

MAZZON Luca

INTERESTS AND CURRENT FIELDS OF RESEARCH

The research activity primarily focuses on the evolutionary and ecological relationships between insects and their associated bacteria, with a special emphasis on symbiotic microorganisms of fruit flies and on the biological control of insect pests.

He has conducted extensive research on heritable and coevolved bacterial symbionts, as well as on the microbial communities associated with various insect hosts. The expertise gained in this field has subsequently allowed him to broaden the research scope to other insect groups, establishing and maintaining collaborations with several national and international research teams, and participating in multiple large-scale projects of both national and European relevance.

At the same time, his scientific activity has also addressed several topics of classical entomology, some of which are still ongoing:

- Sublethal and indirect effects of pesticides (e.g., neonicotinoids and pyrethroids) on beneficial entomofauna
- Ecological and phylogenetic studies on mosquitoes (Culicidae)
- Biological control strategies for recently introduced exotic pests
- Biology, ecology, and management of orthopteran outbreaks

RECENT CAREER

- Associate Professor, Department of Agronomy, Food, Natural Resources, Animals and Environment (DAFNAE) – University of Padova (Italy) (since Dec 2020)
- National Scientific Habilitation for Associate Professor in Entomology (07/D1 – Plant Pathology and Entomology), Call D.D. 1532/2016 (2017)
- Researcher (RU), DAFNAE – University of Padova (Italy) (Jan 2006 – Nov 2020)
- Since 2006, Dr. Mazzon has been coordinating the activities of a research team currently including one PhD student, one research fellow, and one postdoctoral researcher

SELECTED PROFESSIONAL EXPERIENCES

- Member of the final PhD examination board, Agricultural Sciences and Biotechnology – University of Udine (Italy), 2018
- Co-supervisor, PhD thesis of Elisabetta Viale: "Symbiotic bacteria inhabiting tephritid flies: a worldwide specific interaction", DAFNAE – University of Padova (2010–2014)
- Co-supervisor, PhD thesis of Claudia Savio: "Symbiotic and associated bacteria in tephritid flies", DAFNAE – University of Padova (2008–2014)
- Member of the PhD Teaching Council, "Crop Science" – University of Padova (since 2017)
- Former Member, PhD Teaching Council in "Plant Production Sciences" – University of Padova (2010–2016)
- Former Member, PhD Teaching Council in "Crop Protection" – University of Padova (2006–2009)

EDITORIAL AND REVIEWING ACTIVITY

Since 2005, referee for several international journals in entomology and microbiology, including:

• Archives of Microbiology; • BMC Microbiology; • Bulletin of Insectology; • Insect Molecular Biology; • Journal of Entomological and Acarological Research; • Scientific Reports; • Parasite & Vectors; • Bulletin of Entomological Research; • Journal of Visualized Experiments; • Insects; • Agronomy; • Forests; • Environmental Science and Pollution Research; • The Canadian Entomologist; • Journal of Applied Entomology; • Journal of Pest Science

ORGANIZATION OF SCIENTIFIC EVENTS

- Member of the Organizing Committee, 25th National Congress of Entomology (Italy)

MAIN COMPETITIVE GRANTS

- PRIN 2022 - Decoupling a long-term relationship between the olive fly and its symbiont for pest control (EndOfSymb) 2022PMBM8K_002

- PRID 2020 – BIRD205285/20 (PI) – University of Padova (Italy): "Eco-compatible techniques and strategies for the control of the olive fly *Bactrocera oleae* (Rossi)"

- National Institute of Agricultural Science (NAS), Rural Development Administration (RDA), Republic of Korea, 2017–2019 – "Introduction of natural antagonists for the biological control of *Metcalfa pruinosa* in South Korea"

- Seventh Framework Programme (FP7, 2013) – "DROPSA: Strategies to develop effective, innovative, and practical approaches to protect major European fruit crops from pests and pathogens"

- PRIN-MIUR, 2010–2011 – "Global Exotic Sustainable Control Agroforestry (GEISCA)", Unit participant

- COST Action FA0701 (2008–2011) – "Arthropod Symbiosis: From Fundamental Studies to Pest and Disease Management" – Working Group 1: "Stammerula in fruit flies"

- PRIN-MIUR 2008–2011 (2008BPLF7Y) – "Bacterial associations and symbiotic relationships in tephritid flies (Diptera: Tephritidae)" – Principal Investigator (since 2012)

- University of Padova Research Project (CPDA089282, 2008–2011) – "Associated bacteria and obligatory symbiosis in fruit flies"

MEMBERSHIPS AND HONORS

- Member (since 2009) – Italian Entomological Society, Section of Agricultural Entomology

- Member (since 2020) – Research Group of Orthoptera Insects (GRIO), Fondazione Museo Civico di Rovereto (Trento, Italy)

SELECTED PARTICIPATION IN NATIONAL AND INTERNATIONAL CONGRESSES

- National Academy of Entomology (Accademia Nazionale di Entomologia): "Relationships between tephritid flies and their intestinal symbionts", June 15, 2019 – Florence, Italy

- 13th International Congress of Orthopterology: "The strange case of *Barbitistes vicetinus*: from unknown to outbreaking", Agadir, Morocco, March 24–28, 2019

- XI European Congress of Entomology (ECE): "Genetic variability of *Halyomorpha halys* (Stål) and its symbiont '*Candidatus Pantoea carbekii*' across native and newly colonized regions", Naples, Italy, 2018

- E-SOVE 21st Meeting: "Occurrence of potential malaria vectors in north-eastern Italy", Palermo, Italy, October 22–26, 2018

- 6th Allergy Up-Date: "Identification of Hymenoptera species", Padua, Italy, November 24, 2017
- SEI & National Academy of Entomology: "Bacterial community variation in *Drosophila suzukii* introduced populations", Florence, Italy, November 17, 2016
- SEI & National Academy of Entomology: "Phylogenetic relationships between *Bactrocera oleae* and *Candidatus Erwinia dacicola* and implications for rearing improvement", Florence, Italy, February 19, 2015
- XXV National Congress of Entomology: "Bacterial communities associated with *Drosophila suzukii* in the invasion range", Padua, Italy, 2016
- 29th Meeting of the Italian Society of General Microbiology and Microbial Biotechnology: "GFP-labeling of enterobacteria associated with fruit flies and persistence in their natural hosts", Pisa, Italy, 2011
- 8th International Symposium on Fruit Flies of Economic Importance: "Haplotypes of the olive fly symbiont '*Candidatus Erwinia dacicola*' in Italy", Valencia, Spain, 2010
- 4th IOBC/WPRS Meeting on Integrated Protection of Olive Crops: "Is the fecundity of *Bactrocera oleae* dependent on nitrogenous sources?", Córdoba, Spain, June 2009

PUBLICATIONS

Author of more than 50 peer-reviewed publications in ISI-indexed international journals and two book chapters.

Bibliometric indicators (Scopus, September 2025):

- Total citations: 1,274
- H-index: 16
- ORCID: <https://orcid.org/0000-0002-8459-893X>