food Sciences for Innovation and Authenticity (LM-70). Course held at unibz. Language of the course: English

Student tutoring

Since 2009, I have been first supervisor of:

- 10 bachelor students (L-25);
- 5 master students (LM;-69 VEM);
- 7 master students (L;-69 IMaHS)
- 5 PhD students

RESEARCH ACTIVITIES

My research activities during the last years focused on the following lines:

- Physiological responses of grapevine under multiple environmental stresses (focus on drought and heat)
- Vineyard/orchard management and adaptation to climate change. Implementation of mitigation strategies to increase vineyards' resilience and sustainability. Focus on the use of different canopy management techniques (defoliation, antitranspirant, film-forming technologies); the use of biochar as amendment of vineyard soils; the use of biostimulants to improve grapevine (and other fruit crops) tolerance toward abiotic stresses and to increase fruit quality and storability.

These researcher activities are (were) performed with research projects, some of them are listed below.

Research projects

- Assessment and valorization of biochar amendment for promoting soil health, carbon storage and sustainable viticulture 'BIO-C-VITE', PRIN 2022, unibz unit responsible, November 2023-October 2025
- Agritech project, WP 4.1 - Next-generation technologies for resilient traits of crop varieties and tree species, Task 4.1.2 - Smart phenotyping platforms for the on-farm selection of resilient varieties and rootstocks, Unit member, 01/09/2022 – 31/08/2025
- Use of biochar as soil amendment in vineyard: effect on nitrogen balance and water availability for grapevine (CHAR_GOAL), unibz internal project, principal investigator, 15/12/2021 – 14/12/2024
- Use of biostimulants to promote drought tolerance in fruit crops (BIO-DROPS), unibz internal project, principal investigator, 16/01/2020 - 15/07/2022

Presentations at congresses and workshops during the last years (oral presentations)

- VITICOLTURA E BIOCHAR: EVIDENZE E PROSPETTIVE FUTURE. Accademia dei Georgofili, Firenze 20 April, 2023. Invited presentation: "Biochar e viticoltura di montagna: indicazioni da un caso di studio in Alto Adige" by Carlo Andreotti.
- IX CONVEGNO NAZIONALE DI VITICOLTURA (CONAVI). Conegliano, 13-15 June, 2022. Oral presentation "Application of different commercial biostimulants to enhance vine tolerance toward drought stress" by Fadwa Benyahia, Francesco Giovanelli, Carina Veronica Gonzalez and Carlo Andreotti.
- BIOSTIMOLANTI CONFERENCE. Bari, 2-3 Marzo 2022. Invited presentation titled "Impiego dei biostimolanti per la gestione degli stress idrici e nutrizionali di vite e fragola" by Carlo Andreotti.
- BIOSTIMOLANTI IN ORTOFLOROFRUTTICOLTURA, webinar organized by the Italian Society for Horticultural Sciences (SOI) on the 26th of November, 2020. Title of the oral presentation: "Impiego dei biostimolanti in frutticoltura" by Carlo Andreotti.

- BIOCHAR: FILIERA E PROSPETTIVE IN ALTO ADIGE, conclusive event of the EFRE-FESR project Wood_Up held online on the 23rd of October, 2020. Oral communication titled “Effetti dell’impiego del biochar come ammendante sulle relazioni idriche e sul ciclo dell’azoto di piante di vite” by Carlo Andreotti.

Editorial activities

- Associate Editor of *Italus Hortus*, scientific journal of the Italian Society for Horticultural Sciences (SOI) since 2019;
- Reviewer for several journals, including:
 - o Scientia Horticulture
 - o Agricultural and Forest Meteorology
 - o Agricultural Water Management
 - o Frontiers
 - o European Journal of Horticultural Science
 - o Agronomy

Congress organization

- Co-convener of the XI Giornate Scientifiche SOI, Bolzano 14-16 September 2016

LANGUAGES

- Italian (first language)
- English (Cambridge FCE level C1)
- German: B2 (Goethe-Zertifikat B2)

SCIENTIFIC PUBLICATIONS

- Scopus Author ID: 6602497222
- <https://orcid.org/0000-0003-2588-8723>
- Bibliometric indicators on Scopus (11th of July, 2023): h-index:22; 51 documents; 1.258 citations.

Bolzano, January 2024

Prof. Carlo Andreotti