

Andrea Schubert

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SC 05/A2. SSD BIO/04

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***** Education

Master Degree in Agricultural Sciences, University of Turin, full marks *cum laude*
Specialization Diploma in Viticulture and Enology, University of Turin

***** Academic appointments

Research Associate at the University of Turin (1984 – 1998)
Associate Professor in Plant Physiology, University of Turin (1998 – 2006)
Full Professor in Plant Physiology at the University of Turin (since 2006)
Direction of the Bachelor Course in Viticulture and Enology, University of Turin (2002 – 2008)
Direction of the Master Course in Plant Biotechnology, University of Turin (2009)
President of the Evaluation Board of the University of Turin (2013 – 2018)
Member of the University of Turin panel for the National VQR (Evaluation of Research Quality) exercise 2020-2
Director of the Department of Agricultural, Forestry, and Food Sciences, University of Turin (since 2024)

***** Teaching

Plant Molecular Physiology, Master Course in Plant Biotechnology
Grapevine Physiology, Degree Course of Enology and Viticulture
Seminars held at PhD Schools (Amsterdam, Angers, Athens, Bordeaux, Heidelberg, Montpellier, Palma de Mallorca, Turin)

***** Research

Visiting scientist at Rothamsted Experimental Station (UK) (1982), at the University of Basel (CH) (1989 – 1990), and at the Julius-Maximilians-Universität Würzburg (D) (1999)
Research group leader (www.plantstresslab.unito.it), PhD supervisor (actual 2, previous 12), project leader in EU (H2020 SFS-2016 TOMRES; PRIMA 2018 VEG-ADAPT) and national research projects (5), and in bi-national collaboration projects with Germany and Spain (2), direction of contracts with private companies and public bodies (7)
Convener, MACROWINE Turin 2010 Congress; FESPB-EPSO Plant Biology Europe Congress, Turin-online 2021
Peer evaluation of research and PhD project for private and public bodies (CARIPARO Foundation, Lazio Innova, MUR PRIMA, MUR REPRISE, King Khalid Foundation SAU, Polish Research Foundation PL, PRIMA Foundation EU)

***** Technology transfer, science communication and outreach

Founder Associate in two academic spin-off companies: GRAPE srl (innovative solutions grape and wine biotechnology) and STRIGOLAB srl (production of strigolactones and strigolactone-based biostimulants for agriculture). Coordinator of EIT Food BIOSUVEG project for technology transfer.
Contributor to Genova Science Fair in 2020 and 2022. Science communication & position paper events within EU projects.

***** Research focus

Strigolactones as regulators of development and stress acclimation

***** Recent coordinated research projects

Innovative biostimulants for sustainable fruit production from vegetable crops – BIOSUVEG (EU -EIT Food 2021)
Adapting Mediterranean vegetable crops to climate change-induced multiple stress – VEG-ADAPT (EU-PRIMA 2019-2022)
A novel and integrated approach to increase multiple and combined stress tolerance in plants using tomato as a model – TOMRES (EU H2020 SFS-2 2017-2020)

***** Scientific engagement

Chair of the Federation of the European Societies of Plant Biology (2018-2021)

Chair of the Italian Society of Plant Biology (2018 - 2019)

Representative of the University of Turin in the Joint Research Unit PHENITALY (since 2018)

Board Member of the European Plant Science Organization (EPSO) (since 2024)

Reviewer for journals in the Plant Biology sector (55 reviews performed in the last 10 years for 26 Journals)

***** Scientific impact (at 1 November 2024)

WoS -indexed publications 96

WoS total cites 4830

WoS h-index 42

***** Main recent publications

Pagliarani C, Casolo V, Ashofteh Beiragi M, Cavalletto S, Siciliano I, Schubert A, Gullino ML, Zwieniecki MA, Secchi F (2019) - Priming xylem for stress recovery depends on coordinated activity of sugar metabolic pathways and changes in xylem sap pH. *Plant Cell Environ* 42:1775-1787

Visentin I, Pagliarani C, Deva E, Caracci A, Turecková V, Novak O, Lovisolo C, Schubert A, Cardinale F (2020) - A novel strigolactone-miR156 module controls stomatal behaviour during drought recovery. *Plant Cell Environ* 43:1613-1624

Korwin Krukowski P, Ellenberger I, Röhlen-Schmittgen S, Schubert A, Cardinale F (2020) - Phenotyping in Arabidopsis and Crops—Are We Addressing the Same Traits? A Case Study in Tomato. *Genes* 11:1011

Pagliarani C, Gambino G, Ferrandino A, Chitarra W, Vrhovsek U, Cantù D, Palmano S, Marzachi C, Schubert A (2020) - Molecular memory of Flavescence doree phytoplasma in recovering grapevines. *Horticultural Research* 7:126

Ripamonti M, Pegoraro M, Morabito C, Gribaudo I, Schubert A, Bosco D, Marzachi C (2021) - Susceptibility to flavescence doree of different Vitis vinifera genotypes from north-western Italy. *Plant Pathology* 70:511-520

Morabito C, Secchi F, Schubert A (2021) - Grapevine TPS trehalose-6-phosphate synthase family genes are differentially regulated during development, upon sugar treatment and drought stress. *Plant Physiol. Biochem* 164:54-62

Tran F, Holland JE, Quesada N, Young M, Bienkowski D, Savvas D, Schubert A, Ntatsi G, White PJ, Begg GS, Iannetta PMP (2021) - What evidence exists on the effectiveness of the techniques and management approaches used to improve the productivity of field-grown tomatoes under conditions of water-, nitrogen- and/or phosphorus-deficit? A systematic map. *Environmental Evidence* 10, 14

Morabito C, Orozco J, Tonel G, C, Meloni GR, Schubert A., Gullino ML, Zwieniecki MA, Secchi F (2022) - Do the ends justify the means? Impact of drought progression rate on stress response and recovery in *Vitis vinifera*. *Physiologia Plantarum*. 2022;174:e13590

Korwin Krukowski P, Visentin I, Russo G, Minerdi D, Bendahmane A, Schubert A, Cardinale F (2022) .Transcriptome analysis points to BES1as a transducer of strigolactone effects on drought memory in *Arabidopsis thaliana* - *Plant Cell Physiol* 63:1873-1889

Trasoletti M, Visentin I, Campo E, Schubert A, Cardinale F (2022) -Strigolactones as a hormonal hub for the acclimation and priming to environmental stress in plants. *Plant Cell Environ* 45:3611–3630

Russo G, Capitanio S, Trasoletti M, Morabito C, Korwin Krukowski P, Visentin I, Genre A, Schubert A, Cardinale C (2023) - Strigolactones promote the localization of the ABA exporter ABCG25 at the plasma membrane in root epidermal cells of *Arabidopsis thaliana* - *J Exp Bot* 74:5881-5895

Lu H, Tian M, Shi N, Li H, Li M, Cheng C, Chen W, Li S, He F, Duan C, Schubert A, Wang J (2024) - Volatilomics of Cabernet Sauvignon grapes and sensory perception of wines are affected by canopy side in vineyards with different row orientations - *Food Chemistry* 460:140508

Visentin I, Ferigolo LF, Russo G, Korwin Krukowski P, Capezzali C, Tarkowska D, Gresta F, Deva E, Tebaldi Silveira Noguera F, Schubert A, Cardinale F (2024) Strigolactones promote flowering by inducing the miR319- LA- SFT module in tomato- *Proc, Natl. Acad. Sci. USA* 121:e2316371121