



Benedetta Saccomanno

Home : [REDACTED]

E-mail: [REDACTED] Phone: ([REDACTED]) [REDACTED]

Date of birth: [REDACTED]

WORK EXPERIENCE

[2021 – 2023]

Research Scientist

Università del Salento

City: Lecce

Country: Italy

Study of the genetic response to environmental stress in *Drosophila melanogaster* nervous system and its application in biodiversity monitoring for coastal areas

[2020 – 2021]

Senior Chief Research Platform Technician

University of Cambridge

City: Cambridge

Country: United Kingdom

Providing genotyping services for Engineering the Nitrogen Symbiosis for Africa (ENSA) project (<https://www.ensa.ac.uk>)

[2018 – 2020]

Innovation fellow

National Institute of Agricultural Botany (NIAB)

City: Cambridge

Country: United Kingdom

Testing the molecular and biochemical mechanisms affected by altered starch granule composition for future commercialization of new wheat varieties

[2014 – 2018]

Research Scientist

National Institute of Agricultural Botany (NIAB)

City: Cambridge

Country: United Kingdom

- QTL analysis of multiparental wheat populations for rapid development of genetic markers in collaboration with 5 breeding companies (Bayer, Limagrain, KWS, Elsoms, RAGT)
- identification of the gene responsible for the control of B-granule starch content in wheat and barley

EDUCATION AND TRAINING

[2012 – 2014]

MSc Plant Biotechnology

Wageningen University and Research (WUR)

<https://www.wur.nl>

City: Wageningen

Country: Netherlands

Field(s) of study: Molecular Plant Breeding & Pathology

Thesis: Secondary metabolism of the fungal pathogen *Cladosporium fulvum*
- Elucidation of polyketide biosynthetic pathways through heterologous recombination with *Aspergillus oryzae*.

[2007 – 2011]

BSc in Biotechnology

Università degli studi di Perugia

<https://www.unipg.it/>

City: Perugia

Country: Italy

Field(s) of study: Natural sciences, mathematics and statistics

Thesis: Identification of *Pseudomonas syringae* pv. *tabaci* in infected leaves of Kentucky tobacco.

LANGUAGE SKILLS

Mother tongue(s):

Italian

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Spanish

LISTENING B1 READING B2 WRITING A2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SELECTED PUBLICATIONS

[2023] [A Novel Sphingomonas sp. Isolated from Argan Soil for the Polyhydroxybutyrate Production from Argan Seeds Waste](#)

A. Aragosa, **B. Saccomanno**, V. Specchia, M. Frigione

Polymers 2023, 15, 512.

DOI: <https://doi.org/10.3390/polym15030512>

[2022] [Characterization of wheat lacking B-type starch granules](#)

Benedetta Saccomanno, Pierre Berbezy, Kim Findlay, Jennifer Shoesmith, Cristobal Uauy, Bruno Viallis, Kay Trafford.

Journal of Cereal Science, 2022, Volume 104, ISSN 0733-5210,

DOI: <https://doi.org/10.1016/j.jcs.2021.103398>

[2021] [Testing the Influence of Incomplete DNA Barcode Libraries on Ecological Status Assessment of Mediterranean Transitional Waters](#)

Pinna, M.; **Saccomanno, B.**; Marini, G.; Zangaro, F.; Kabayeva, A.; Khalaj, M.; Shaimardan, L.; D'Attis, S.; Tzafesta, E.; Specchia, V..

Biology 2021, 10, 1092.

DOI: <https://doi.org/10.3390/biology10111092>

- [2020] [Use of genetic markers for the detection of off-types for DUS phenotypic traits in the inbreeding crop, barley](#)
Saccomanno, B., Wallace, M., O'Sullivan, D. M., & Cockram.
J.Molecular Breeding, 2020, 40, 1-10.
- [2017] [Transfer of a starch phenotype from wild wheat to bread wheat by deletion of a locus controlling B-type starch granule content](#)
Chia T, Adamski NM, **Saccomanno B**, Greenland A, Nash A, Uauy C, Trafford K.
Journal of Experimental Botany, 2017, 28;68(20):5497-5509.
DOI: <https://doi.org/10.1093/jxb/erx349>
- [2017] [Starch granule morphology in oat endosperm](#)
Benedetta Saccomanno, Alan H. Chambers, Alec Hayes, Ian Mackay, Simon C. McWilliam, Kay Trafford.
Journal of Cereal Science, 2017, Volume 73.
DOI: <http://dx.doi.org/10.1016/j.jcs.2016.10.011>
- [2017] [Growth strategy, phylogeny and stoichiometry determine the allelopathic potential of native and non-native plants](#)
Bart M. C. Grutters, **Benedetta Saccomanno**, Elisabeth M. Gross, Dedmer B Van de Waal, Ellen van Donk, Elisabeth S. Bakker.
OIKOS, 2017, Volume 126, Issue 12
DOI: <https://doi.org/10.1111/oik.03956>
- [2016] [Down-regulation of cladofulvin biosynthesis is required for biotrophic growth of Cladosporium fulvum on tomato](#)
Scott Griffiths, Carl H. Mesarich, Elysa J. R. Overdijk, **Benedetta Saccomanno**, Pierre J. G. M. de Wit Jérôme Collemare.
Molecular Plant pathology, 2016.
DOI: <https://doi.org/10.1111/mpp.12527>
- [2016] [Elucidation of cladofulvin biosynthesis reveals a cytochrome P450 monooxygenase required for anthraquinone dimerization](#)
Scott Griffiths, Carl H. Mesarich, **Benedetta Saccomanno**, Abraham Vaisberg, Pierre J. G. M. De Wit, Russell Cox, and Jérôme Collemare.
PNAS, 2016, 113 (25) 6851-6856;
DOI: <https://doi.org/10.1073/pnas.1603528113>
- [2015] [Regulation of secondary metabolite production in the fungal tomato pathogen Cladosporium fulvum](#)
Scott Griffiths, **Benedetta Saccomanno**, Pierre J.G.M. de Wit, Jérôme Collemare.
Fungal Genetics and Biology 2015, Volume 84.
DOI: <https://doi.org/10.1016/j.fgb.2015.09.009>.

CONFERENCES AND SEMINARS

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|--------------------------|---|
| [2019- Wien, Austria] | 19th ICC Conference - Science meets Technology |
| [2019- Birmingham, UK] | FoodFuture Dissemination Event |
| [2018-San Diego, USA] | Plant and Animal Genome Conference |
| [2017-Bristol, UK] | Monogram Cereal Conference |